



# **Notebook PC**

E-Manual



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## **About this manual**

This manual provides information about the hardware and software features of your Notebook PC, organized through the following chapters:

#### **Chapter 1: Hardware Setup**

This chapter details the hardware components of your Notebook PC.

#### Chapter 2: Using your Notebook PC

This chapter shows you how to use the different parts of your Notebook PC.

#### Chapter 3: Working with Windows® 8

This chapter provides an overview of using Windows® 8 in your Notebook PC.

#### **Chapter 4: ASUS Apps**

This chapter features selected ASUS apps included with your Notebook PC's Windows® 8 operating system.

#### **Chapter 5: Power-on Self-test (POST)**

This chapter shows you how to use POST to change the settings of your Notebook PC.

#### **Chapter 6: Module Slot Features**

This chapter guides you through the process of installing compatible drives into the module slot of your Notebook PC.

#### **Tips and FAQs**

This section presents some recommended tips, hardware FAQs, and software FAQs you can refer to for maintaining and fixing common issues with your Notebook PC.

## **Appendices**

This section includes notices and safety statements for your Notebook PC.

#### Conventions used in this manual

To highlight key information in this manual, some text are presented as follows:

**IMPORTANT!** This message contains vital information that must be followed to complete a task.

**NOTE:** This message contains additional information and tips that can help complete tasks.

**WARNING!** This message contains important information that must be followed to keep you safe while performing tasks and prevent damage to your Notebook PC's data and components.

#### Icons

The icons below indicate the devices you can use for completing a series of tasks or procedures on your Notebook PC.



= Use the touchpad.



= Use the keyboard.

## **Typography**

**Bold** = This indicates a menu or an item that must be selected.

*Italic* = This indicates sections that you can refer to in this manual.

## Safety precautions

## **Using your Notebook PC**



This Notebook PC should only be used in environments with ambient temperatures between 5°C (41°F) and 35°C (95°F).



Refer to the rating label on the bottom of your Notebook PC and ensure that your power adapter complies with this rating.



Do not leave your Notebook PC on your lap or near any part of your body to prevent discomfort or injury from heat exposure.



Do not use damaged power cords, accessories, and other peripherals with your Notebook PC.



While powered on, ensure that you do not carry or cover your Notebook PC with any materials that can reduce air circulation.



Do not place your Notebook PC on uneven or unstable work surfaces.



You can send your Notebook PC through x-ray machines (used on items placed on conveyor belts), but do not expose them to magnetic detectors and wands.



Contact your airline provider to learn about related inflight services that can be used and restrictions that must be followed when using your Notebook PC in-flight.

## **Caring for your Notebook PC**



Disconnect the AC power and remove the battery pack (if applicable) before cleaning your Notebook PC. Use a clean cellulose sponge or chamois cloth dampened with a solution of nonabrasive detergent and a few drops of warm water. Remove any extra moisture from your Notebook PC using a dry cloth.



Do not use strong solvents such as thinners, benzene, or other chemicals on or near your Notebook PC.



Do not place objects on top of your Notebook PC.



Do not expose your Notebook PC to strong magnetic or electrical fields.



Do not use or expose your Notebook PC near liquids, rain, or moisture.



Do not expose your Notebook PC to dusty environments.



Do not use your Notebook PC near gas leaks.

## **Proper disposal**



Do not throw your Notebook PC in municipal waste. This product has been designed to enable proper reuse of parts and recycling. The symbol of the crossed out wheeled bin indicates that the product (electrical, electronic equipment and mercury-containing button cell battery) should not be placed in municipal waste. Check local regulations for disposal of electronic products.



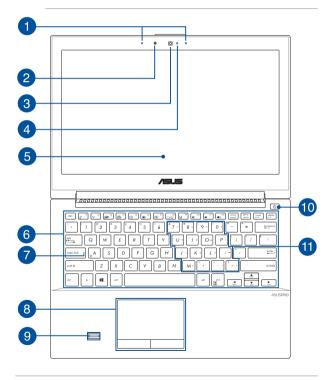
Do not throw the battery in municipal waste. The symbol of the crossed out wheeled bin indicates that the battery should not be placed in municipal waste.

# Chapter 1: Hardware Setup

## **Getting to know your Notebook PC**

## **Top View**

**NOTE:** The keyboard's layout may vary per region or country. The Notebook view may also vary in appearance depending on the Notebook PC model



Array microphones

The array microphones feature echo canceling, noise suppression, and beam forming functions for better voice recognition and audio recording.

Ambient light sensor

The ambient light sensor detects the amount of ambient light in your environment. It allows the system to automatically adjust the brightness of the display depending on the ambient light condition.

Camera

The built-in camera allows you to take pictures or record videos using your Notebook PC.

Camera indicator
 The camera indicator lights up when the built-in camera is in use.

Display panel

This high-definition display panel provides excellent viewing features for photos, videos, and other multimedia files on your Notebook PC.

6 Keyboard

The keyboard provides full-sized QWERTY keys with a comfortable travel depth for typing. It also enables you to use the function keys, allows quick access to Windows®, and controls other multimedia functions

**NOTE:** The keyboard layout differs by model or territory.

Capital lock indicator

This indicator lights up when the capital lock function is activated. Using capital lock allows you to type capitalized letters (such as A, B, C) using your Notebook PC's keyboard.

8 Touchpad with buttons

The touchpad allows the use of multi-gestures to navigate onscreen, providing an intuitive user experience. It also simulates the functions of a regular mouse.

**NOTE:** For more details, refer to the *Using touchpad gestures* section in this manual

Fingerprint sensor

This built-in fingerprint sensor captures your fingerprint and uses it as biometric authentication for logging on to your Notebook PC's system and other programs inside Windows® 8.1.

**NOTE:** For more details, refer to the *ASUS Fingerprint* section in this manual.

#### Power button

Press the power button to turn your Notebook PC on or off. You can also use the power button to put your Notebook PC to sleep or hibernate mode and wake it up from sleep or hibernate mode.

In the event that your Notebook PC becomes unresponsive, press and hold the power button for about four (4) seconds until your Notebook PC shuts down.

## Keyboard as numeric keypad

These set of keys toggles between their actual key functions and as numeric keys.

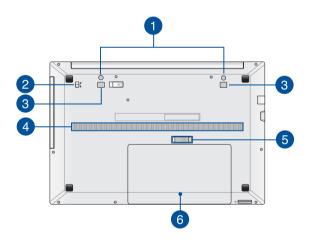
**NOTE:** For more details, refer to the *Keyboard as numeric keypad* section in this manual.

#### **Bottom**

**NOTE:** The bottom side may vary in appearance depending on model.

**WARNING!** The bottom of the Notebook PC can get warm to hot while in use or while charging the battery pack. When working on your Notebook PC, do not place it on surfaces that can block the vents.

**IMPORTANT!** Battery time varies by usage and by the specifications for this Notebook PC. The battery pack cannot be disassembled.



Docking station pin slots

Insert the pins on your docking station into these slots to securely attach it to your Notebook PC.

Spring module lock

This spring module lock automatically locks the removable module in place once it is inserted into the module slot.

**IMPORTANT!** This lock should be held in an unlocked position when removing the module.

Docking station hook slots

Align the hooks on your docking station over these slots then gently insert the hooks to securely attach the docking station to your Notebook PC.

Air vents

The air vents allow cool air to enter and warm air to exit the Notebook PC.

**WARNING!** Ensure that paper, books, clothing, cables, or other objects do not block any of the air vents or else overheating may occur.

Spring battery lock

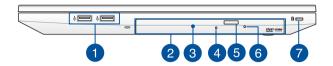
The spring battery lock automatically locks the battery pack in place once it is inserted into the battery slot.

**IMPORTANT!** This lock should be held in an unlocked position when removing the battery pack.

6 Battery pack

The battery pack is automatically charged when your Notebook PC is connected to a power source. When charged, the battery pack supplies power to your Notebook PC.

## **Right Side**



USB 2.0 ports

These USB (Universal Serial Bus) ports are compatible with USB 2.0 or USB 1.1 devices such as keyboards, pointing devices, flash disk drives, external HDDs, speakers, cameras and printers.

**Module slot** 

This slot allows you to attach an optical disc drive, lithium-ion battery pack, or a compatible 2.5-inch 7mm hard disk drive (HDD) into your Notebook PC.

**NOTE:** For more details, refer to *Chapter 6: Module Slot Features* in this manual.

Optical disc drive module\*

Your Notebook PC's optical disc drive is a removable module that may support several disc formats such as CDs, DVDs, recordable discs, or rewritable discs.

**NOTE:** For more details, refer to the *Using the optical drive* section in this manual.

Optical drive indicator\*

This indicator lights up when the optical drive electronic eject button is pressed while the Notebook PC is powered on. This indicator also lights up when the optical drive is currently reading data from or writing data to a disc.

- Optical disc drive eject button\*
  Press this button to eject the optical drive tray.
- 6 Manual eject hole\*

  The manual eject hole is used to eject the drive tray in case the electronic eject button does not work.

**WARNING!** Use the manual eject hole only when the electronic eject button does not work.

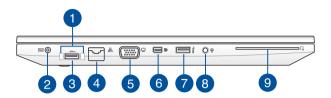
**NOTE:** For more details, refer to the *Using the optical drive* section in this manual

**7** Kensington® security slot

The Kensington® security slot allows you to secure your Notebook PC using Kensington® compatible Notebook PC security products.

<sup>\*</sup> on selected models only

#### **Left Side**



- Docking station pin guide
  Insert the guide pins of your docking station into these pin
  guides to securely connect it with your Notebook PC.
- Power (DC) input port

  Insert the bundled power adapter into this port to charge the battery pack and supply power to your Notebook PC.

**WARNING!** The adapter may become warm to hot while in use. Do not cover the adapter and keep it away from your body while it is connected to a power source.

**IMPORTANT!** Use only the bundled power adapter to charge the battery pack and supply power to your Notebook PC.

A LAN port

Insert the network cable into this port to connect to a local area network.

5 VGA port

This port allows you to connect your Notebook PC to an external display.

6 Mini DisplayPort
Use a VGA adapter to connect your Notebook PC to a
DisplayPort, VGA, DVI, or HDMI external display.

USB 3.0 port
This USB 3.0 (Universal Serial Bus 3.0) port provides a transfer rate of up to 5 Gbit/s and is backward compatible to USB 2.0.

B Headphone output/microphone input combo jack port
This port allows you to connect your Notebook PC to amplified speakers or headphones. You can also use this port to connect your Notebook PC to an external microphone.

Smart card reader This Notebook PC has a built-in memory card reader slot that supports smart card formats.

#### **Front Side**



Status indicators

The status indicators help identify the current hardware status of your Notebook PC.



#### ○ Power indicator

The power indicator lights up when the Notebook PC is turned on and blinks slowly when the Notebook PC is in sleep mode.

#### **Two-color battery charge indicator**

The two-color LED provides a visual indication of the battery's charge status. Refer to the following table for details:

Color	Status	
Solid Green	The Notebook PC is plugged to a power source and the battery power is between 95% and 100%.	
Solid Orange	The Notebook PC is plugged to a power source, charging its battery, and the battery power is less than 95%.	
Blinking Orange	The Notebook PC is running on battery mode and the battery power is less than 10%.	
Lights off	The Notebook PC is running on battery mode and the battery power is between 10% to 100%.	

## Drive activity indicator

This indicator lights up when your Notebook PC is accessing the internal storage drives.

#### (•) Bluetooth / Wireless indicator

This indicator lights up when your Notebook PC's wireless function (Bluetooth or Wi-Fi) is enabled.



### **Memory card reader**

This Notebook PC has a built-in memory card reader slot that supports MMC and SD card formats.

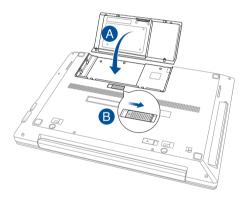
# Chapter 2: Using your Notebook PC

# **Getting started**

**NOTE:** If your Notebook PC does not have its battery pack installed, use the following procedures for installation.

## Install the battery pack.

- A. Align and insert the battery pack into the battery compartment.
- B. Move the spring lock's latch as shown below, to lock the battery pack in place.



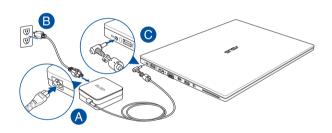
## **Charge your Notebook PC.**

- A. Connect the AC power cord to the AC/DC adapter.
- B. Plug the AC power adapter into a 100V~240V power source.
- Connect the DC power connector into your Notebook PC's power (DC) input.



Charge the Notebook PC for **3 hours** before using it in battery mode for the first time.

**NOTE:** The power adapter may vary in appearance, depending on models and your region.



#### IMPORTANT!

Power adapter information:

- Input voltage: 100-240Vac
- Input frequency: 50-60Hz
- Rating output current: 4.74A (90W)
- Rating output voltage: 19V

#### IMPORTANT!

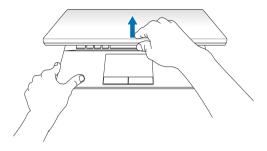
- Locate the input/output rating label on your Notebook PC and ensure that it matches the input/output rating information on your power adapter. Some Notebook PC models may have multiple rating output currents based on the available SKU.
- Ensure that your Notebook PC is connected to the power adapter before turning it on for the first time. We strongly recommend that you use a grounded wall socket while using your Notebook PC on power adapter mode.
- The socket outlet must be easily accessible and near your Notebook PC.
- To disconnect your Notebook PC from its main power supply, unplug your Notebook PC from the power socket.

#### WARNING!

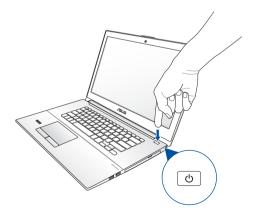
Read the following precautions for your Notebook PC's battery.

- The battery used in this device may present a risk of fire or chemical burn if removed or disassembled.
- · Follow the warning labels for your personal safety.
- · Risk of explosion if battery is replaced by an incorrect type.
- Do not dispose of in fire.
- · Never attempt to short-circuit your Notebook PC's battery.
- Never attempt to dissamble and reassemble the battery.
- · Discontinue usage if leakage is found.
- The battery and its components must be recycled or disposed of properly.
- Keep the battery and other small components away from children.

# Lift to open the display panel.



## Press the power button.



# **Gestures for the touchpad**

Gestures allow you to launch programs and access the settings of your Notebook PC. Refer to the following illustrations when using hand gestures on your touchpad.

## Moving the pointer using the touchpad

You can tap or click anywhere on the touchpad to activate its pointer, then slide your finger on the touchpad to move the pointer onscreen.

#### Slide horizontally



#### Slide vertically

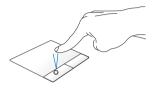


#### Slide diagonally



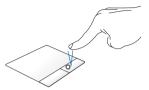
## **One-finger gestures**

#### Left-click



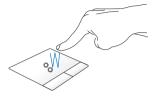
- In the Start screen, click an app to launch it.
- In Desktop mode, doubleclick an application to launch it.

## Right-click



- In the Start screen, click an app to select it and launch the settings bar. You can also press this button to launch the All Apps bar.
- In Desktop mode, use this button to open the right-

#### Tap/Double tap



- In the Start screen, tap an app to launch it.
- In Desktop mode, double-tap an application to launch it.

#### Drag and drop



Double-tap an item, then slide the same finger without lifting it off the touchpad. To drop the item to its new location, lift your finger from the touchpad.

#### Top edge swipe



- In the Start screen, swipe from the top edge to launch the All Apps bar.
- In a running app, swipe from the top edge to view its menu.

### Left edge swipe



## Right edge swipe



Swipe from the left edge to shuffle Swipe the right edge to launch the your running apps. **Charm bar.** 

## **Two-finger gestures**

#### Two-finger scroll (up/down)



Slide two fingers to scroll up or down.

#### Two-finger scroll (left/right)



Slide two fingers to scroll left or right.

#### Zoom out



Bring together your two fingers on Spread apart your two fingers on the touchpad.

## Zoom in



the touchpad.

#### Drag and drop



Select an item then press and hold the left button. Using your other finger, slide down the touchpad to drag and drop the item to a new location.

## **Using ASUS Smart Gesture**

The ASUS Smart Gesture app of your Notebook PC allows you to enable other touchpad gestures or disable selected gestures depending on your preference.

## **Enabling the rotate gesture**

1. From the taskbar on your Desktop, click ...



2. Double-click the ■ icon to launch the ASUS Smart Gesture app.



3. In the ASUS Smart Gesture window, tick **Rotate** 



 Click **Apply** to save the changes then **OK** to exit the ASUS Smart Gesture window.

## **Enabling the three-finger gestures**

1. From the taskbar on your Desktop, click ...



2. Double-click the ■ icon to launch the ASUS Smart Gesture app.



 In the ASUS Smart Gesture window, tick the gestures you would like to enable under Three Fingers.



 Click **Apply** to save the changes then **OK** to exit the ASUS Smart Gesture window.

## Using the rotate and three-finger gestures

#### Rotate



With one finger steady on the touchpad, rotate another finger clockwise or counterclockwise.

#### Swipe left or swipe right



Swipe three fingers left or right to navigate pages.

#### Swipe up



Swipe three fingers upward to show all running applications.

#### Swipe down



Swipe three fingers downward to show the Desktop mode.

## Using the keyboard

## **Function keys**

The function keys on your Notebook PC's keyboard can trigger the following commands:



**NOTE:** When enabled, the **Airplane mode** disables all wireless connectivity.



**NOTE:** Ensure that the second display is connected to your Notebook PC.

 $f_n$  + g Enables or disables the touchpad  $f_n$  + g Turns the speaker on or off  $f_n$  + g Turns the speaker volume down  $f_n$  + g Turns the speaker volume up  $f_n$  + g Enables or disables the ambient light sensor

## Windows® 8.1 keys

There are two special Windows® keys on your Notebook PC's keyboard used as below:

Press this key to go back to the Start screen. If you are already in the Start screen, press this key to go back to the last app you opened.

Press this key to simulate the right-click functions.

## Keyboard as numeric keypad



This Notebook PC comes with 15 select keys that you can also use for numeric input.



Press  $f_n$  +  $\frac{logen}{logen}$  to toggle between using these keys as number keys or as their original keyboard function.

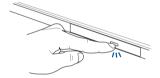
## Using the optical drive

#### NOTE:

- The actual location of the electronic eject button may vary depending on your Notebook PC model.
- The actual appearance of the Notebook PC optical drive may also vary depending on model but usage procedures remaing the same.

#### Inserting an optical disc

 While the Notebook PC is on, press the electronic eject button to partially eject the optical drive tray.



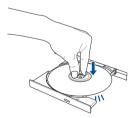
2. Gently pull out the drive tray.

**IMPORTANT!** Be careful not to touch the optical drive lens. Ensure that there are no objects that may get jammed under the drive tray.

3. Hold the disc by the edge, with its printed side up, then gently place it inside the hub.

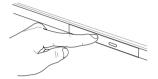


4. Push down the disc's plastic hub until it snaps onto the optical drive hub.



5. Push the drive tray gently to close the optical drive.

**NOTE:** While data is being read, it is normal to hear some spinning and vibrating in the optical drive.



#### Using the manual eject hole

The manual eject hole is located on the optical drive door and is used to eject the optical drive tray in case the electronic eject button does not work.

To manually eject the optical drive tray, insert a straightened paper clip into the manual eject hole until the drive tray opens.

**WARNING!** Use the manual eject hole only when the electronic eject button does not work.



# Chapter 3: Working with Windows® 8.1

## Starting for the first time

When you start your computer for the first time, a series of screens appear to guide you in configuring your Windows® 8.1 operating system.

To start your Notebook PC for the first time:

- Press the power button on your Notebook PC. Wait for a few minutes until the setup screen appears.
- From the setup screen, pick your region and a language to use on your Notebook PC.
- 3. Carefully read the License Terms. Select I accept.
- Follow the onscreen instructions to configure the following basic items:
  - Personalize
  - Get online
  - Settings
  - Your account
- After configuring the basic items, Windows® 8.1 proceeds to install your apps and preferred settings. Ensure that your Notebook PC is kept powered on during the setup process.
- 6. Once the setup process is complete, the Start screen appears.

## Windows® UI

Windows® 8.1 comes with a tile-based user interface (UI) which allows you to organize and easily access Windows® apps from the Start screen. It also includes the following features that you can use while working on your Notebook PC.

#### Start screen

The Start screen appears after successfully signing in to your user account. It helps organize all the applications you need in just one place.



#### Windows® Apps

These are apps pinned on the Start screen and displayed on tiled-format for easy access.

**NOTE:** Some apps require signing in to your Microsoft account before they are fully launched.

## **Hotspots**

Onscreen hotspots allow you to launch programs and access the settings of your Notebook PC. The functions in these hotspots can be activated using the touchpad.

#### Hotspots on a running app



## **Hotspots on the Start screen**



Hotspot	Action
upper left corner	Hover your mouse pointer on the upper left corner then tap/click on the recent app's thumbnail to revert back to that running app.
	If you launched more than one app, slide down to show all running apps.
lower left corner	From a running app screen:
	Hover your mouse pointer on the lower left
	corner then tap/click 🛑 to go back to the
	Start screen.
	NOTE: You can also press the Windows key on your keyboard to go back to the Start screen.
	From the Start screen:
	Hover your mouse pointer on the lower left corner then tap/click to go back to that app.

Hotspot	Action
top side	Hover your mouse pointer on the top side until it changes to a hand icon. Drag then drop the app to a new location.
	<b>NOTE:</b> This hotspot function only works on a running app or when you want to use the Snap feature. For more details, refer to the Snap feature under <i>Working with Windows® apps</i> .
upper or lower right corner	Hover your mouse pointer on the upper or lower right corner to launch the <b>Charms bar.</b>

#### Start button

Windows® 8.1 features the Start button which allows you to switch between the two most recent apps that you opened. The Start button may be accessed from the Start screen, while on Desktop mode, and on any app that is currently open onscreen.

#### Start button on the Start screen

**NOTE:** The actual color of your Start button varies depending on the display settings you chose for your Start screen.



Hover your mouse pointer over the left corner of your Start screen or any opened app to call out the Start button.

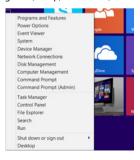
Start button on Desktop mode



#### **Context menu**

The context menu appears as a box filled with quick access to some of the programs inside Windows® 8.1 when you right-click on the Start button.

The context menu also includes the following shut down options for your Notebook PC: sign out, sleep, shut down, restart.



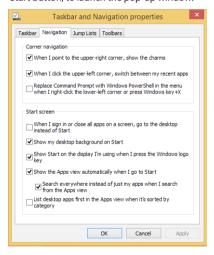
## **Customizing your Start screen**

Windows® 8.1 also enables you to customize your Start screen, allowing you to boot directly to the Desktop mode and customize the arrangement of your apps onscreen.

To customize the settings of your Start screen:



- 1. Launch the Desktop.
- 2. Right-click anywhere on the taskbar, except on the Start button, to launch the pop-up window.



- Click Properties then select the Navigation tab to tick the Navigation and Start screen options you want to use.
- 4. Tap/click **Apply** to save the new settings then exit.

## Working with Windows® apps

Use your Notebook PC's touchpad, or keyboard to launch, customize, and close apps.

## Launching apps



Position your mouse pointer over the app then left-click or tap once to launch it.



