

User Guide
For
Laptop EF20EA

Regulatory Compliance

Information

FCC Declaration of Conformity

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

RF exposure warning

This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. End-users and installers must be provided with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance.

CAUTION:

Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.

For questions related to the EMC performance of this product, contact:

Elitegroup Computer Systems Co., Ltd
No.239, Sec. 2, Ti Ding Blvd., Taipei, Taiwan 11493
886-2162-1177

Canadian Department of Communications Compliance**Statement**

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications. This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil numérique n'émet pas de bruits radio électriques dépassant les limites applicables aux appareils numériques de la classe B prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada. Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.



CE mark. Declaring compliance to all the applicable European Union (EU) directives. For CE mark related questions:

Elitegroup Computer Systems Co., Ltd

No.239, Sec. 2, Ti Ding Blvd., Taipei, Taiwan 11493
886-2162-1177

French SAR/DAS

Votre ordinateur a un DAS. Pour plus d'informations, voir le portail radiofréquences-sante-environnement:
www.radiofrequences.gouv.fr



In the European Union, this symbol indicates that this product including battery must not be disposed of with household waste. It is your responsibility to hand it over to a designated collection point for the recycling of waste electrical and electronic equipment. For more information, please contact your local waste collection center or the point of purchase of this product.

Japan VCCI Statement

この装置は、情報処理装置等電波障害自主規制協議会（VCCI）の基準に基づくクラス B 情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。

取扱説明書に従って正しい取り扱いをして下さい。

Taiwan battery recycling:

Translation – please recycle batteries



廢電池請回收

經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。
低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。
前項合法通信，指依電信法規定作業之無線電通信。低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

在5.25 ~ 5.35GHz 頻帶內操作之無線資訊傳輸設備,限於室內使用'

*使用過度恐傷害視力。

*使用30分鐘請休息10分鐘。

2歲以下幼兒不看螢幕, 2歲以上每天看螢幕不要超過1小時

Attention: Teachers, Parents and Adult Supervisors

This product is an educational tool designed for school children, ages 6 and up. There must be supervision by an adult on school children under 10 when using this laptop. It is a must to have a thorough explanation to students on safe and proper handling of the laptop, power supply, battery pack, and power cord.



Be sure to keep the power cord away from younger children

Please ensure that students understand the following:

- ▶▶ As with all electrical products, precautions should be observed during handling and use to prevent electric shock. The power supply (adapter) should not be handled by the children.”
- ▶▶ Emphasize to students that this device is an educational tool and not a toy. The computer, power supply, battery pack or power cord should not be dropped, crushed, stepped on or otherwise abused.
- ▶▶ Ensure students understand the safe and proper handling of power cord and power supply. Misuse could result in serious injury.
- ▶▶ The teacher, parent or adult supervisor should periodically inspect the computer; power supply and power cord for damage and replace it, if necessary.
- ▶▶ Students should report any damage or loose parts to their teacher, parent or adult supervisor, immediately.
- ▶▶ Do not leave the PC plugged in or “on” when enclosed in a non-vented container, such as a school backpack, as overheating may occur.
- ▶▶ It is recommended that students should take a 5 minute break every 30 minutes of use.

Safety Precautions

The following are lists of precautionary measures the students must understand before using this computer inside the classroom or home environment:



1. Do not place near the fire or other sources of heat.
2. Do not expose to magnetic fields.
3. Do not expose to direct sunlight.
4. Do not expose to rain or moisture.
5. Do not place heavy objects to add heavy pressure on the computer.
6. Do not drop the computer.

CAUTION

RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE.
DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

ATTENTION

RISQUE D'EXPLOSION SI LA BATTERIE EST REMPLACÉE PAR UN TYPE INCORRECT. RECYCLEZ LES BATTERIES USAGÉES SELON LES INSTRUCTIONS.



TO PREVENT POSSIBLE HEARING DAMAGE, DO NOT LISTEN AT HIGH VOLUME LEVELS FOR LONG PERIODS.

IT IS RECOMMENDED TO USE THIS COMPUTER IN AN ENVIRONMENT WHERE THE AMBIENT TEMPERATURE IS NO MORE THAN 35°C.

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1. Getting to know your computer

Package contents

Carefully unpack your box and take out the items listed as below. If any of the items is missing or damaged, contact your dealer immediately:

• One laptop	• One AC adapter
	
• This manual	
	

Layout

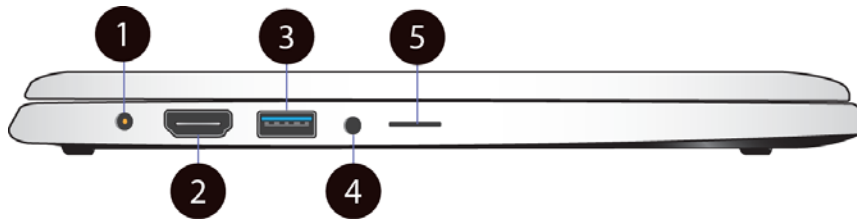
Views

- Front



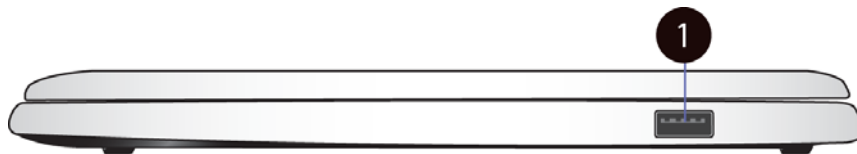
No.	Name	Function
1	Front facing camera	Often for taking self-portraits as well as for video conferencing.
2	LCD screen	The main display of your laptop
3	Power button	Power on/off your laptop.
4	Windows key	Press here to open the Start menu.
5	Touchpad	Allows you to control your system using figure gestures.

