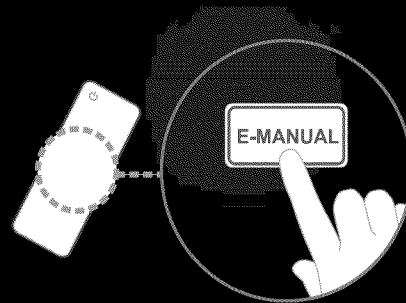




E-MANUAL



imagine the possibilities

Thank you for purchasing this Samsung product.
To receive more complete service, please register
your product at

www.samsung.com/register


Model _____ Serial No. _____


■ Ad-Hoc Network Setup


You can connect to a mobile device supporting Ad-hoc connections without a wireless router or AP through the “Samsung Wireless LAN adapter”. When connected to a mobile device, you can use files on the device or connect to the Internet using the AllShare or Multimedia function.

How to set up using Ad hoc

1. Go to **Network Settings** screen. (**MENU**  → **Network** → **Network Settings** → **ENTER** ).
2. Select **Wireless (General)**, and press **ENTER** , then press **ENTER**  again.


3. Select **Ad hoc**. The message “**Ad hoc service supports a direct connection with Wi-Fi compatible devices like a cell phone or PC. Other network services may be limited. Do you want to change the network connection?**” is displayed.
4. Select **OK**, and press **ENTER** . The TV searches for the mobile device.
5. When the TV finishes searching for mobile devices, input the generated **Network Name (SSID)** and **Security Key** into the device you want to connect and then connect to the network.

 If network does not operate normally, check the **Network Name (SSID)** and Security key again. An incorrect Security key may cause a malfunction.

 If a device is connected once, it is displayed in the Network Setting list. When you connect to it again, you can find it in the List.





■ One Foot Connection Network Setup

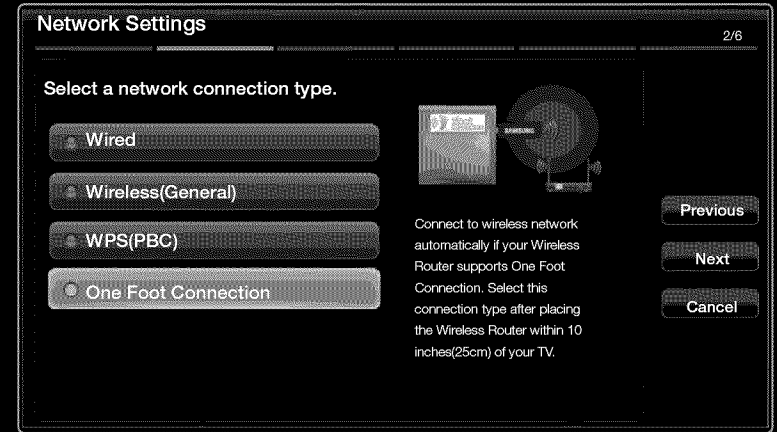
The **One Foot Connection** function lets you connect your Samsung TV automatically to Samsung wireless routers. If your wireless router does not support **One Foot Connection**, you must connect using one of the other methods.

 You can check for equipment that supports **One Foot Connection** on www.samsung.com.




How to set up using One Foot Connection

1. Turn on the Samsung wireless router and the TV.
2. Go to **Network Settings** screen. (**MENU**  → **Network** → **Network Settings** → **ENTER** ).
3. Select **One Foot Connection**, and press **ENTER** , then press **ENTER**  again.




- The displayed image may differ depending on the model.

4. Place the wireless router in parallel with the Samsung Wireless LAN adapter or your TV set (if you do not need to use the Adaptor), and no farther away than 25cm (about 9 3/4 inches).

 If **One Foot Connection** does not connect your TV to your router, a pop-up window appears on the screen notifying you of the failure. If you want to try using **One Foot Connection** again, reset the wireless router, disconnect the Samsung Wireless LAN adapter and then try again from Step 1. You can also choose one of the other connection setup methods.

◀ 5. The network connection screen appears, and network setup is done. ▶

6. Place the wireless router to a desired location.

 If the wireless router's settings change or you install a new wireless router, you must perform the **One Foot Connection** procedure again, beginning from Step 1.

■ Plug & Access Network Setup


The **Plug & Access** function lets you easily connect your Samsung TV to your Samsung wireless router by using a USB memory stick to transfer the setup information from the router to the TV. If your wireless router does not support **Plug & Access**, you must connect using one of the other methods.

 You can check for equipment that supports **Plug & Access** on www.samsung.com.



How to set up using the Plug & Access function

1. Turn on the Samsung wireless router and your TV.
2. Insert a USB memory stick into the USB port in your Samsung wireless router. Check the router's LED's to make sure it is on (Blinking → on).
3. Take the USB memory stick out of the router, and then insert it into a USB port on your Samsung TV. The memory stick downloads the connection information.
4. Wait until the connection is automatically established.

◀  If **Plug & Access** does not connect your TV to your wireless router, a pop-up window appears on the screen notifying you of the failure. If you want to try using **Plug & Access** again, reset the wireless router, disconnect the Samsung Wireless LAN adapter and then try again from Step 1. You can also choose one of the other connection setup methods. ▶

5. The network connection screen appears, and the network set up is done.
6. Place the wireless router in a desired location.
 - ☒ If the wireless router's settings change or you install a new wireless router, you must perform the **Plug & Access** procedure again, beginning from Step 1.



Priority QOS

Samsung wireless routers are optimized to stream HD AV to Samsung DTVs.

This Priority QOS function is unique to Samsung wireless routers.

You can connect a Samsung wireless router to many devices, such as laptops, mobile phones, BD players etc. But, when you connect a Samsung TV to a Samsung wireless router, the Samsung wireless router gives the Samsung TV a priority connection.

This ensures you get the highest quality streaming contents and the fastest throughput speed.

- Priority QOS makes your TV faster by giving it priority bandwidth. (Priority QOS is optional. You can turn it on and off.)
- Because your Samsung TV has a priority connection, you can enjoy HD content without buffering.

 The connection speed may vary based on the network environment.

If Your TV Fails to Connect to the Internet

Your TV may not be able to connect to the Internet because your ISP has permanently registered the MAC address (a unique identifying number) of your PC or modem, which it then authenticates each time you connect to the Internet as a way of preventing unauthorized access. As your TV has a different MAC address, your ISP can not authenticate its MAC address, and your TV can not connect.

To resolve this problem, ask your ISP about the procedures required to connect devices other than a PC (such as your TV) to the Internet.

If your Internet service provider requires an ID or password to connect to the Internet, your TV may not be able to connect to the Internet. If this is the case, you must enter your ID or password when connecting to the Internet.

The internet connection may fail because of a firewall problem. If this is the case, contact your Internet service provider.

If you cannot connect to the Internet even after you have followed the procedures of your Internet service provider, please contact Samsung Electronics at 1-800-SAMSUNG.

□ Setting the Time

👉 MENU  → System → ENTER 

■ Time

👉 The current time will appear every time you press the **INFO** button.

- **Clock:** Set the clock to use the various various timer features of the TV.

📝 If you disconnect the power cord, you have to set the clock again.

– **Clock Mode:** Set the current time manually or automatically.




Auto: Have the TV set the current time automatically using the time from a digital channel.

📝 You must have the cable or an antenna connected to the TV to set the time automatically.

Manual: Set the current time manually.

☞ Depending on the broadcast station and signal, the auto time set up may not be correct. In this case, set the time manually.

– **Clock Set:** Set the **Date** and **Time**.

Select **Clock Set**. Select **Date** or **Time**, and then press **ENTER** . Use the number buttons to enter numbers or press the up and down arrow buttons. Use the left and right arrow buttons to move from one entry field to the next. Press **ENTER**  when done. To exit **Clock Set**, select **Close**, and then press **ENTER** .



☞ Available only when **Clock Mode** is set to **Manual**.

☞ You can set the **Date** and **Time** directly by pressing the number buttons on the remote control.

- **Time Zone:** Select your time zone.
 - ☑ This function is only available when the **Clock Mode** is set to **Auto**.
- **DST (Off / On):** Switches the DST (Daylight Saving Time) function on or off.
 - ☑ This function is only available when the **Clock Mode** is set to **Auto**.

Using the Sleep Timer

 **MENU**  → **System** → **Time** → **Sleep Timer** → **ENTER** 

- **Sleep Timer** : Automatically shuts off the TV after a preset period of time (30, 60, 90, 120, 150 and 180 minutes).
 - ☑ Use the up and down arrows to select a period of time, and then press **ENTER** . To cancel **Sleep Timer**, select **Off**.

Setting the On / Off Timer

 **MENU**  → **System** → **Time** → **ENTER** 

Set **On Timer** so that your TV turns on automatically at a time and on a day of your choosing.

- **On Timer:** You can set up three separate **On Timer** configurations. (**On Timer 1**, **On Timer 2**, **On Timer 3**)

 You must set to clock before you can use **On Timer**.



- The displayed image may differ depending on the model.

Setup: Select **Off**, **Once**, **Everyday**, **Mon~Fri**, **Mon~Sat**, **Sat~Sun** or **Manual**. If you select **Manual**, you can choose the days you want **On Timer** to turn on your TV.

 The ✓ mark indicates days you've selected.

Time: Set the hour, minute, am/pm. Use the number buttons or the up and down arrow keys to enter numbers. Use the left and right arrow buttons to change entry fields.

Volume: Set the desired volume level. Use the left and right arrow buttons to change the volume level.

Source: Select **TV** or **USB**. Select **TV** and the TV will display broadcast or cable TV programs when it turns on automatically. Select **USB** and the TV will play content from a USB device when the TV turns on automatically. (You can select **USB** only when a USB device is connected to the TV)

Antenna (when the **Source** is set to **TV**): Select **Air** or **Cable**.

Channel (when the **Source** is set to **TV**): Select the desired channel.

Music / Photo (when the **Source** is set to **USB**): Select a folder in the USB device containing music or photo files you want played when the TV turns on automatically.

NOTE

- If there is no music file on the USB device or you don't select a folder containing a music file, the Timer function does not operate correctly.
- If there is only one photo file in the USB, the Slide Show will not play.



- If a folder name is too long, the folder cannot be selected. Each USB you use is assigned its own folder. When using more than one of the same type of USB, make sure the folders assigned to each USB have different names.
- We recommend that you use a USB memory stick and a multi card reader when using **On Timer**. The **On Timer** function may not work with USB devices with a built-in battery, MP3 players, or PMPs made by some manufacturers because the TV can take too long to recognize these devices.

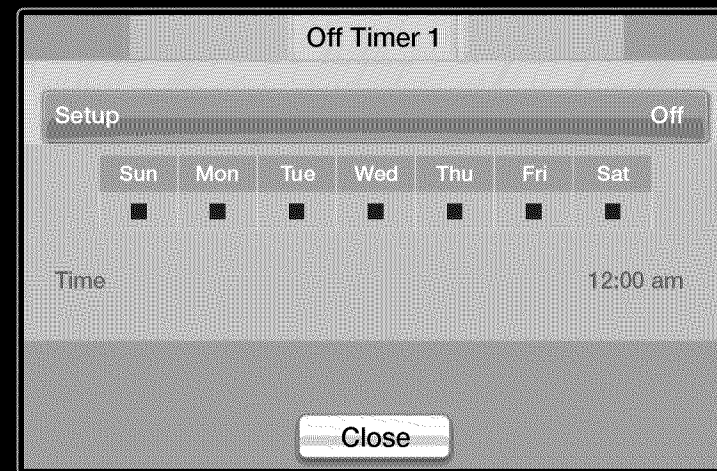
- **Off Timer** : You can set up three separate Off Timer configurations. (**Off Timer 1**, **Off Timer 2**, **Off Timer 3**)

 You must set the clock before you can use **Off Timer**.

Setup: Select **Off**, **Once**, **Everyday**, **Mon~Fri**, **Mon~Sat**, **Sat~Sun** or **Manual**. If you select **Manual**, you can choose the days you want **Off Timer** to turn off your TV.

 The ✓ mark indicates days you've selected.

Time: Set the hour, minute, and am/pm. Use the number buttons or the up and down arrow keys to enter numbers. Use the left and right arrow buttons to change entry fields.



- The displayed image may differ depending on the model.

❑ Blocking Programs

👉 MENU  → System → Security → ENTER 

■ Security

When you access the **Security** functions for the first time, the PIN input screen appears. Enter a 4 digit PIN you will remember. The PIN screen closes and the Security Menu appears. Every time you access the Security functions, the PIN screen will appear and you must enter that PIN.



- **Program Rating Lock (Off / On):** When turned on, the **Program Rating Lock** feature can automatically block programs that you deem inappropriate for your children. You must enter a PIN (personal identification number) before you can set or change any of the **Program Rating Lock** restrictions.

☒ **Program Rating Lock** is not available in **HDMI**, **Component** or **PC** mode.

☒ The default PIN number for a new TV set is “0-0-0-0”.



TV Rating: You can block TV programs based on their ratings. This function allows you to control what your children can watch.



TV Rating displays a grid with locks. The following categories are on the left side:

- **TV-Y:** Young children / **TV-Y7:** Children 7 and over / **TV-G:** General audience / **TV-PG:** Parental guidance / **TV-14:** Viewers 14 and over / **TV-MA:** Mature audience



The following categories are on top:

- **ALL**: Lock all TV ratings. / **FV**: Fantasy violence / **V**: Violence / **S**: Sexual situation / **L**: Adult Language / **D**: Sexually Suggestive Dialog

 To block certain content, you select a lock, and press **ENTER**  (That is, you “click it”). For example, click the lock at the intersection of **V** and **TV-MA**, and you block all programs that are rated violent and for mature adults. The blocks are also assigned to related groups. For example, if you click **TV-Y** under **All**, then **TV-Y7** will also automatically be blocked. Similarly, if you click **TV-G** under **ALL**, then all the categories in the young adult group will be blocked (**TV-G**, **TV-PG**, **TV-14** and **TV-MA**). The sub-ratings (**D**, **L**, **S**, **V**) work similarly. So, if you block the L sub-rating in **TVPG**, then the L sub-ratings in **TV-14** and **TV-MA** will automatically be blocked.


- ☞ To unblock a category, click the lock. To unblock all the categories in a row, click the lock under **ALL**.
- ☞ To watch a blocked program, you must enter the Security code when requested.



Movie Rating (MPAA): You can block movies based on their MPAA rating. The Motion Picture Association of America (MPAA) has implemented a rating system that provides parents or guardians with advanced information on which films are appropriate for children.

Movie Rating displays a column with locks and the following ratings categories:



- **G:** General audience (no restrictions). / **PG:** Parental guidance suggested. / **PG-13:** Parents strongly cautioned. / **R:** Restricted. Children under 17 should be accompanied by an adult. / **NC-17:** No children under age 17. / **X:** Adults only. / **NR:** Not rated.

- ☑ To block certain content, you select a lock, and press **ENTER**  (That is, you “click it”). For example, click the **X** lock and you block all X-rated movies. The rating categories are also grouped so that clicking one category blocks all the categories a parent would block along with it. For example, if you block the **PG-13** category, then **R**, **NC-17** and **X** will automatically be blocked also.
- ☑ To unblock a category, click the lock.

Canadian English Rating: You can block TV programs based on their Anglophone Canadian rating.

Canadian English Rating displays a column with locks and the following ratings categories:

- **C:** Programming intended for children under age 8. / **C8+:** Programming generally considered acceptable for children 8 years and over to watch on their own. / **G:** General programming, suitable for all audiences. / **PG:** Parental Guidance. / **14+:** Programming contains themes or content which may not be suitable for viewers under the age of 14. / **18+:** Adult programming.

 To block certain content, you select a lock, and press **ENTER**  (That is, you “click it”). For example, click the **18+** lock and you block all TV programs rated 18+. The rating categories are also grouped so that clicking one category blocks all the categories a parent would block along with it. For example, if you block the **G** category, then **PG**, **14+** and **18+** will automatically be blocked.


 To unblock a category, click the lock.



Canadian French Rating: You can block TV programs based on their French Canadian rating.

Canadian English Rating displays a column with locks and the following ratings categories:

- **G: General / 8 ans+:** Programming generally considered acceptable for children 8 years and over to watch on their own. / **13 ans+:** Programming may not be suitable for children under the age of 13. / **16 ans+:** Programming is not suitable for children under the age of 16. / **18 ans+:** Programming restricted to adults.

☑ To block certain content, you select a lock, and press **ENTER**  (That is, you “click it”). For example, click the **18 ans+** lock and you block all TV programs rated **18 ans+**. The rating categories are also grouped so that clicking one category blocks all the categories a parent would block along with it. For example, if you block the **8 ans+** category, then **13 ans+**, **16 ans+** and **18 ans+** will automatically be blocked also.

☑ To unblock a category, click the lock.

Downloadable U.S. Rating: Parental restriction information you can use while watching DTV channels.

NOTE

- If information is not downloaded from the broadcasting station, **Downloadable U.S. Rating** menu is deactivated.
- Parental restriction information is automatically downloaded while you watch DTV channels. It may take several seconds.
- The **Downloadable U.S. Rating** menu is available for use after information is downloaded from the broadcasting station. However, depending on the information from the broadcasting station, it may not be available for use.
- Parental restriction levels differ depending on the broadcasting station. The default menu name and **Downloadable U.S. Ratings** change depending on the downloaded information.

- Even if you set the on-screen display to another language, the **Downloadable U.S. Rating** menu will appear in English only.
- Blocking one rating level will automatically block other categories that deal with more sensitive material.
- The rating titles (For example: Humor Level..etc) and TV ratings (For example: DH, MH, H..etc) may differ depending on the broadcasting station.



- **Change PIN:** The **Change PIN** screen will appear. Choose any 4 digits for your PIN and enter it in **Enter New PIN**. Re-enter the same 4 digits in Confirm New PIN. When the Confirm screen disappears, press the **Close** button. The TV has memorized your new PIN.

How to watch a restricted program or movie

If the TV is tuned to a restricted program or movie, the **Program Rating Lock** will block it. The screen will go blank and the following message will appear:



◀ “This channel is blocked by **Program Rating Lock**. Please enter the PIN to unblock.” ▶

Enter the PIN to unblock the program or movie.

- ☞ If you forget the PIN code, press the remote control buttons in the following sequence in Standby mode, which resets the PIN to “0-0-0-0”: **MUTE** → 8 → 2 → 4 → **POWER** (on).

□ Economical Solutions

■ Eco Solution

☞ MENU  → System → Eco Solution → ENTER 

- **Energy Saving (Off / Low / Medium / High / Picture Off)**: Lets you adjust the brightness of the TV in order to reduce power consumption. If you select **Picture Off**, the screen is turned off, but the sound remains on. Press any button except the volume button to turn on the screen.

- **Eco Sensor (Off / On):** To enhance your power savings, the picture settings will automatically adapt to the light in the room.

☞ If you adjust **Backlight** for LED TV / **Cell Light** for PDP TV in the Picture menu, the **Eco Sensor** will be set to **Off**.

Min Backlight for LED TV / **Min Cell Light** for PDP TV: When **Eco sensor** is **On**, you can manually adjust the minimum screen brightness.

☞ If **Eco Sensor** is **On**, the display brightness may change (become slightly darker or brighter) depending on the surrounding light intensity. You can control the screen's minimum brightness with the **Min Backlight / Min Cell Light** function.

- **No Signal Power Off (Off / 15 min. / 30 min. / 60 min.):** To avoid unnecessary energy consumption, you can set how long you want the TV to remain on if it's not receiving a signal.

 Disabled when an attached PC is in power saving mode.

- **Auto Power Off (Off / On):** The TV will automatically turn off if you don't press a button on the remote or touch a button on TV's front panel within 4 hours to prevent overheating.



■ Auto Protection Time (Off / 2 hours / 4 hours / 8 hours / 10 hours)

for LED TV

If the screen displays a still image for a certain period of time you define, the TV activates the screen saver to prevent the formation of burnt in ghost images on the screen.



■ **Screen Burn Protection**

for PDP TV

To reduce the possibility of screen burn, this unit is equipped with Pixel Shift screen burn prevention technology. Pixel Shift moves the picture slightly on the screen. The Pixel Shift Time setting allows you to program the time between movements of the picture in minutes.

Your TV also has the following additional screen burn protection functions:

- **Pixel Shift**
- **Auto Protection Time**
- **Scrolling**
- **Side Gray**

- **Pixel Shift (Off / On):** Using this function, you can set the TV to move pixels minutely on the PDP screen in a horizontal or vertical direction to minimize after images on the screen.

 Available **Pixel Shift** Settings and Optimum Settings

	Available Settings	Optimum Settings for TV/AV/ Component/HDMI/PC
Horizontal	0~4 (pixels)	4
Vertical	0~4 (pixels)	4
Time (minute)	1~4 min	4 min

 The **Pixel Shift** value may differ depending on the monitor size (inches) and mode.

 This function is not available in the **Screen Fit** mode.

- **Auto Protection Time (Off / 10 min. / 20 min. / 40 min. / 1 hour):** If the screen displays a still image for a certain period of time you define, the TV activates the screen saver to prevent the formation of burnt in ghost images on the screen.
- **Scrolling:** This function removes after-images on the screen by illuminating all the pixels on the PDP according to a pattern. Use this function when there are after images or symbols on the screen, especially when you displayed a still image on the screen for a long time.

☞ The after-image removal function has to be executed for a long time (approximately 1 hour) to effectively remove after-images on the screen. If the after-image is not removed after you apply the function, repeat the function again.

☞ Press any key on the remote control to cancel this feature.

- **Side Gray (Light / Dark):** When you watch TV with the screen ratio set to 4:3, using the Side Gray function can prevent damage to the edges of the screen by adjusting the white balance on the extreme left and right sides.


□ Picture In Picture (PIP)

 MENU  → System → PIP → ENTER 

■ PIP

You can watch a program whose signal has passed through the TV's tuner and the video from one external video source simultaneously. For example, if you have a cable box connected to the Cable In jack, you can use PIP to watch programs from the cable box and a movie from a Blu-ray player attached to the HDMI In jack.

NOTE

- For PIP sound, refer to the **Sound Select** instructions.
- If you turn the TV off while watching in the PIP mode, the PIP function is reset to off. When you turn your TV on, you must turn PIP on again to watch in the PIP mode.
- You may notice that the picture in the PIP window becomes slightly unnatural when you use the main screen to view a game or karaoke.
- While **Program Rating Lock** is on, you cannot use PIP.
- **PIP** is not supported in **3D** mode. 

- PIP Settings

The picture from the external video source will be in the main screen and the picture from the TV's tuner will be in the PIP sub-picture window.

Main picture	Sub picture
Component, HDMI, PC	TV



- **PIP (Off / On):** Activate or deactivate the PIP function.
- **Air/Cable (Air / Cable):** Select either **Air** or **Cable** as the input source for the sub-screen.
- **Channel:** Select the channel for the sub-screen.
- **Size (■ ■ ■ / ■ ■ ■):** Select a size for the subpicture.
- **Position (■ ■ / ■ ■ / ■ ■ / ■ ■):** Select a position for the sub-picture.
- **Sound Select (Main / Sub):** You can choose to listen to the sound from the Main picture or the Sub picture.

❑ Other Features

👉 MENU  → System → ENTER 

■ Menu Language

Set the menu language.

1. Select **Menu Language**, and then press the **ENTER**  button.
 2. Choose a language, and then press the **ENTER**  button.
- 👉 Choose from **English**, **Español**, and **Français**.

■ Caption

(On-Screen Text Messages)

- **Caption (Off / On):** You can switch the caption function on or off. If captions are not available, they will not be displayed on the screen.

✎ The **Caption** feature does not work with devices connected to the TV through the Component, HDMI or PC input jacks.

- **Caption Mode:** You can select the desired caption mode.

✎ The availability of captions depends on the program being broadcast.

Default / CC1 ~CC4 / Text1 ~Text4: (analog channels only) The Analog Caption function operates in either analog TV channel mode or when a signal is supplied from an external device to the TV. (Depending on the broadcasting signal, the Analog Caption function may or may not work with digital channels.)

Default / Service1 ~Service6 / CC1 ~CC4 / Text1 ~Text4: (digital channels only) The Digital Captions function works with digital channels.

 **Service1 ~6** may not be available in digital caption mode depending on the broadcast.

- **Digital Caption Options:** (digital channels only) Adjusts the each option. When done, select **Close**.

Size: Options include Default, Small, Standard and Large. The default is Standard.

Font Style: Options include Default and Styles 0 to 7. The default is Style 0.

Foreground Color: You can change the color of the letters. Options include Default, White, Black, Red, Green, Blue, Yellow, Magenta and Cyan. The default is White.

Background Color: You can change the background color of the caption. Options include Default, White, Black, Red, Green, Blue, Yellow, Magenta and Cyan. The default is Black.

Foreground Opacity: This adjusts the opacity of text. Options include Default, Transparent, Translucent, Solid and Flashing.

Background Opacity: This adjusts the opacity of the caption background. Options include Default, Transparent, Translucent, Solid and Flashing.

Return to Default: This option sets each Size, Font Style, Foreground Color, Background Color, Foreground Opacity and Background Opacity to its default.

NOTE

- **Digital Caption Options** are available only when you can select **Default** and **Service1 ~ Service6** in **Caption Mode**.
- The availability of captions depends on the program being broadcast.
- The **Default** setting follows the standards set by the broadcaster.
- You cannot set the **Foreground** and **Background** to the same color.
- You cannot set both the **Foreground Opacity** and the **Background Opacity** to the same color.

■ General

- **Game Mode (Off / On):** When you have connected a game console such as a PlayStation™ or Xbox™ to the TV, you can enjoy a more realistic gaming experience if you set **Game Mode** on.

📝 Precautions and limitations for Game Mode:

- Before disconnecting a game console and connecting another external device, set **Game Mode** to **Off** in the **System** menu.
- If you display the TV menu in **Game Mode**, the screen shakes slightly.

✎ **Game Mode** is not available when the input source is set to TV or PC.

✎ Set **Game Mode** to On only after connecting a game console. If you turn **Game Mode** on before you have attached the game console, you may notice reduced picture quality.

✎ If **Game Mode** is On:

– **Picture Mode** is set to **Standard** and **Sound Mode** is set to **Movie**.

- **BD Wise (Off / On)** for PDP TV: Provides the optimal picture quality for Samsung DVD, Blu-ray and Home Theater products which support **BD Wise**. When **BD Wise** is turned On, the picture mode is automatically changed to the optimal resolution.

✎ Available when you connect Samsung products that support **BD Wise** through an HDMI cable to the TV.

- **Boot Logo (Off / On):** Displays the Samsung logo when the TV is turned on.
- **TV Name:** Sets the TV name so you can find it easily on a mobile device.
 - ☑ If you select User Input, you can type on the TV using the OSK (On Screen Keyboard).



■ Anynet+(HDMI-CEC)

For details on set up options, refer to the “What is Anynet+?” instructions.



■ DivX® Video On Demand

Shows the registration code authorized for the TV. If you connect to the DivX web site and register using that code, you can download the VOD registration file. If you activate the VOD registration using Smart Hub, the registration is completed.

 For more information about DivX® VOD, visit “<http://vod.divx.com>”.



■ Network Remote Control (On / