E8781
First Edition
December 2013

BC

HDMI®
HIGH-DEFINITION MULTIMEDIA INTERFACE

Notebook PC

E-Manual

ASUS®
IN SEARCH OF INCREDIBLE

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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.

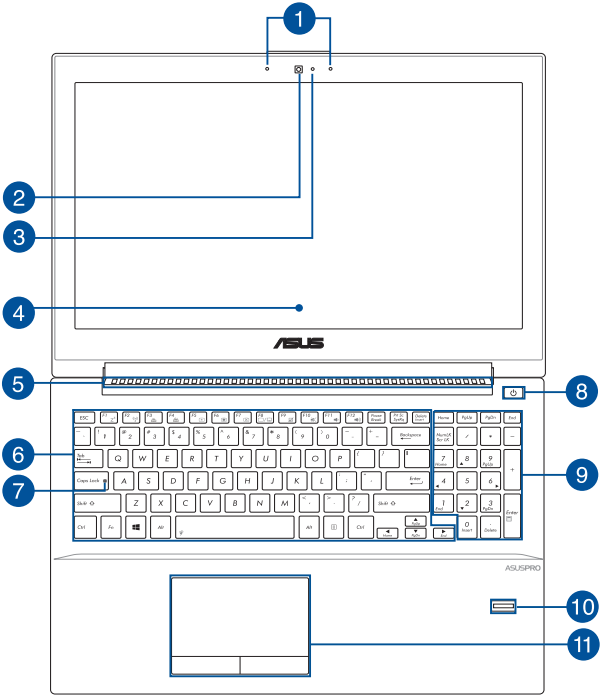
Do not throw the battery in municipal waste. The symbol of the crossed out wheeled bin indicates that the battery should not be placed in municipal waste.

Chapter 1:
Hardware Setup

Getting to know your Notebook PC

Top View

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



1 **Microphone**

The built-in microphone can be used for video conferencing, voice narrations, or simple audio recording.

2 **Camera**

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

3 **Camera indicator**

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

4 **Display panel**

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

5 **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.

---

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.

---

7 **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 **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.

9 **Numeric keypad**

The numeric keypad toggles between these two functions: for numeric input and as pointer direction keys.

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

---

10 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.

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

11 Touchpad

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 *Gestures for the touchpad* section in this manual.

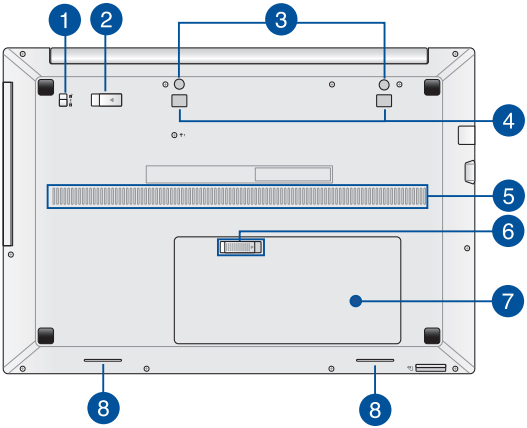
Bottom

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.

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



1 **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.

2 **Module latch**

This latch provides an additional lock to keep the removable module in place. It also automatically locks in place once the module is inserted into the module slot.

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

3 **Docking station pin slots**

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

4 **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.

5 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.

6 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.

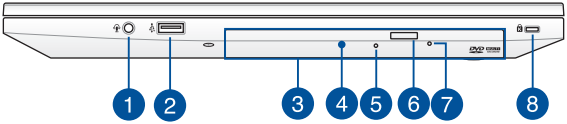
7 Battery pack

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.

8 Audio speakers

The built-in audio speaker allows you to hear audio straight from the Notebook PC. The audio features of this Notebook PC are software-controlled.

Right Side



1 **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.

2 **USB 2.0 port**

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

3 **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.

4 **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.

5 **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.

6 **Optical disc drive eject button***

Press this button to eject the optical drive tray.

7 **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.

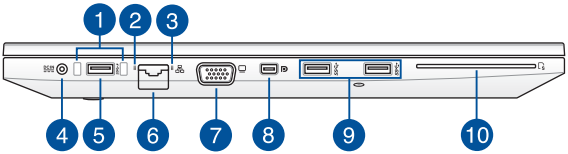
NOTE: For more details, refer to the *Using the optical drive* section in this manual.

8 **Kensington® security slot**

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

** on selected models only*

Left Side



1 **Docking station pin guide**

Insert the guide pins of your docking station into these pin guides to securely connect it with your Notebook PC.

2 **LAN LED activity indicator**

This LED indicator provides a visual indication of the LAN activity's status. Refer to the following table for details:

Color	Status
Blinking Orange	The Notebook PC is currently connected to a LAN network and accessing data.
Lights off	The Notebook PC is not connected to a LAN network

3 **LAN LED indicator**

This LED indicator lights up when your Notebook PC is connected to an active LAN port using a network cable.

4 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.

5 USB 3.0 Power Direct port with USB Charger+

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.

This port also offers the following features:

- **USB Charger+ -** The ⚡ icon indicates this port's USB Charger+ feature which allows you to quick-charge mobile devices.

  NOTE: For more details, refer to the *USB Charger+* section in this manual.

- **Power Direct -** This port allows you to supply higher power voltage and current to your Notebook PC while it is connected to a compatible docking station.

6 **LAN port**

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

7 **VGA port**

This port allows you to connect your Notebook PC to a standard VGA-compatible device, such as monitors or projectors.

8 **Mini DisplayPort/Thunderbolt port (varies by model)**

Use a Thunderbolt adapter to connect your Notebook PC to a DisplayPort, VGA, DVI, or HDMI external display and experience high-resolution display features via Intel® Thunderbolt™ technology.

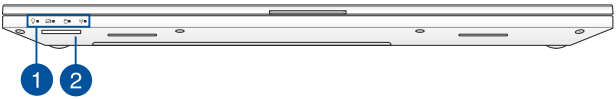
9 **USB 3.0 ports**

These Universal Serial Bus 3.0 (USB 3.0) ports provide a transfer rate of up to 5 Gbit/s and are backward compatible to USB 2.0.

10 **Memory card reader**

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

Front Side



1 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.

2 Memory card reader

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

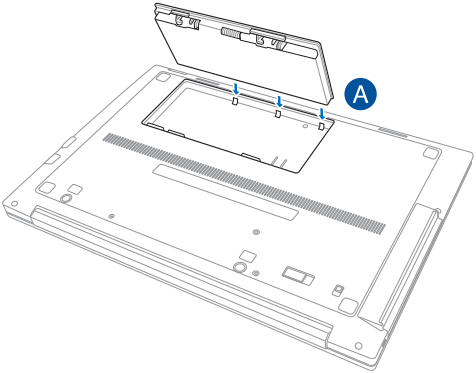
Chapter 2:
Using your Notebook PC

Getting started

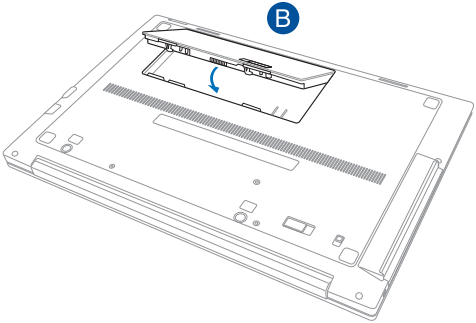
NOTE: If your Notebook PC does not have its battery pack installed, use the following procedures for installation.

Install the battery pack.

A. Align the battery pack's hooks with their corresponding slots in the battery compartment.



B. Press the battery pack gently into the battery compartment, aligning the battery pack's connector with the compartment's golden pins.



Charge your Notebook PC.