● Right



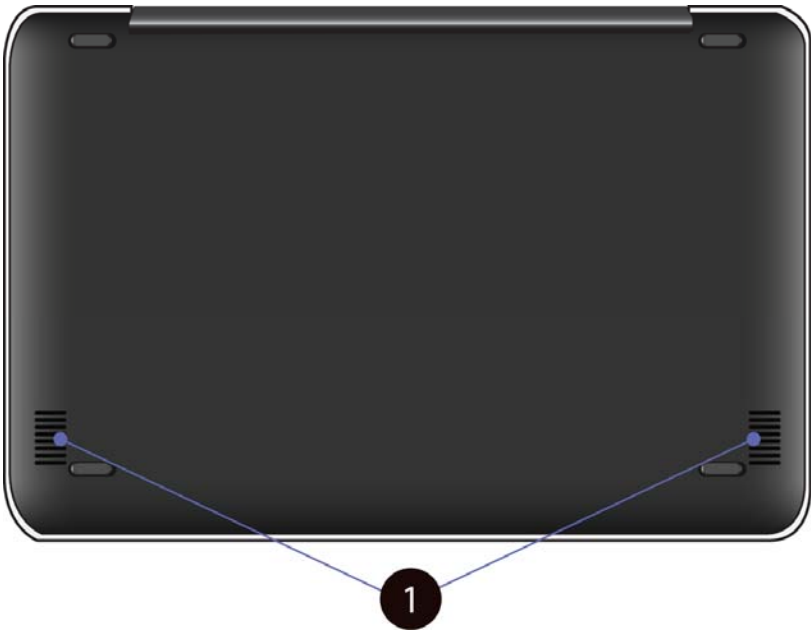
No.	Name	Function
1	DC-in	Plug the adapter to charge the battery.
2	HDMI port	Plug your HDMI-capable monitor here.
3	USB 3.0 port	Plug your USB devices here.
4	Combo Audio jack for microphone/headphone	Plug your 3.5mm headphone here.
5	Micro SD card slot	Plug your micro SD card here

● Left



No.	Name	Function
1	USB 2.0 port	Plug your USB devices here.

● Back



No.	Name	Function
1	Speaker	The sound system has two speakers for playing music, notification sounds, and other audio data.

Function keys



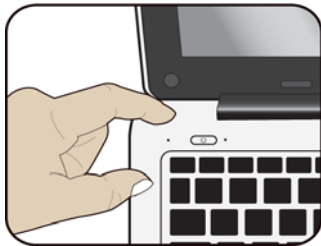
+

F2 	Puts your computer into sleep mode.	F7 	Decreases the volume level.
F3 	Decreases the display brightness.	F8 	Increases the volume level
F4 	Increases the display brightness.	F9 	Disables or enables the touchpad.
F5 	Switches display output between your display, external monitor (if connected) and both.	F10 	Enables or disables the airplane mode by stopping all wireless features
F6 	Mutes/unmutes the audio output.		

2. Using your computer

Powering ON/OFF

Powering on your computer



1. If this is the first time you turn this computer on, connect the AC adapter and fully charge the battery.

2. Press the power button (normally 1 to 2 seconds) until you see the power indicator lights up in blue.



Powering on for the first time

The laptop will require you to do the initial setup, which including:

- Activate your Windows 10
- Sign in to or create your Microsoft account
- Setup a wireless connection and more

Please follow the instruction to complete the initial setup.

Powering off your computer

Save all your data before powering your computer off.

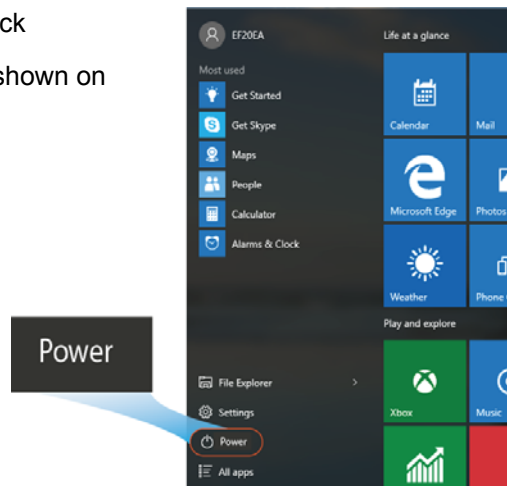
To power off your system, following the steps below:

A. By Start menu

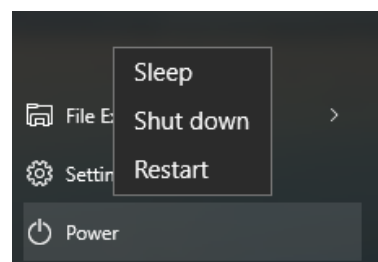
1. Click the Windows icon in the low-left corner of the Desktop. Or, press on the Windows key in the keyboard.



