Using in Another Location

By configuring the network settings (IP address, printer setting, etc.) for each location, you can immediately access the network in one click, without performing the network setting procedures regardless of your location.

1 Click **Start > All Programs > Samsung > Easy Network Manager > Easy Network Manager** when connected to the Internet.

2 Select an icon that represents the corresponding location from the Saved Locations window and then click **Move**.

3 If the Internet connection is a wired LAN, you can immediately load the settings for the new location and the corresponding network connection information is displayed in the Current Location Information window.

To connect to a wireless LAN, select the **AP Setting** from the menu. The available APs are represented as icons. If you double-click an AP icon to connect to, the computer is connected to the AP through the wireless LAN and you are moved to the corresponding location.

Click the **AP Setting** menu item at the top of the screen and double-click one of the available APs.
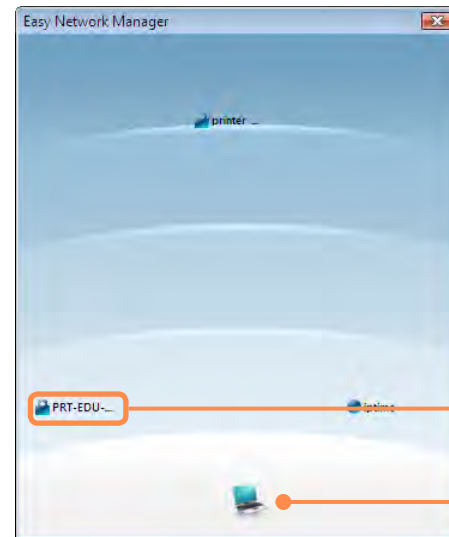
Available AP Icon

PC Icon

> ✎ ● The closer to the PC icon 🖥 at the bottom of the screen, the stronger the signal from the AP is, while the further from the icon, the weaker the signal strength is.
> ● If a network key is required, request the key from your network administrator.
> ● AP Setting is supported in Windows XP SP3 or higher and Vista only.
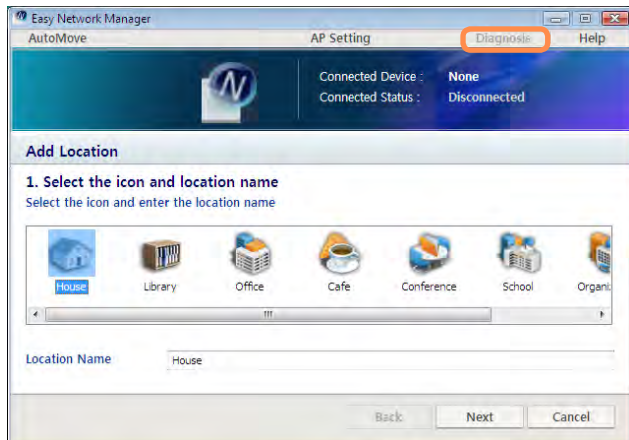
Diagnosing the Network Status

You can diagnose the network state and find solutions for why you cannot connect to the network.

1 Launch Easy Network Manager.

2 Select **Diagnosis** from the menu.

3 The Network Connections window appears.

Click **Start** to start the network diagnosis.

4 When the diagnosis is complete, a device with a problem is marked by a **X** mark icon with a description of the problem at the bottom of the window.

Bluetooth (Optional)

Bluetooth is a wireless communication technology that allows access to devices nearby such as a computer, mobile phone, printer, keyboard or mouse without a cable connection.

Bluetooth enables file transmissions, Internet access, a private area network function, and access to a keyboard, mouse and printer between devices supporting the Bluetooth function without a cable connection.

- The Bluetooth function is only available between devices supporting Bluetooth (computers, mobile phones, PDAs, printers, etc.), and the function may be restricted depending on the device profile.
- The Bluetooth function is optional and may not be supported depending on your model.
- Compatibility with a Bluetooth device not certified by a Bluetooth certification or logo is not guaranteed.

Bluetooth Functions

File Transmission		You can exchange files between 2 Bluetooth devices. You can exchange files with other computers, mobile phones, PDAs, etc.
Network Access		You can connect to another computer with the Bluetooth function as you access a wireless LAN in Ad-Hoc mode or connect to the Internet through an AP or Internet Connecting Sharing Server.
Network Access through a Phone Connection		You can connect to the Internet through a Bluetooth mobile phone.
Data Sync (Synchronization)		You can synchronize the PIMS data (Outlook E-mail address data) with mobile phones, PDAs, notebook computers, etc. supporting Bluetooth.

Electronic Business Card (Vcard)		You can exchange electronic business cards with mobile phones, PDAs, notebook computers, etc. supporting Bluetooth.
Sound Output		You can listen to audio from the computer through another Bluetooth device or listen to audio of another Bluetooth device through the computer.
HID Connections		You can connect a keyboard, mouse, joystick, etc. supporting Bluetooth. For more information about using the Bluetooth function, see the online help of the Bluetooth Device.

For more information about using the Bluetooth function, refer to the online help of the Bluetooth Device.

Bluetooth Software Setup

Bluetooth software is installed on computers supporting Bluetooth.
For first time use, set up the Bluetooth software as follows.

1 Double-click **My Bluetooth Places** icon 🔵 on the desktop.

2 Click the **Next** button to start setting up.

> ✎ ● In the setting up steps, enter a device name to be displayed in the Bluetooth Manager program. Enter a name in the **Computer Name** field and select **Laptop** for the **Computer Type** field.
>
> ● Also, a step appears for selecting the services to be provided by your Bluetooth device for other Bluetooth devices. At this point, the program automatically detects available services and displays them as selected. It is recommended not to change the default selection.
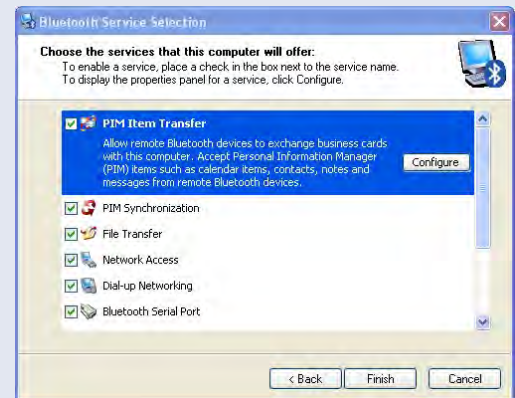

If you change the service settings, the driver necessary for the additionally selected services are installed.

At this point, a warning message may appear informing you that there is no Microsoft logo. Since it does not affect the operation, continue the installation.

3 If the driver installation is complete, the next step proceeds which searches for nearby Bluetooth devices. Since you do not have to search while setting up, click **Skip** and finish the settings.

4 If the settings are complete, the My Bluetooth Environment window appears.
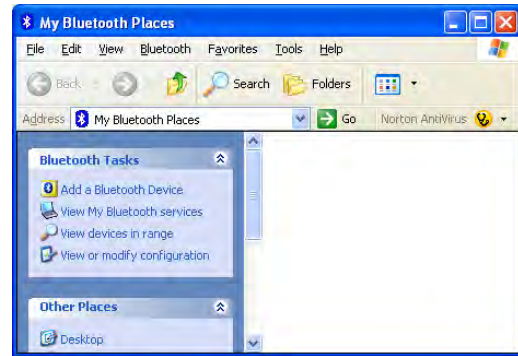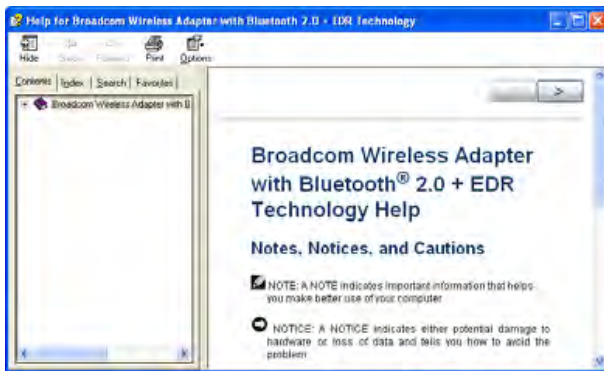
Using Bluetooth

Describes how to exchange files between computers supporting Bluetooth and how to use other Bluetooth devices.

Bluetooth Help

Bluetooth Help provides detailed procedures on using Bluetooth functions.
Double-click **My Bluetooth Settings** on the **Desktop** and press the **<F1>** key (Help).

> ✎ Select **Start > Help and Support > Networking and the Web > Networking > Wireless networking > Bluetooth devices (wireless)** to view Windows Help.

Exchanging Files between Bluetooth computers

The procedures to exchange files and folders between Bluetooth computers are described below.

1 On the computer that is sending a file (hereafter Computer A), right-click the **Bluetooth** icon 🔵 in the notification area and select **Quick Connection > File Transmission > Search for Device**.

2 In the **Select Device** window, click a computer to be connected (hereafter Computer B).

3 When the Bluetooth Security Setting window appears, enter the Bluetooth security code (or Bluetooth PIN) and click **Start Pairing**.
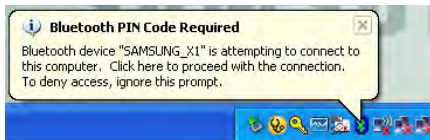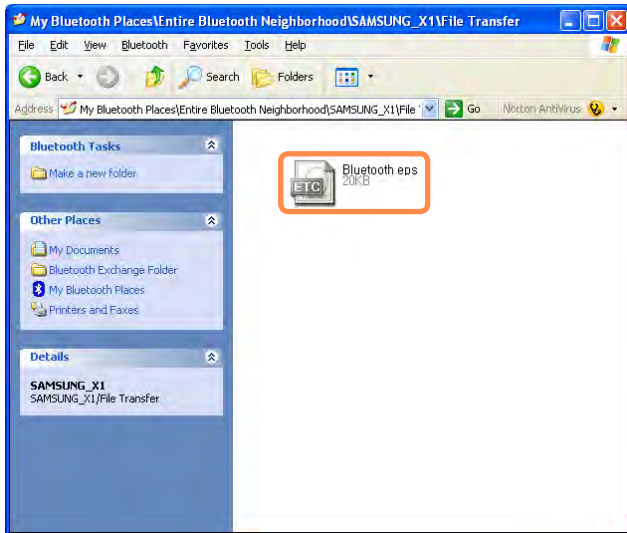

✎ The Bluetooth PIN Code is a password used for the connection between two Bluetooth devices, the user just enter the same PIN Code (for example, same numbers) on both Bluetooth devices to make a connection.

4 After a short while, the Bluetooth PIN Code required dialog box appears on **Computer B**, enter the code that you have input in Step 3 above.

5 If the FTP File Access Privilege Request window appears on **Computer B**, click the window. If the Select Access Permission window appears, click **OK**.

6 The file transmission window appears on computer A. Drag files or folders to send onto the window, and the files or folders are automatically transmitted.

7 If the file transmission is complete, close the File Transmission window. The received files are saved in the **C:\Documents and Settings\[user name]\My Documents\Bluetooth Exchange** folder.

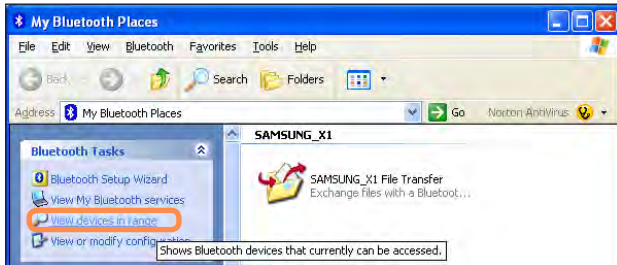## Connecting Keyboard, Mouse, Joystick and Headset devices

The procedures to use Bluetooth HID devices (keyboard, mouse, joystick, etc.) or a headset, etc. on the computer are described below.

> ✎ The Bluetooth PIN Code is a password used for the connection between two Bluetooth devices, the user just enter the same PIN Code on both Bluetooth devices to make a connection.

1 Turn on the Bluetooth function on the device to connect to (mouse, keyboard, joystick or headset).

Some devices have a button to turn on the Bluetooth function, so see the corresponding device manual.

2 Double-click the **My Bluetooth Settings** icon 🅑 on the Desktop.

3 If the My Bluetooth Settings window appears, click **View devices in range.**

If the device to connect to appears, click the device. (for example, mouse)

If the device does not appear, click **View devices in range**. If the device has not appeared yet, since this menu changes to **Search devices in range**, click **Search devices in range** to show the device.

---

4 If the Bluetooth PIN Code input window appears, enter a PIN code referring to the manual of the corresponding device. The PIN code for an HID device is generally printed in the manual of the corresponding device.

5 If you enter the PIN code, you can immediately use the device.

A Bluetooth keyboard and mouse work only in Windows. They will not work in MS-DOS mode or in Hibernation mode.

Connecting to the Internet via a Bluetooth mobile phone

If you have a Bluetooth mobile phone, you can connect your computer to the Internet without a wired or wireless connection to an Internet service provider.

● Check if your mobile phone supports Bluetooth.
● To connect to the Internet through the Bluetooth mobile phone, you need the wireless operator account information such as the **username, password, dial number** and so on. For this information, contact your mobile phone operator.

If you connect to the Internet through a Bluetooth mobile phone, the connection tariff may be very expensive. Please use this function only after ascertaining the connection cost or subscribing to a data communications plan that allows you to connect to the Internet directly.

1 Double-click the **My Bluetooth Environment** icon 🔹 on the Desktop.

2 When the **My Bluetooth Environment** window appears, click **Add Bluetooth device**.
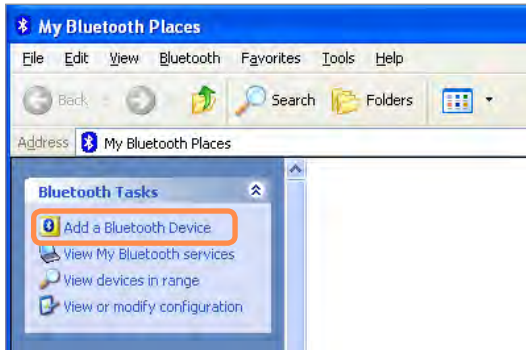
3 If the **Bluetooth Setup Wizard** screen appears, click **Next** to start the device search.

4 Select your mobile phone from the Select Device window and click **Next**.

> ✎ The following descriptions use a mobile phone called 'V740'.

5 If the **Bluetooth Security Setup** window appears, enter a Bluetooth security code (Bluetooth PIN) and then click **Start Pairing**.
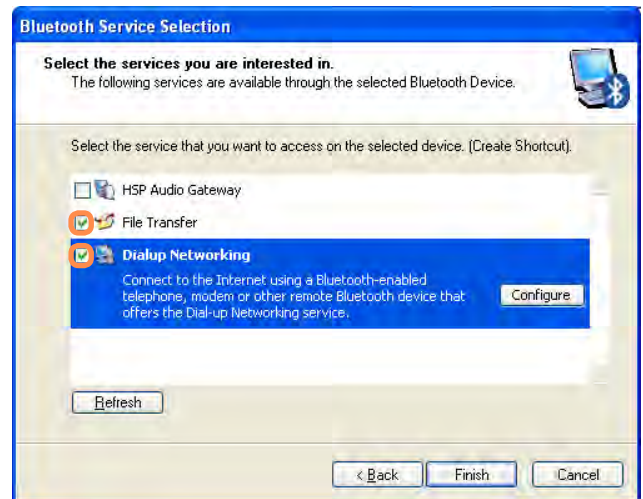
✎ The **Bluetooth security code (Bluetooth PIN)** is a password used between two devices connected through Bluetooth. You can enter **any number** between 4 to 6 alphanumeric characters on the two devices.

6 If the Pairing signal is delivered to the mobile phone, the Bluetooth security code input window appears in the mobile phone screen. Enter the same security code into the mobile phone that you entered in Step 4. For example, if you entered '1234' on your computer, you must also enter '1234' on the mobile phone.
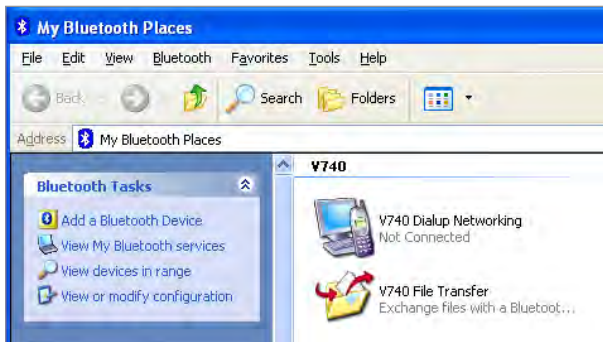

7 In the **Select Bluetooth Service** window, select the **File Transfer** and **Dialup Networking** services and then click **Finish**.