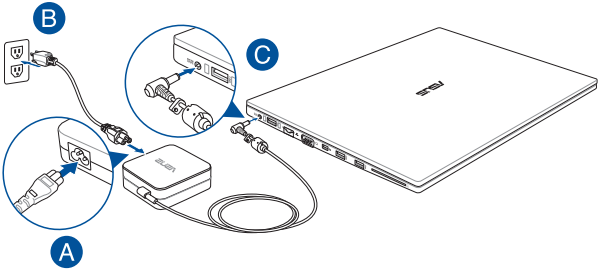
A. Connect the AC power cord to the AC/DC adapter.

B. Plug the AC power adapter into a 100V~240V power source.

C. 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: 3.42A (65W)
- Rating output voltage: 19V

IMPORTANT!

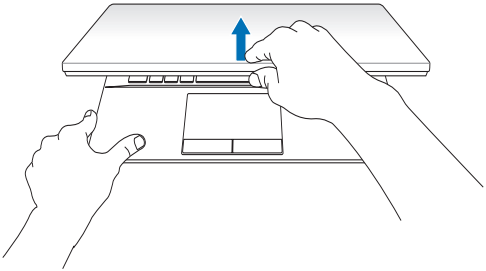
- Locate the input/output rating label on your Notebook PC and ensure that it matches the input/output rating information on your power adapter. Some Notebook PC models may have multiple rating output currents based on the available SKU.
- Ensure that your Notebook PC is connected to the power adapter 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!

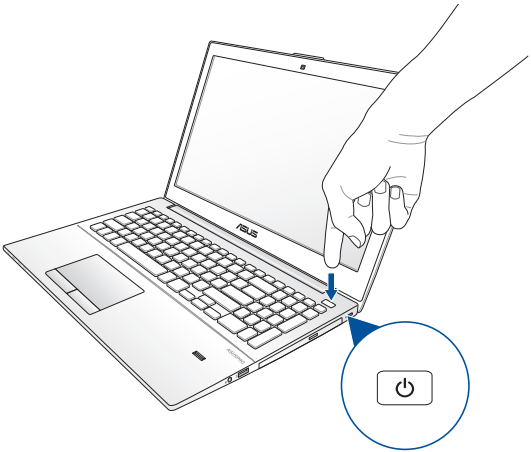
Read the following precautions for your Notebook PC's battery.

- 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.



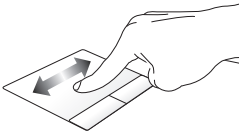
Gestures for the touchpad

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.

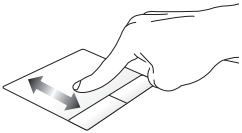
Moving the pointer

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.

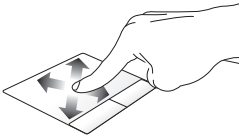
Slide horizontally



Slide vertically

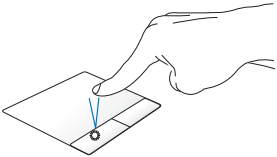


Slide diagonally



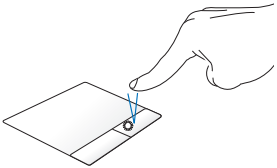
One-finger gestures

Left-click



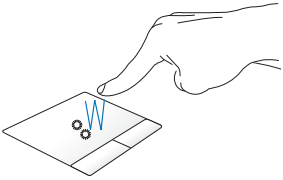
- In the Start screen, click an app to launch it.
- In Desktop mode, double-click an application to launch it.

Right-click



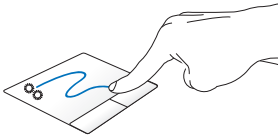
- In the Start screen, click an app to select it and launch the settings bar. You can also press this button to launch the **All Apps** bar.
- In Desktop mode, use this button to open the right-click menu.

Tap/Double tap



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

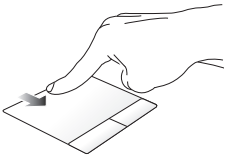
Drag and drop



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.

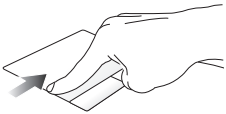
NOTE: The following edge gestures work only in Windows® 8.

Top edge swipe



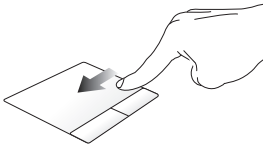
- In the Start screen, swipe from the top edge to launch the **All Apps** bar.
- In a running app, swipe from the top edge to view its menu.

Left edge swipe



Swipe from the left edge to shuffle your running apps.

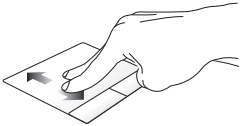
Right edge swipe



Swipe the right edge to launch the **Charm bar.**

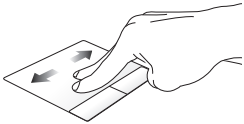
Two-finger gestures

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.

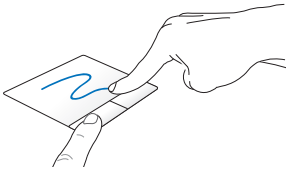
Zoom out

Bring together your two fingers on the touchpad.

Zoom in

Spread apart your two fingers on the touchpad.

Drag and drop



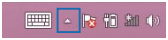
Select an item then press and hold the left button. Using your other finger, slide down the touchpad to drag and drop the item to a new location.

Using ASUS Smart Gesture

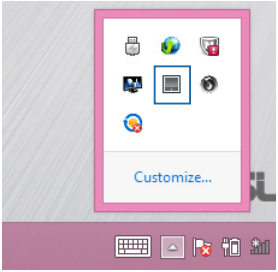
The ASUS Smart Gesture app of your Notebook PC allows you to enable other touchpad gestures or disable selected gestures depending on your preference.

Enabling the rotate gesture

1. From the taskbar on your Desktop, click .



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

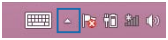


3. In the ASUS Smart Gesture window, tick **Rotate**

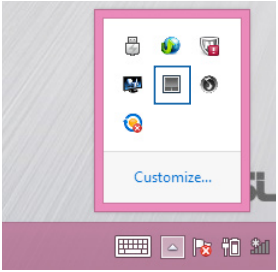
4. Click **Apply** to save the changes then **OK** to exit the ASUS Smart Gesture window.

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.

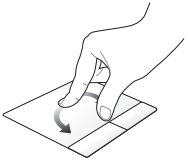


3. In the ASUS Smart Gesture window, tick the gestures you would like to enable under **Three Fingers**

4. 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.

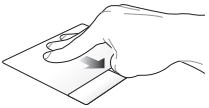
Swipe left or swipe right

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:

fn + f1 — Puts the Notebook PC into **Sleep mode**

fn + f2 — Turns **Airplane mode** on or off

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

fn + f5 — Decreases display brightness

fn + f6 — Increases display brightness

fn + f7 — Turns the display panel off

fn + f8 — Activates the second screen

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

fn + f9 Enables or disables the touchpad

fn + f10 Turns the speaker on or off

fn + f11 Turns the speaker volume down

fn + f12 Turns the speaker volume up

Function keys for ASUS App

Your Notebook PC also comes with a special set of function keys that can be used to launch an ASUS app.

fn + Launches the ASUS Power4Gear Hybrid app

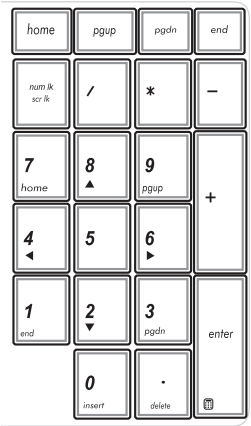
Windows® 8 keys

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.

Numeric keypad



A numeric keypad is available on selected Notebook PC models. You can use this keypad for numeric input or as pointer direction keys.

Press shift⇧ + num lk scr lk to toggle between using the keypad as number keys or as pointer direction keys.

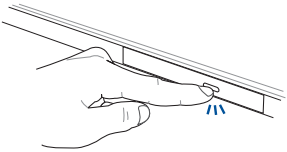
Using the optical drive

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

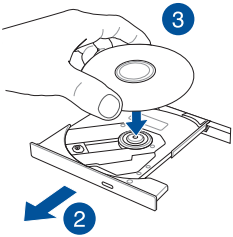
1. While the Notebook PC is on, press the electronic eject button to partially eject the optical drive tray.



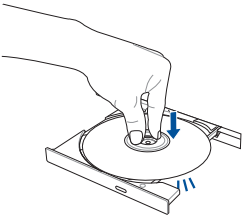
2. Gently pull out the drive tray.

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.

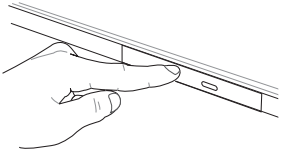


4. Push down the disc's plastic hub until it snaps onto the optical drive hub.



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.



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

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 operating system.

To start your Notebook PC for the first time:

1. Press the power button on your Notebook PC. Wait for a few minutes until the setup screen appears.
2. From the setup screen, pick a language to use on your Notebook PC.
3. Carefully read the License Terms. Tick **I accept the terms for using Windows** then click **Accept.**
4. Follow the onscreen instructions to configure the following basic items:
   - Keep your PC secure
   - Personalize
   - Wireless
   - Settings
   - Sign in to your PC
5. After configuring the basic items, the Windows®8 tutorial appears. Watch this to learn more about Windows®8 functionalities.

Windows® 8 lock screen

The Windows® 8 lock screen may appear when your Notebook PC enters the Windows® 8 operating system. To proceed, tap on the lock screen or press any key on your Notebook PC's keyboard.

Windows® UI

Windows® 8 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.

Zoom in/out button

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 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 on the Start screen's thumbnail 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 on the running app's thumbnail 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. **NOTE:** 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 *Working with Windows® apps*.
upper or lower right corner	Hover your mouse pointer on the upper or lower right corner to launch the **Charms bar.**

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 tab twice then use the arrow keys to browse through the apps. Press enter 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 its settings bar then tap

or

.

Unpinning apps

Right-click on the app to activate the settings bar then tap

.

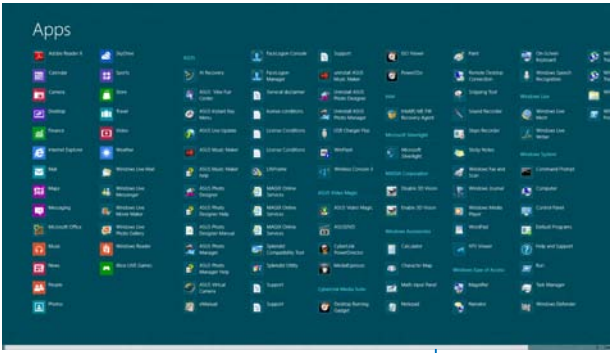
Closing apps

1. 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 alt + f4.

Accessing the Apps screen

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



Horizontal scroll bar

Launching the Apps screen

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

Swipe from the top edge to launch the **All Apps** bar.

From the Start screen, press [⊞] + [Z] to select the **All Apps** icon

then press [enter].

Pinning more apps on the Start screen

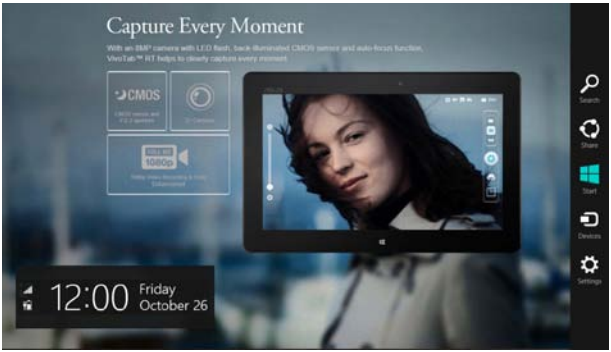
You can pin more apps on the Start screen using your touchpad.

1. Position the mouse pointer over the app you want to pin on the Start screen.
2. Right-click on the app to activate its settings.
3. Tap on the

icon.

Charms bar

The charms bar is a toolbar that can be triggered on the right side of your screen. It consists of several charms 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.
2. Hover the mouse point on the top side of your screen.
3. 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 [⊞] + [> .].
3. Launch another app.
4. To switch between apps, press [⊞] + [J].

Other keyboard shortcuts

Using the keyboard, you can also use the following shortcuts to help you launch applications and navigate Windows® 8.

⊞	Switches between the Start screen and the last running app
⊞ + D	Launches the desktop
⊞ + E	Launches the **Computer** window on Desktop mode
⊞ + F	Opens the **File** charm
⊞ + H	Opens the **Share** charm
⊞ + I	Opens the **Settings** charm
⊞ + K	Opens the **Devices** charm
⊞ + L	Activates the Lock screen
⊞ + M	Minimizes the currently active window

⊞ + P	Opens the **Second screen** pane
⊞ + Q	Opens the **Apps** search pane
⊞ + R	Opens the **Run** window
⊞ + U	Opens **Ease of Access Center**
⊞ + W	Opens the **Settings** charm
⊞ + X	Opens a menu box of Windows® tools
⊞ + + =	Launches the magnifier icon and zooms in your screen
⊞ + − -	Zooms out your screen

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

and tap

.
3. Select an access point from the list of available Wi-Fi connections.

4. Tap **Connect** to start the network connection**.**

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

5. If you want to enable sharing between your Notebook PC and other wireless-enabled systems, tap **Yes**, **turn on sharing and connect to devices.** Tap **No, don't turn on sharing or connect to devices** if you do not want to enable the sharing function.

Bluetooth

Use Bluetooth to facilitate wireless data transfers with other Bluetooth-enabled devices.

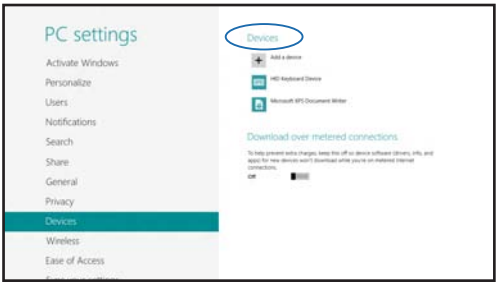
IMPORTANT! The **Airplane mode** disables this feature. Ensure that **Airplane mode** is turned off before enabling the Bluetooth connection of your Notebook PC.

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:

1. Launch the **Charms bar**.
2. Tap

then tap **Change PC Settings.**
3. Under **PC Settings,** select **Devices** then tap **Add a Device** to search for Bluetooth-enabled devices.



4. 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 **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

1. Launch the **Charms bar**.
2. Tap

and tap

.
3. Move the slider to the right to turn the Airplane mode on.

Press fn + f2.

Turning Airplane mode off

1. Launch the **Charms bar**.
2. Tap

and tap

.
3. Move the slider to the left to turn the Airplane mode off.

Press fn + f2.

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.**
2. From the Windows® taskbar, right-click the network icon then tap **Open Network and Sharing Center**.
3. In the Network and Sharing Center window, tap **Change adapter settings**.
4. Right-click on your LAN then select **Properties**.