2. In the Start menu, click <Power> option, as shown on the right,

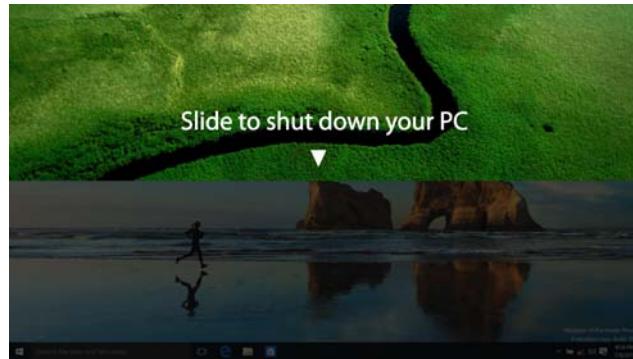


3. Select <Shut down> from the power option menu, as shown on the right.



B. Using the power button

Press and hold the power button for at least four seconds, and you will see an instruction appear in the middle of the screen, which is as shown below.



Drag the upper image downward to the bottom of the screen or simply press the spacebar of the keyboard, and the system will power off itself.

In here, if you don't want to power off your system, just press any key (but not the spacebar) on the keyboard.

Putting your computer into sleep mode

When you will be away from your computer for a short time, put the computer to sleep.

Do one of the following:

- Close the display panel
- Press Fn + F1.
- Press the power button briefly one time.
- Open the Start menu and then select <Power> → <Sleep>.

Waking up your computer

Note: It is recommended that you put your computer to sleep before you move it. Moving your computer while the hard disk is spinning can sometimes damage the hard disk, causing loss of data.

Do one of the following:

A: Pressing the power button briefly one time.

B: Pressing any key on the keyboard, tapping the touchpad, or opening the display panel.

Basic touchpad operations

The touchpad works like a traditional mouse. With it, you can move the cursor and perform left-click, right-click, double-click actions. However, the actual available actions are application dependent.

Action name	Explanation
Left-clicking (or Clicking)	Tap once on the touchpad surface or press once on the low-left corner of the touchpad.
Right-clicking	Press once on the low-right corner of the touchpad.
Dragging	Press and continue to hold down the left corner and then move (drag) your finger across the touchpad surface.

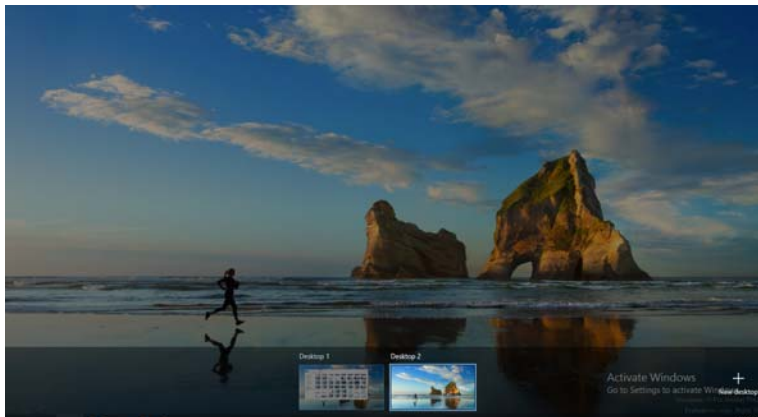
3. Windows Interface

Desktop and virtual desktop experience

The Desktop screen is as shown below and natively provides virtual desktop feature.



To launch the feature you can click the app icon as shown on the left or just press Window key and TAB key of your keyboard in the same time.



Taskbar

The black bar on the bottom of the desktop is called Taskbar. It provides several key features and they are:

- Start menu
- Search box
- App shortcuts area
- Notification area

Start menu



To open the Start menu, you can either click on the windows icon (which is also known as Start button) located at the left end of the taskbar or press once on the windows

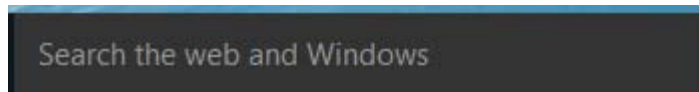
key of the keyboard. And the Start menu will appear, as shown below



