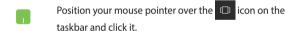
## Task view

Quickly switch between opened apps and programs using the task view feature, you can also use task view to switch between desktops.



#### Launching task view





## **Snap feature**

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



## **Snap hotspots**

You can drag and drop apps to these hotspots to snap them into place.



#### **Using Snap**



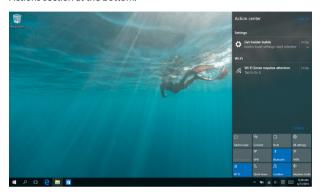
- 1. Launch the app you wish to snap.
- 2. Drag the title bar of your app and drop the app to the edge of the screen to snap.
- 3. Launch another app and repeat the above steps to snap another app.



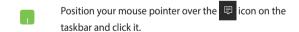
- 1. Launch the app you wish to snap.
- Press and hold the key, then use the arrow keys to snap the app.
- 3. Launch another app and repeat the above steps to snap another app.

## **Action Center**

Action Center consolidates notifications from apps and presents a single place where you can interact with them. It also has a really useful Quick Actions section at the bottom.



#### **Launching Action Center**





## Other keyboard shortcuts

Using the keyboard, you can also use the following shortcuts to help you launch applications and navigate Windows® 10.

=	Launches <b>Start menu</b>
+ A	Launches Action Center
+ D	Launches the desktop
+ E	Launches the File Explorer
+ H	Opens the <b>Share</b> panel
+ 1	Launches <b>Settings</b>
+ K	Launches <b>Connect</b> panel
## + L	Activates the Lock screen
+ M	Minimizes all currently active windows

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

#### **Connecting Wi-Fi**

Connect your Notebook PC to a Wi-Fi network by using the following steps:



- 1. Select the 🖟 icon from the taskbar.
- 2. Select the icon to enable Wi-Fi.
- Select an access point from the list of available Wi-Fi connections.
- 4. Select **Connect** to start the network connection.

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

#### **Bluetooth**

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

IMPORTANT! 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. Connect your devices by using the following steps:



- Launch **Settings** from the Start menu.
- Select **Devices**, then select **Bluetooth** to search for Bluetooth-enabled devices.
- Select a device from the list. Compare the passcode on your Notebook PC with the passcode sent to your chosen device. If they are the same, select 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

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

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

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



- Launch Action Center from the taskbar.
- 2. Select the icon to enable Airplane mode.



Press fn + 12.

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



- Launch Action Center from the taskbar.
- 2. Select the icon to disable Airplane mode.



Press  $f_n$  +  $\frac{f_{12}}{x}$ .

## **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



- Launch Settings.
- 2. Select Network & Internet.
- 3. Select Ethernet > Network and Sharing Center.
- 4. Select your LAN then select **Properties**.
- Select Internet Protocol Version 4(TCP/IPv4) then select Properties.
- 6. Select **Obtain an IP address automatically** then select **OK**

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

- Return to the Network and Sharing Center window then select Set up a new connection or network.
- Select Connect to the Internet then select Next.
- Select Broadband (PPPoE).
- Type your User name, Password, and Connection name then select Connect.
- 11. Select **Close** to finish the configuration.
- 12. Select on the taskbar then select the connection you just created.
- Type your user name and password then select 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 Select Use the following IP address.
- 3. Type the IP address, Subnet mask and Default gateway from your service provider.
- If needed, you can also type the preferred DNS server address and alternate DNS server address then select **OK.**

## **Turning your Notebook PC off**

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



- Launch the Start menu, then select Power >
   Shut down to do a normal shutdown.
- From the log-in screen, select 💍 > **Shut down.**



- Press alt + [14] to launch Shut down

  Windows. 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 to Sleep mode:



- Launch the Start menu, then select Power >
   Sleep to put your Notebook PC to sleep.
- From the log-in screen, select  $\circlearrowleft$  > **Sleep.**



Press of + to launch Shut Down Windows.

Select **Sleep** from the drop-down list then select **OK.** 

**NOTE:** You can also put your Notebook PC to Sleep mode by pressing the power button once.

## **Using Xbox One Wireless Controller**

Your Notebook PC offers built-in support for Xbox Wireless, which allows you to connect an Xbox One Wireless Controller and enable the same gaming experience on Xbox One. For more details, please go to <a href="https://support.xbox.com/en-US/xbox-one/accessories/using-xbox-one-wireless-controllers-on-pc-info">https://support.xbox.com/en-US/xbox-one/accessories/using-xbox-one-wireless-controllers-on-pc-info</a>.

## Chapter 4: Power-On Self-Test (POST)

## The Power-On Self-Test (POST)

The POST (Power-On Self-Test) 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 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**

Enter the BIOS settings by using any of the following methods:

- Restart your Notebook PC then press [42] during POST.
- Launch the Start menu, and choose Settings > Update & security > Recovery, then select Restart now under Advanced startup. When you enter the Advanced startup screen, select Troubleshoot > Advanced options > UEFI Firmware Settings > Restart

### **BIOS Settings**

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

#### **EZ Mode**



#### **Boot**

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

- 1. On the **Boot** screen, select **Boot Option #1**.
- 2. Press and select a device as the **Boot Option #1**.



#### Security

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

#### NOTE:

- If you install a User Password, you will be prompted to input this before entering the operating system.
- If you install an Administrator Password, you will be prompted to input this before entering BIOS.



#### To set the password:

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

#### To clear the password:

- On the Security screen, select Administrator Password or User Password.
- 2. Type in the current password then press enter.
- Leave other fields blank then select OK to continue.
- 4. Select **OK** to clear the old password.

**NOTE:** A keyboard is required to type in the password.

#### Save & Exit

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



#### To update the BIOS:

- Verify the Notebook PC's exact model then download the latest BIOS file for your model from the ASUS website.
- 2. Save a copy of the downloaded BIOS file to a flash disk drive.
- 3. Connect your flash disk drive to your Notebook PC.
- 4. Restart your Notebook PC then access the BIOS settings.
- From the BIOS menu, select Advanced > ASUS EZ Flash 3 Utility, then press enter.



6. Locate your downloaded BIOS file in the flash disk drive then press Follow the onscreen instructions to complete the update.



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

## **Recovering your system**

Using recovery options on your Notebook PC allows you to restore the system to its original state or simply refresh its settings to help improve performance.

#### IMPORTANT!

- Backup all your data files before doing any recovery option on your Notebook PC.
- Note down important customized settings such as network settings, user names, and passwords to avoid data loss.
- Ensure that your Notebook PC is plugged in to a power source before resetting your system.

Windows® 10 allows you to do any of the following recovery options:

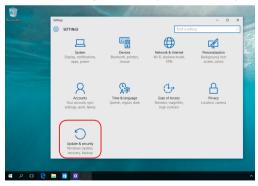
- Keep my files This option allows you refresh your Notebook PC without affecting personal files (photos, music, videos, documents).
- Remove everything This option resets your Notebook PC to its factory settings. You must backup your data before doing this option.

- Go back to an earlier build This option allows you to go back to an earlier build. Use this option if this build is not working for you.
- Advanced startup Using this option allows you to perform other advanced recovery options on your Notebook PC such as:
  - Using a USB drive, network connection or Windows recovery DVD to startup your Notebook PC.
  - Using Troubleshoot to enable any of these advanced recovery options: System Restore, System Image Recovery, Startup Repair, Command Prompt, UEFI Firmware Settings, and Startup Settings.

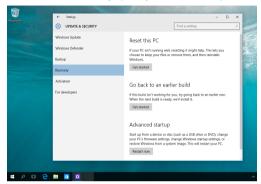
## Performing a recovery option

Refer to the following steps if you want to access and use any of the available recovery options for your Notebook PC.