8 The **Dialup Networking** and **File Transfer** service icons are added to the **My Bluetooth Environment** window.

9 Double-click **V740 Dialup Networking** in the **My Bluetooth Environment** window.

10 If the **Connect to Bluetooth** window appears after a while, enter the **Username, Password**, and **Dial (Dial Number)** fields and click the Dial button. Then, when the Internet connection is established, you can use the Internet using Internet Explorer.

If you click this button, enter the phone number in the **Dial Number** field and click **OK** to save the phone number.

If you check this option, the currently entered username and password are saved.

- About the **Username, Password**, and **Dial Number**

  The username, password and dial number used here do not refer to the ones used by the mobile phone user. They refer to the unique username, password and phone number of the mobile phone operator that are required to make the connection. Ask your mobile phone operator about them.

- **When an AP name is required to connect to the Internet**

  An APN (AP Name) may be required depending on the mobile phone or mobile phone operator. In this case, click **Start > Control Panel > Performance and Maintenance > System > Device Manager > Modem**, double-click **Bluetooth Modem**, select the **Advanced tab** and then enter an APN in the format of **+CGDCONT=1,"IP","APN"** in the **Miscellaneous Initialization Command** field (e.g. when the APN is 'internet.com'). For detailed information, ask your mobile phone operator about this.
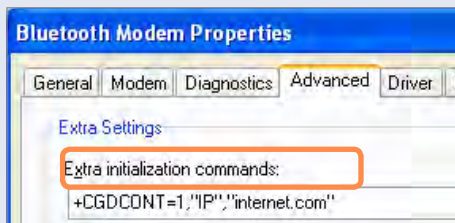
- **Disconnecting the Internet connection**
  ❶ Double-click **V740 Dialup Networking** in the **My Bluetooth Environment** window.
  ❷ Click the Disconnect button in the **Bluetooth Connection Status** window. Alternatively, press the Disconnect button on the mobile phone to disconnect the Internet connection.
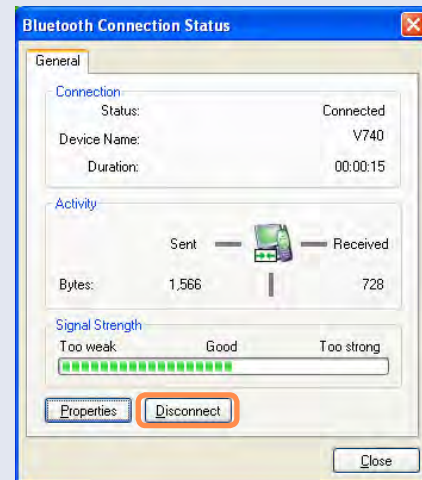
Stopping a Bluetooth device

Right-click the **Bluetooth** icon on the Taskbar and select **Stop the Bluetooth device**.

To use a Bluetooth device after stopping it, select **Start Bluetooth device** like above.

Usage Instructions

● Generally, Bluetooth devices deliver stable performance while connected within a 3m(10 ft.) distance.

● For Bluetooth to operate smoothly, use the computer in an open environment with no walls or obstacles in the way and having low radio interference.

● You can connect to only one Bluetooth device at a time for a phone connection, data syncing, electronic business card exchange, FAX transmission/reception, sound related functions, and serial port functions.

● It is recommended using only one Bluetooth device at a time as connecting multiple Bluetooth or other wireless devices at the same time may slow or destabilize the Bluetooth connection.

● Data communications via Bluetooth may be poor when the CPU load is at full capacity or there are insufficient system resources.

● The Bluetooth function of a Bluetooth PDA, mobile phone, mouse or keyboard may be turned off. To use them in connection with a Samsung computer supporting Bluetooth, you must check if the Bluetooth function of the device to connect to is turned on.

For the procedures on turning on the Bluetooth function of a device, refer to the relevant device manual.

● The services provided by Bluetooth devices may vary depending on their capabilities. For the services provided by the Bluetooth device, refer to the device manual.

Chapter 5.
Using Applications

Introducing Programs

Using the software supplied with the Samsung computer, you can easily use functions and troubleshoot problems.

Try to use the software after learning about the basic use of the software. For detailed information, refer to the help section of the corresponding software.

> The software programs provider may vary, depending on your computer model.
> In addition, some pictures may differ from actual product depending on the computer model and software version.

Multi Media Functions

● **CyberLink YouCam** (Optional)

Using this program, you can easily capture photos and videos with your web camera. CyberLink YouCam makes it more fun to have online video chats or to record videos with live effects. ▤ 121

Management Functions

● **Samsung Update Plus** (Optional)

Samsung Update Plus is a software function that examines and updates the Samsung software and drivers installed on your Samsung computer to the most recent versions. ▤ 123

● **McAfee SecurityCenter** (Optional)

This is a security solution that detects and removes computer viruses and protects the computer from Internet threats. ▤ 125

● **Easy Network Manager** (Optional)

Easy Network Manager is a program that enables you to easily configure the network settings.

You can configure the network settings for each location and you can also diagnose the network status. ▤ 99

● **Samsung Battery Manager** (Optional)

Samsung Battery Manager is a power management program that provides easy-to-use power management and power saving settings so that the battery usage time can be extended. ▤ 149

● **Easy Display Manager (Optional)**

Easy Display Manager is a program that displays the changed setting on the screen when a setting is changed by pressing the shortcut keys, and enables changing the display mode through the Display Settings window.

Example) The icon that appears when pressing the **Fn** + [↑] keys to change the screen brightness.

- **Easy SpeedUP Manager (Optional)**

  This program enables you to select operation mode when you need maximum system performance or low-noise/low power consumption with one-click. ⊟ 59

  For Windows XP model, Easy SpeedUp Manager function is provided in Magic Keyboard program.

  If you reinstall Windows XP, you have to install the Magic Keyboard program additionally using the System Software Media in order to use this function.

- **MS Live Skydrive ⊞ (Optional)**

  If you double-click the Microsoft Live icon ⊞ when the computer is connected to the Internet, you can visit the website that allows you to use free web storage provided by Microsoft.

  If you sign up and log onto the website, you can use the web storage for free.

  For more information, refer to the help center on the website.

- **Easy Resolution Manager ⊞ (Optional)**

  This program allows you to set a resolution of 1024x768 pixels on a computer that supports a resolution less than 1024x768 pixels.

  You can view the whole picture when running a program or game that supports a resolution of 1024x768 pixels.

  However, when the resolution is set to 1024x768 pixels, the picture on the screen may be distorted.

- **Battery Life Extender (Optional)**

  The Battery Life Extender is a battery power management program that enables extending the battery life. ⊟ 151

- **Phoenix Failsafe ⊞ (Optional)**

  Phoenix FailSafe is a program developed by Phoenix Technologies LTD, that enables PC users to protect and track their PC via the FailSafe website when their PC is lost or stolen. For more information, please refer to the online help of the software or the FailSafe website.

Troubleshooting Functions

- **SAMSUNG Magic Doctor**
  (Optional)

  SAMSUNG Magic Doctor is troubleshooting software provided by Samsung Computer for system diagnosis, and restoring the system.

  The system diagnosis function enables users to diagnose system problems without assistance from others.

- **Samsung Recovery Solution**
  (Optional)

  Samsung Recovery Solution provides a **Restore Function** that enables you to easily restore your computer to a previous, normal state when a problem occurs with your computer, as well as a **Backup Function** that enables you to easily save your computer's current status and your data.

  For models with an SSD (Solid State Disk), Samsung Recovery Solution is not provided.

CyberLink YouCam (Optional)

CyberLink YouCam makes it more fun to have online video chats or to record videos with live effects.

> - The program versions described in this manual are subject to change and the screen images and terms in this manual may differ from actual product.
> - For more information on how to use the program, refer to the online help.
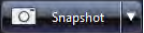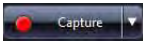
> - Do not take pictures or record video of someone without their permission.
> - Do not take pictures or record video in locations where photography is prohibited.
> - Do not take pictures or record video in locations where you could violate another person's privacy.

1 Double click the **CyberLink YouCam** icon ⊙ on the Desktop. Or click **Start > All programs > Samsung > CyberLink YouCam > CyberLink YouCam**.
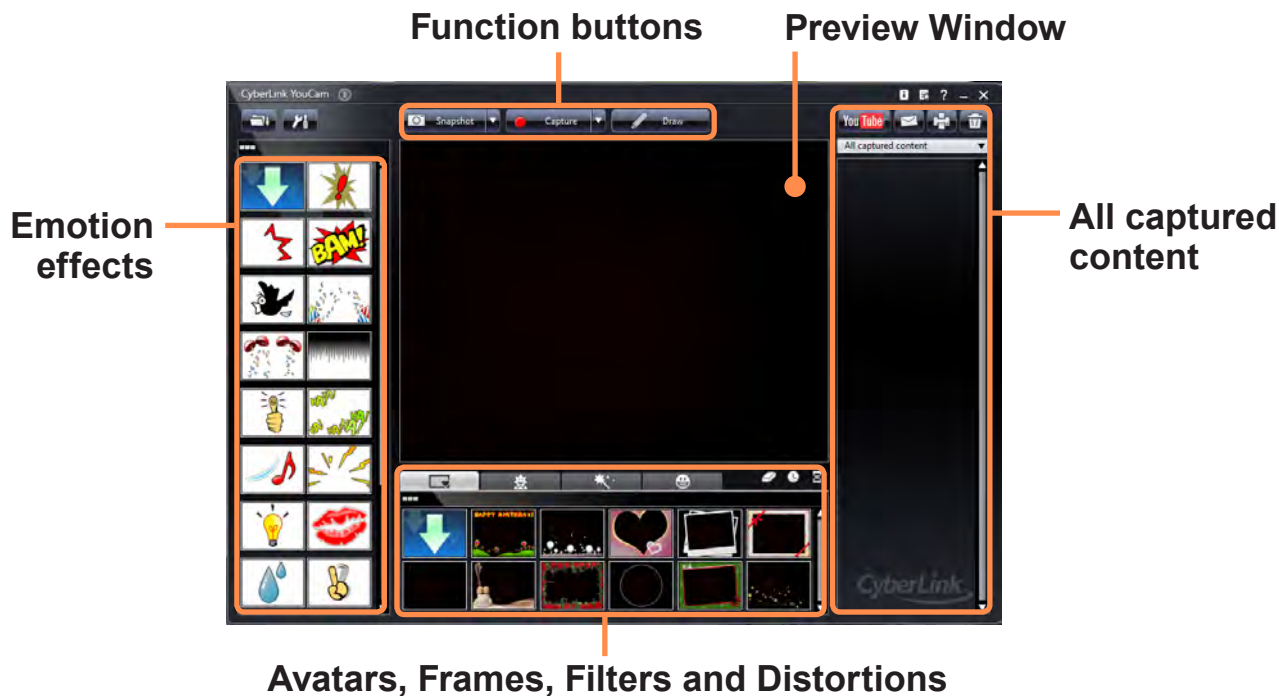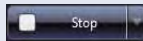
Function buttons

Preview Window

Emotion effects

All captured content

Avatars, Frames, Filters and Distortions

2 Click the **Snapshot** 📷 Snapshot ▾ or **Capture** button 🔴 Capture ▾ in front of the camera. A snapshot is taken or video starts recording.

3 You can view your captured photos and videos in the **All captured content** window.

You can view a picture or watch a video by double-clicking it.

Samsung Update Plus (Optional)

Samsung Update Plus is software that examines and updates the Samsung software and drivers installed on your Samsung computer to the optimal version.

- To check for updates and update your computer using Samsung Update Plus, your computer must be connected to the Internet.
- The update search result may differ depending on your computer model.

Samsung Update Plus does not provide updates for applications installed after purchasing the computer.

To update the software and drivers

1 Select **Start > All Programs > Samsung > Samsung Update Plus > Samsung Update Plus**.

If this is the first time you are running the program, a window will appear asking you if you agree to the agreement in the window.

Click **Agree** to use this software.

2 If you click on **Check for updates**, new updates are searched for.
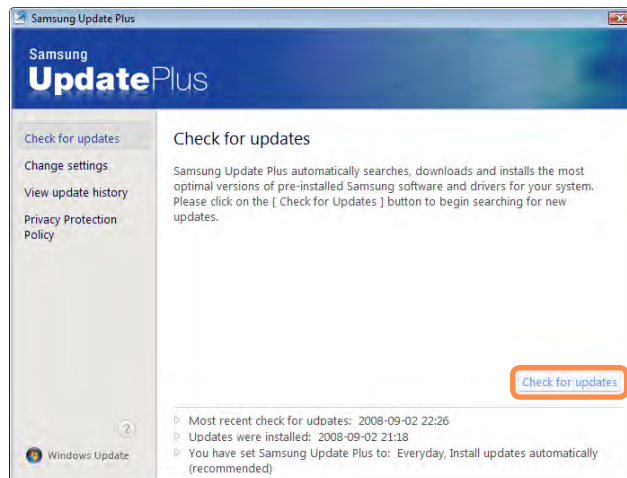
3 If there are available software or driver updates for your computer, the available updates will be listed. Select the required updates from the list and click **Install Update** to start the update. (The update list on the screen may differ depending on the computer model.)

> **Updates that must be installed separately.**
>
> If you select an update item that must be installed separately, a message appears informing you of this. Follow the instruction message to correctly install it.

> **Automatic update items display**
> By default, your computer is configured to automatically check for updates. If there is a new update available, this is notified in the notification area. Click the balloon help icon in the notification area. Here you will be able to find the latest available updates.

McAfee SecurityCenter (Optional)

McAfee SecurityCenter (a virus/spyware detection and protection software that includes a firewall function. Hereafter, referred to as "McAfee") is software that protects your PC from various Internet threats as well as detecting and removing viruses.

> - For more detailed information on the program, refer to the McAfee help.
> - You can register McAfee when connected to the Internet.
> - McAfee software is optional. It may not be supplied for some models or it may be supplied through the McAfee installation icon. When the installation icon is provided, you have to install the program referring to the Installing McAfee section.
> - A different anti-virus program may be provided depending on the computer model.

Installing McAfee

For some models, an **Install McAfee Web Essentials** icon is located on the Desktop. In this case, you can install the McAfee software according to the following procedures and then use the McAfee software.

For some models, a **McAfee Security Center** icon is located on the Desktop, since the software is already installed, the installation step is not required.

❶ Double click the **Install McAfee Web Essentials** icon on the Desktop.
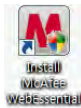
❷ The **Chain Installer** window opens and the installation begins automatically. Please wait for a moment.
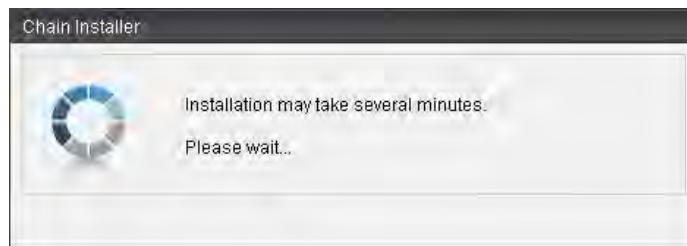
❸ When the installation is complete, the **Chain Installer** window disappears.

Using McAfee

To use McAfee, user registration is required. If a user is not registered, even though virus inspection is supported, your PC will not be completely protected because the virus information will not be updated with the latest information. The procedures to inspect and heal viruses after the user registration will be described below.

User Registration

1 The **Program Setup** screen appears while booting. Click **Next**.

If the **Program Setup** screen does not appear, right-click over the **McAfee** icon M in the Taskbar and then select **Product Setup** from the pop-up menu.
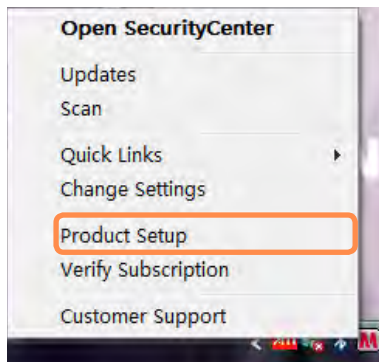
2 The **End User License Agreement** appears.
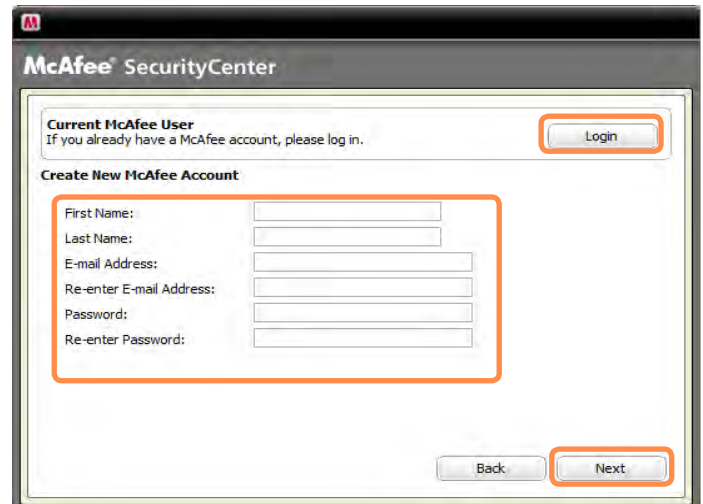
Check if the country has been correctly selected and then click **Accept**.

3 The **Create New McAfee Account** item appears.

Be sure to fill in all the fields and click **Next**. The **Program Setup Completed** window appears.

> 🖉 If you have already registered with McAfee, click **Login** and enter the registered email address and password to login. The **Program Setup Completed** window appears.

126

Inspecting and Healing Viruses

The procedures to check if the computer's files or information have been infected by a virus and to heal viruses found by McAfee are described below.

1 Click **Start > All Programs > McAfee > McAfeeSecurityCenter**.

2 Click the **Scan** button on the left side of the program. The **Scan** begins.
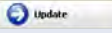
At this time, if a virus is found, it is immediately healed during the inspection.

3 If a virus has been found, click **View Results**.

The viruses are listed. Since the corresponding viruses have already been removed, you can use your computer without any concern.

● For possible virus infections (where it is not completely certain), the **Detected** message appears. In this case, the items will be maintained or deleted depending on your decision.

● To deal with new viruses, please always keep McAfeeSecurityCenter up to date. In general, it is automatically updated when connected to the Internet. Alternatively, you can update it manually by clicking **Update** after connecting to the Internet.

Configuring the McAfee Firewall

The McAfee Firewall is configured for the product when purchasing the product in order to protect the computer from viruses. However, if the firewall is activated, you may not connect to the network or the Internet properly. In this case, you have to change the settings as follows.

Method 1) When you need to select Allow Access in the Server or Internet Access Request window.

When you connect to a bank, stock market, or gaming website, an access request window appears. In this case, select **Allow Access** in the window and click **OK**. Then you can install the program normally or open the page.
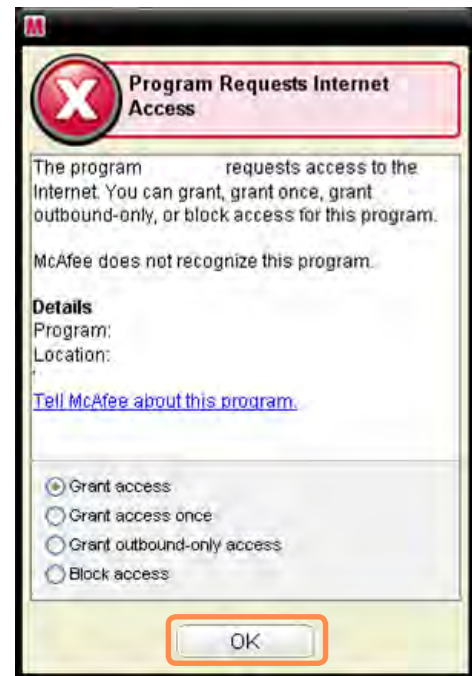
Method 2) When you need to deactivate the Firewall

If you cannot connect to the Internet when using a broadband Internet service, you can connect to the Internal normally if you disable the McAfee Firewall. However, since it may cause a security problem, be careful when doing so.

❶ Double-click the **McAfee Security Center** icon from the Desktop.

❷ Click the **Advanced menu** at the bottom left and click **Configure > Internet&Network**.

❸ Turn the **Internet&Network** at the right to **Off**, set the **Select when to re-enable firewall** to **Never** and then click **OK**.

❹ Click **Home** in the left menu pane and click **Ignore** next to the **'Firewall protection is disabled'** message.

✎ It is recommended activating the Windows Firewall for your computer's safety when you have disabled the McAfee Firewall. To activate the Windows Firewall, click **Start > Control Panel > Windows Firewall > Change Settings > On(recommended)**.

Using Samsung Magic Doctor (Optional)

Magic Doctor is troubleshooting software provided by Samsung Computer. A user can diagnose system problems via one-click or by selecting diagnostic items.

> The screens used in this manual may differ from actual screens according to the program version.

Diagnosing the System

1 Select **Start > All Programs > Samsung > Samsung Magic Doctor > Samsung Magic Doctor**.

2 Click the **Diagnose the System** icon.
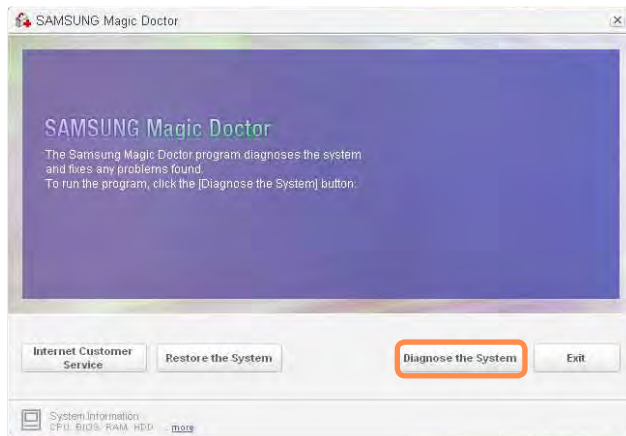
The system status diagnostics start.

3 When the system status diagnostics are complete, the diagnostics result appears.
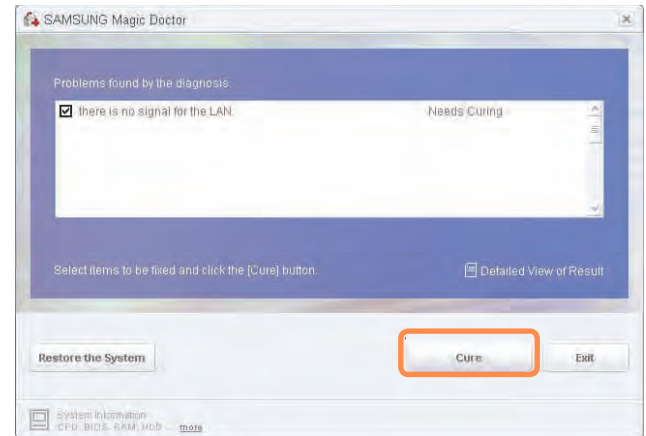
If a problem has been found, click on **Cure** for Samsung Magic Doctor to cure the problem.

Reinstalling Software (Optional)

If you have reinstalled the Windows operating system, or the system and program do not operate properly, you can re-install the driver and program using the System Software Media.

> - When software is not working properly, it is recommended removing the software using the Add or Remove Programs of the Control Panel and reinstalling the software using the System Software Media.
> - The System Software Media is supplied as a CD or DVD depending on your computer model.
> - To use the System Software Media, the external USB ODD must be connected to the computer. The following descriptions are supposing that the external USB ODD is connected.
> - Some model is not supplied System Software Media depending on your computer model.

Running the System Software Media

Insert the **System Software Media** into the CD-ROM drive. The initial screen appears automatically.

Standard Installation	This displays a list of drivers or programs that are not currently installed on your computer from the system software Media provided.All necessary components are installed using the factory defaults.
Minimum Installation	This displays the components (driver, Windows programs,etc) that, if not installed, may cause problems with the system performance.You can install only required components.
Custom Installation	You can customize the installation of drivers and programs.

Installing drivers and programs

1 Select **Standard Installation** in the **System Software Media** main screen.

2 The system is scanned to display the drivers and programs that need to be installed.

3 Click **OK**.

The drivers and programs are automatically installed as factory defaults.

4 When done, restart the system.

Chapter 6.
Settings and Upgrade

LCD Brightness Control

You can adjust the LCD brightness in 8 levels.

Adjusting LCD Brightness Using Keyboard

Press the **Fn**+ ⬜ or **Fn**+ ⬜ to adjust the brightness of LCD.

The LCD brightness has eight levels of degree.
By pressing the **Fn**+ ⬜, the LCD gets brighter by one level of degree.

Adjusting LCD Brightness Using Samsung Battery Manager

Appropriate LCD brightness is set for each mode in **Samsung Battery Manager**. In user settings mode, you can select the brightness level.

Click **Start > All Programs > Samsung > Samsung Battery Manager > Samsung Battery Manager.**

(for example, in Customized mode)
In this mode, you can change the brightness and device setting details.

LCD Brightness

The LCD brightness settings for maximum battery mode, general mode, and maximum performance mode in Samsung Battery Manager are not maintained when your computer reboots.

Only the LCD brightness setting in the user settings mode is maintained once you reboot the computer.
For information on the other features of Samsung Battery Manager, see the description on batteries. 目 149

● **To Maintain the Changed LCD Brightness After Reboot**

Configure the following settings to maintain the LCD brightness set using the screen adjustment key or **Samsung Battery Manager**.

❶ Turn on the computer. If the SAMSUNG logo appears, press the**F2** key.
 Then, setup will start.
❷ Change the value of Brightness Mode Control on the Boot menu to User Control.
❸ Press the**F10** key to save the change and complete setup.

● **How to Reduce Battery Consumption**

Adjust the screen brightness to a darker value or select the maximum battery mode in **Samsung Battery Manager** to reduce battery consumption.

● **Bad pixels of an LCD**

The LCD may have less than 4 bad pixels but it does not affect the computer performance. This product may have bad pixels of the same level as the products made by other companies.

Caution for Cleaning up LCD
Wipe the LCD from the center to the outside with a soft cloth soaked in a computer-dedicated detergent. If you wipe the LCD firmly, it may have damage.

BIOS Setup

The BIOS Setup enables you to configure your computer hardware according to your needs.

> 💡 ● Use the BIOS setup to define a boot password, change the booting priority, or add a new device.
> Since incorrect settings may cause your system to malfunction or crash, take care when configuring the BIOS.
> ● The functions of the BIOS setup are subject to change for product function enhancement purposes.

> ✎ The BIOS Setup menus and items may differ depending on your computer model.

Entering the BIOS Setup

1 Turn the computer on.

2 When the booting screen (SAMSUNG logo) appears, press the **F2** key to enter the BIOS Setup.
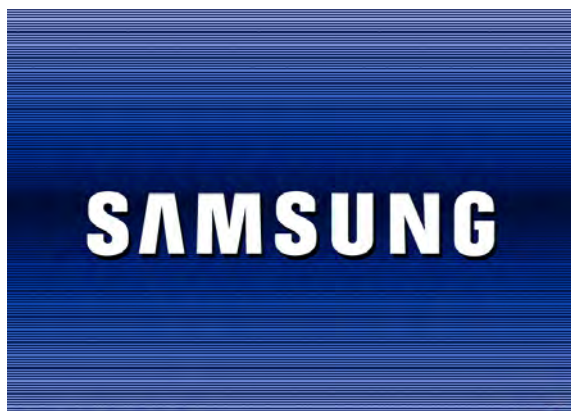
SAMSUNG

> ✎ Press the **F12** key while the booting screen(SAMSUNG logo) appears, the system will try to boot from the network.

3 After a moment, the BIOS setup screen appears.

The items in the BIOS setup may differ depending on the product.

```
┌─────────────────────────────────────────────────────────────┐
│              Phoenix SecureCore (tm) Setup Utility            │
├─────────────────────────────────────────────────────────────┤
│  ┌──────┐                                                     │
│  │ Main │  Advanced    Security     Boot     Exit             │
│  └──────┘                                                     │
│                                         ┌───────────────────┐ │
│                                         │ Item Specific Help│ │
│   System Time        [10:21:53]         ├───────────────────┤ │
│   System Date        [07/30/200X]       │<Tab>, <Shift-Tab>,│ │
│                                         │ or                │ │
│   IDE Channel 0 Master    XXXXXXXX      │<Enter> selects    │ │
│                                         │ field.            │ │
│   CPU Type           XXXXXXXX           └───────────────────┘ │
│   CPU Speed          X.XX GHz                                 │
│                                                               │
│   Total Memory       XXX MB                                   │
│                                                               │
│   BIOS Version       XXXXXXXX                                 │
│   MICOM Version      XXXXXXXX                                 │
│                                                               │
│                                                               │
├─────────────────────────────────────────────────────────────┤
│  F1   Help   ↑↓  Select Item   F5/F6  Change Values           │
│                                            F9   Setup Defaults│
│  Esc  Exit   ←→  Select Menu   Enter  Select ▶Sub-Menu        │
│                                            F10  Save and Exit │
└─────────────────────────────────────────────────────────────┘
```

Setup Menu

Help
Help for the selected item appears automatically.

Setup Items

The BIOS Setup Screen

Phoenix SecureCore (tm) Setup Utility

Main	Advanced	Security	Boot	Exit

Item Specific Help

System Time	[10:21:53]
System Date	[07/30/200X]
IDE Channel 0 Master	XXXXXXXX
CPU Type	XXXXXXXX

`<Tab>, <Shift-Tab>, or <Enter> selects field.`
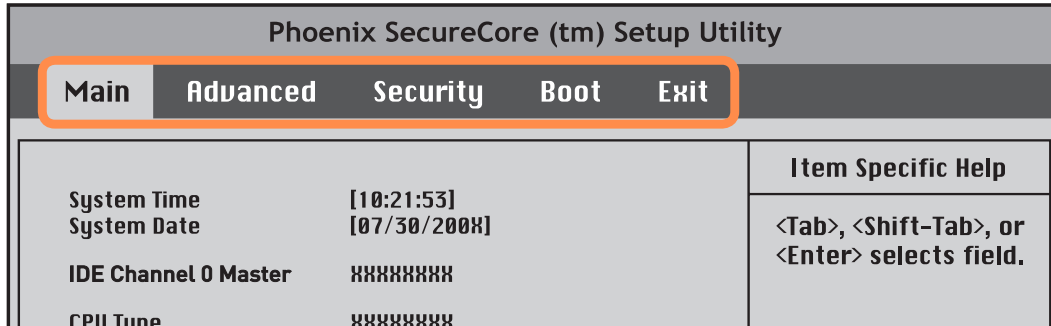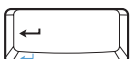
Menu	Description
Main	Used to change the basic system and environment settings.
Advanced	Used to configure advanced functions on your computer for devices and chipsets.
Security	Used to configure security functions, including passwords.
Boot	Used to set the boot priority and other boot options
Exit	Used to exit the Setup either saving the changes or not.

System Setup Keys

In the Setup, you have to use the keyboard.

F1	F1	Press to view the Setup Help.
Up & Down Keys	↑ ↓	Press to move up and down.
F5/F6	F5 F6	Press to change the item value.
F9	F9	Press to load the default Setup settings.
ESC	Esc	Press to return to a higher level menu or to move to the Exit menu.
Left & Right Keys	← →	Press to move to another menu.
Enter	↵	Press to select an item or to enter a sub menu.
F10	F10	Press to save the changes and exit Setup.

✎ The keyboard image and color may differ from the actual keyboard.

Setting a Boot Password

When setting a password, you have to enter a password to use the computer or enter the BIOS Setup.

By configuring a password, you can restrict system access to authorized users only and protect data and files saved on the computer.

> Do not lose or forget your password.
> If you have forgotten your password, contact a Samsung service center. In this case, a service fee will be charged.

Setting a Supervisor Password

A Supervisor Password is required to turn the computer on or to start the System Setup.

When setting a Supervisor Password, users other than a supervisor cannot use the computer.