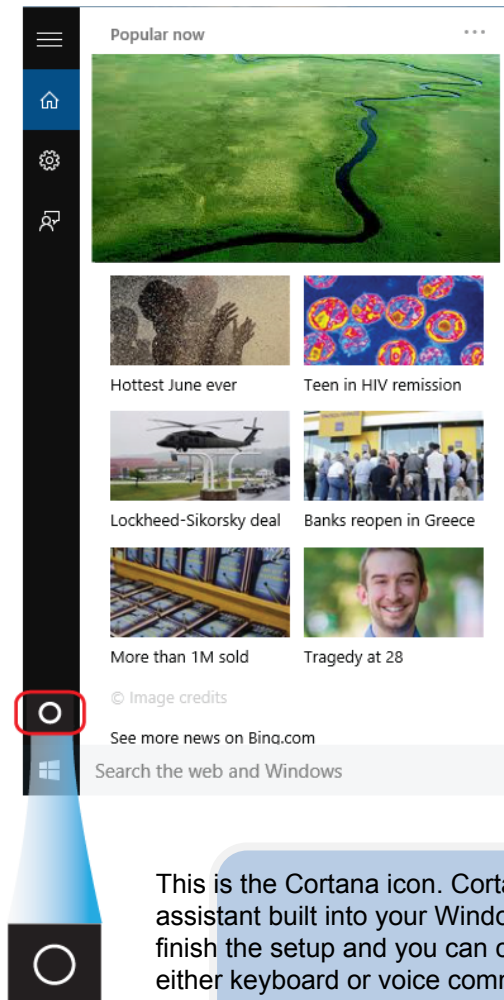
For how to setup this menu, please refer to page17.

Search box - Cortana

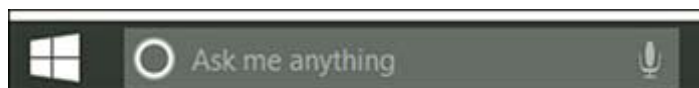
Next to the Start menu is the search box, as shown below.



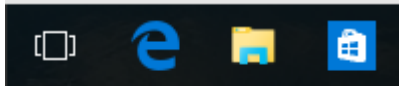
When you select this box, a window will pop out as shown below.



After you setup the Cortana settings, the search box will look like



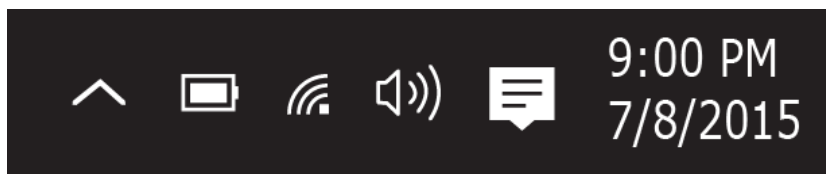
App shortcuts area



In this area, you can put the shortcuts of your frequently used apps. For how to arrange this area, please refer to p.17

Notification area

The right part of the taskbar holds several icons that show you the status of your laptop, as shown below.



This is an area called Notification Area, where

	Click here to show more status icons.
	Shows you the current battery status.(For detail, please refer to page 23)
	Shows you the status of your wireless network connection.
	Click here to show the unread notifications.

4. Setup and Connection

Settings screen

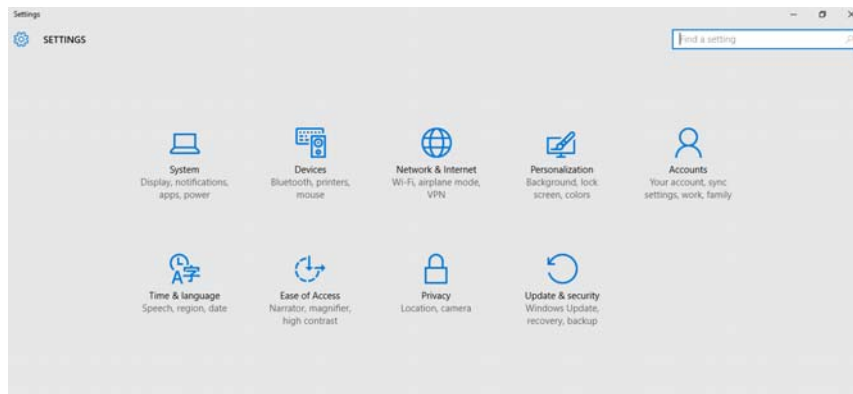
To access to the Settings screen:

1. Click the Windows icon in the low-left corner of the Desktop.
Or, press on the Windows key in the keyboard.



2. Select <Settings>.

This will open the Settings screen, as shown below



Windows Activation

To use all features of your Windows laptop, you may need to activate your Windows system. Follow the following steps to register and activate your Windows.

1. Open the Start menu and click <Settings >.
2. Click <Update & security>
3. Select <Activate>.
4. Follow the instructions to activate your windows.

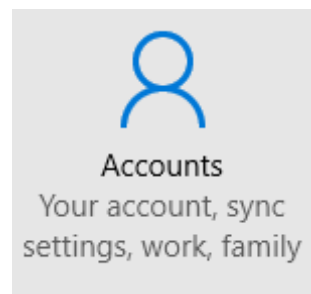


Setup Your Microsoft Account

To share files or settings with other devices running Windows 10, you need to setup a Microsoft Account. Furthermore, if you want to download or purchase apps from the Microsoft Store, such Microsoft Account is required.

To setup your Microsoft account

1. Open the Settings screen and select <Accounts> .
2. Select <Your account >
3. Select <Sign in with a Microsoft account instead>.
4. Follow the instruction to register your account information.