1. Launch Settings and select Update and security.



 Under the Update and security option, select Recovery then select the recovery option you would like to perform.



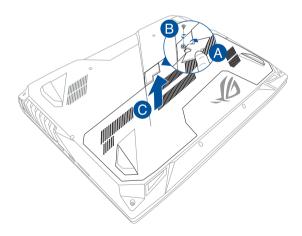
# Chapter 5: Upgrading your Notebook PC

## Removing the compartment cover

A. Pull the rubber cover to expose the screw underneath.

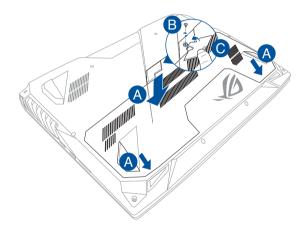
**IMPORTANT!** The rubber cover is designed to be attached to the Notebook PC's compartment cover. DO NOT force to detach it or completely remove it from the compartment cover.

- B. Remove the screw from the Notebook PC's compartment cover.
- Pull out the compartment cover and remove it completely from your Notebook PC.



#### To reattach the compartment cover:

- A. Align and reattach the cover of the compartment.
- B. Secure the cover using the screw you removed earlier.
- C. Put the rubber cover in place.



## Installing a RAM module

Upgrade the memory capacity of your Notebook PC by installing a RAM (Random Access Memory) module in the memory module compartment. The following steps show you how to install a RAM module into your Notebook PC:

**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 compartment cover.

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

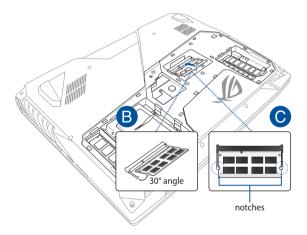
#### NOTE:

- The appearance of your Notebook PC's bottom side and RAM module may vary per model but the RAM module installation remains the same.
- It is recommended that you install the RAM module under professional supervision. You may also visit an authorized service center for further assistance.

A. Remove the compartment cover.

**NOTE:** For more details, refer to the *Removing the compartment cover* section in this manual.

- B. Align and insert the RAM module into the RAM module slot.
- C. Push down the RAM module until it clicks in place.



## **Installing the Hard Disk Drive**

Refer to the following steps if you need to install a new HDD (Hard Disk Drive) of your Notebook PC:

**IMPORTANT!** Purchase an HDD from authorized retailers of this Notebook PC to ensure maximum compatibility and reliability.

**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 compartment cover.

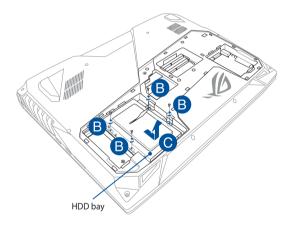
#### NOTE:

- The appearance of your Notebook PC's bottom side and HDD may vary per model but the HDD installation remains the same.
- It is recommended that you replace the HDD under professional supervision. You may also visit an authorized service center for further assistance

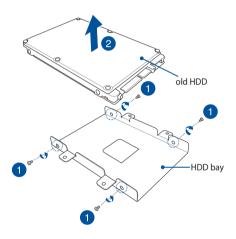
A. Remove the compartment cover.

**NOTE:** For more details, refer to the *Removing the compartment cover* section in this manual.

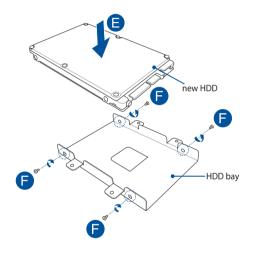
- B. Remove the screws securing the HDD bay to the compartment.
- C. (Optional) If an HDD is currently installed in your Notebook PC, disconnect the HDD bay from the HDD port as shown in the illustration below.