1 Select the **Security** menu in the BIOS Setup.

2 In the **Set Supervisor Password** item, press <**Enter**>.

```
            Phoenix SecureCore (tm) Setup Utility

  Main    Advanced    Security    Boot    Exit

                                              Item Specific Help

  Supervisor Password      Clear
  User Password            Clear           Supervisor Password
  HDD Password             Clear           controls access to the
                                           setup utility.
  Set Supervisor Password  [Enter]
  Set User Password        [Enter]
  Set HDD Password         [Enter]

  Password on boot         [Disabled]
  Fixed disk boot sector   [Normal]

  F1   Help   ↑↓  Select Item   F5/F6  Change Values   F9   Setup Defaults
  Esc  Exit   ←→  Select Menu   Enter  Select ►Sub-Menu F10  Save and Exit
```

3 Enter a password, press <**Enter**>, re-enter the password for confirmation, and press <**Enter**> again.

The password can be up to 8 alphanumeric characters. Special characters are not allowed.


```
Set Supervisor Password

Enter New Password    [        ]
Confirm New Password  [        ]
```
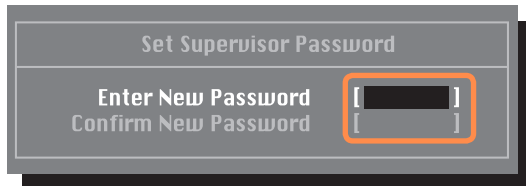
4 When a message confirming the password configuration appears in the **Setup Notice** window, press <**Enter**>.

The supervisor password has been set.

The supervisor password is required to turn the computer on or to enter the BIOS Setup.

Setting a User Password

The User Password restricts access to the computer or for configuring the BIOS Setup, like a Supervisor Password. However, the Setup items that can be configured with a User Password are restricted, unlike for a Supervisor Password.

Before configuring a user password, a **supervisor password** must have been configured. Deactivating the supervisor password also deactivates the user password.

In the **Set User Password** item, press <**Enter**> and complete the procedures from Step 3 of Setting a Supervisor Password.

Setting Up a Boot Password

To setup a boot password, the administrator password (**Set Supervisor Password**) should be set in advance.

Set the **Password on boot** item to **Enabled**.

Once a boot password is set, you have to enter a password to boot up the computer.

Setting up a Hard Disk Drive Password (Optional)

A supervisor password must be set using the Set Supervisor Password menu.

If you set a password for a hard disk drive, it cannot be accessed from another computer.

Press <**Enter**> in the **Set HDD Password** item and define a password as described in Step 3 of the Setting up the Supervisor Password.

> **!** The hard disk drive password setting function is not provided for some models.

> **!** **Changing the hard disk drive password**
>
> For security purposes, you can only change a hard disk drive password after restarting the computer by pressing the computer **Power** button.
>
> If you cannot change the hard disk drive password or the **HDD Password Frozen** message appears when entering the BIOS Setup and then selecting **Security > HDD Password**, press the **Power** button to turn the computer on again.

Deactivating the Password

1 Press <**Enter**> on the password to be deactivated. For example, to deactivate a supervisor password in the **Set Supervisor Password** item, press <**Enter**>.

2 In the **Enter Current Password** item, enter the currently configured password and press <**Enter**>.

3 Leave the **Enter New Password** item field empty, and press <**Enter**>.

4 Leave the **Confirm New Password** field empty, and press <**Enter**>.

5 In the **Setup Notice** window, press <**Enter**>.
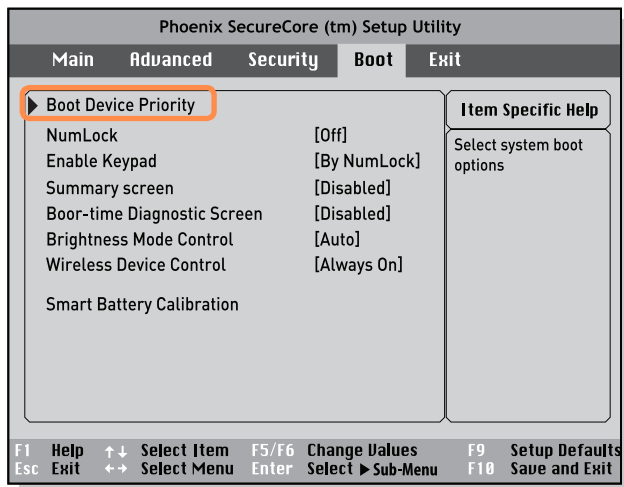
The password is deactivated.

Changing the Boot Priority

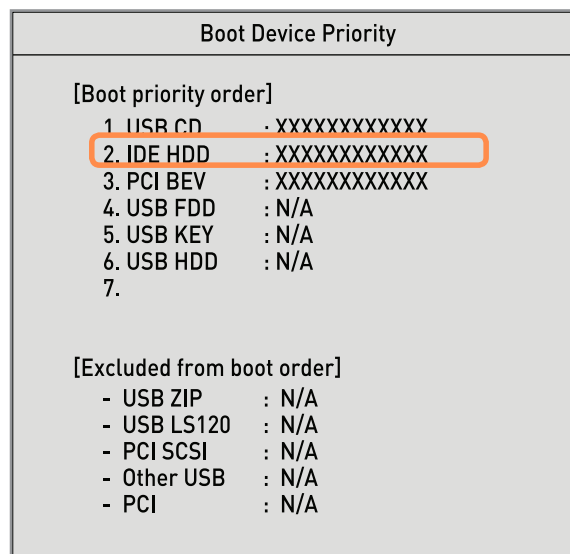This computer is configured to boot from an external-type ODD first.

This chapter describes how to change the boot priority so that the computer boots from the hard disk drive first.

1 Select the **Boot** menu in the BIOS Setup.

2 Press <**Enter**> on the **Boot Device Priority** item.

```
                Phoenix SecureCore (tm) Setup Utility

   Main    Advanced    Security    Boot    Exit

▶ Boot Device Priority                        Item Specific Help
  NumLock                    [Off]
  Enable Keypad              [By NumLock]      Select system boot
  Summary screen             [Disabled]        options
  Boor-time Diagnostic Screen [Disabled]
  Brightness Mode Control    [Auto]
  Wireless Device Control    [Always On]

  Smart Battery Calibration


  F1  Help   ↑↓  Select Item   F5/F6  Change Values    F9   Setup Defaults
  Esc Exit   ←→  Select Menu   Enter  Select ▶Sub-Menu F10  Save and Exit
```

3 Press the down key (↓) to move to the **IDE HDD** item and press the **F6** key to move up to the top item.

```
                    Boot Device Priority

      [Boot priority order]
         1. USB CD       : XXXXXXXXXXXX
         2. IDE HDD      : XXXXXXXXXXXX
         3. PCI BEV      : XXXXXXXXXXXX
         4. USB FDD      : N/A
         5. USB KEY      : N/A
         6. USB HDD      : N/A
         7.


      [Excluded from boot order]
         - USB ZIP       : N/A
         - USB LS120     : N/A
         - PCI SCSI      : N/A
         - Other USB     : N/A
         - PCI           : N/A
```

4 Press the **F10** key to save the settings and exit Setup.

The highest boot priority device is now set to the Hard Drive.

Upgrading Memory

A memory is installed in the memory slot at the bottom of this computer.
The procedures to replace the memory are described below.

> - Replace new memory only after shutting the computer down completely.
>   Do not replace memory when the computer is in Sleep mode.
> - Disconnect main power plug and remove the battery before continuing.
> - Only use the same type of memory as specified in the Product Specification.
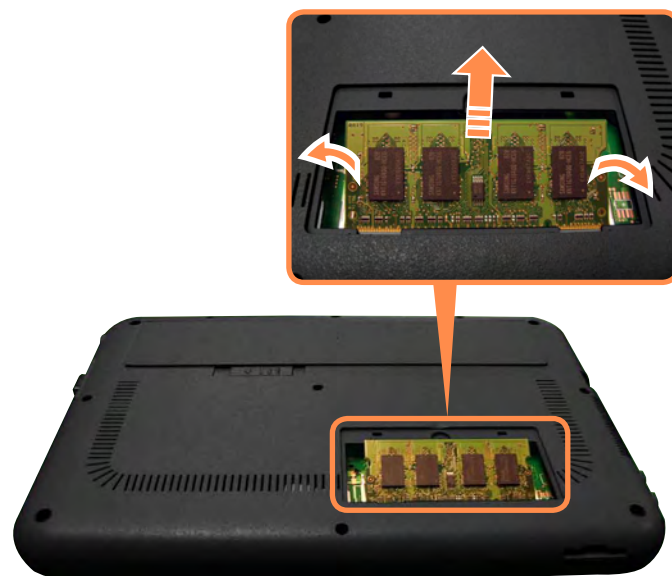
Replacing the Memory