5. Tap **Internet Protocol Version 4(TCP/IPv4)** then tap **Properties**.

6. Tap **Obtain an IP address automatically** then tap **OK**.

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

---

7. Return to the **Network and Sharing Center** window then tap **Set up a new connection or network**.

8. Select **Connect to the Internet** then tap **Next**.

9. Tap **Broadband (PPPoE)**.

10. Type your User name, Password, and Connection name then tap **Connect**.

11. Tap **Close** to finish the configuration.

12. Tap on the taskbar then tap the connection you just created.

13. Type your user name and password then tap **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 **Use the following IP address**.
3. Type the IP address, Subnet mask and Default gateway from your service provider.
4. If needed, you can also type the preferred DNS server address and alternate DNS server address then tap **OK.**

Turning your Notebook PC off

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

- Tap

from the **Charms bar** then tap

> **Shut down** to do a normal shutdown.
- From the log-in screen, tap

> **Shut down**.
- 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.**

Chapter 4:
ASUS apps

Featured ASUS Apps

Power4Gear Hybrid

Optimize the performance of your Notebook PC using the power saving modes in Power4Gear.

NOTE: Unplugging the Notebook PC from its power adapter automatically switches Power4Gear Hybrid to Battery Saving mode.

Launching Power4Gear Hybrid

Press fn + .

Running System

This option allows you to enable either of the following power saving modes in your Notebook PC.

NOTE: By default, your Notebook PC is set to **Performance** mode.

Performance mode

Use this mode when doing high-performance activities like playing games or conducting business presentations using your Notebook PC.

Battery Saving mode

This mode extends your Notebook PC's battery life while plugged in to the power adapter or while running on battery power only.

Select from these power saving modes.

Use these options to customize your power saving mode.

This option allows you to hide the desktop icons and turns the presentation mode on or off.

System in Sleep

This option allows you to enable or disable either of the following sleep modes:

Instant On

This mode is default-enabled in your Notebook PC. It allows the system to return to its last working state even after your Notebook PC has entered into sleep mode.

Move this slider to switch between **Instant On** or **Long Standby Time.**

Long Standby Time

This mode allows your Notebook PC's battery to last for up to sixty-nine (69) days or more. When enabled, the Notebook PC returns to its last working state in as fast as seven seconds, four hours after entering into deep sleep mode.

USB Charger+

USB Charger+ allows you to quick-charge devices using your Notebook PC's USB 3.0 charge port with the ⚡ icon.

WARNING: If your connected device overheats, remove it immediately.

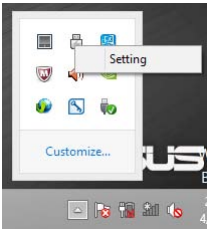
Setting the quick-charge limit

By default, your Notebook PC can support quick-charging via the USB Charger+ port while on power adapter mode.

Using the USB Charger+ settings, you can set a quick-charge limit so you can continue quick-charging devices using the same port even while your Notebook PC is running on battery mode or turned off.

NOTE: Some Notebook PC models support quick-charging even while on sleep, hibernate, or shut down mode, depending on SKU.

1. From the taskbar on your Desktop, click .
2. Right-click on the icon then click **Settings.**



3. Move the percentage slider to the left or to the right to set the limit for charging devices.

NOTE: The default limit is set to 40% but you can set the quick-charge limit from 20% to 99%.

4. Click **OK** to save and exit.

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.

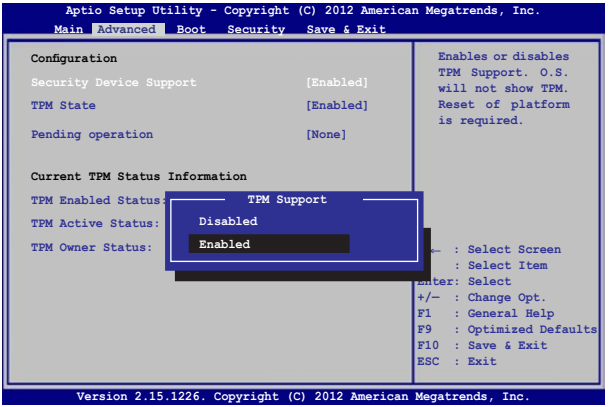
TPM helps provide security that can be stronger than that contained in the system BIOS, operating system, or any non-TPM application.

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

** on selected models only*

Enabling TPM Support

Restart your Notebook PC then press [f2] during POST. Set **TPM Support** to **[Enable]** in BIOS setup **Advanced** > **Trusted Computing**.



IMPORTANT! Use your TPM application's "Backup" or "Migration" function to backup your TPM security data.

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:

1. From the Windows® 8 Start Screen, go to **All Apps** then click on the **ASUS FingerPrint** icon from the list of applications under **ASUS.**

2. Click **OK** to proceed to the next step.

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

4. 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.

6. **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.

9. 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.

Basic

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.

Advanced

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.

ASUSPRO Business Center*

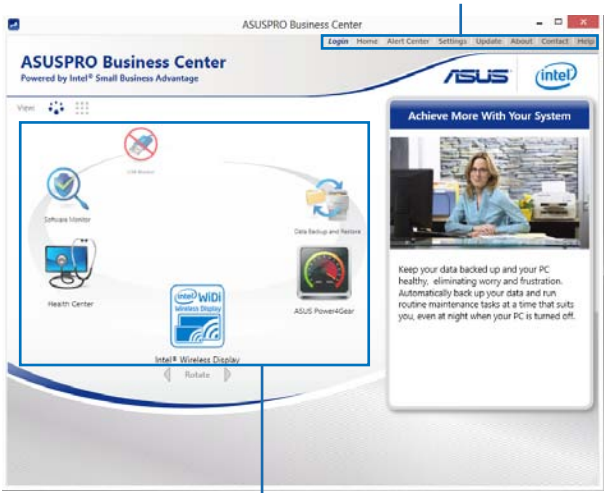
The ASUSPRO Business Center is an application hub that features some exclusive ASUS apps and the Intel® Small Business Advantage (SBA) to improve manageability when using your Notebook PC for business productivity.

Accessing ASUS Business Center

Go to Desktop mode then click on the

icon.

menu options



Click on any of these icons to launch the application.

** on selected models only*

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

Intel® Wireless Display

This application allows you to stream business presentations, multimedia files, and even websites from your Notebook PC to an external display device using an adapter.

NOTE: For details on using the Intel® Wireless Display, click **Help** inside the Intel® WiDi window.

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.

Software Monitor

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

USB 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.

ASUS Power4Gear

This application launches ASUS Power4Gear. For more details, refer to the *ASUS Power4Gear* section in this manual.

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 f2 during POST.

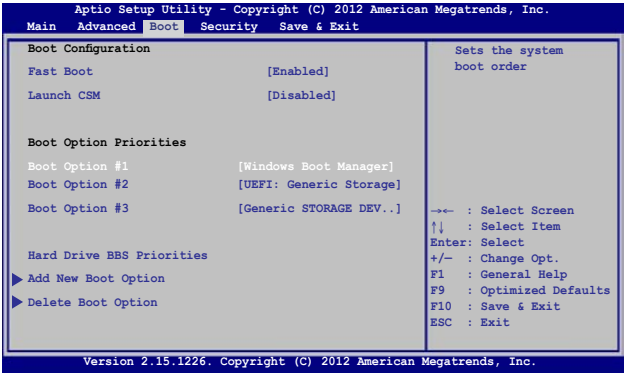
BIOS Settings

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

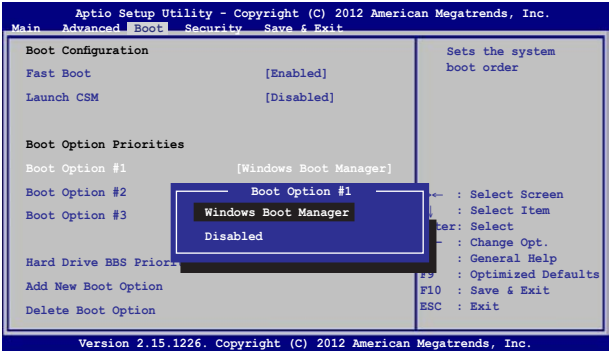
Boot

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 enter 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.

```
Aptio Setup Utility - Copyright (C) 2012 American Megatrends, Inc.
Main   Advanced   Boot   Security   Save & Exit

Password Description                          Set Administrator
                                              Password. The
If ONLY the Administrator's password is set,  password length
then this only limits access to Setup and is  must be in the
only asked for when entering Setup. If ONLY   following range:
the user's password is set, then this is a
power on password and must be entered to boot Minimum length 3
or enter Setup. In Setup, the User will have
Administrator rights.                         Maximum length 20
Administrator Password Status      NOT INSTALLED
User Password Status               NOT INSTALLED

Administrator Password
User Password
HDD Password Status :              NOT INSTALLED
Set Master Password
Set User Password                             →←  : Select Screen
▶ I/O Interface Security                      ↑↓  : Select Item
System Mode state                  User       Enter: Select
Secure Boot state                  Enabled    +/-  : Change Opt.
Secure Boot Control                [Enabled]  F1   : General Help
Key Management                                F9   : Optimized Defaults
                                              F10  : Save & Exit
                                              ESC  : Exit

Version 2.15.1226. Copyright (C) 2012 American Megatrends, Inc.
```

To set the password:

1. 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:

1. On the **Security** screen, select **Administrator Password** or **User Password**.

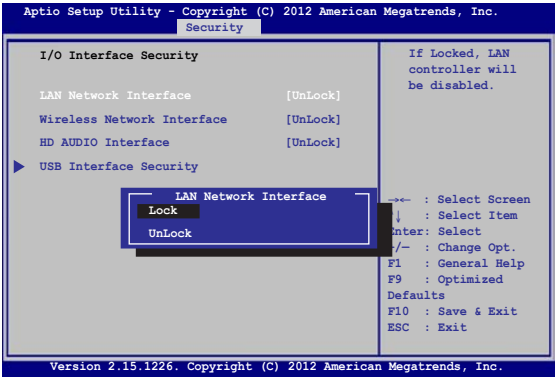
2. Type in the current password then press enter.

3. Leave the **Create New Password** field blank then press enter.

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:

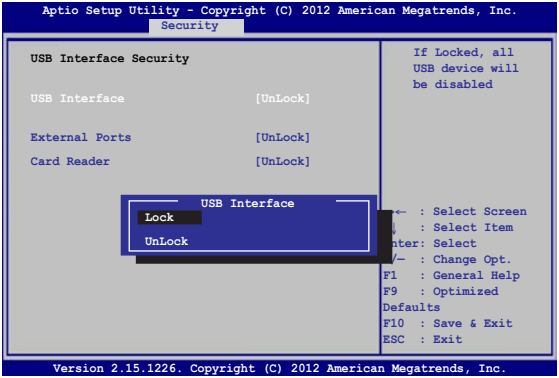
1. On the **Security** screen, select **I/O Interface Security**.

2. Select an interface you would like to lock then press enter.

3. 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:

1. On the **Security** screen, select **I/O Interface Security > USB Interface Security**.

2. 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.

```
Aptio Setup Utility - Copyright (C) 2012 American Megatrends, Inc.
Main   Advanced   Boot   Security   Save & Exit

Password Description                    Set HDD Master
                                        Password.
If ONLY the Administrator's password is
set,then this only limits access to Setup  ***Advisable to
and is only asked for when entering Setup. Power Cycle System
If ONLY the user's password is set, then   after Setting Hard
this is a power on password and must be    Disk Passwords***
entered to boot or enter Setup. In Setup,
the User will have Administrator rights.

Administrator Password Status   NOT INSTALLED
User Password Status            NOT INSTALLED
Administrator Password
User Password
HDD Password Status :           NOT INSTALLED   →← : Select Screen
Set Master Password                             ↑↓ : Select Item
Set User Password                               Enter: Select
                                                +/- : Change Opt.
▶ I/O Interface Security                        F1 : General Help
System Mode state               Setup           F9 : Optimized
                                                Defaults
Secure Boot state               Disabled        F10 : Save & Exit
Secure Boot Control             [Enabled]       ESC : Exit
▶ Key Management

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```

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.
4. 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.

```
Aptio Setup Utility - Copyright (C) 2012 American Megatrends, Inc.
Main   Advanced   Boot   Security   Save & Exit

Save Changes and Exit                 Exit system setup
Discard Changes and Exit              after saving the
                                      changes.
Save Options
Save Changes
Discard Changes

Restore Defaults

Boot Override
Windows Boot Manager                  →←   : Select Screen
                                      ↑↓   : Select Item
Launch EFI Shell from filesystem device Enter: Select
                                      +/-  : Change Opt.
                                      F1   : General Help
                                      F9   : Optimized Defaults
                                      F10  : Save & Exit
                                      ESC  : Exit

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```
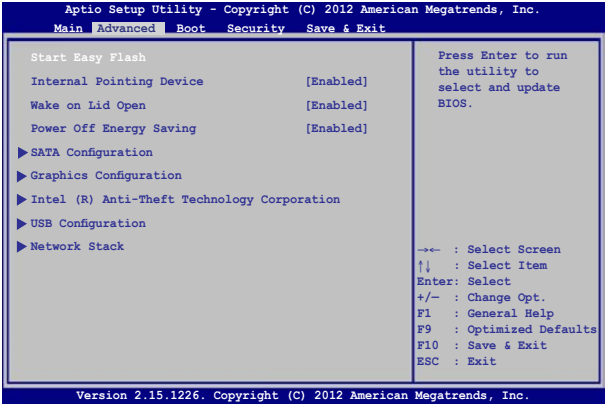
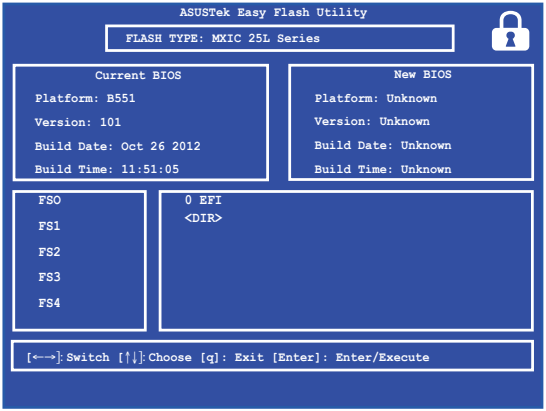

To update the BIOS:

1. 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 f2 during POST.
5. From the BIOS menu, Select **Advanced > Start Easy Flash,** then press enter.



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



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

Troubleshoot

By pressing [f9] during POST, you can access Windows® 8 troubleshoot options which includes the following:

- **Refresh your PC**
- **Reset your PC**
- **Advanced options**

Refresh your PC

Use **Refresh your PC** if you want to refresh your system without losing your current files and applications.

To access this during POST:

1. Restart your Notebook PC then press [f9] during POST.
2. Wait for Windows® to load the Choose an option screen then tap **Troubleshoot.**
3. Tap **Refresh your PC.**
4. In the Refresh your PC screen, read the bullet points to learn more about using this option then tap **Next.**
5. Tap the account you would like to refresh.
6. Type your account password then tap **Continue.**
7. Tap **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 f9 during POST.
2. Wait for Windows® to load the Choose an option screen then tap **Troubleshoot.**
3. Tap **Reset your PC.**
4. In the Reset your PC screen, read the bullet points to learn more about using this option then tap **Next.**
5. Tap your preferred reset option: **Just remove my files** or **Fully clean the drive.**
6. Tap **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:

1. Restart your Notebook PC then press f9 during POST.
2. Wait for Windows® to load the Choose an option screen then tap **Troubleshoot.**
3. Tap **Advanced options.**
4. In the Advanced options screen, select the troubleshooting option you wish to perform.
5. 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:

1. Restart your Notebook PC then press f9 during POST.
2. Wait for Windows® to load the Choose an option screen then tap **Troubleshoot.**
3. Tap **Advanced options.**

4. In the Advanced options screen, select **System Image Recovery**.

5. Choose an account you would like to recover using a system image file.

6. Type your account password then tap **Continue.**

7. Select **Use the latest available system image (recommended),** then tap **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.

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.

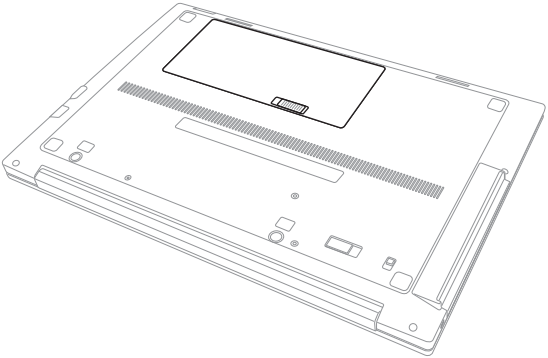
NOTE: The appearance of your Notebook PC's bottom side and module may vary per model but the installation process remains the same.

Installing a removable optical disc drive

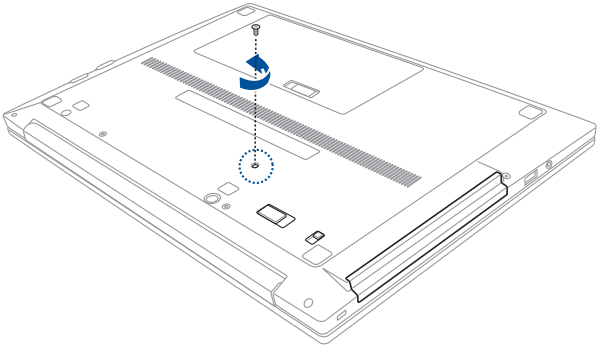
WARNING! Do not disassemble any components from your removable optical disc drive. Consult an authorized service center or retailer if you encounter any problems with this module.

NOTE: The removable optical disc drive is bundled with select models only. Visit an authorized service center or retailer to purchase compatible removable disc drives for your Notebook PC.

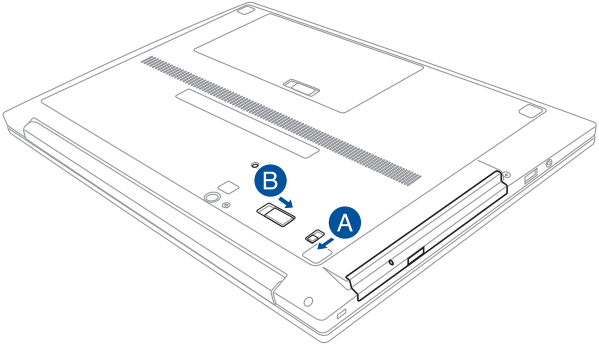
1. Shut down your Notebook PC and disconnect all cables and other peripherals.
2. Put your Notebook PC on a flat, clean and stable surface with its bottom side facing up.



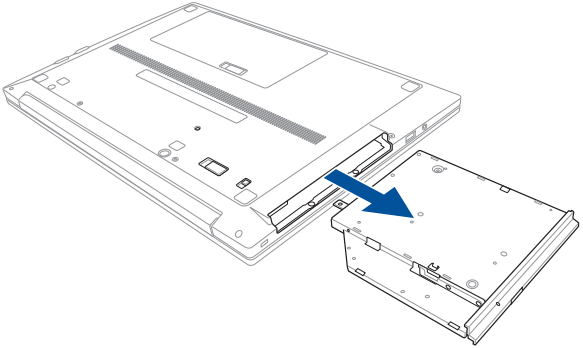
3. Loosen the screw that secures the module as shown in the illustration below.



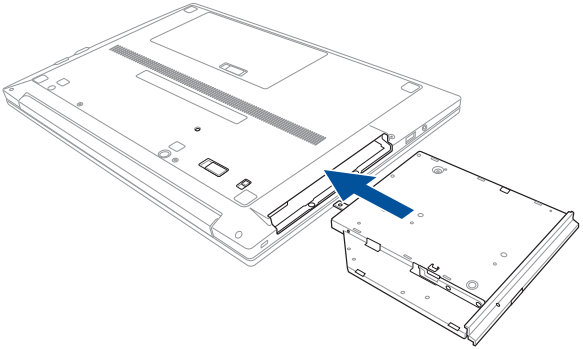
4. Slide and hold the spring module lock (A) then push the module latch (B) towards the direction of the arrows to release the current module from the slot.



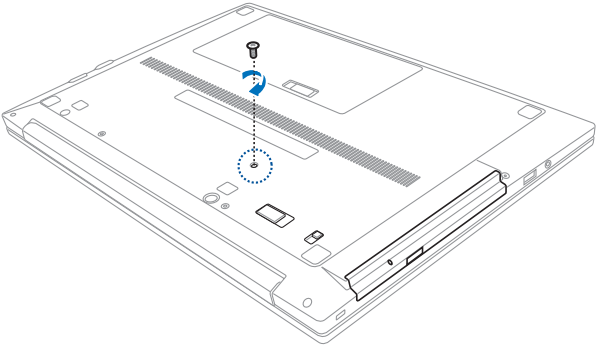
5. Gently pull out the current module from the slot.



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



7. Secure the optical disc drive module using the screw you removed earlier.

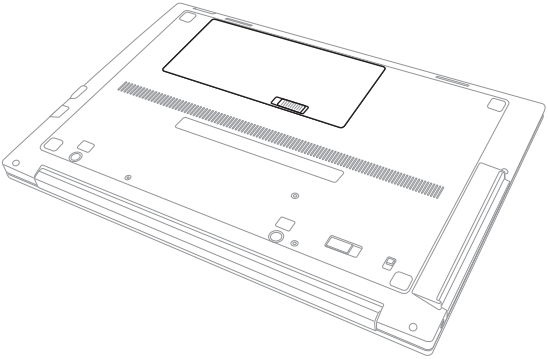


Installing a secondary battery pack

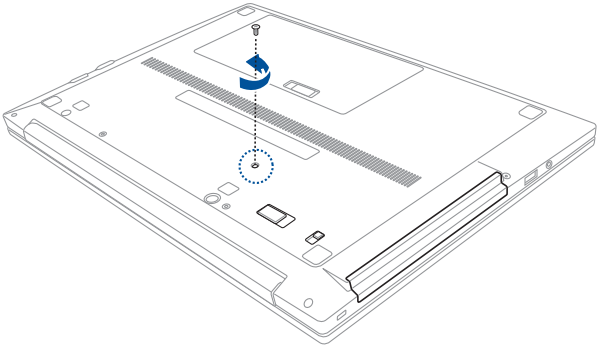
WARNING! Do not disassemble any components from your battery pack. Consult an authorized service center or retailer if you encounter any problem with this module.

NOTE: 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.

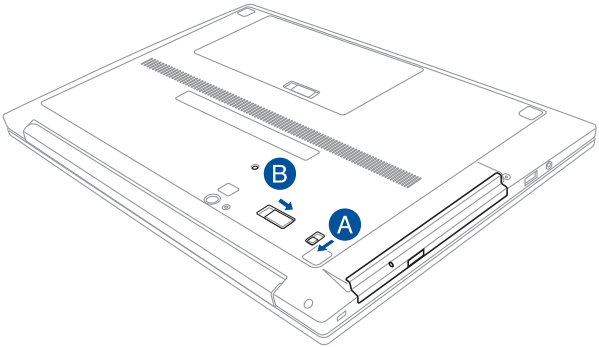
1. Shut down your Notebook PC and disconnect all cables and other peripherals.
2. Put your Notebook PC on a flat, clean and stable surface with its bottom side facing up.