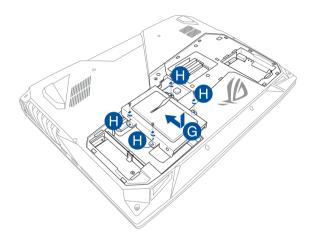
- D. (Optional) If an HDD is currently attached to the HDD bay, refer to the following steps on how to remove the old HDD:
  - 1. Remove all the screws on the sides of the HDD bay.
  - Remove the HDD bay from the old HDD, then place the old HDD on a flat dry surface with its PCB (Printed Circuit Board) facing up, as shown in the illustration below.



- E. Place the new HDD within the HDD bay as shown below. Ensure that the port connectors of your HDD are not obstructed by any part of the HDD bay.
- Reattach and secure the HDD with the screws you removed earlier.



- G. Replace the HDD bay back in the compartment with the HDD connector aligned with the Notebook PC's HDD port. Push the HDD bay until it connects with the Notebook PC.
- H. Secure the HDD bay with the screws you removed earlier.



## Installing an M.2 card

Refer to the following steps when installing a compatible M.2 card in your Notebook PC:

**IMPORTANT!** Purchase your M.2 card from authorized retailers of this Notebook PC to ensure maximum compatibility and reliability.

**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 compartment cover.

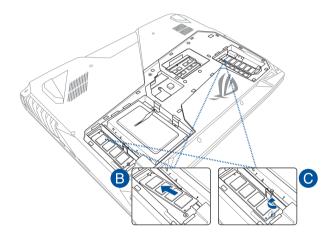
#### NOTE:

- The appearance of your Notebook PC's bottom side and M.2 card may vary per model but the module installation remains the same.
- It is recommended that you install the M.2 card under professional supervision. You may also visit an authorized service center for further assistance
- The M.2 2280 slots do not support M.2 SATA SSD.

A. Remove the compartment cover.

**NOTE:** For more details, refer to the *Removing the compartment cover* section in this manual.

- B. Align and insert the M.2 card into its card module slot.
- C. Secure the M.2 card in place using the bundled screw.



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

## **Hardware FAQs**

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

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

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

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

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

You can try doing any of the following suggestions:

- Use the function keys to adjust the display brightness.
- 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 charge indicator does not light up. What's wrong?

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

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

Press  $f_n + \frac{f_0}{g}$  to enable your touchpad.

### 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 ( 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

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

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

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

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

## 10. I overclocked the system and now my screen freezes. What should I do?

Press and hold the power button for twenty (20) seconds and release. Your Notebook PC will re-boot and load the default ratio settings automatically.

## 11. I have disabled sleep mode, but why does my Notebook PC still go into sleep mode when I close the lid?

Closing the lid when the system is under high load forces your Notebook PC to go into sleep mode to prevent overheating.

## **Software FAQs**

 When I turn on my Notebook PC, the power indicator lights up but nothing appears on my screen. 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 at least four (4) seconds. Check if the power adapter and battery pack are inserted correctly then turn on your Notebook PC.
- If the problem still exists, contact your local ASUS service center for assistance
- What should I do when my screen displays this message: "Remove disks or other media. Press any key to restart."?

You can try doing any of the following suggestions:

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

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

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

You can try doing any of the following suggestions:

- Remove all connected devices to your Notebook PC then restart your system.
- If the problem still exists, contact your local ASUS service center for assistance.

### 5. Why can't my Notebook PC wake up from sleep 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.



# **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 multi-frequency signalling.

## **Network Compatibility Declaration**

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

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

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

## **Non-Voice Equipment**

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

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

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

This information was copied from CETECOM and is supplied without liability. For updates to this table, you may visit:

http://www.cetecom.de/technologies/ctr\_21.html

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

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

# Federal Communications Commission Interference Statement

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

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

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

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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

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

# FCC Radio Frequency (RF) Exposure Caution Statement

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

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

## **Radiation Exposure Statement**

This device meets the government's requirements for exposure to radio waves. This device is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government. The exposure standard for wireless device employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6W/kg.

\*Tests for SAR are conducted using standard operating positions accepted by the FCC with the device transmitting at its highest certified power level in all tested frequency bands.