Press twice then use the arrow keys to browse

through the apps. Press to launch an app.

## **Customizing apps**

You can move, resize, unpin, or close apps from the Start screen using the following steps:

#### **Moving apps**



Double-tap on the app then drag and drop the app to a new location.

#### **Resizing apps**



Right-click on the app to activate the Customize bar, then tap/click and select an app tile size.

#### **Unpinning apps**



Right-click on the app to activate the Customize bar then tap/click.

#### **Closing apps**



- Move your mouse pointer on the top side of the launched app then wait for the pointer to change to a hand icon.
- 2. Drag then drop the app to the bottom of the screen to close it.



From the running app's screen, press



## **Accessing the Apps screen**

Aside from the apps already pinned on your Start screen, you can also open other applications through the Apps screen.

**NOTE:** Actual apps shown onscreen may vary per model. The following screenshot is for reference only.



#### **Launching the Apps screen**

Launch the Apps screen using your Notebook PC's touchpad or keyboard.



On the Start screen, click the





From the Start screen, Press



then press



#### Pinning more apps on the Start screen

You can pin more apps on the Start screen using your touchpad.



- 1. Launch the All Apps screen
- 2. Right-click on the apps that you want to add on the Start screen.
- 3. Tap/click on the icon to pin the selected apps on the Start screen.

#### **Charms bar**

The Charms bar is a toolbar that can be triggered on the right side of your screen. It consists of several tools that allow you to share applications and provide quick access for customizing the settings of your Notebook PC.



Charms bar

#### Launching the Charms bar

**NOTE:** When called out, the Charms bar initially appears as a set of white icons. The image above shows how the Charms bar looks like once activated.

Use your Notebook PC's touchpad or keyboard to launch the Charms bar.



Move your mouse pointer on the upper or lower right corner of the screen.



Press + C

#### Inside the Charms bar



#### Search

This charm allows you to look for files, applications, or programs in your Notebook PC.



#### Share

This charm allows you to share applications via social networking sites or email.



#### Start

This charm reverts the display back to the Start screen. From the Start screen, you can also use this to revert back to a recently opened app.



#### Devices

This charm allows you to access and share files with the devices attached to your Notebook PC such as an external display or printer.



#### **Settings**

This charm allows you to access the PC settings of your Notebook PC.

## **Snap feature**

The Snap feature displays two apps side-by-side, allowing you to work or switch between apps.

**IMPORTANT!** Ensure that your Notebook PC's screen resolution is set to 1366 x 768 pixels or higher before using the Snap feature.



Snap bar

#### **Using Snap**

Use your Notebook PC's touchpad or keyboard to activate and use Snap.



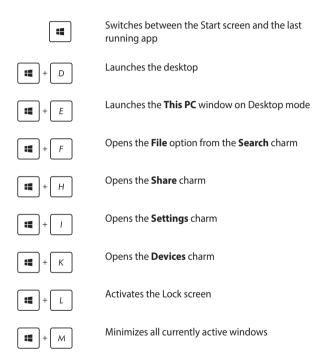
- 1. Launch the app you wish to snap.
- Hover the mouse point on the top side of your screen.
- Once the pointer changes to a hand icon, drag then drop the app to the left or right side of the display panel.
- 4. Launch another app.

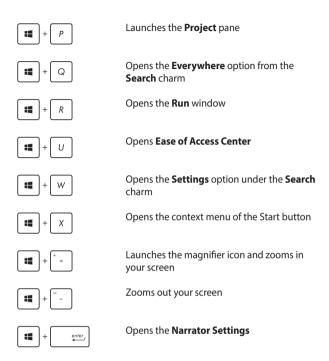


- 1. Launch the app you wish to snap.
- 2. Press and the left or right arrow key to snap the app to the left or right pane.
- 3. Launch another app. This app is automatically placed in the empty pane.

## Other keyboard shortcuts

Using the keyboard, you can also use the following shortcuts to help you launch applications and navigate Windows® 8.1.





## **Connecting to wireless networks**

#### Wi-Fi

Access emails, surf the Internet, and share applications via social networking sites using your Notebook PC's Wi-Fi connection.

**IMPORTANT!** The **Airplane mode** disables this feature. Ensure that **Airplane mode** is turned off before enabling the Wi-Fi connection of your Notebook PC

#### **Enabling Wi-Fi**

Activate Wi-Fi in your Notebook PC using the following steps on your touchpad.



- 1. Launch the Charms bar.
- 2. Tap/click and tap/click
- Select an access point from the list of available Wi-Fi connections.
- 4. Tap/click **Connect** to start the network connection.

**NOTE:** You may be prompted to enter a security key to activate the Wi-Fi connection.

 If you want to enable sharing between your Notebook PC and other wireless-enabled systems, tap/click Yes. Tap/click No if you do not want to enable the sharing function.

#### **Bluetooth**

Use Bluetooth to facilitate wireless data transfers with other Bluetoothenabled devices.

**IMPORTANT!** The **Airplane mode** disables this feature. Ensure that **Airplane mode** is turned off before enabling the Bluetooth connection of your Notebook PC.

#### Pairing with other Bluetooth-enabled devices

You need to pair your Notebook PC with other Bluetooth-enabled devices to enable data transfers. To do this, use your touchpad as follows:



- Launch the Charms bar.
- 2. Tap/click then tap/click Change PC Settings.
- Under PC Settings, select Devices then tap/click Add a Device to search for Bluetooth-enabled devices.
- Select a device from the list. Compare the passcode on your Notebook PC with the passcode sent to your chosen device. If they are the same, tap/click Yes to successfully pair your Notebook PC with the device.

**NOTE:** For some bluetooth-enabled devices, you may be prompted to key in the passcode of your Notebook PC.

### Airplane mode

The **Airplane mode** disables wireless communication, allowing you to use your Notebook PC safely while in-flight.

#### **Turning Airplane mode on**



- Launch the Charms bar.
- 2. Tap/click and tap/click Available
- 3. Move the slider to the right to turn the Airplane mode on.



Press  $f_n$  +  $\frac{f_2}{f_1}$ 

#### **Turning Airplane mode off**



- 1. Launch the Charms bar.
- 2. Tap/click strings and tap/click Airplane mode
- Move the slider to the left to turn the Airplane mode off.



Press  $f_n$  +  $\frac{f_2}{(q)}$ .

**NOTE:** Contact your airline provider to learn about related inflight services that can be used and restrictions that must be followed when using your Notebook PC in-flight.

## **Connecting to wired networks**

You can also connect to wired networks, such as local area networks and broadband Internet connection, using your Notebook PC's LAN port.

**NOTE:** Contact your Internet Service Provider (ISP) for details or your network administrator for assistance in setting up your Internet connection.

To configure your settings, refer to the following procedures.

**IMPORTANT!** Ensure that a network cable is connected between your Notebook PC's LAN port and a local area network before performing the following actions.

## Configuring a dynamic IP/PPPoE network connection



- 1. Launch **Desktop.**
- From the Windows<sup>\*</sup> taskbar, right-click the network icon then tap/click Open Network and Sharing Center.
- In the Network and Sharing Center window, tap/ click Change adapter settings.
- Right-click on your LAN then select Properties.
- Tap/click Internet Protocol Version 4(TCP/IPv4) then tap/click Properties.

 Tap/click Obtain an IP address automatically then tap/click OK.

**NOTE:** Proceed to the next steps if you are using PPPoE connection.

- Return to the Network and Sharing Center window then tap/click Set up a new connection or network.
- 8. Select **Connect to the Internet** then tap/click **Next**.
- 9. Tap/click **Broadband (PPPoE)**.
- Type your User name, Password, and Connection name then tap/click Connect.
- 11. Tap/click **Close** to finish the configuration.
- 12. Tap/click on the taskbar then tap/click the connection you just created.
- Type your user name and password then tap/click Connect to start connecting to the Internet.

## **Configuring a static IP network connection**



- 1. Repeat steps 1 to 5 under Configuring a dynamic IP/PPPoE network connection.
- 2 Tap/click Use the following IP address.
- Type the IP address, Subnet mask and Default gateway from your service provider.
- If needed, you can also type the preferred DNS server address and alternate DNS server address then tap/click **OK.**

# **Turning your Notebook PC off**

You can turn off your Notebook PC by doing either of the following procedures:



- tap/click from the **Charms bar** then tap/click Shut down to do a normal shutdown.
- From the log-in screen, tap/click open



- You can also shut down your Notebook PC using Desktop mode. To do this, launch the desktop then press alt + f4 to launch the Shut Down window. Select Shut Down from the drop-down list then select OK.
  - If your Notebook PC is unresponsive, press and hold the power button for at least four (4) seconds until your Notebook PC turns off.

## **Putting your Notebook PC to sleep**

To put your Notebook PC on Sleep mode, press the power button once.



You can also put your Notebook PC to sleep mode using Desktop mode. To do this, launch the desktop then press alt + f4 to launch the Shut Down window. Select **Sleep** from the drop-down list then select **OK.** 

## Windows® 8.1 lock screen

The Windows® 8.1 lock screen appears when you wake your Notebook PC from sleep or hibernate mode. It also appears when you lock or unlock Windows® 8.1.



The lock screen can be customized to regulate access to your operating system. You can change its background display and access some of your apps while your Notebook PC is still locked.

## To proceed from the lock screen



- Tap/click on the touchpad or press any key on your Notebook PC's keyboard.
- (optional) If your account is password-protected, you need to key in the password to continue to the Start screen.

## **Customizing your lock screen**

You can customize your lock screen to show your preferred photo, a photo slideshow, app updates, and quickly access your Notebook PC's camera. To change the settings of your lock screen, you may refer to the following information:

#### Selecting a photo

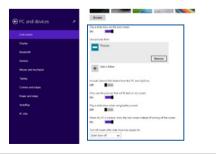


- 1. Launch the Charms bar > **Settings.**
- 2. Select Change PC Settings > Lock screen.
- Under the Lock screen preview, click Browse to select the photo you would like to use as a background on your lock screen.

#### Playing a slideshow



- 1. Launch the Charms bar > **Settings.**
- 2. Select Change PC Settings > Lock screen.
- Under the Lock screen preview, move the Play a slide show on the lock screen slide bar to On.
- Scroll down to customize the following options for your lock screen's slideshow:



#### **Adding app updates**



- 1. Launch the Charms bar > **Settings.**
- 2. Select Change PC Settings > Lock screen.
- Scroll down until you see the Lock screen apps option.
- Use the following options to add the apps whose updates you would like to see from your lock screen:



#### Activating your Notebook PC camera from the lock screen

From the lock screen, you can swipe down to activate and use your Notebook PC's camera. Refer to the following steps on how to enable this feature:



- 1. Launch the Charms bar > **Settings.**
- 2. Select Change PC Settings > Lock screen.
- 3. Scroll down until you see the **Camera** option.
- Move the slide bar to On.



# Chapter 4: Featured apps

## ASUS FingerPrint

Capture fingerprint biometrics on your Notebook PC's fingerprint sensor using the ASUS FingerPrint app. This app allows you to use fingerprint biometrics as user-authenticated access into your Notebook PC's system and applications.

Using this app, you can enable the following features:

- Swipe your finger over the fingerprint sensor to log on from boot up straight into the Windows® operating system without manually keying in passwords.
- Set up the boot key as backup access for your fingerprint biometrics.
- Import or back up other fingerprint biometrics you would like to use to log on to your Notebook PC and its system programs.

## **Using the ASUS FingerPrint app**

Create your fingerprint biometrics using the following steps:

 Launch the Apps screen then click on the ASUS FingerPrint icon from the list of applications under ASUS.



2. Click **Register** to create a new fingerprint account.



3. Key in your user account password then click **OK**.



 Click the on the finger illustration that corresponds to the same finger you would like to use as your fingerprint biometric data.