Replacing Desktop with Start screen

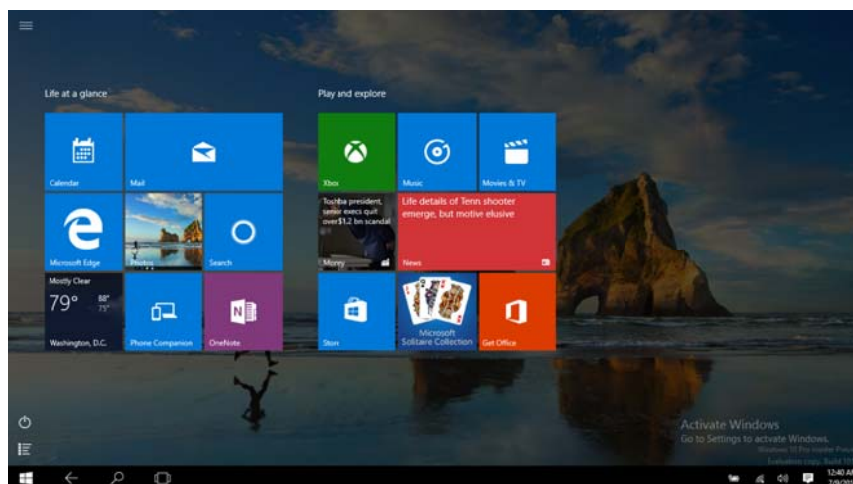


Personalization
Background, lock
screen, colors

If you are more familiar with the interface similar to the Start screen introduced in Windows 8 series, you can set your laptop to show the Start screen instead of the Desktop every time when you power on your laptop. To do so, do the following steps:

1. Open the Settings screen.
2. Select <Personalization>.
3. In the Personalization screen, enable the option <Use Start full screen>

After these steps, you will see the Start screen every time you turn on your laptop, as shown below.

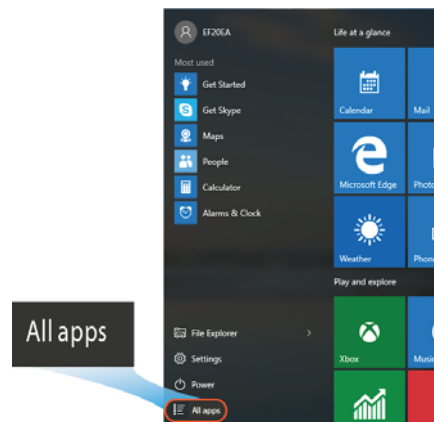


Pin and unpin your app

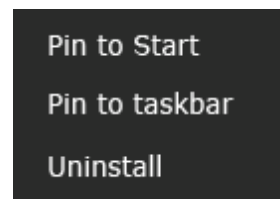
Pinning an App to Start menu or taskbar

To add an app:

1. Open the Start menu and select <All Apps> .



2. Right-click on the app that you want to appear on your Start menu or taskbar, and an option menu appears.



3. Click <Pin to Start> or <Pin to taskbar> to add the app to your Start menu or taskbar .

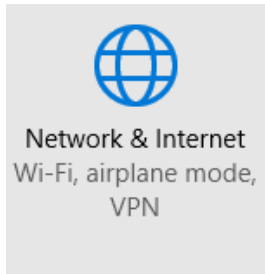
Removing an App

To remove an app:

1. Right click the app that you want to remove from your Start menu or taskbar.
2. Click <Unpin from Start> or <Unpin from taskbar> to remove it from your Start menu or taskbar.

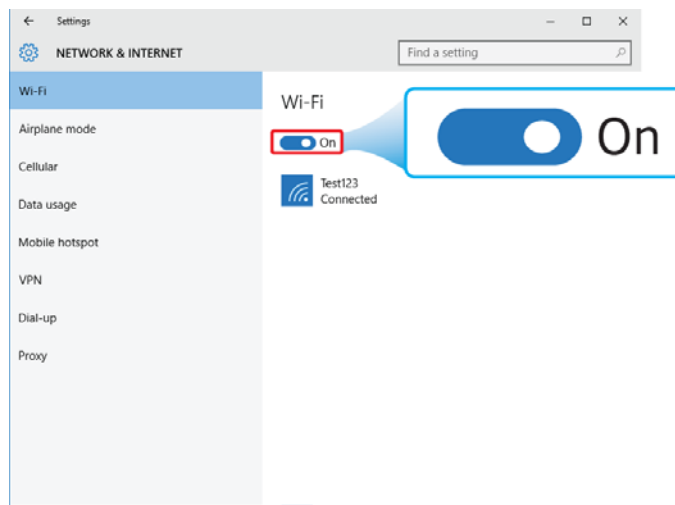
Wireless LAN

Enabling wireless connection



1. Open Settings menu and select <Network & Internet>.

2. Select <Wi-Fi> and set the function to ON, as shown below



3. Make sure you have switched the Airplane mode off. To confirm that Airplane mode is disabled, go to the desktop and check the notification area. If you see an airplane icon displayed on the lower right, press Fn+F10 to disable the Airplane mode.

Connecting to a wireless LAN

Once the wireless has been enabled, the computer automatically scans for available wireless networks and displays them in the wireless LAN network list. To connect to your desired wireless

network, click the network's name in the list, and then click Connect.

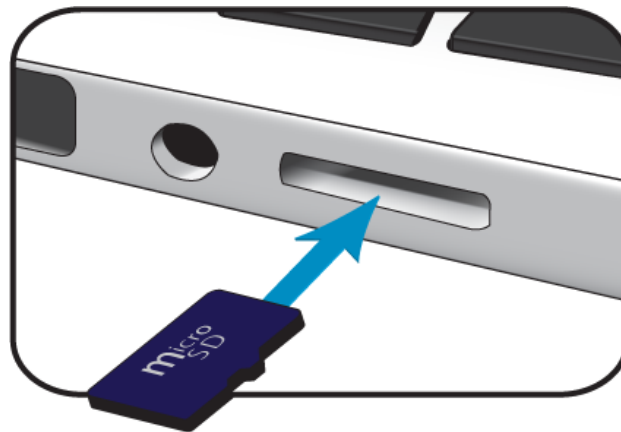
Note: Some networks require a network security key or password for connection. If necessary, ask the network administrator or the Internet service provider (ISP) for the required information.

Micro SD Card Slot

You can utilize your micro SD cards as removable disks and conveniently exchange data with digital devices such as a digital camera, digital camcorder, MP3, etc.

To insert your micro SD card

1. Insert the micro SD card into the card slot as shown below.



2. Follow the message on the screen, and choose to open and view files.
3. A Windows Explorer runs and shows all the folders and files in the micro SD cards, and you can save, move and delete data as you are handling a storage device.

To remove your memory card

1. Press the card and release. The card will pop up.
2. Pull the card out by holding the end of the card.

Connecting an External Device

Connecting to the USB port

Your computer comes with one USB 2.0 port and one USB 3.0 port compatible with USB devices.

Once you plug a USB device into a USB port on your computer, Windows automatically loads a driver for that device. After the driver has been loaded one time, you can disconnect and reconnect the same device without performing any additional steps.

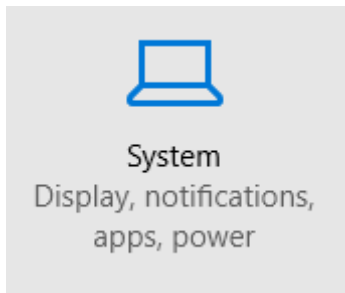
Note: If Windows requires you to install the driver before connecting, check the documentation provided by the device's manufacturer before connecting the device.



To disconnect a USB storage device, make sure you click the Safely Remove Hardware icon (as shown on the left) in the notification area of the taskbar to remove the device before disconnecting.

Note: If your USB device uses a power cord, connect the device to a power source before connecting it.

Connecting to the HDMI port

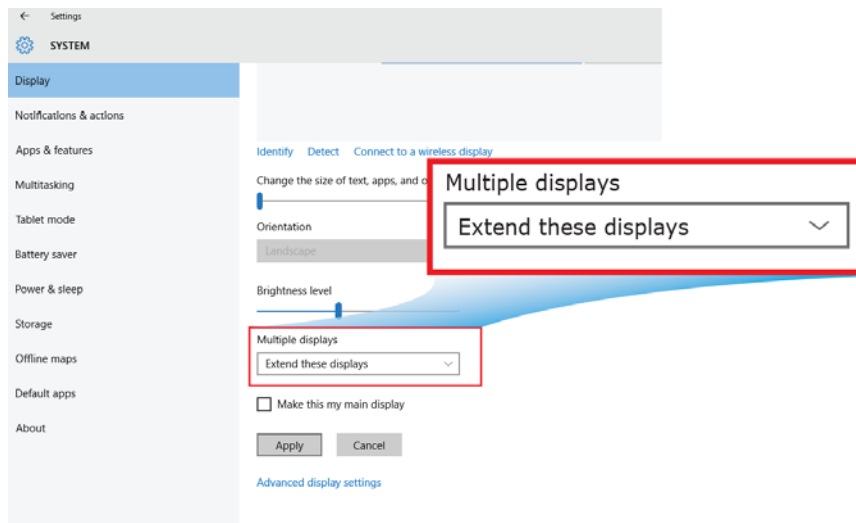


You can connect an external display device such as a monitor, TV, projector, etc., only if such device has a HDMI port. By doing so, you have a wider view when you give a presentation or watch a video or movie.

1. Power off the external device.
2. Locate the HDMI port on your computer.
3. Connect one end of your HDMI cable to the port, and the other end to the HDMI port on the external device.
4. Power on the external device.

When connecting a TV, you may need to configure your TV to external device mode.