# Compliance Statement of Innovation, Science and Economic Development Canada (ISED)

This device complies with Innovation, Science and Economic Development Canada licence exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems.

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

## Déclaration de conformité de Innovation, Sciences et Développement économique Canada (ISED)

Le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement

La bande 5150–5250 MHz est réservée uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux.

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

## **Radiation Exposure Statement**

The product comply with the Canada portable RF exposure limit set forth for an uncontrolled environment and are safe for intended operation as described in this manual. The further RF exposure reduction can be achieved if the product can be kept as far as possible from the user body or set the device to lower output power if such function is available.

This device has been tested for compliance with IC SAR values at a typical operating near the body. To ensure that RF exposure levels below the levels tested, use accessories with this equipment to maintain a minimum separation distance of 0 cm between the body of the user and the device. These accessories should not contain metallic components. It is possible that the accessories used close to the body that do not meet these requirements are not consistent with the SAR limits and it is advisable to avoid using them.

## Déclaration d'exposition aux radiations

Le produit est conforme aux limites d'exposition pour les appareils portables RF pour les Etats-Unis et le Canada établies pour un environnement non contrôlé.

Le produit est sûr pour un fonctionnement tel que décrit dans ce manuel. La réduction aux expositions RF peut être augmentée si l'appareil peut être conservé aussi loin que possible du corps de l'utilisateur ou que le dispositif est réglé sur la puissance de sortie la plus faible si une telle fonction est disponible.

Ce dispositif a été testé pour la conformité avec les valeurs SAR à un fonctionnement typique près du corps . Pour assurer que les niveaux d'exposition aux radiofréquences en deçà des niveaux testés , utiliser des accessoires avec cet équipement pour maintenir une distance de séparation minimale de 0 cm entre le corps de l'utilisateur et l'appareil. Ces accessoires ne doivent pas contenir des composants métalliques . Il est possible que les accessoires utilisés près du corps qui ne répondent pas à ces exigences ne sont pas compatibles avec les limites SAR et il est conseillé d'éviter de les utiliser.

### **Caution**

- (i) the device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;
- (ii) the maximum antenna gain permitted for devices in the bands 5250-5350 MHz and 5470-5725 MHz shall comply with the e.i.r.p. limit; and
- (iii) the maximum antenna gain permitted for devices in the band 5725-5825 MHz shall comply with the e.i.r.p. limits specified for point-to-point and non point-to-point operation as appropriate.
- (iv) Users should also be advised that high-power radars are allocated as primary users (i.e. priority users) of the bands 5250-5350 MHz and 5650-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

### **Avertissement**

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

- (i) Les dispositifs fonctionnant dans la bande 5150-5250 MHz sont réservés uniquement à une utilisation en intérieur afin de réduire les risques d'interférence préjudiciables aux systèmes de satellites mobiles utilisant les mêmes canaux:
- (ii) Le gain maximal d'antenne permis pour les dispositifs utilisant les bandes 5250-5350 MHz et 5470-5725 MHz doit être conforme à la limite de P.I.R.E. et
- (iii) Le gain maximal d'antenne permis (pour les dispositifs utilisant la bande 5725-5825 MHz) doit être conforme à la limite de P.I.R.E spécifiée pour l'exploitation point à point et non point à point, selon le cas.
- (iv) De plus, les utilisateurs devraient aussi être avisés que les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bandes 5250-5350 MHz et 5650-5850 MHz et que ces radars pourraient créer des interférences et/ou des dommages aux dispositifs LAN-EL.

# Wireless Operation Channel for Different Domains

 N. America
 2.412-2.462 GHz
 Ch01 through CH11

 Japan
 2.412-2.484 GHz
 Ch01 through Ch14

 Europe ETSI
 2.412-2.472 GHz
 Ch01 through Ch13

## **Power Safety Requirement**

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

### **TV Notices**

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

#### **REACH**

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

### **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 (non-rechargeable) 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.

## **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.



## **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.

# Nordic Lithium Cautions (for lithium-ion batteries)

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

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

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

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

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

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

ATTENTION! Il y a danger d'explosion s'îl 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)

# 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-netwekaansluituunt.

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

#### **Enalish**

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) EUn jäsenvaltioissa. Eri maiden yleisten kytkentäisten puhelinverkkojen välillä on kuitenkin eroja, joten hyväksyntä ei sellaisenaan takaa häiriötöntä toimintaa kaikkien yleisten kytkentäisten puhelinverkkojen liityntäpisteissä.

Ongelmien ilmetessä ottakaa viipymättä yhteyttä laitteen toimittajaan."

#### French

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

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

#### German

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

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

#### Greek

«Ο εξοπλισμός έχει εγκριβεί για παντυρωπαϊκή σύνδεση μεμονομέου τερματικού με το δημόσιο πιβεφονικό δίκτιο μεταγωγής (PSTN), σύμφωνα με την απόφαση 98/482/ΕΚ του Συμβουλίου φωστόςο, επειδή υπάγχουν διαφορές μεταξύ των επιμέρους PSTN που παρέχονται σε διάφορες χώρες, η έγκριση παρέχει αφ' επιντής ανεπιφίλακτη εξασφάλιση επιτιχούς λειτουργίας σε κάθε σημείο απόληξης του δικτίου 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 si sola una garantía incondicional de funcionamiento satisfactorio en todos los puntos de terminación de la red de una RTPC.

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

#### Swedish

"Utrustningen har godkänts i enlighet med rådets beslut 98/482/EG för alleuropeisk anslutning som enskild terminal till det allmänt tillgångliga kopplade telenätet (PSTN). På grund av de skillander som finns mellan telenätet i olika länder utgör godkännandet emellertid inte i sig självt en absolut granti för att utrustningen kommer att fungera tillfredsstållande 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 10 and 30 minutes of user inactivity. To wake your computer, click the mouse or press any key on the keyboard. Please visit <a href="http://www.energystar.gov/powermanagement">http://www.energystar.gov/powermanagement</a> for detail information on power management and its benefits to the environment. In addition, please visit <a href="http://www.energystar.gov">http://www.energystar.gov</a> for detail information on the ENERGY STAR joint program.

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

# Global Environmental Regulation Compliance and Declaration

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

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

Japan JIS-C-0950 Material Declarations

**EU REACH SVHC** 

Korea RoHS

## **ASUS Recycling/Takeback Services**

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

# Rechargeable Battery Recycling Service in North America



For US and Canada customers, you can call 1-800-822-8837 (toll-free) for recycling information of your ASUS products' rechargeable batteries.

## **Regional notice for California**



#### WARNING

Cancer and Reproductive Harm - www.P65Warnings.ca.gov

## **Regional notice for Singapore**

Complies with IMDA Standards DB103778 This ASUS product complies with IMDA Standards.

## **Regional notice for India**

This product complies with the "India E-Waste (Management) Rules, 2016" and prohibits use of lead, mercury, hexavalent chromium, polybrominated biphenyls (PBBs) and polybrominated diphenyl ethers (PBDEs) in concentrations exceeding 0.1% by weight in homogenous materials and 0.01% by weight in homogenous materials for cadmium, except for the exemptions listed in Schedule II of the Rule.

### **Notices for removable batteries**

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

## Avis concernant les batteries remplaçables

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

## **Simplified EU Declaration of Conformity**

ASUSTek Computer Inc. hereby declares that this device is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU. Full text of EU declaration of conformity is available at https://www.asus.com/support/.

The WiFi operating in the band 5150-5350 MHz shall be restricted to indoor use for countries listed in the table below:

AT	BE	BG	CZ	DK	EE	FR
DE	IS	ΙE	IT	EL	ES	CY
LV	LI	LT	LU	HU	MT	NL
NO	PL	PT	RO	SI	SK	TR
FI	SE	CH	UK	HR		