1 Remove the screw on the memory compartment cover at the bottom of the computer using a screw driver.
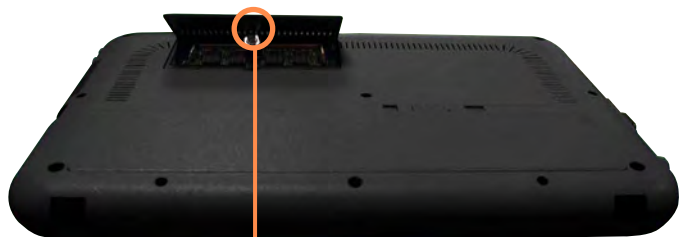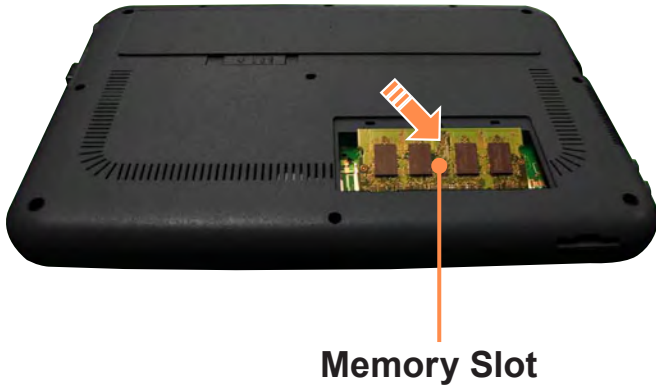

Fixing Screw

**2** Pull the memory module latches outward. The memory module will pop up.

Remove the memory module out at an angle of 30 degrees.

3 Insert a new memory module into the memory slot at an angle of approximately 30 degrees aligning it to the angle of the memory slot.

Memory Slot

4 Push the memory module down so that it is completely fixed. If the memory does not fit easily, push the memory module down while pulling the memory module latches outward.
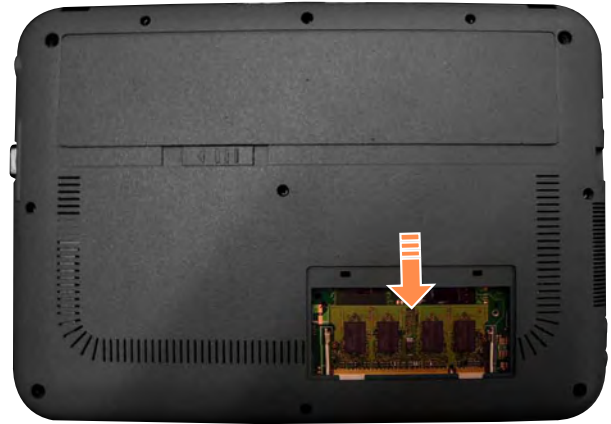
5 Close the memory compartment cover and fasten the screw.

Battery

Please refer to the following instructions when running the computer on battery power without connecting the AC power.

A Lithium-Ion smart battery is supplied with this computer.

> Carefully read and follow the precautions printed on the battery before using the battery.

Precautions

Use only chargers specified in the User Manual.

Never heat the battery pack, put it near or in a fire or use at a temperature higher than 60°C, as this may cause fire.

Never cause a short circuit between the battery pack terminals or disassemble the battery pack.

Carefully read and follow the precautions printed on the battery and the safety instructions in the User Manual before using the battery.

Please refer to the system operation environment (📖 190) of this manual and operate and store the battery at room temperature.

Installing/Removing the Battery

1 Shutdown the system, close the LCD panel and place the computer upside down on a flat surface.

2 Slide the center battery latch into the **UNLOCK** 🔓 position and then remove the battery.
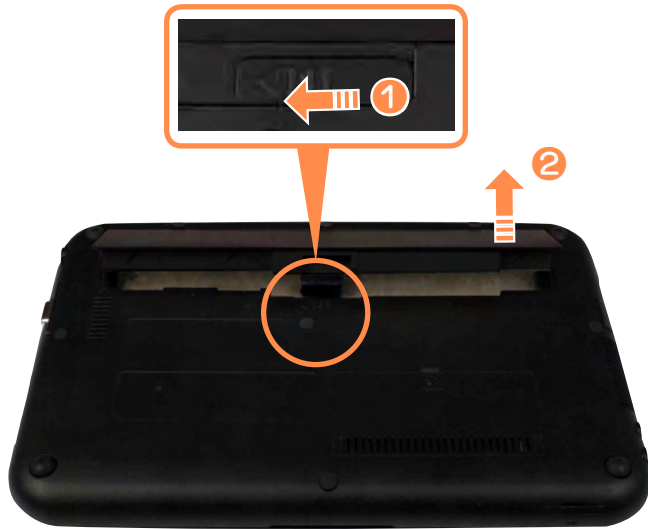
3 To install the battery again, slide the battery into the system.

Charging the Battery

1 Attach the battery and connect the AC adapter to the DC-in jack of the computer.

The battery will then start charging.

2 When charging is complete, the Charge LED turns green.

Status	Charge LED
Charging	Amber
Charging complete	Green
AC adapter not connected	Off

Measuring the Remaining Battery Charge

You can view the battery charge status by completing the following procedures.

To use the shortcut key to view

Press the **Fn** + ⌨ keys on the keyboard. The remaining battery charge (%) will displayed for a moment.

You can only view the charge status in this way when Easy Display Manager is installed on your computer.

> ✎ **Battery Warning**
> ● You will hear an alarm when the remaining battery charge reaches below 10%.
>   In this case, connect the AC adapter or turn off the computer and install a fully charged battery.
> ● If the battery residual amount is 3~5%, the computer automatically shuts down after saving the data. The battery residual amount may vary depending on the computer model.

Battery Usage Time Information

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

For long periods of not using the battery, keep the battery discharged. This extends the battery life time.

Extending the Battery Usage Time

Decreasing the LCD Brightness

Press the **Fn** + ⬇ keys on the keyboard to decrease the LCD brightness to extend the battery usage time.

Using Samsung Battery Manager

Battery Manager is a management program that allows you to use the battery efficiently. You can select the optimized power mode depending on the system environment.

Click **Start > All Programs > Samsung > Samsung Battery Manager > Samsung Battery Manager**.
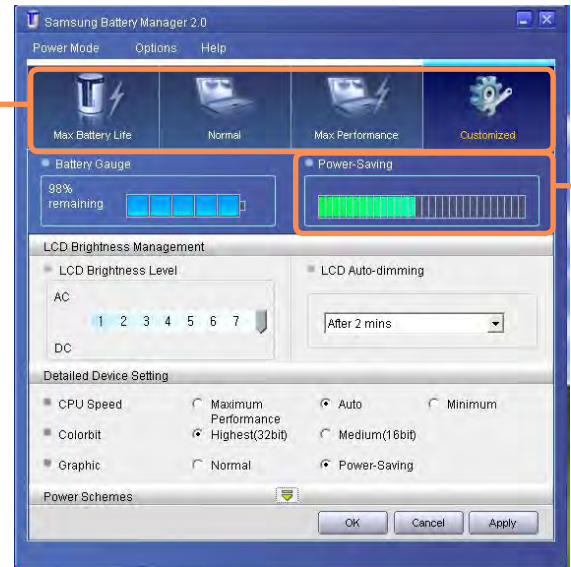
Select Power Mode　　　**Power-saving Effect**

Maximum Battery Mode

This mode is appropriate for the environment that requires maximum battery lifetime. The system performance may be degraded in this mode.

General Mode

This mode is appropriate for the regular environment and it optimizes the performance of the system and battery.

Maximum Performance Mode

This mode is appropriate for the environment that requires maximum system performance. The battery life may get shorter in this mode.

User Settings Mode

This mode allows you to configure the detailed settings. You can set LCD brightness, power status, and color quality.

✎ **What is the Power-saving Effect?**
This product displays the battery life in each power mode. The higher the power saving effect increases, the longer the graph bar is displayed.

When Using Games or Multimedia
The system may not operate properly in maximum battery mode. It is recommended to connect the AC adapter to the system or to use the system in general mode.

Usage Mode of Samsung Battery Manager
- The maximum battery mode optimizes the system operation speed to increase the battery run time, so the program execution time may get longer.
- If you change the power settings, the properties in **Power Options** window will also be changed.
- Complete, install Samsung Battery Manager using the **System Software Media** in order to use the general mode.

Disabling Unused Devices

If you turn off unused devices, battery lifetime will improve.

1 Click Device Manager from **Start > Control Panel > Performance and Maintenance > Systems > Hardware** tab.

2 Right-click the devices that you are not using and select **Disable**.