5. Swipe your designated finger twice on the fingerprint sensor to create your fingerprint biometric data.



 1 and 2 changes to blue to indicate that the fingerprint was successfully captured. Click Next to proceed.



7. Create your boot key password in the next window to serve as backup access for your fingerprint biometric data.



8. Click **Enable** to activate using your current fingerprint biometric data for system log on.



The ASUS FingerPrint settings window appears next. You
may either close this window or change the settings of your
fingerprint biometric data.

**NOTE:** For more information on configuring your fingerprint biometric settings, refer to the *ASUS FingerPrint Settings* section in this manual.

## **ASUS FingerPrint settings**

Configure your boot key settings and fingerprint biometrics using the basic and advanced options of the ASUS FingerPrint settings.

#### **Accessing the ASUS FingerPrint settings**

The ASUS FingerPrint settings window appears right after creating your first fingerprint biometric data. Later on, you may also access this window by launching the **ASUS FingerPrint** app from the Start Screen.



The Basic settings of ASUS FingerPrint allows you to configure your current fingerprint biometrics, add more fingerprint biometrics, and change the details of your boot key. It also shows the current status of your Notebook PC's fingerprint sensor.





The Advanced settings of ASUS FingerPrint allows you to setup lock options when the wrong password or fingerprint is detected, back up and import your account information, and delete fingerprint or boot key records from your system.



# **Trusted Platform Module (TPM)**

The TPM, or Trusted Platform Module, is a security hardware device on the system board that will hold computer-generated keys for encryption. It is a hardware-based solution that can help avoid attacks by hackers looking to capture passwords and encryption keys for sensitive data.

The security features provided by the TPM are internally supported by the following cryptographic capabilities of each TPM:

- hashing
- random number generation
- · asymmetric key generation
- asymmetric encryption/decryption

Each individual TPM on each individual computer system has a unique signature initialized during the silicon manufacturing process that further enhances its trust or security effectiveness. Each individual TPM must have an Owner before it is useful as a security device.

### **TPM Applications**

TPM is useful for any customer that is interested in providing an addition layer of security to the computer system. The TPM, when bundled with an optional security software package, can provide overall system security, file protection capabilities and protect against email/privacy concerns.

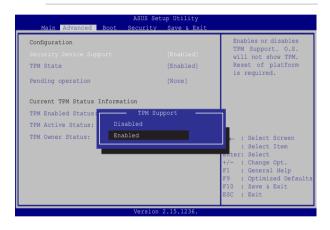
TPM helps provide security that can be stronger than that contained in the system BIOS, operating system, or any non-TPM application.

NOTE: The TPM is disabled byb default. Use BIOS to enable this feature.

## **Enabling TPM Support**

Restart your Notebook PC then press [17] during POST. Set **TPM Support** to [Enable] in BIOS setup **Advanced** > **Trusted Computing**.

**NOTE:** For more information on POST, refer to the **Chapter 5: Power-On Self-Test (POST)** section in this manual.



 $\textbf{IMPORTANT!} \ Use your \ TPM \ application `s` `Backup'' \ or ``Migration'' function to \ backup your \ TPM \ security \ data.$ 

## **ASUSPRO Business Center**

The ASUSPRO Business Center is an application hub that features some exclusive ASUS apps and the Intel® Small Business Advantage (SBA) to improve manageability when using your Notebook PC for business productivity.

## **Accessing ASUS Business Center**

Launch the Apps screen then click on the **ASUSPRO Business Center** icon from the list of applications.



#### **ASUSPRO Business Center home screen**



Click on any of these icons to launch the application.

#### **ASUSPRO Business Center menu options**

**Login/Logout** - This option allows you to login or logout from ASUSPRO Business Center using your ASUSPRO Business Center password.

**Home** - This option allows you to return to the ASUSPRO Business Center home page.

**Alert Center** - This option allows you to view the list of alerts sent to your Notebook PC.

**Settings** - This option allows you to configure your password settings, send email settings, and export/import settings.

**Update** - This option allows you to check on available updates for ASUSPRO Business Center.

**About** - This option features some important details about the ASUSPRO Business Center such as the copyright date and the app's version number.

**Contact** - This option shows you links you can use to contact ASUS regarding the application.

**Help** - This option gives you a detailed information about the Intel® Small Business Advantage (SBA) and its applications.

#### **ASUSPRO Business Center apps**



#### **USB Blocker**

LICE Blocker

This application allows you to restrict which USB devices are permitted to access your Notebook PC. Using this app, you can prevent unauthorized Notebook PC access from these USB device categories: audio/video, entertainment, storage, office, and others.



## **Software Monitor**

Software Monitor

This application allows you to monitor other security-related system applications so you can receive alerts when they stop running.



Health Center

This application allows you to schedule maintenance tasks that help maintain system performance. It also allows you to receive email notifications whenever your Notebook PC receives alerts as balloon messages or as sent to its Windows® system tray.



# Data Backup and Restore

Data Backup and Restore

This application allows you to automatically backup your specified data based from a predefined schedule. This backup process automatically runs in the background even while you are using your Notebook PC.



# Chapter 5: Power-On Self-Test (POST)

# The Power-On Self-Test (POST)

The Power-On Self-Test (POST) is a series of software-controlled diagnostic tests that run when you turn on or restart your Notebook PC. The software that controls the POST is installed as a permanent part of the Notebook PC's architecture.

## **Using POST to access BIOS and Troubleshoot**

During POST, you can access the BIOS settings or run troubleshooting options using the function keys of your Notebook PC. You may refer to the following information for more details.

#### **BIOS**

The Basic Input and Output System (BIOS) stores system hardware settings that are needed for system startup in the Notebook PC.

The default BIOS settings apply to most conditions of your Notebook PC. Do not change the default BIOS settings except in the following circumstances:

- An error message appears onscreen during system bootup and requests you to run the BIOS Setup.
- You have installed a new system component that requires further BIOS settings or updates.

**WARNING:** Using inappropriate BIOS settings may result to system instability or boot failure. We strongly recommend that you change the BIOS settings only with the help of a trained service personnel.

## **Accessing BIOS**



Restart your Notebook PC then press [67] during POST.

### **BIOS Settings**

**NOTE:** The BIOS screens in this section are for reference only. The actual screens may differ by model and territory.

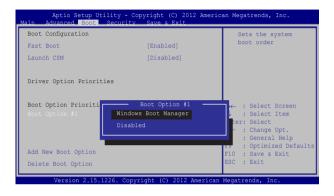
#### **Boot**

This menu allows you to set your boot option priorities. You may refer to the following procedures when setting your boot priority.

1. On the **Boot** screen, select **Boot Option #1**.



2. Press and select a device as the **Boot Option #1**.



#### **Security**

This menu allows you to set up the administrator and user password of your Notebook PC. It also allows you to control the access to your Notebook PC's hard disk drive, input/output (I/O) interface, and USB interface.

#### NOTE:

- If you install a User Password, you will be prompted to input this before entering your Notebook PC's operating system.
- If you install an Administrator Password, you will be prompted to input this before entering BIOS.



#### To set the password:

- On the Security screen, select Administrator Password or User Password.
- 2. Type in a password then press enter.
- 3. Re-type to confirm the password then press enter.

#### To clear the password:

- On the Security screen, select Administrator Password or User Password.
- 2. Type in the current password then press enter.
- 3. Leave the **Create New Password** field blank then press
- 4. Select **Yes** in the confirmation box then press enter.

#### **I/O Interface Security**

In the Security menu, you can access I/O Interface Security to lock or unlock some interface functions of your Notebook PC.

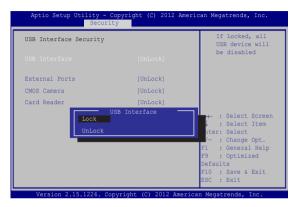


#### To lock an interface:

- 1. On the **Security** screen, select **I/O Interface Security**.
- 2. Select an interface you would like to lock then press
- Select Lock.

#### **USB Interface Security**

Through the I/O Interface Security menu, you can also access USB Interface Security to lock or unlock ports and devices.



To lock the USB interface:

- On the Security screen, select I/O Interface Security > USB Interface Security.
- Select an interface that you would like to lock then select Lock.

**NOTE:** Setting the **USB Interface** to **Lock** also locks and hides the **External Ports** and other devices included under **USB Interface Security**.

#### Set Master Password

In the Security menu, you can use **Set Master Password** to set up a password-enabled access to your hard disk drive.



To set the HDD password:

- 1. On the Security screen, select Set Master Password.
- 2. Type in a password then press enter.
- 3. Re-type to confirm the password then press enter,
- Select Set User Password then repeat the previous steps to set up the user password.

#### Save & Exit

To keep your configuration settings, select **Save Changes and Exit** before exiting the BIOS.



#### To update the BIOS:

- Verify the Notebook PC's exact model then download the latest BIOS file for your model from the ASUS website.
- 2. Save a copy of the downloaded BIOS file to a flash disk drive.
- 3. Connect your flash disk drive to your Notebook PC.
- 4. Restart your Notebook PC then press [ during POST.
- From the BIOS menu, Select Advanced > Start Easy Flash, then press press .



6. Locate your downloaded BIOS file in the flash disk drive then press on the press of the press



 After the BIOS update process, select Exit > Restore Defaults to restore the system to its default settings.

## **Troubleshoot**

By pressing during POST, you can access Windows® 8.1 troubleshoot options which includes the following:

- · Refresh your PC
- Reset vour PC
- Advanced options

## **Refresh your PC**

Use **Refresh your PC** if you want to reinstall your system and keep your file, personal settings, and apps from Windows® store.

**NOTE:** Your PC settings will be restored to its default settings and other installed apps will be deleted.

To access this during POST:





- 2. Wait for Windows® to load the Choose an option screen then tap/click **Troubleshoot.**
- 3. Tap/click Refresh your PC.

- In the Refresh your PC screen, read the bullet points to learn more about using this option then tap/click Next.
- 5. Tap/click the account you would like to refresh.
- Type your account password then tap/click Continue.
- 7. Tap/click Refresh.

**IMPORTANT!** Ensure that your Notebook PC is plugged in to a power source before refreshing your system.

### **Reset your PC**

**IMPORTANT!** Back up all your data before performing this option.

Use **Reset your PC** to restore your Notebook PC to its default settings.

To access this during POST:



- 1. Restart your Notebook PC then press 🗷 ' during POST.
- Wait for Windows® to load the Choose an option screen then tap/click Troubleshoot.
  - 3. Tap/click Reset your PC.
  - In the Reset your PC screen, read the bullet points to learn more about using this option then tap/click Next.
  - Tap/click your preferred reset option: Just remove my files or Fully clean the drive.
  - 6. Tap/click Reset.

**IMPORTANT!** Ensure that your Notebook PC is plugged in to a power source before resetting your system.

### **Advanced options**

Use **Advanced options** to perform additional troubleshooting options in your Notebook PC.

To access this during POST:





- Wait for Windows® to load the Choose an option screen then tap/click **Troubleshoot.**
- 3. Tap/click **Advanced options.**
- In the Advanced options screen, select the troubleshooting option you wish to perform.
- Follow the succeeding steps to complete the process.

#### **Using System Image Recovery**

Under **Advanced options**, you can use **System Image Recovery** to recover your system using your Notebook PC's original image file.

To access this during POST:



Restart your Notebook PC then press g during
 POST.



- Wait for Windows® to load the Choose an option screen then tap/click **Troubleshoot.**
- 3. Tap/click Advanced options.

- In the Advanced options screen, select System Image Recovery.
- 5. Choose an account you would like to recover using a system image file.
- Type your account password then tap/click Continue.
- Select Use the latest available system image (recommended), then tap/click Next. You can also choose Select a system image if your system image is in an external device or DVD.
- 8. Follow the succeeding steps to complete the system image recovery procedure.