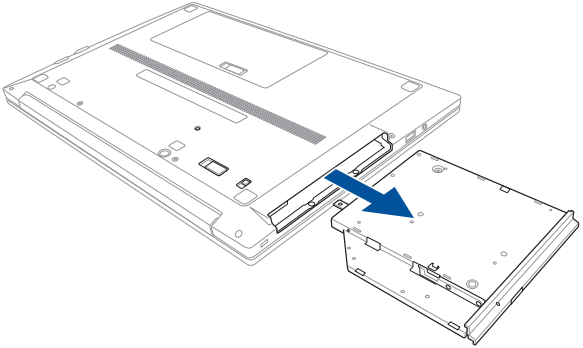
3. Loosen the screw that secures the module as shown in the illustration below.



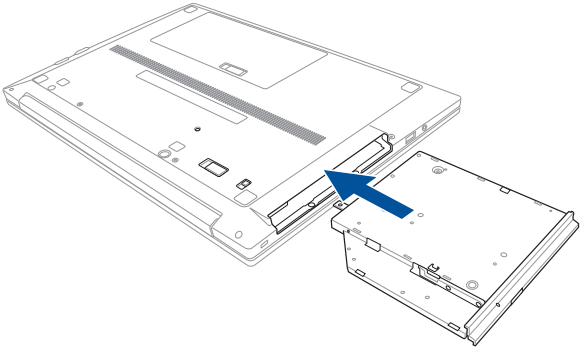
4. Slide and hold the spring module lock (A) then push the module latch (B) towards the direction of the arrows to release the current module from the slot.



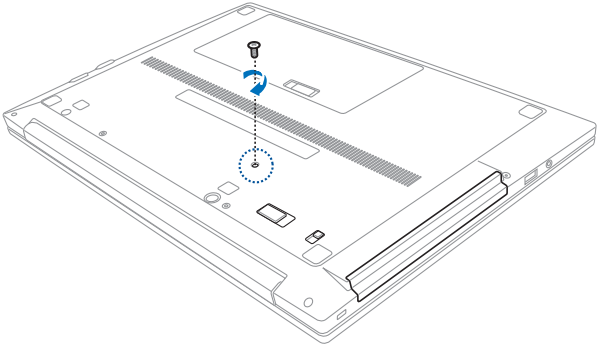
5. Gently pull out the current module from the slot.



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



7. Secure the secondary battery pack using the screw you removed earlier.



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

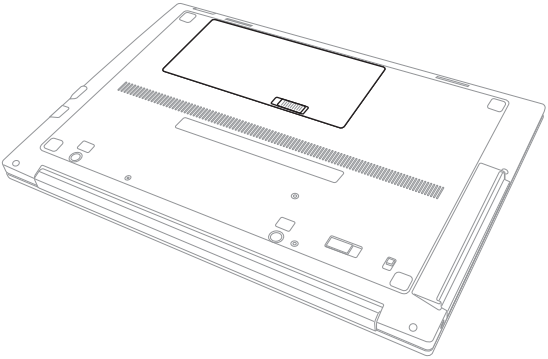
Upgrade the memory capacity of your Notebook PC by installing an additional 2.5-inch 7mm. HDD or SSD module. The following steps show you how to install or replace the removable HDD/SSD module of your Notebook PC.

WARNING! Do not disassemble any components from your HDD or SSD. Consult an authorized service center or retailer if you encounter any problems with your drive.

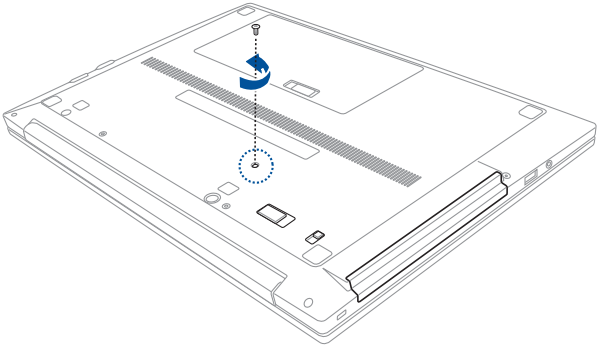
IMPORTANT! Purchase an HDD or SSD from authorized retailers of this Notebook PC to ensure maximum compatibility and reliability. You may also visit an authorized service center for further assistance.

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

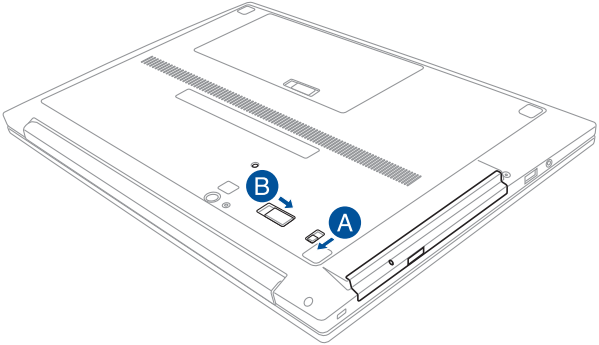
1. Shut down your Notebook PC and disconnect all cables and other peripherals.
2. Put your Notebook PC on a flat, clean and stable surface with its bottom side facing up.



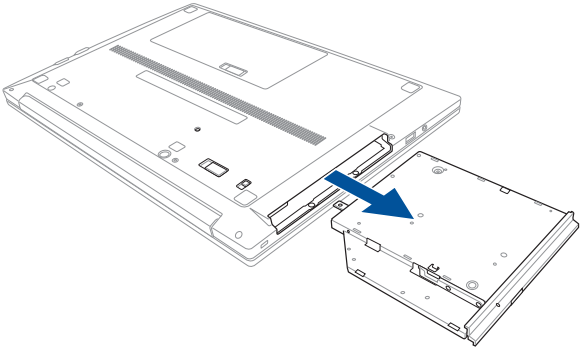
3. Loosen the screw that secures the module as shown in the illustration below.



4. 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.

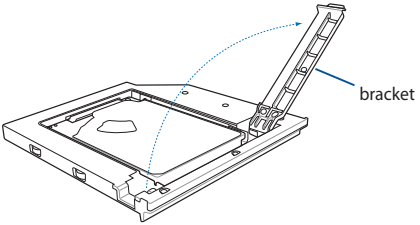


5. Gently pull out the current module from the slot.

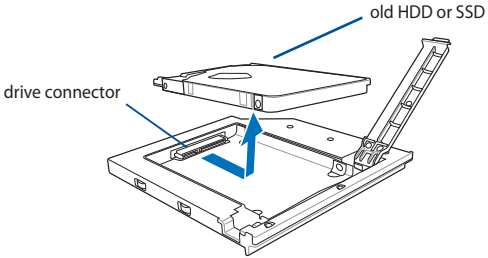


NOTE: If your purchased HDD or SSD comes with its own module bay, refer to its user manual for installation details. The following procedures applies only to ASUS module bays for this Notebook PC.

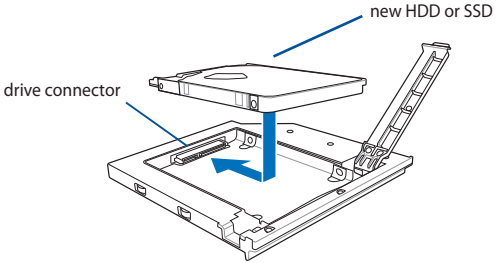
6. Turn the module bay to its other side then unlock the module bay's bracket. If your module bay contains an existing HDD or SSD, proceed to step 7. Otherwise, you may proceed to step 8.