5. Open the Settings screen, select <System>and then <Display>.
6. Click <Multiple displays> to open the drop-down list.



7. From the list, select your desired monitor mode.
8. Click <Apply> and confirm your setting.

5. Battery

Charging your battery



1. Plug the adapter into the DC-in, which you can find on the left side of your laptop.

2. Plug the adapter into a wall-socket.



3. You shall see the battery indicator starts blinking in blue.

4. When the battery is fully charged, the battery indicator will stop blinking and stays solid in blue

While system is off, it takes around 3 hours to fully charge the battery.

After fully charged, the battery Life reaches 11hrs on full HD video playback

Note: If the remaining power in your battery capacity is 90% or above, plugging the adapter will not fully charge your battery.

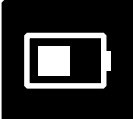
Inspecting your battery status

By inspecting the taskbar

In Desktop, move the cursor to the battery icon in the taskbar. A pop-up dialog box appears and shows you the remaining battery percentage, as shown below.



The battery icon reveals the status of your battery, which described as below.

	Battery is fully charged
	Battery is starting to drain
	Battery is about to completely drain, and you should stop using your computer and charge it at once.
	Battery is being charged.

By inspecting the battery indicator

When your laptop is not powered by the adapter, the color of the battery indicator shows you the approximate status of your battery.

Battery Low : Blinking in red

Battery High: Blue and Red LED off.

A battery is an expendable supply, so when using it over a long time, the capacity/battery life is shortened. If the battery life is reduced to under half of its initial time, we recommend purchasing a new battery.

When not using the battery for a long time, store the battery after charging it to 30-40% of its capacity. This extends the battery life time.

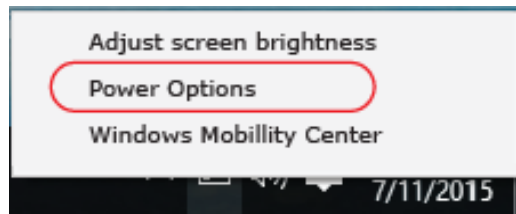
6. Windows Help and Troubleshooting

Settings for Sleep mode

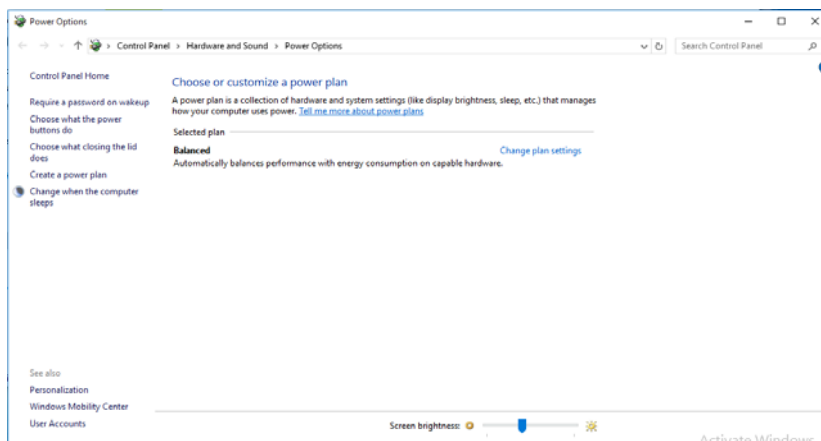
Your laptop is delivered with the factory settings. In the factory settings, for example, the idle time before going into the sleep mode is set as follows:

- 4 minutes (for Battery mode) or
- 10 minutes (for Plugged-in mode).

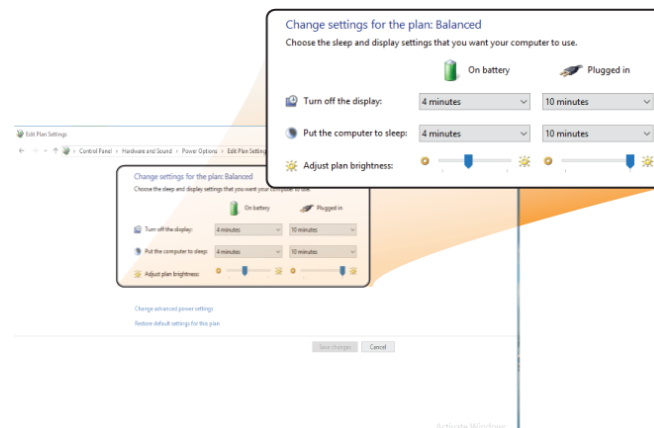
If you want to change the settings, just right click on the battery level icon that can be found on the taskbar, and select <Power Options>



The setting page will be open as shown below..



This page provides an option for you to edit your Power Plan settings. To do this, simply click on the <When the computer sleeps>. Then, the editing page will be displayed as shown below



After setting the waiting time, you need to press <Save changes> to confirm your changes.

Troubleshooting

This section describes some common problems and suggested solutions, and ways to recover your computer from a crash.

Be aware that the problems and solutions described here are meant only as a guide. They are not definitive problem solving techniques. For certain problems, you might need help from your reseller or your service provider.

When you observe a problem, stop operation immediately, because taking further action might result in data loss or damage. Take a note of what the system is doing and what actions you performed before the problem occurred. Provide detailed information to your service provider for quicker problem resolution.