**NOTE:** We strongly recommend that you regularly backup your system to prevent data loss in case your Notebook PC stops working.



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# Chapter 6: Module Slot Features

### Using the module slot

Your Notebook PC comes with a module slot that allows you to install any of the following upgrades: an optical disc drive, a 2.5-inch 7mm. hard disk drive (HDD)/solid state drive (SSD), or a secondary lithium-ion battery pack.

The following steps show you how to install these removable items into the module slot of your Notebook PC.

**IMPORTANT!** Visit an authorized service center or retailer for information on available module upgrades for your Notebook PC. Purchase modules from authorized retailers of this Notebook PC to ensure maximum compatibility and reliability.

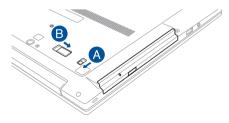
**NOTE:** The appearance of your Notebook PC's bottom side and module may vary per model but the installation process remains the same.

## Installing a removable optical disc drive or battery module

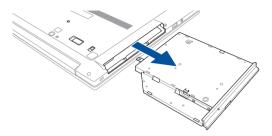
**WARNING!** Do not disassemble any components from your removable optical disc drive or secondary battery pack. Consult an authorized service center or retailer if you encounter any problems with this module.

#### NOTES:

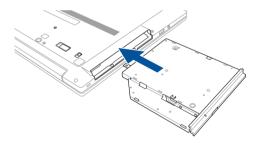
- The removable optical disc drive and is bundled with select models only. Visit an authorized service center or retailer to purchase compatible removable disc drives for your Notebook PC.
- The secondary battery pack is an optional accessory for your Notebook PC. Visit an authorized service center or retailer to purchase compatible removable battery packs for your Notebook PC.
- Shut down your Notebook PC and disconnect all cables and other peripherals.
- Put your Notebook PC on a flat, clean and stable surface with its bottom side facing up.
- Slide and hold the spring module lock (A) then push the module latch (B) towards the direction of the arrows to release the current module from the slot.



4. Gently pull out the current module from the slot.

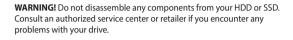


 Orient and insert the optical disc drive module or secondary battery pack into the module slot then gently push all the way until the spring module lock and module latch clicks into place.



## Installing a hard disk drive (HDD) or solid state drive (SSD) module

Upgrade the memory capacity of your Notebook PC by installing an additional 2.5-inch 7mm. HDD or SSD module. The following steps show you how to install or replace the removable HDD/SSD module of your Notebook PC.



**IMPORTANT!** Purchase an HDD or SSD from authorized retailers of this Notebook PC to ensure maximum compatibility and reliability. You may also visit an authorized service center for further assistance.

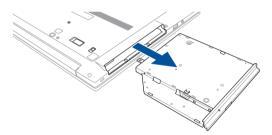
**NOTE:** The appearance of your Notebook PC's bottom side may vary per model but the installation process remains the same.

- Shut down your Notebook PC and disconnect all cables and other peripherals.
- Put your Notebook PC on a flat, clean and stable surface with its bottom side facing up.

 Slide and hold the spring module lock (A) then push the module latch (B) towards the direction of the arrows to release the current module from the slot.

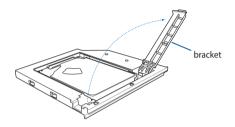


4. Gently pull out the current module from the slot.

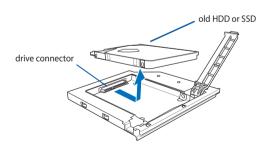


**NOTE:** If your purchased HDD or SSD comes with its own module bay, refer to its user manual for installation details. The following procedures applies only to ASUS module bays for this Notebook PC.

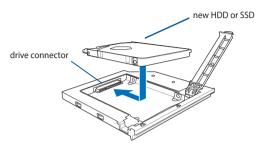
 Turn the module bay to its other side then unlock the module bay's bracket. If your module bay contains an existing HDD or SSD, proceed to step 6. Otherwise, you may proceed to step 7.



Carefully slide the old HDD or SSD from the drive connector, then remove it from the module bay.



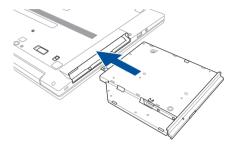
7. Carefully place the new HDD or SSD into the module bay, then slide the drive towards the drive connector.



8. Replace the bracket on the module bay to secure and stabilize the new HDD or SSD in place.



 Orient and insert the module bay into the module slot then gently push all the way until the spring module lock and module latch clicks into place.





## Tips and FAQs

## **Useful tips for your Notebook PC**

To help you maximize the use of your Notebook PC, maintain its system performance, and ensure all your data are kept secured, here are some useful tips that you can follow:

- Update Windows® periodically to ensure that your applications have the latest security settings.
- Use ASUS Live Update to update ASUS-exclusive applications, drivers and utilities in your Notebook PC. Refer to the ASUS Tutor installed in your Notebook PC for more details.
- Use an anti-virus software to protect your data and keep this updated too.
- Unless absolutely necessary, refrain from using force shutdown to turn off your Notebook PC.
- Always backup your data and make it a point to create a backup data in an external storage drive.
- Refrain from using the Notebook PC at extremely high temperatures. If you are not going to use your Notebook PC for a long period of time (at least a month), we recommend that you take out the battery if the battery is removable.
- Disconnect all external devices and ensure you have the following items prior to resetting your Notebook PC:
  - Product key for your operating systems and other installed applications
  - Backup data
  - Log in ID and password
  - Internet connection information

## **Hardware FAQs**

## A black dot, or sometimes a colored dot, appears onscreen when I turn on the Notebook PC. What should I do?

Although these dots normally appear onscreen, they will not affect your system. If the incident continues and subsequently affects system performance, consult an authorized ASUS service center.

#### My display panel has an uneven color and brightness. How can I fix this?

The color and brightness of your display panel may be affected by the angle and current position of your Notebook PC. The brightness and color tone of your Notebook PC may also vary per model. You may use the function keys or the display settings in your operating system to adjust the appearance of your display panel.

#### 3. How can I maximize my Notebook PC's battery life?

You can try doing any of the following suggestions:

- Use the function keys to adjust the display brightness.
- Enable **Battery Saving** mode under Instant On.
- If you are not using any Wi-Fi connection, switch your system into Airplane mode.
- Disconnect unused USB devices.
- Close unused applications, especially those that take up too much system memory.

#### 4. My battery LED indicator does not light up. What's wrong?

- Check whether the power adapter or battery pack is attached correctly. You may also disconnect the power adapter or battery pack, wait for a minute, then reconnect them again to the power outlet and Notebook PC.
- If the problem still exists, contact your local ASUS service center for assistance

#### 5. Why is my touchpad not working?

- Press  $f_n$  + g to enable your touchpad.
- Check if ASUS Smart Gesture has been set to disable the touchpad when connecting an external pointing device.

#### 6. When I play audio and video files, why can't I hear any sound from my Notebook PC's audio speakers?

You can try doing any of the following suggestions:

- Press  $f_n$  +  $\P$  to turn up the speaker volume.
- Check if your speakers were set to mute.
- Check if a headphone jack is connected to your Notebook PC and remove it.
- Unlock the I/O Interface Security in your system's BIOS. For more details, refer to the I/O Interface Security section in this manual.

## 7. What should I do if my Notebook PC's power adapter gets lost or my battery stops working?

Contact your local ASUS service center for assistance.

8. Why does audio still come out from my Notebook PC's audio speakers even if I already connected my headphone into the right jack port?

Go to Control Panel > Hardware and Sound then access Audio Manager to configure the settings.

9. My Notebook PC cannot do keystrokes correctly because my cursor keeps on moving. What should I do?

Make sure that nothing accidentally touches or presses on your touchpad while you type on the keyboard. You can also disable your touchpad by pressing  $f_n + \frac{f_0}{g_0}$ .

10. My Notebook PC's touchpad is not working. What should I do?

You can try doing any of the following suggestions:

- Check if ASUS Smart Gesture is set to disable touchpad by connecting an external pointing device to your Notebook PC. If yes, disable this function.
- Press  $f_n$  +  $\frac{f_n}{\mathbb{H}}$ .
- 11. Instead of showing letters, pressing the "U", "I", and "O" keys on my keyboard displays numbers. How can I change this?

Press the  $\begin{bmatrix} n_{am,R} \\ s_{C},R \end{bmatrix}$  key or  $\begin{bmatrix} shift \Omega \\ \end{bmatrix}$  +  $\begin{bmatrix} n_{am,R} \\ s_{C},R \end{bmatrix}$  (on selected models) on

your Notebook PC to turn off this feature and use the said keys for inputting letters.

## **Software FAQs**

 When I turn on my Notebook PC, the power indicator lights up but not my drive activity indicator. System bootup does not happen as well. What can I do to fix this?

You can try doing any of the following suggestions:

- Force shutdown your Notebook PC by pressing the power button for more than four (4) seconds. Check if the power adapter and battery pack are inserted correctly then turn on your Notebook PC.
- If the problem still exists, contact your local ASUS service center for assistance.
- What should I do when my screen displays this message: "Remove disks or other media. Press any key to restart."?

You can try doing any of the following suggestions:

- Remove all connected USB devices then restart your Notebook PC.
- Remove any optical discs that are left inside the optical drive then restart.
- If the problem still exists, your Notebook PC might have a memory storage problem. Contact your local ASUS service center for assistance.
- 3. My Notebook PC boots slower than usual and my operating system lags. How can I fix this?

Delete the applications you recently installed or were not included with your operating system package then restart your system.

#### 4. My Notebook PC does not boot up. How can I fix this?

You can try doing any of the following suggestions:

- Remove all connected devices to your Notebook PC then restart your system.
- Press F9 upon startup. When your Notebook PC enters Troubleshooting, select Refresh or Reset your PC.
- If the problem still exists, contact your local ASUS service center for assistance.

## 5. Why can't my Notebook PC wake up from sleep or hibernate mode?

- You need to press the power button to resume your last working state.
- Your system might have completely used up its battery power. Connect the power adapter to your Notebook PC and connect to a power outlet then press the power button.

#### 6. How can I boot to DOS using my USB drive or ODD?

Refer to the following steps:

- Restart your Notebook PC and enter BIOS by pressing F2 on your keyboard.
- b. Go to Boot > Launch CSM > Enabled.
- Go to the Security menu then set Secure Boot Control to Disabled.
- d. Press **F10** to save changes and exit BIOS.
- Press and hold ESC to launch boot menu when your Notebook PC restarts.

## **Appendices**

## **DVD-ROM Drive Information** (on selected models)

The DVD-ROM drive allows you to view and create your own CDs and DVDs. You can purchase an optional DVD viewer software to view DVD titles.

#### **Regional Playback Information**

Playback of DVD movie titles involves decoding MPEG2 video, digital AC3 audio and decryption of CSS protected content. CSS (sometimes called copy guard) is the name given to the content protection scheme adopted by the motion picture industry to satisfy a need to protect against unlawful content duplication.

Although the design rules imposed on CSS licensors are many, one rule that is most relevant is playback restrictions on regionalized content. In order to facilitate geographically staggered movie releases, DVD video titles are released for specific geographic regions as defined in "Region Definitions" below. Copyright laws require that all DVD movies be limited to a particular region (usually coded to the region at which it is sold). While DVD movie content may be released for multiple regions, CSS design rules require that any system capable of playing CSS encrypted content must only be capable of playing one region.

IMPORTANT! The region setting may be changed up to five times using the viewer software, then it can only play DVD movies for the last region setting. Changing the region code after that will require factory resetting which is not covered by warranty. If resetting is desired, shipping and resetting costs will be at the expense of the user.

#### **Region Definitions**

#### Region 1

Canada, US, US Territories

#### Region 2

Czech, Egypt, Finland, France, Germany, Gulf States, Hungary, Iceland, Iran, Iraq, Ireland, Italy, Japan, Netherlands, Norway, Poland, Portugal, Saudi Arabia, Scotland, South Africa, Spain, Sweden, Switzerland, Syria, Turkey, UK, Greece, Former Yugoslav Republics, Slovakia

#### Region 3

Burma, Indonesia, South Korea, Malaysia, Philippines, Singapore, Taiwan, Thailand, Vietnam

#### Region 4

Australia, Caribbean (Except US Territories), Central America, New Zealand, Pacific Islands, South America

#### Region 5

CIS, India, Pakistan, Rest of Africa, Russia, North Korea

#### Region 6

China

## Blu-ray ROM Drive Information (on selected models)

The Blu-ray ROM Drive allows you to view high definition (HD) videos and other disc file formats such as DVDs and CDs.

#### **Region Definitions**

#### Region A

North, Central and South American countries, and their territories; Taiwan, Hong Kong, Macao, Japan, Korea (South and North), South East Asian countries and their territories

#### Region B

European, African, and South West Asian countries and their territories; Australia and New Zealand.

#### Region C

Central, South Asian, Eastern European countries and their territories; China and Mongolia.

**NOTE:** Refer to Blu-ray Disc website at <u>www.blu-raydisc.com/en/Technical/FAQs/Blu-rayDiscforVideo.aspx for more details.</u>

### **Internal Modem Compliancy**

The Notebook PC with internal modem model complies with JATE (Japan), FCC (US, Canada, Korea, Taiwan), and CTR21. The internal modem has been approved in accordance with Council Decision 98/482/EC for pan-European single terminal connection to the public switched telephone network (PSTN). However due to differences between the individual PSTNs provided in different countries, the approval does not, of itself, give an unconditional assurance of successful operation on every PSTN network termination point. In the event of problems you should contact your equipment supplier in the first instance.

#### **Overview**

On 4th August 1998 the European Council Decision regarding the CTR 21 has been published in the Official Journal of the EC. The CTR 21 applies to all non voice terminal equipment with DTMF-dialling which is intended to be connected to the analogue PSTN (Public Switched Telephone Network).

CTR 21 (Common Technical Regulation) for the attachment requirements for connection to the analogue public switched telephone networks of terminal equipment (excluding terminal equipment supporting the voice telephony justified case service) in which network addressing, if provided, is by means of dual tone multi-frequency signalling.

### **Network Compatibility Declaration**

Statement to be made by the manufacturer to the Notified Body and the vendor: "This declaration will indicate the networks with which the equipment is designed to work and any notified networks with which the equipment may have interworking difficulties."

Statement to be made by the manufacturer to the user: "This declaration will indicate the networks with which the equipment is designed to work and any notified networks with which the equipment may have inter-working difficulties. The manufacturer shall also associate a statement to make it clear where network compatibility is dependent on physical and software switch settings. It will also advise the user to contact the vendor if it is desired to use the equipment on another network"

Up to now the Notified Body of CETECOM issued several pan-European approvals using CTR 21. The results are Europe's first modems which do not require regulatory approvals in each individual European country.

### **Non-Voice Equipment**

Answering machines and loud-speaking telephones can be eligible as well as modems, fax machines, auto-dialers and alarm systems. Equipment in which the end-to-end quality of speech is controlled by regulations (e.g. handset telephones and in some countries also cordless telephones) is excluded.

## This table shows the countries currently under the CTR21 standard.

Country	Applied	More Testing
Austria <sup>1</sup>	Yes	No
Belgium	Yes	No
Czech Republic	No	Not Applicable
Denmark <sup>1</sup>	Yes	Yes
Finland	Yes	No
France	Yes	No
Germany	Yes	No
Greece	Yes	No
Hungary	No	Not Applicable
Iceland	Yes	No
Ireland	Yes	No
Italy	Still Pending	Still Pending
Israel	No	No
11.1.		
Lichtenstein	Yes	No
Luxemburg	Yes Yes	No No
Luxemburg	Yes	No
Luxemburg The Netherlands <sup>1</sup>	Yes Yes	No Yes
Luxemburg The Netherlands <sup>1</sup> Norway	Yes Yes Yes	No Yes No
Luxemburg The Netherlands <sup>1</sup> Norway Poland	Yes Yes Yes	No Yes No Not Applicable
Luxemburg The Netherlands <sup>1</sup> Norway Poland Portugal	Yes Yes Yes No	No Yes No Not Applicable Not Applicable
Luxemburg The Netherlands¹ Norway Poland Portugal Spain	Yes Yes Yes No No	No Yes No Not Applicable Not Applicable Not Applicable

This information was copied from CETECOM and is supplied without liability. For updates to this table, you may visit http://www.cetecom.de/technologies/ctr\_21. html

1 National requirements will apply only if the equipment may use pulse dialling (manufacturers may state in the user guide that the equipment is only intended to support DTMF signalling, which would make any additional testing superfluous).

In The Netherlands additional testing is required for series connection and caller ID facilities.

## Federal Communications Commission Interference Statement

This device complies with FCC Rules Part 15. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- 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 Federal Communications Commission (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.

**WARNING!** The use of a shielded-type power cord is required in order to meet FCC emission limits and to prevent interference to the nearby radio and television reception. It is essential that only the supplied power cord be used. Use only shielded cables to connect I/O devices to this equipment. You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

(Reprinted from the Code of Federal Regulations #47, part 15.193, 1993. Washington DC: Office of the Federal Register, National Archives and Records Administration, U.S. Government Printing Office.)

## FCC Radio Frequency (RF) Exposure Caution Statement

**WARNING!** Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. "The manufacture declares that this device is limited to Channels 1 through 11 in the 2.4GHz frequency by specified firmware controlled in the USA."

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. To maintain compliance with FCC RF exposure compliance requirements, please avoid direct contact to the transmitting antenna during transmitting. End users must follow the specific operating instructions for satisfying RF exposure compliance.

The exposure standard for wireless device employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6 W/kg. Tests for SAR are conducted using standard operating positions accepted by the FCC with the device transmitting at its highest certified power level in all tested frequency bands.

**NOTE:** The country code selection is for non-US model only and is not available to all US model. Per FCC regulation, all WiFi product marketed in US must fixed to US operation channels only.

## Declaration of Conformity (R&TTE directive 1999/5/EC)

The following items were completed and are considered relevant and sufficient:

- Essential requirements as in [Article 3]
- Protection requirements for health and safety as in [Article 3.1a]
- Testing for electric safety according to [EN 60950]
- Protection requirements for electromagnetic compatibility in [Article 3.1b]
- Testing for electromagnetic compatibility in [EN 301 489-1] & [EN 301 489-17]
- Effective use of the radio spectrum as in [Article 3.2]
- Radio test suites according to [EN 300 328-2]

### **CE Marking**

## $C \in$

#### CE marking for devices without wireless LAN/Bluetooth

The shipped version of this device complies with the requirements of the EEC directives 2004/108/EC "Electromagnetic compatibility" and 2006/95/EC "Low voltage directive".



#### CE marking for devices with wireless LAN/ Bluetooth

This equipment complies with the requirements of Directive 1999/5/EC of the European Parliament and Commission from 9 March, 1999 governing Radio and Telecommunications Equipment and mutual recognition of conformity.

### **IC Radiation Exposure Statement for Canada**

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. To maintain compliance with IC RF exposure compliance requirements, please avoid direct contact to the transmitting antenna during transmitting. End users must follow the specific operating instructions for satisfying RF exposure compliance.

Operation is subject to the following two conditions:

- · This device may not cause interference and
- This device must accept any interference, including interference that may cause undesired operation of the device.

To prevent radio interference to the licensed service (i.e. co-channel Mobile Satellite systems) this device is intended to be operated indoors and away from windows to provide maximum shielding. Equipment (or its transmit antenna) that is installed outdoors is subject to licensing.

This device complies with Industry Canada licence-exempt RSS standard(s).

CAN ICES-3(B)/NMB-3(B)

This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter, except tested built-in radios. The County Code Selection feature is disabled for products marketed in the US/ Canada.

#### Caution:

(i) the device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;

- (ii) the maximum antenna gain permitted for devices in the bands 5250-5350 MHz and 5470-5725 MHz shall comply with the e.i.r.p. limit; and
- (iii) the maximum antenna gain permitted for devices in the band 5725-5825 MHz shall comply with the e.i.r.p. limits specified for point-to-point and non point-to-point operation as appropriate.
- (iv) Users should also be advised that high-power radars are allocated as primary users (i.e. priority users) of the bands 5250-5350 MHz and 5650-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

### Déclaration d'Industrie Canada relative à l' exposition aux ondes radio

Cet appareil est conforme aux limites d'exposition aux radiations d'Industrie Canada définies pour un environnement non-contrôlé. Pour maintenir la conformité avec les exigences d'exposition RF d'IC, veuillez éviter tout contact direct avec l'antenne pendant l'émission. Les utilisateurs finaux doivent suivre les instructions de fonctionnement spécifiques pour satisfaire la conformité aux expositions RF.

Son utilisation est sujette aux deux conditions suivantes :

- Cet appareil ne peut pas causer d'interférence, et
- Cet appareil doit accepter toute interférence, y compris les interférences qui pourraient causer un fonctionnement non souhaité de l'appareil.

Pour éviter les interférences radio avec le service sous licence (c'est à-dire le partage de canal avec les systèmes de téléphonie satellite), cet appareil est destiné à être utilisé en intérieur et loin des fenêtres pour fournir un blindage maximal. Tout appareil (ou son antenne d'émission) qui est installé en extérieur est sujet à cette licence.

Le present appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence.

Cet appareil et son antenne ne doivent pas être situés ou fonctionner en conjonction avec une autre antenne ou un autre émetteur, exception faites des radios intégrées qui ont été testées. La fonction de sélection de l'indicatif du pays est désactivée pour les produits commercialisés aux États-Unis et au Canada.

#### **Avertissement:**

Le guide d'utilisation des dispositifs pour réseaux locaux doit inclure des instructions précises sur les restrictions susmentionnées, notamment :

- (i) les dispositifs fonctionnant dans la bande 5 150-5 250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux:
- (ii) le gain maximal d'antenne permis pour les dispositifs utilisant les bandes 5 250-5 350 MHz et 5 470-5 725 MHz doit se conformer à la limite de p.i.r.e.;
- (iii) le gain maximal d'antenne permis (pour les dispositifs utilisant la bande 5 725-5 825 MHz) doit se conformer à la limite de p.i.r.e. spécifiée pour l'exploitation point à point et non point à point, selon le cas.
- (iv) De plus, les utilisateurs devraient aussi être avisés que les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bandes 5 250-5 350 MHz et 5 650-5 850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

## Wireless Operation Channel for Different Domains

 N. America
 2.412-2.462 GHz
 Ch01 through CH11

 Japan
 2.412-2.484 GHz
 Ch01 through Ch14

 Europe ETSI
 2.412-2.472 GHz
 Ch01 through Ch13

### **France Restricted Wireless Frequency Bands**

Some areas of France have a restricted frequency band. The worst case maximum authorized power indoors are:

- 10mW for the entire 2.4 GHz band (2400 MHz–2483.5 MHz)
- 100mW for frequencies between 2446.5 MHz and 2483.5 MHz

 $\mbox{NOTE:}$  Channels 10 through 13 inclusive operate in the band 2446.6 MHz to 2483.5 MHz.

There are few possibilities for outdoor use: on private property or on the private property of public persons, use is subject to a preliminary authorization procedure by the Ministry of Defense, with maximum authorized power of 100mW in the 2446.5–2483.5 MHz band. Use outdoors on public property is not permitted.

In the departments listed below, for the entire 2.4 GHz band:

- Maximum authorized power indoors is 100mW
- Maximum authorized power outdoors is 10mW

Departments in which the use of the 2400–2483.5 MHz band is permitted with an EIRP of less than 100mW indoors and less than 10mW outdoors:

01 Ain	02 Aisne	03 Allier
05 Hautes Alpes	08 Ardennes	09 Ariège
11 Aude	12 Aveyron	16 Charente
24 Dordogne	25 Doubs	26 Drôme
32 Gers	36 Indre	37 Indre et Loire
41 Loir et Cher	45 Loiret	50 Manche
55 Meuse	58 Nièvre	59 Nord
60 Oise	61 Orne	63 Puy du Dôme
64 Pyrénées Atlantique	66 Pyrénées Orientales	67 Bas Rhin
68 Haut Rhin	70 Haute Saône	71 Saône et Loire
75 Paris	82 Tarn et Garonne	84 Vaucluse
88 Vosges	89 Yonne	90 Territoire de Belfort

94 Val de Marne

This requirement is likely to change over time, allowing you to use your wireless LAN card in more areas within France. Please check with ART for the latest information (www.arcep.fr)

NOTE: Your WLAN Card transmits less than 100mW, but more than 10mW.

## **UL Safety Notices**

Required for UL 1459 covering telecommunications (telephone) equipment intended to be electrically connected to a telecommunication network that has an operating voltage to ground that does not exceed 200V peak, 300V peak-to-peak, and 105V rms, and installed or used in accordance with the National Electrical Code (NFPA 70).

When using the Notebook PC modem, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and injury to persons, including the following:

- DO NOT use the Notebook PC near water, for example, near a bath tub, wash bowl, kitchen sink or laundry tub, in a wet basement or near a swimming pool.
- DO NOT use the Notebook PC during an electrical storm. There may be a remote risk of electric shock from lightning.
- DO NOT use the Notebook PC in the vicinity of a gas leak.

Required for UL 1642 covering primary (nonrechargeable) and secondary (rechargeable) lithium batteries for use as power sources in products. These batteries contain metallic lithium, or a lithium alloy, or a lithium ion, and may consist of a single electrochemical cell or two or more cells connected in series, parallel, or both, that convert chemical energy into electrical energy by an irreversible or reversible chemical reaction.

- Do not dispose the Notebook PC battery pack in a fire, as they may explode. Check with local codes for possible special disposal instructions to reduce the risk of injury to persons due to fire or explosion.
- Do not use power adapters or batteries from other devices to reduce the risk of injury to persons due to fire or explosion. Use only UL certified power adapters or batteries supplied by the manufacturer or authorized retailers.

# **Power Safety Requirement**

Products with electrical current ratings up to 6A and weighing more than 3Kg must use approved power cords greater than or equal to: H05VV-F, 3G, 0.75mm<sup>2</sup> or H05VV-F, 2G, 0.75mm<sup>2</sup>.

## **TV Notices**

Note to CATV System Installer—Cable distribution system should be grounded (earthed) in accordance with ANSI/NFPA 70, the National Electrical Code (NEC), in particular Section 820.93, Grounding of Outer Conductive Shield of a Coaxial Cable – installation should include bonding the screen of the coaxial cable to the earth at the building entrance.

## **REACH**

Complying with the REACH (Registration, Evaluation, Authorization, and Restriction of Chemicals) regulatory framework, we publish the chemical substances in our products at ASUS REACH website at http://csr.asus.com/english/

# **Macrovision Corporation Product Notice**

This product incorporates copyright protection technology that is protected by method claims of certain U.S.A. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing uses only *unless otherwise authorized by Macrovision Corporation*. Reverse engineering or disassembly is prohibited.

## **Prevention of Hearing Loss**

To prevent possible hearing damage, do not listen at high volume levels for long periods.



# Nordic Lithium Cautions (for lithium-ion batteries)

CAUTION! Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions. (English)

ATTENZIONE! Rischio di esplosione della batteria se sostituita in modo errato. Sostituire la batteria con un una di tipo uguale o equivalente consigliata dalla fabbrica. Non disperdere le batterie nell'ambiente. (Italian)

VORSICHT! Explosionsgefahr bei unsachgemäßen Austausch der Batterie. Ersatz nur durch denselben oder einem vom Hersteller empfohlenem ähnlichen Typ. Entsorgung gebrauchter Batterien nach Angaben des Herstellers. (German)

ADVARSEL!! Lithiumbatteri - Eksplosionsfare ved fejlagtig håndtering. Udskiftning må kun ske med batteri af samme fabrikat og type. Levér det brugte batteri tilbage til leverandøren. (Danish)

VARNING! Explosionsfara vid felaktigt batteribyte. Använd samma batterityp eller en ekvivalent typ som rekommenderas av apparattillverkaren. Kassera använt batteri enligt fabrikantens instruktion. (Swedish)

VAROITUS! Paristo voi räjähtää, jos se on virheellisesti asennettu. Vaihda paristo ainoastaan laitevalmistajan sousittelemaan tyyppiin. Hävitä käytetty paristo valmistagan ohjeiden mukaisesti. (Finnish)

ATTENTION! Il y a danger d'explosion s'il y a remplacement incorrect de la batterie. Remplacer uniquement avec une batterie du mêre type ou d'un type équivalent recommandé par le constructeur. Mettre au rebut les batteries usagées conformément aux instructions du fabricant. (French)

ADVARSEL! Eksplosjonsfare ved feilaktig skifte av batteri. Benytt samme batteritype eller en tilsvarende type anbefalt av apparatfabrikanten. Brukte batterier kasseres i henhold til fabrikantens instruksjoner. (Norwegian)

標準品以外の使用は、危険の元になります。交換品を使用する場合、製造者 に指定されるものを使って下さい。製造者の指示に従って処理して下さい。 (Japanese)

ВНИМАНИЕ! При замене аккумулятора на аккумулятор иного типа возможно его возгорание. Утилизируйте аккумулятор в соответствии с инструкциями производителя. (Russian)

# **Optical Drive Safety Information**

## **Laser Safety Information**

# **CD-ROM Drive Safety Warning**

## **CLASS 1 LASER PRODUCT**

**WARNING!** To prevent exposure to the optical drive's laser, do not attempt to disassemble or repair the optical drive by yourself. For your safety, contact a professional technician for assistance.

## Service warning label

**WARNING!** INVISIBLE LASER RADIATION WHEN OPEN. DO NOT STARE INTO BEAM OR VIEW DIRECTLY WITH OPTICAL INSTRUMENTS.

## **CDRH Regulations**

The Center for Devices and Radiological Health (CDRH) of the U.S. Food and Drug Administration implemented regulations for laser products on August 2, 1976. These regulations apply to laser products manufactured from August 1, 1976. Compliance is mandatory for products marketed in the United States.

**WARNING!** Use of controls or adjustments or performance of procedures other than those specified herein or in the laser product installation guide may result in hazardous radiation exposure.

## **Coating Notice**

IMPORTANT! To provide electrical insulation and maintain electrical safety, a coating is applied to insulate the device except on the areas where the I/O ports are located.

# CTR 21 Approval (for Notebook PC with built-in Modem)

#### Danish

-Udstyret er i henhold til Rådets beslutning 98/482/EF EU-godkendt til at blive opkoblet på de offentlige telefonnet som enkeltforbundet terminal. På grund af forskelle mellem de offentlige telefonnet i de forskellige lande giver godkendelsen dog ikke i sig selv ubetinget garanti for, at udstyret kan fungere korrekt på samtlige nettermineringspunkter på de offentlige telefonnet.

I tilfælde af problemer bør De i første omgang henvende Dem til leverandøren af udstyret.«

#### Dutch

"Dit apparant is goedgekeurd volgens Beschikking 98/482/EG van de Raad voor de pan-Europese aansluiting van enkelvoudige eindapparatuur op het openbare geschakelde telefoonnetwerk (PSTN). Gezien de verschillen tussen de individuele PSTN's in de verschillende landen, biedt deze goedkeuring op zichzell geen onvoorwaardelijke garantie voor een succesvolle werking op elk PSTN-netwerkaansluitpunt.

Neem bij problemen in eerste instantie contact op met de leverancier van het apparaat.".

## **English**

The equipment has been approved in accordance with Council Decision 98/482/EC for pan-European single terminal connection to the public switched telephone network (PSTN). However, due to differences between the individual PSTNs provided in different countries, the approval does not, of itself, give an unconditional assurance of successful operation on every PSTN network termination point.

In the event of problems, you should contact your equipment supplier in the first instance.'

#### Finnish

"Tämä laite on hyväksytty neuroston päätöksen 98/482/EY mukaisesti liitettäväksi yksittäisenä laitteena yleiseen kytkentäiseen puhelinverkkoon (PSTN) EUn jäsenvaltioissa. Eri maiden yleisten kytkentäisten puhelinverkkojen välillä on kuitenkin eroja, joten hyväksyntä ei sellaisenaan takaa häiriötöntä toimintaa kaikkien yleisten kytkentäisten puhelinverkkojen liityntäpisteissä.

Ongelmien ilmetessä ottakaa viipymättä yhteyttä laitteen toimittajaan."

#### French

«Cet équipement a reçu l'agrément, conformément à la décision 98/482/CE du Conseil, concernant la connexion paneuropéenne de terminal unique aux réseaux téléphoniques publics commutés (RTPC). Toutefois, comme il existe des différences d'un pays à l'autre entre les RTPC, l'agrément en soi ne constitue pas une garantie absolue de fonctionnement optimal à chaque point de terminaison du réseau RTPC.

En cas de problème, vous devez contacter en premier lieu votre fournisseur.»

#### German

"Dieses Gerät wurde gemäß der Entscheidung 98/482/EG des Rates europaweit zur Anschaltung als einzelne Endeinrichtung an das öffentliche Fernsprechnetz zugelassen. Aufgrund der zwischen den öffentlichen Fernsprechnetzen verschiedener Staaten bestehenden Unterschiede stellt diese Zulassung an sich jedoch keine unbedingte Gewähr für einen erfolgreichen Betrieb des Geräts an jedem Netzabschlügbnukt dar.

Falls beim Betrieb Probleme auftreten, sollten Sie sich zunächst an ihren Fachhändler wenden."

#### Greek

«Ο εξοπλισμός έχει εγκριθεί για πανακροπαϊκή σύνθεση μεμονωμέου τερματικού με το δημόσιο πήλειρενικό δίκτιο μεταγωγής (PSTN), σύμφωνα με την απόφαση 98/482/ΕΚ του Συμθουλίου αστόσιο, επειδή υπάγχουν διαφορές μεταξύ των επιμέρους PSTN που παρέχονται σε διάφορες χώρες, η έγκριστη δεν παρέχει ως εσυτής ανεπιφίλακτη εξασφάλιση επιτιχούς λειτουργίας σε κάθε σημείο απόληξης του δικτίου PSTN.

Εάν ανακύψουν προδλήματα, θα πρέπει κατ' αρχάς να απευθύνεστε στον προμηθευτή του εξοπλισμού σας.»

#### Italian

-La presente apparecchiatura terminale è stata approvata in conformità della decisione 98/482/CE del Consiglio per la connessione paneuropea come terminale singolo ad una rete analogica PSTN. A causa delle differenze tra le reti dei differenti paesi, l'approvazione non garantisce però di per sé il funzionamento corretto in tutti i punti di terminazione di rete PSTN.

In caso di problemi contattare in primo luogo il fornitore del prodotto.»

### **Portuguese**

-Este equipamento foi aprovado para ligação pan-europeia de um único terminal à rede telefónica pública comutada (RTPC) nos termos da Decisio 98/482/CE. No entanto, devido às diferenças existentes entre as RTPC dos diversos países, a aprovação não garante incondicionalmente, por si só, um funcionamento correcto em todos os pontos terminais da rede da RTPC.

Em caso de problemas, deve entrar-se em contacto, em primeiro lugar, com o fornecedor do equipamento.