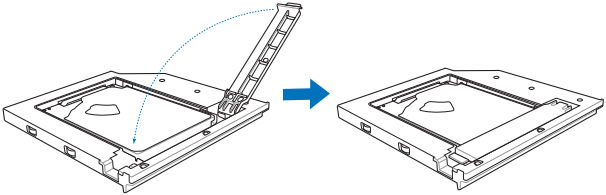
7. Carefully slide the old HDD or SSD from the drive connector, then remove it from the module bay.



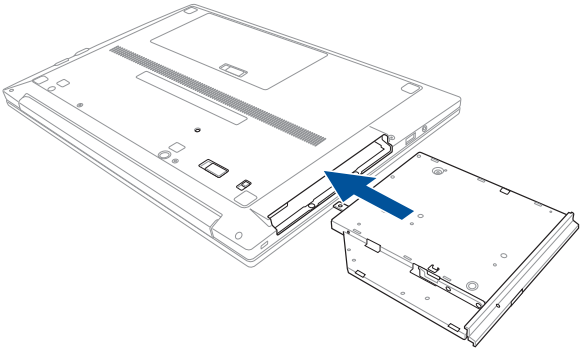
8. Carefully place the new HDD or SSD into the module bay, then slide the drive towards the drive connector.



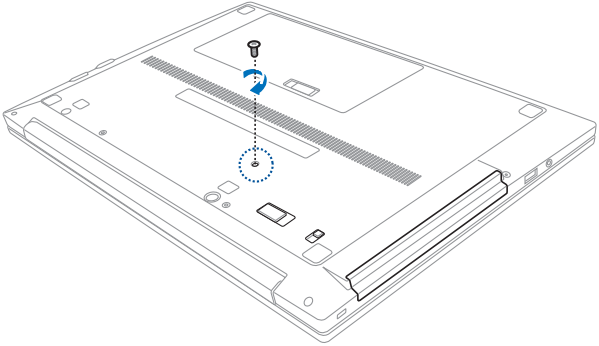
9. Replace the bracket on the module bay to secure and stabilize the new HDD or SSD in place.



10. 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.



11. Secure the module bay using the screw you removed earlier.



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

1. **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.

2. **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 **Battery Mode** under Power4Gear.
   - 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 fn + f9 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 fn + f12 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 fn + f9.

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 fn + f9.

11. **Instead of showing letters, pressing the "U", "I", and "O" keys on my keyboard displays numbers. How can I change this?**

    Press the num lk scr lk key or shift + num lk scr lk (on selected models) on your Notebook PC to turn off this feature and use the said keys for inputting letters.

Software FAQs

1. **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.

2. **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:

a. Restart your Notebook PC and enter BIOS by pressing **F2** on your keyboard.

b. Go to **Boot** > **Launch CSM** > **Enabled.**

c. Go to the **Security** menu then set **Secure Boot Control** to **Disabled.**

d. Press **F10** to save changes and exit BIOS.

e. Press and hold **ESC** to launch boot menu when your Notebook PC restarts.

Appendices

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 multifrequency 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 inter-working 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[1]	Yes	No
Belgium	Yes	No
Czech Republic	No	Not Applicable
Denmark[1]	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
Lichtenstein	Yes	No
Luxemburg	Yes	No
The Netherlands[1]	Yes	Yes
Norway	Yes	No
Poland	No	Not Applicable
Portugal	No	Not Applicable
Spain	No	Not Applicable
Sweden	Yes	No
Switzerland	Yes	No
United Kingdom	Yes	No

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.

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

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)

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.

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

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

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^2 or H05VV-F, 2G, 0.75mm^2.

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/REACH.htm.

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)

ADVARSELI! 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 apparaat 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 zichzelf 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 neuvoston päätöksen 98/482/EY mukaisesti liitettäväksi yksittäisenä laitteena yleiseen kytkentäiseen puhelinverkkoon (PSTN) EU:n 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 Netzabschlußpunkt dar.

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

Greek

«Ο εξοπλισμός έχει εγκριθεί για πανευρωπαϊκή σύνδεση μεμονωμένου τερματικού με το δημόσιο τηλεφωνικό δίκτυο μεταγωγής (PSTN), σύμφωνα με την απόφαση 98/482/ΕΚ του Συμβουλίου· ωστόσο, επειδή υπάρχουν διαφορές μεταξύ των επιμέρους PSTN που παρέχονται σε διάφορες χώρες, η έγκριση δεν παρέχει αφ' εαυτής ανεπιφύλακτη εξασφάλιση επιτυχούς λειτουργίας σε κάθε σημείο απόληξης του δικτύου PSTN.

Εάν ανακύψουν προβλήματα, 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 Decisão 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 sí 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 varje 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 15 and 30 minutes of user inactivity. To wake your computer, click the mouse or press any key on the keyboard. Please visit http://www.energy.gov/powermanagement for detail information on power management and its benefits to the environment. In addition, please visit http://www.energystar.gov 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.

For more information on the EU Flower label, please visit the European Union Eco-label 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 http://csr.asus.com/english/Compliance.htm for information disclosure based on regulation requirements ASUS is complied with:

Japan JIS-C-0950 Material Declarations

EU REACH SVHC

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 http://csr.asus.com/english/Takeback.htm for detailed recycling information in different regions.

Regional notice for Singapore

Complies with
IDA Standards
DB103778

This ASUS product complies with IDA Standards.

TCO DEVELOPMENT

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 www.tcodevelopment.com, 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

We, the undersigned,

Manufacturer:	ASUSTeK COMPUTER INC.
Address, City:	4F, No. 150, Li-Te Rd., PEITOU, TAIPEI 112, TAIWAN
Country:	TAIWAN
Authorized representative in Europe:	ASUS COMPUTER GmbH
Address, City:	HARKORT STR. 21-23, 40880 RATINGEN
Country:	GERMANY

declare the following apparatus:

Product name :	**Notebook PC**
Model name :	**B551L,PRO551L,E551L**

conform with the essential requirements of the following directives:

☒2004/108/EC-EMC Directive

☒ EN 55022:2010+AC:2011	☒ EN 55024:2010
☒ EN 61000-3-2:2006+A2:2009	☒ EN 61000-3-3:2008
☐ 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 301 908-13 V5.2.1(2011-05)	☒ EN 301 489-24 V1.5.1(2010-09)
☒ EN 301 893 V1.7.1(2012-06)	☒ EN 302 326-2 V1.2.2(2007-06)
☐ EN 302 544-2 V1.1.1(2009-01)	☒ EN 302 326-3 V1.3.1(2007-09)
☐ EN 302 623 V1.1.1(2009-01)	☒ EN 301 357-2 V1.4.1(2008-11)
☐ EN 50360:2001	☒ EN 302 291-1 V1.1.1(2005-07)
☐ EN 62479:2010	☒ EN 302 291-2 V1.1.1(2005-07)
☐ EN 50385:2002	
☒ EN 62311:2008	

☒2006/95/EC-LVD Directive

☒ 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 Ver. 130816

☒CE marking

(EC conformity marking)

Position : **CEO**

Name : **Jerry Shen**

Signature : _____

Declaration Date: 29/01/2014

Year to begin affixing CE marking: 2014

EC Declaration of Conformity

We, the undersigned,

Manufacturer:	ASUSTeK COMPUTER INC.
Address, City:	4F, No. 150, Li-Te Rd., PEITOU, TAIPEI 112, TAIWAN
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Authorized representative in Europe:	ASUS COMPUTER GmbH
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