For about any problem, follow these steps:

1. Restart your laptop.
2. Check your Wi-Fi connection.
3. Reset your Wi-Fi connection.
4. Plug your laptop to a wall socket to charge it for at least one hour.

Screen problems

When I turn on the computer, nothing appears on the screen.

- If the screen is blank, make sure that:
 - The AC adapter is connected to the computer and the power cord is plugged into a working electrical outlet.
 - The computer power is on. (Press the power button 6 seconds to force the power off, and power it on again.)
- If these items are properly set, and the screen remains blank, have the computer serviced.

My screen goes blank while the computer is on.

- Your laptop is in its sleep mode. Do one of the following to resume from sleep mode:
 - Press any key on the keyboard for 2 to 3 seconds.
 - Press the power button.
 - Press the windows key button.

Sleep problems

The critical low-battery error message appears, and the computer turns off	• The battery power is getting low. Connect the AC adapter to the computer.
The computer enters sleep mode immediately after Power-on.	• Make sure that the battery is charged. - The operating temperature may be too hot. Move to a cooler environment and try to wake the computer.
The computer does not return from sleep mode and the computer does not work.	• If your computer is in sleep mode, connect the AC adapter to the computer, then press the key button or the power button. • If your computer is powered-off, connect the AC adapter to the computer, then press the power button to resume operation.
Display problem	
The screen is blank.	• Do the following: - If you are using the AC adapter, or using the battery, and the battery status indicator is on, press Fn+F4 to make the screen brighter. - Press the power button to resume from sleep mode. - If the problem persists, follow the solution in the next problem "The screen is unreadable or distorted."

The screen is unreadable or distorted.	• Make sure that: - The screen resolution and color quality are correctly set. - The monitor type is correct.
Incorrect characters appear on the screen.	• Are the operating system or programs installed correctly? If they are installed and configured correctly, have the computer serviced.
Sound problems	
No sound can be heard from the speaker even when the volume is turned up.	• Make sure that: - The Mute function is off. - The combo audio jack is not being used. - Speakers are selected as the playback device.
Other problems	
Your computer does not respond.	• To turn off your computer, press and hold the power button for 6 seconds or more. If the computer still does not respond, remove the AC adapter. • Your computer might lock when it enters sleep mode during a communication operation. Disable the sleep timer when you are working on the network.
The connected external device does not work.	• Do not connect or disconnect any external device cables other than USB while the computer power is on. Otherwise, you might damage your computer. • When using a high power consumption

	external device such as an external USB optical disk drive, use an external device power adapter. Otherwise, the device may not be recognized.
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7. Specification

Processor	■ Intel® Cherry Trail Type3 ■ Z8300
Memory	■ 2 GB ■ DDR3L one channel, 1600MT/s (max.)
Storage	■ EMMC Module ● 32GB/ 64GB EMMC v4.51 ● eMMC Controller ■ HDD (WD/TOSHIBA) ● SATA III, 7mm, 320G/500G ● HDD Boot
Dimension	■ 305 x 202 x 19.9 mm
Weight	■ 1.3 kg
Wireless	■ 802.11a/b/g/n dual-band radio ■ Bluetooth V4.0 and Low Energy (BLE) support
LCD	■ 11.6"TN 3.6mm 1366 x 768 (w/o Touch)
Cameras	■ Front facing camera: VGA 0.3M,D-MIC*2 (default)/ D-MIC*1 (optional)
Battery	■ 2cell ,5000mAh with 2S1P ■ Model No.: EF20-2S5000-G1A1 EF20-2S5000-S4L8

Input/Output	■ 1 x Mini DC-in jack ■ 1 x USB 2.0 port ■ 1 x USB 3.0 port - Supports USB Charger Function ■ 1x HDMI port ■ 1x Micro SD Card slot ■ 1 x combo Audio jack ■ 1x Micro SIM Card slot (w/ 3G Optional)
Speaker	Speaker : ■ Build-in 2 Speakers (1.1 W)
Language	■ English ■ Spanish ■ Portuguese ■ Arabic ■ Turkish ■ Russian ■ Simplified Chinese ■ Thai ■ Greek ■ Hungarian ■ Traditional Chinese ■ German ■ Hebrew ■ Italian ■ Latin Spanish ■ Brazil Portuguese ■ French

AC adapter	■ DC Output: 12V/24W ■ Input Voltage: 100–240VAC Nominal ■ Input Frequency: 50–60Hz. ■ Model No.: ● Asian WA-24Q12Fy, WA-24Q12R (y=A,B,C,G,K,N, S, T, or U) ● Kuantech KSASB024xxxxyyyVz (xxx=090-240, yyyy=0001-0250, z=A, C, E, I, K, O, R, B, or U)	
Certification	EMC	■ CE ■ FCC
	RF	■ FCC&SAR / R&TTE ■ NCC
	Safety& Environment	■ UL / CB ■ CCC ■ CEL ■ WEEE ■ RoHS
	Others	■ HDMI ■ Energy star 6.1 (Design ready) ■ Erp Lot 6 (Design ready) ■ Drop test 50 cm ■ HDCP (Design Ready)