#### Spanish

• Este equipo ha sido homologado de conformidad con la Decisión 98/482/CE del Consejo para la conexión paneuropea de un terminal simple a la red telefónica pública conmutada (RTPC). No obstante, a la vista de las diferencias que existen entre las RTPC que se ofrecen en diferentes países, la homologación no constituye por si sola una garantía incondicional de funcionamiento satisfactorio en todos los puntos de terminación de la red de una RTPC.

En caso de surgir algún problema, procede ponerse en contacto en primer lugar con el proveedor del equipo.».

#### Swedish

"Utrustningen har godkänts i enlighet med rådets beslut 98/482/EG för alleuropeisk anslutning som enskild terminal till det allmänt tillgängliga kopplade telenätet (PSTN). På grund av de skillnader som finns mellan telenätet i olika länder utgör godkännandet emellertid inte i sig självt en absolut garanti för att utrustningen kommer att fungera tillfredsställande vid varie telenätsanslutningspunkt.

Om problem uppstår bör ni i första hand kontakta leverantören av utrustningen."

## **ENERGY STAR complied product**



ENERGY STAR is a joint program of the U.S. Environmental Protection Agency and the U.S. Department of Energy helping us all save money and protect the environment through energy efficient products and practices.

All ASUS products with the ENERGY STAR logo comply with the ENERGY STAR standard, and the power management feature is enabled by default. The monitor and computer are automatically set to sleep after 10 and 30 minutes of user inactivity. To wake your computer, click the mouse or press any key on the keyboard. Please visit <a href="http://www.energy.gov/powermanagement">http://www.energy.gov/powermanagement</a> for detail information on power management and its benefits to the environment. In addition, please visit <a href="http://www.energystar.gov">http://www.energystar.gov</a> for detail information on the ENERGY STAR joint program.

NOTE: Energy Star is NOT supported on FreeDOS and Linux-based operating systems.

## **European Union Eco-label**

This Notebook PC has been awarded the EU Flower label, which means that this product has the following characteristics:

- 1. Decreased energy consumption during use and stand-by modes.
- 2. Limited use of toxic heavy metals.
- 3. Limited use of substances harmful to the environment and health.
- 4. Reduction of the use of natural resources by encouraging recycling.
- Designed for easy upgrades and longer lifetime through providing compatible spare parts such as batteries, power supplies, the keyboard, the memory, and if available the CD drive or DVD drive.
- 6. Reduced solid waste through takeback policy.

For more information on the EU Flower label, please visit the European Union Ecolabel website at http://www.ecolabel.eu.

# Global Environmental Regulation Compliance and Declaration

ASUS follows the green design concept to design and manufacture our products, and makes sure that each stage of the product life cycle of ASUS product is in line with global environmental regulations. In addition, ASUS disclose the relevant information based on regulation requirements.

Please refer to <a href="http://csr.asus.com/english/Compliance.htm">http://csr.asus.com/english/Compliance.htm</a> for information disclosure based on regulation requirements ASUS is complied with:

Japan JIS-C-0950 Material Declarations

**EU REACH SVHC** 

Korea RoHS

**Swiss Energy Laws** 

# **ASUS Recycling/Takeback Services**

ASUS recycling and takeback programs come from our commitment to the highest standards for protecting our environment. We believe in providing solutions for you to be able to responsibly recycle our products, batteries, other components as well as the packaging materials. Please go to <a href="http://csr.asus.com/english/Takeback.htm">http://csr.asus.com/english/Takeback.htm</a> for detailed recycling information in different regions.

# Rechargeable Battery Recycling Service in North America



For customers in US and Canada:

If you have rechargeable batteries of ASUS products that needs to be recycled, you may call 1-800-822-8837 (toll-free) for assistance

# **Regional notice for Singapore**

Complies with IDA Standards DB103778

This ASUS product complies with IDA Standards.

# **Regional notice for India**

This product complies with the "India E-waste (Management and Handling)Rule 2011" and prohibits use of lead, mercury, hexavalent chromium, polybrominated biphenyls (PBBs) and polybrominated diphenyl ethers (PBDEs) in concentrations exceeding 0.1 % by weight in homogenous materials and 0.01 % by weight in homogenous materials for cadmium, except for the exemptions listed in Schedule-II of the Rule.

## **Regional notice for California**

This product contains chemicals, including lead, known to the State of California to cause birth defects or other reproductive harm. Wash hands after handling.

## **Notices for removeable batteries**

- · Risk of explosion if battery is replaced by an incorrect type.
- The battery and its component must be recycled or disposed of properly.

## Avis concernant les batteries remplaçables

- La batterie de l'ordinateur portable peut présenter un risque d'incendie ou de brûlure si celle-ci est retirée ou désassemblée.
- La batterie et ses composants doivent être recyclés de façon appropriée.



### Congratulations!

### This product is TCO Certified - for Sustainable IT



TCO Certified is an international third party sustainability certification for IT products. TCO Certified ensures that the manufacture, use and recycling of IT products reflect environmental, social and economic responsibility. Every TCO Certified product model is verified by an accredited independent test laboratory.

This product has been verified to meet all the criteria in TCO Certified, including:

#### Corporate Social Responsibility

Socially responsible production - working conditions and labor law in manufacturing country **Energy Efficiency** 

Energy efficiency of product and power supply. Energy Star compliant, where applicable

Environmental Management System

Manufacturer must be certified according to either ISO 14001 or EMAS

### Minimization of Hazardous Substances

Limits on cadmium, mercury, lead & hexavalent chromium including requirements for mercury-free

#### products, halogenated substances and hazardous flame retardants

Design for Recycling

Coding of plastics for easy recycling. Limit on the number of different plastics used.

## Product Lifetime. Product Take Back

Minimum one-year product warranty. Minimum three-year availability of spare parts. Product takeback **Packaging** 

#### Limits on hazardous substances in product packaging. Packaging prepared for recycling

#### Ergonomic, User-centered design

Visual ergonomics in products with a display. Adjustability for user comfort (displays, headsets)
Acoustic performance – protection against sound spikes (headsets) and fan noise (projectors, computers)
Ergonomically designed keyboard (notebooks)

#### Electrical Safety, minimal electro-magnetic Emissions

#### Third Party Testing

All certified product models have been tested in an independent, accredited laboratory.

A detailed criteria set is available for download at <a href="www.tcodevelopment.com">www.tcodevelopment.com</a>, where you can also find a searchable database of all TCO Certified IT products.

TCO Development, the organization behind TCO Certified, has been an international driver in the field of Sustainable IT for 20 years. Criteria in TCO Certified are developed in collaboration with scientists, experts, users and manufacturers. Organizations around the world rely on TCO Certified as a tool to help them reach their sustainable IT goals. We are owned by TCO, a non-profit organization representing office workers. TCO Development is headquartered in Stockholm, Sweden, with regional presence in North America and Asia.

For more information, please visit www.tcodevelopment.com

## **EC Declaration of Conformity**



Address: Authorized representative in Europe: Address, City: Country: declare the following apparatus: Product name:	4F, No. 150, LI-TE Rd., PEITOU, TAIPEI 112, TAIWAN ASUS COMPUTER GmbH HARKORT STR. 21-23, 40880 RATINGEN GERMANY	
Address, City: Country: leclare the following apparatus:	HARKORT STR. 21-23, 40880 RATINGEN	
Country: leclare the following apparatus:	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
leclare the following apparatus:	GERMANY	
• 11		
Product name :		
r roudot riumo .	Notebook PC	
Model name :	B451J, PRO451J	
conform with the essential requirements of t	the following directives:	
2004/108/EC-EMC Directive		
EN 55022:2010+AC:2011	⊠ EN 55024:2010	
⊠ EN 61000-3-2:2006+A2:2009     □ EN 55013:2001+A1:2003+A2:2006	□ EN 61000-3-3:2013     □ EN 55020:2007+A11:2011	
⊠1999/5/EC-R&TTE Directive	EN 33020.2007 FATT-2011	
⊠ FN 300 328 V1.8.1(2012-06)     □ N 300 440-1 V1.6.1(2010-08)     □ N 300 440-2 V1.4.1(2010-08)     □ N 300 440-2 V1.4.1(2010-08)     □ N 301 511 V9.0.2(2003-03)     □ N 301 908-1 V5.2.1(2011-05)     □ N 301 908-1 V5.2.1(2011-07)     □ N 301 908-1 V1.7.1(2011-06)     □ N 301 908-1 V1.7.1(2010-06)     □ N 301 908-1 V1.7.1(2010-02)     □ N 300 330-1 V1.7.1(2010-02)     □ N 300 330-1 V1.7.1(2010-02)     □ N 300 330-2 V1.5.1(2010-02)     □ N 50360:2001     □ N 62479-2010	X	
☑ EN 60950-1 / A12:2011	☐ EN 60065:2002 / A12:2011	
2009/125/EC-ErP Directive		
☐ Regulation (EC) No. 1275/2008	☑ Regulation (EC) No. 278/2009	
Regulation (EC) No. 642/2009	Regulation (EC) No. 617/2013	
2011/65/EU-RoHS Directive	\	/er. 14033
⊠CE marking		

Name : <u>Jerry Shen</u>

Declaration Date: 05/09/2014

Year to begin affixing CE marking: 2014

Signature : \_\_\_\_\_

Position : CEO

## **EC Declaration of Conformity**



We, the undersigned. Manufacturer: ASHSTAK COMPLITED INC Address: 4F, No. 150, LI-TE Rd., PEITOU, TAIPEI 112, TAIWAN Authorized representative in Europe: ASUS COMPUTER GmbH HARKORT STR. 21-23, 40880 RATINGEN Address. City: GERMANY declare the following apparatus: Product name : Notebook PC Model name : B451J. PRO451J conform with the essential requirements of the following directives: 2004/108/EC-EMC Directive ⊠ EN 55024:2010
 ⊠ EN 61000-3-3:2013 EN 55013:2001+A1:2003+A2:2006 EN 55020:2007+A11:2011 ⊠1999/5/EC-R&TTE Directive EN 300 328 V1.8.1(2012-06) EN 301 489-1 V1.9.2(2011-09) EN 300 440-1 V1.6.1(2010-08) EN 301 489-3 V1.4.1(2002-08) EN 300 440-2 V1.4.1(2010-08) EN 301 489-4 V1.4.1(2009-05) EN 301 511 V9.0.2(2003-03) EN 301 489-7 V1.3.1(2005-11) EN 301 908-1 V5.2.1(2011-05) EN 301 489-9 V1.4.1(2007-11) EN 301 908-2 V5.2.1(2011-07) EN 301 489-17 V2.2.1(2012-09) EN 301 893 V1 7 1(2012-06) EN 301 489-24 V1.5 1(2010-09) EN 302 544-2 V1.1.1(2009-01) EN 302 326-2 V1.2.2(2007-06) EN 302 623 V1.1.1(2009-01) EN 302 326-3 V1.3.1(2007-09) EN 301 357-2 V1.4.1(2008-11) EN 300 330-1 V1.7.1(2010-02) EN 300 330-2 V1.5.1(2010-02) EN 302 291-1 V1.1.1(2005-07) EN 50360-2001 EN 302 291-2 V1.1.1(2005-07) EN 62479:2010 EN 50385-2002 EN 50566: 2013 2006/95/EC-LVD Directive ☐ EN 60065:2002 / A12:2011 X EN 60950-1 / A12:2011 ⊠2009/125/EC-ErP Directive Regulation (EC) No. 1275/2008 Regulation (EC) No. 278/2009 Regulation (EC) No. 642/2009 Regulation (EC) No. 617/2013 ⊠2011/65/EU-RoHS Directive Ver. 140331

(EC conformity marking)

Position: CEO

Jerry Shen Name:

Declaration Date: 05/09/2014

Year to begin affixing CE marking: 2014

Signature :