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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, including the BIOS.

**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 the ASUS apps included with your Notebook PC.

**Chapter 5: Upgrading your Notebook PC**
This chapter guides you through the process of replacing and upgrading parts of your Notebook PC.

**Chapter 6: Troubleshooting your Notebook PC**
This chapter includes common problems and solutions for 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 connected to the power source once it is fully charged. Some electronic devices are not designed to be left connected to the power source for extended periods of time.

Incorrect installation of battery may cause explosion and damage your Notebook PC.

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.
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.
Airplane mode

You can send your Notebook PC through airport 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.

Proper disposal

Do not throw the battery into fire to avoid explosion.

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 **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.

6 **Numeric keypad (on selected models)**
A numeric keypad is available on selected Notebook PC models.

**NOTE:** For more details, refer to the *Numeric Keypad* section in this manual.
7 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.
- Some selected models come with a backlit keyboard.

8 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.

9 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 table below for details:

<table>
<thead>
<tr>
<th>Color</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid Green</td>
<td>Battery power is between 95% and 100%</td>
</tr>
<tr>
<td>Solid Orange</td>
<td>Battery power is less than 95%</td>
</tr>
<tr>
<td>Blinking Orange</td>
<td>Battery power is less than 10%</td>
</tr>
<tr>
<td>Lights off</td>
<td>Battery power is more than 10% and below 100%</td>
</tr>
</tbody>
</table>

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

Bluetooth / Wireless indicator (on selected models)
This indicator lights up when your Notebook PC’s wireless function (Bluetooth or Wi-Fi) is enabled.

Number lock indicator
This indicator lights up when the number lock function is activated. This allows you to use some of the keys on your keyboard for numeric input.

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.
**Bottom**

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

**WARNING!** The bottom of the Notebook PC can get very 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.
1 **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.

2 **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.

3 **Manual battery lock**
The manual battery lock is used to keep the battery pack secured. This lock should be manually moved to a locked or unlocked position to insert or remove the battery pack.

4 **Hard disk drive compartment**
This compartment is a reserved space for the hard disk drive of your Notebook PC.

5 **Random-access memory module (RAM) compartment**
The RAM compartment allows you to add RAM memory modules to increase the memory capacity of your Notebook PC.
Right Side

1 Headphone output jack port
The headphone output jack port allows you to connect your Notebook PC to amplified speakers or headphones.

2 Microphone input jack port
The microphone input jack port is used to connect your Notebook PC to an external microphone.

3 USB 2.0 port
The 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.

4 Optical drive (on selected models)
Your Notebook PC’s optical drive may support several disc formats such as CDs, DVDs, recordable discs, or rewritable discs.
**Optical disc drive eject button**
Press this button to eject the optical drive tray.

**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.

**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 an power source.

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

1 Kensington® lock port
The Kensington® lock port allows you to secure your Notebook PC using Kensington® compatible Notebook PC security products.

2 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.

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

4 HDMI port
This port is for a High-Definition Multimedia Interface (HDMI) connector and is HDCP compliant for HD DVD, Blu-ray, and other protected content playback.
5 LAN port
Insert the network cable into this port to connect to a local area network (LAN).

6 USB 3.0 ports
These Universal Serial Bus 3.0 (USB 3.0) ports are backward compatible to USB 2.0 and USB 1.0 devices such as keyboards, pointing devices, flash disk drives, external HDDs, speakers, cameras and printers. These ports have a transfer speed of up to 5 Gbit/s.
Front View

1 Memory card reader
This Notebook PC has a single built-in memory card reader slot that supports MMC, SD, and SDHC card formats.

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

NOTE: For more details, refer to the Top View section in this manual.
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  Move the manual battery lock to the unlocked position.

B  Align and insert the battery pack into the Notebook PC’s battery slot.

C  Move the manual battery lock back to the locked position after inserting the battery pack.
Charge your Notebook PC.

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

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

**IMPORTANT!**

- Ensure that your Notebook PC is connected to the power adapter before turning it on for the first time.
- Use only the power adapter bundled with your Notebook PC.
- Power adapter information:
  - Input voltage: 100-240Vac
  - Input frequency: 50-60Hz
  - Rating output current: 3.42A (65W)
  - Rating output voltage: 19Vdc
Lift to open the display panel.

Press the power button.
The Power-on Self Test (POST)

When you turn on the Notebook PC, it runs through a series of software-controlled diagnostic tests called the Power-on Self Test (POST).

The software that controls the POST is installed as a permanent part of the Notebook PC’s architecture. If the POST discovers a difference between the record and the existing hardware, it will display a message on the screen prompting you to correct the conflict by running BIOS Setup.

BIOS

The BIOS (Basic Input and Output System) 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 `Esc` 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 access to your Notebook PC’s hard disk drive, input/output (I/O) interface, and USB interface.

NOTE:

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

To set the password:

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:

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

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

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

To set the HDD password:

1. On the **Security** screen, select **Set Master Password**.

2. Type in a password then press enter.

3. Re-type to confirm the password then press enter.

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.

---

**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. Connect your flash disk drive to the Notebook PC and turn on your Notebook PC.
3. From the BIOS menu, Select **Advanced > Start Easy Flash**, then press `Enter`.

   ![Aptio Setup Utility](image)

   - **Start Easy Flash**
     - Internal Pointing Device: [Enabled]
     - Wake on Lid Open: [Enabled]
     - Power off Energy Saving: [Enabled]
     - Intel Virtualization Technology: [Enabled]

   - Graphics Configuration
   - SATA Configuration
   - Intel (R) Anti-Theft Technology Corporation
   - USB Configuration
   - Network Stack

   ->← : Select Screen
   ↑↓ : Select Item
   Enter: Select
   +/- : Change Opt.
   F1 : General Help
   F9 : Optimized Defaults
   F10 : Save & Exit
   ESC : Exit

4. Locate the latest BIOS file then start updating the BIOS.

   ![ASUSTek Easy Flash Utility](image)

   - **FLASH TYPE:** W25Q64BV
     - **Current BIOS**
       - Platform: Q500A
       - Version: 202
       - Build Date: Jul 16 2012
       - Build Time: 14:53:46
     - **New BIOS**
       - Platform: Unknown
       - Version: Unknown
       - Build Date: Unknown
       - Build Time: Unknown

   - FSO
   - FS1
   - FS2
   - FS3
   - FS4
   - 0 EFI <DIR>

   (←→): Switch [↑↓]: Choose [q]: Exit [Enter]: Enter/Execute

5. After the BIOS update process, select **Exit > Restore Defaults** to restore the system to its default settings.
**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 horizontally](image1)

**Slide vertically**

![Slide vertically](image2)

**Slide diagonally**

![Slide diagonally](image3)
One-finger gestures

Tap/Double tap

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

Left-click

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

Right-click

- In the Metro 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.

NOTE: The areas inside the dotted line represent the locations of the left mouse button and the right mouse button on the touchpad.
Drag and drop

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

Top edge swipe

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

Left edge swipe

Right edge swipe

Swipe from the left edge to launch the running apps. Swipe the right edge to launch the Charm bar.
Two-finger gestures

Tap

Tap two fingers on the touchpad to simulate the right-click function.

Rotate

To rotate an image, place two fingers on the touchpad then turn one finger clockwise or counterclockwise while the other stays still.

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 mouse button. Using your other finger, slide down the touchpad to drag and drop the item to a new location.

Three-finger gestures

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 actions inside the Metro Start screen and desktop mode of Windows®.

- \( fn + z \) Puts the Notebook PC into **Sleep mode**
- \( fn + v \) Turns **Airplane mode** on or off

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

- \( fn + y \) (on selected models) Decreases keyboard brightness for Notebook PC models with a backlit keyboard
- \( fn + a \) (on selected models) Increases keyboard brightness for Notebook PC models with a backlit keyboard
- \( fn + r \) Decreases display brightness
- \( fn + t \) Increases display brightness
- \( fn + q \) Turns the display panel off
- \( fn + w \) Activates the second screen

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

- \( fn + e \) Enables or disables the touchpad
Function keys for ASUS Apps

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

- **fn + C** Toggles the ASUS Splendid Video Enhancement Technology app to switch between these display color enhancement modes: Gamma Correction, Vivid Mode, Theater Mode, Soft Mode, My Profile, and Normal.

- **fn + V** Launches the ASUS LifeFrame app

- **fn + f** Launches the ASUS Power4Gear Hybrid app

Windows®8 keys

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

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

- **fn + i** Press this key to simulate the right-click functions.
Multimedia control keys

The multimedia control keys allow you to control multimedia files, such as audios and videos, when played in your Notebook PC.

Press \( \text{fn} \) in combination with the arrow keys on your Notebook PC, illustrated as below.

![Multimedia control keys](image)

Numeric keypad (on selected models)

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

![Numeric keypad](image)

Press \( \text{shift} + \) to toggle between using the keypad as number keys or as pointer direction keys.
Using the optical drive (on selected models)

**NOTE:** The actual location of the electronic eject button may vary depending on your Notebook PC model.

Inserting an optical disc

1. While the Notebook PC is on, press the drive’s eject button to partially eject the drive’s 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 the basic settings of 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. 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. Once you are done configuring the basic items, a Windows® 8 tutorial appears. Watch this to learn more about Windows® 8 functionalities.
6. The Metro Start screen appears after successfully signing in to your user account.

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.
**Metro style UI**

The Metro style user interface (UI) is the tile-based display used in Windows® 8. It includes the following features you can use while working on your Notebook PC.

**Metro Start screen**

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

**Metro Style App**

These are apps pinned on the Metro 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 Metro Start screen
<table>
<thead>
<tr>
<th>Hotspot</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>upper left corner</strong></td>
<td>Hover your mouse pointer 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.</td>
</tr>
<tr>
<td><strong>lower left corner</strong></td>
<td>From a running app screen: Hover your mouse pointer then tap on the Metro Start screen's thumbnail to go back to the Metro Start screen. <strong>NOTE:</strong> You can also press the Windows key on your keyboard to go back to the Metro Start screen. From the Metro Start screen: Hover your mouse pointer then tap on the running app's thumbnail to go back to that app.</td>
</tr>
<tr>
<td><strong>top side</strong></td>
<td>Hover your mouse pointer until it changes to a hand icon. Drag then drop the app to a new location. <strong>NOTE:</strong> 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 the <em>Working with Metro Apps</em> section in this manual.</td>
</tr>
<tr>
<td><strong>upper and lower right corner</strong></td>
<td>Hover your mouse pointer to launch the Charm bar.</td>
</tr>
</tbody>
</table>
Working with Metro Style apps

Use your Notebook PC’s touchpad or keyboard to launch and customize your 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 the app you chose.

Customizing apps

You can move, resize, or unpin apps from the Metro Start screen using the following steps.

Moving apps

- To move an app, double-tap on the app then drag and drop to a new location.

Resizing apps

- Right-click on the app to activate its settings bar then tap `Smaller`.

Unpinning apps

- To unpin an app from the Metro Start screen, right-click on the app to activate its settings then tap `Unpin from Start`.
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` + `Esc`.
Accessing the Apps screen

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

Launching the Apps screen

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

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

2. From the Metro Start screen, press \( \text{Windows} + Z \) to select the All Apps icon, then press enter.
Pinning more apps on the Metro Start screen

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

1. Position the mouse pointer over the app you want to pin on the Metro Start screen.
2. Right-click on the app to activate its settings.
3. Click on the icon.
Charm bar

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

Launching the Charm bar

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

Use your Notebook PC’s touchpad or keyboard to launch the Charm bar.

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

  Press `Windows` + `C`
Inside the Charm bar

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

**Share**
This tool allows you to share applications via social networking sites or email.

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

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

**Settings**
This tool 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.

**Using Snap**

Perform the following steps to activate Snap using your Notebook PC’s touchpad or keyboard.

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 an app then
3. To switch between apps, press `Windows + J`. 
**Other keyboard shortcuts**

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

![Alt Text](image)

- **Switches between the Metro Start screen and the last running app**
- **Launches the desktop**
- **Launches the **Computer** window on Desktop mode**
- **Opens the **File** search pane**
- **Opens the **Share** pane**
- **Opens the **Settings** pane**
- **Opens the **Devices** pane**
- **Activates the Lock screen**
- **Minimizes the **Internet Explorer** window**
- **Opens the **Second screen** pane**
- **Opens the **Apps** search pane**
- **Opens the **Run** window**
- **Opens **Ease of Access Center**
- **Opens the **Settings** search pane**
- **Opens a menu box of Windows tools**
Wi-Fi connection

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

**IMPORTANT!** Ensure the Airplane mode is turned off to enable the Wi-Fi function of your Notebook PC. For more details, refer to the Airplane mode section in this manual.

**Enabling Wi-Fi**

Activate Wi-Fi in your Notebook PC using the following steps:

1. Launch the Charm bar.
2. Tap Settings 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 connection

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

**IMPORTANT!** Ensure the **Airplane mode** is turned off to enable the Bluetooth function of your Notebook PC. For more details, refer to the **Airplane mode** section in this manual.

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 or touchpad as follows:

1. Launch the Charm bar.

2. Tap ![Settings](image) 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 Charm bar.
2. Tap ![Settings] and tap ![Airplane mode].
3. Move the slider to the left to turn the Airplane mode off.
   ![Keyboard] Press $fn + i^2$.

**Turning Airplane mode off**

1. Launch the Charm bar.
2. Tap ![Settings] and tap ![Airplane mode].
3. Move the slider to the right to turn the Airplane mode on.
   ![Keyboard] Press $fn + i^2$.

**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.
Remove everything and reinstall Windows

Restoring your Notebook PC to its original factory settings is done using the Remove everything and reinstall option in PC Settings. Refer to the steps below to enable this option:

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

**NOTE:** This process may take a while to complete.

1. Launch the Charm bar.
2. Tap > Change PC Settings > General.
3. Scroll down to view the Remove everything and reinstall Windows option. Under this option, click Get Started.
4. Follow the onscreen instructions to complete the reinstallaation and reset process.
### Turning your Notebook PC off

You can shut down your Notebook PC by doing either of the following:

- Tap ![Settings](image) from the Charm bar then tap ![Power](image) > **Shut down** to do a normal shutdown.
- From the log-in screen, tap ![Power](image) > **Shut down**.
- 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.
Chapter 4:
ASUS apps
Featured ASUS Apps

LifeFrame

Enhance your webcam functions through the LifeFrame app. Create snapshots, edit photos, record videos, record audio files, use your webcam as a security monitoring device, and play games using this app.

To launch LifeFrame

Press \( fn + V \).

The archive toolbar displays a function's saved files in thumbnail view.
LifeFrame functions

**Camera**
Use this function to take pictures using your webcam.

**Camcorder**
Use this function to take videos through your webcam.

**Monitor**
This function lets you use your webcam as a security video monitor as it automatically detects movement then captures it on photo.

**Voice Recorder**
Use this function to record audio files in your Notebook PC.

**Game**
This function lets you play games using the webcam.
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.

**To launch Power4Gear Hybrid**

Press \[ fn + \] .

Select from these power saving modes.

- **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.
**USB Charger+**

USB Charger+ allows you to quick charge mobile devices via your ASUS Notebook PC’s USB charge port.

This feature can also be used even while your Notebook PC is on sleep, hibernate, or shutdown mode (available on selected models only).

| NOTE: | USB Charger+ is available in your USB 3.0 charge port with the ⚡ icon. |

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

### Using the USB Charger+ Settings

The USB Charger+ Settings lets you set the charge limit when your ASUS Notebook PC is running on battery power and allows you to charge devices while your Notebook PC is on sleep, hibernate, or shutdown mode.

1. Right-click on the USB Charger+ icon on the desktop tray, then click **Settings**.

2. Tick **Enable USB Charger+ in battery mode**.
3. Select one or both of these charging options: **Enable quick charge when the system is running** or **Enable quick charge when the system is in sleep/hibernate/shutdown mode**.

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

5. Tap **OK** to save the settings made. Otherwise, tap **Cancel**.

**NOTE:** On some models, the USB Charger+ automatically selects both options. You can deselect these two options, if necessary.
**Instant On**

Save battery power while your Notebook PC is on deep sleep mode (Deep S3) using Instant On.

**NOTE:** Deep S3 is a technology that lets you save more battery power while your ASUS Notebook PC is on sleep mode.

**IMPORTANT!** The standby time varies according to your Notebook PC’s remaining battery capacity, computer model, configuration, and operating conditions.

**Performance mode**

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

**Battery saving mode**

This mode enables longer standby times allowing the battery to last for up to thirty (30) 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.
Chapter 5:  
Upgrading your Notebook PC
Installing a Random Access Memory (RAM) module

**NOTE:** Visit an authorized service center or retailer for information on memory upgrades for your Notebook PC. Only purchase expansion modules from authorized retailers of this Notebook PC to ensure maximum compatibility and reliability.
RAM card
Replacing the Hard Disk Drive (HDD)

**WARNING!** Disconnect all the connected peripherals, any telephone or telecommunication lines and power connector (such as external power supply, battery pack, etc.) before removing the hard disk cover.

**IMPORTANT!** When replacing or upgrading the hard drive, always visit an authorized service center or retailer for this Notebook PC.
Replacing the battery pack

old battery pack

new battery pack

A

B

C

D

E

F
Chapter 6: Troubleshooting your Notebook PC
<table>
<thead>
<tr>
<th>Issue</th>
<th>Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>My optical disc drive cannot read from or write to discs.</td>
<td>Update the BIOS to the latest version then try again. If the problem still exists, contact your local service center for assistance.</td>
</tr>
</tbody>
</table>
| My Notebook PC does not wake up from sleep or hibernate mode. | • Remove upgraded parts such as RAM cards, the hard disk drive (HDD), or WLAN/Bluetooth modules if they were purchased separately from your Notebook PC.  
• Run **Remove everything and reinstall Windows** to restore the system to its factory default settings.  
**IMPORTANT!** Back up all your data to another location before restoring your Notebook PC to its factory settings.  
• If the problem still exists, contact your local ASUS Service Center for assistance. |
<p>| The function keys do not work. | Reinstall the “ATK0100” driver from the driver CD or download it from the ASUS website. |
| My built-in camera is not working properly. | Try reinstalling the webcam driver. You can also try updating the BIOS to the latest version. If the problem still exists, contact your local ASUS service center for assistance. |</p>
<table>
<thead>
<tr>
<th>Issue</th>
<th>Solutions</th>
</tr>
</thead>
</table>
| My Notebook PC does not turn on.                                       | • Check the power cord connections.  
• Check if the battery pack is properly aligned at the notches and fitted completely into the battery slot.  
• If your Notebook PC is connected to the power adapter but does not load the BIOS or the operating system, the problem might be in the Notebook PC’s hard disk drive. Contact your local ASUS Service Center for assistance. |
| My Notebook PC displays an “Open policy file error” message when I turn it on. | Download the latest Power4Gear utility from the ASUS website and reinstall it in your Notebook PC.                                           |
| My Notebook PC gets too hot even when the cooling fan is working. How do I solve this? | • Ensure that nothing blocks any of the air vents while using your Notebook PC.  
• Close some running applications to decrease the system’s load.  
• Check your system for viruses.  
• Try restoring your system to its original factory settings. |

**IMPORTANT!** Back up all your data to another location before restoring your Notebook PC to its factory settings.
Appendices
DVD-ROM Drive Information
(on selected models)

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

Regional Playback Information

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

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

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

Region 1
Canada, US, US Territories

Region 2
Czech, Egypt, Finland, France, Germany, Gulf States, Hungary, Iceland, Iran, Iraq, Ireland, Italy, Japan, Netherlands, Norway, Poland, Portugal, Saudi Arabia, Scotland, South Africa, Spain, Sweden, Switzerland, Syria, Turkey, UK, Greece, Former Yugoslav Republics, Slovakia

Region 3
Burma, Indonesia, South Korea, Malaysia, Philippines, Singapore, Taiwan, Thailand, Vietnam

Region 4
Australia, Caribbean (Except US Territories), Central America, New Zealand, Pacific Islands, South America

Region 5
CIS, India, Pakistan, Rest of Africa, Russia, North Korea

Region 6
China
Blu-ray ROM Drive Information
(on selected models)

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

Region Definitions

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

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

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

Internal Modem Compliancy

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

Overview

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

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

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.

<table>
<thead>
<tr>
<th>Country</th>
<th>Applied</th>
<th>More Testing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria¹</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Belgium</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>No</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Denmark¹</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Finland</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>France</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Germany</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Greece</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Hungary</td>
<td>No</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Iceland</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Ireland</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Italy</td>
<td>Still Pending</td>
<td>Still Pending</td>
</tr>
<tr>
<td>Israel</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Lichtenstein</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Luxemburg</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>The Netherlands¹</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Norway</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Poland</td>
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<tr>
<td>Portugal</td>
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<td>Sweden</td>
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<td>No</td>
</tr>
<tr>
<td>Switzerland</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>
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 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.

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


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.
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 Tuner 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.

**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 empfohlenen ähnlichen Typ. Entsorgung gebrauchter Batterien nach Angaben des Herstellers. (German)

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

WARNING! 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 sousittelemmaan tyyppiin. Hävitä käytetty paristo valmistajan 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 même 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 kasserer 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
Internal or external optical drives sold with this Notebook PC contains a CLASS 1 LASER PRODUCT.

**WARNING!** Making adjustments or performing procedures other than those specified in the user’s manual may result in hazardous laser exposure. Do not attempt to disassemble the optical drive. For your safety, have the optical drive serviced only by an authorized service provider.

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.

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

Danish
"Udnyttet er i henhold til Rådets beslutning 98/482/EF EU-godkendt til at blive opkoblet på de offentlige telefonnet som inaktiv/forbundet terminal. På grund af forskelle mellem de offentlige telefonnet i de forskellige lande giver godkendelsen dog ikke i sig selv udelukkende garant for, at udnyttet kan fungere korrekt på samtlige netterminningspunkter på de offentlige telefonnet.

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

Dutch
"Dit apparaat is goedgekeurd volgens Beschikking 98/482/EG van de Raad voor de pan-Europese aansluiting van enkelvoudige eindapparaat op het openbare geschakelde telefoonnetwerk (PSTN). Gezien de verschillen tussen de individuele PSTNs in de verschillende landen, biedt deze goedkeuring op zichzelf geen onvoorwaardelijke garantie voor een succesvolle werking op elk PSTN-netwerkablesheidspunt.

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 to terminal public service connection to the PSTN (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 yksittäiseksi liitettäsi yleiseen kytkentäliikkeen puhelinverkkoong (PSTN) EU:n jäsenvaltioiden. Eri maiden liitennäisten puhelinverkkojen välillä on kuitenkin eroja, joten hyväksytystä ei sovelleta uusiksi liitettäustedatkaan liitettävistä kytkentäisten puhelinverkkojen liitettävyyteen.

Ongelmiin liittyvä osittaisia vikkoja on tarkastettava liitettävän toimintaan."

French
"Cet équipement a reçu l'agrément, conformément à la décision 98/482/CE du Conseil, concernant la connexion pan-européenne de terminal unique aux réseaux téléphoniques publics communautaires (RTCP). 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

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

Greek
"O εξοπλισμός χρησιμοποιεί για πανευρωπαϊκή σύνδεση μονοτιμοκρατικό με το δημόσιο τηλεφωνικό δίκτυο μετακίνησης (PSTN), σύμφωνα με την απόφαση 98/482/ΕΚ του Συμβουλίου. Ωστόσο, εξαιτίας των διαφορών μεταξύ των διαφόρων PSTN που παρέχονται σε διαφόρως χώρες, η απόφαση δεν παρέχει πεντηκοσάτονεν συμπλήρωση εξετάσεως λειτουργίας σε κάθε σημείο τελικότητας του δικτύου PSTN.

Εάν ανακύψει πρόβλημα, πρέπει να επικοινωνήσετε με τον παροχό του εξοπλισμού."

Italian
"La presente apparecchiatura terminale è stata approvata in conformità alla decisione 98/482/CE del Consiglio per la connessione pan-europea come terminale singolo ad una rete analogica PSTN. A causa delle differenze tra le reti dei diversi paesi, l’approvazione non garantisce in condizioni di 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 computada (RTPC) nos termos da_decisão 98/482/CE. No entanto, devido às diferenças existentes entre os RTPC de diversos países, a aprovação não garante incondicionalmente, por si só, um funcionamento corrente em todos os pontos terminais da rede da RTPC.

Em caso de problemas, deve entrar em contacto, em primeiro lugar, com o fornecedor do equipamento."
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](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](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, which means that this product has the following characteristics:

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

For more information on the EU Flower label, please visit the European Union Eco-label website at [http://www.ecolabel.eu](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**
- **Korea RoHS**
- **Swiss Energy Laws**
- **ASUS Recycling/Takeback Services**

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

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 IO ports are located.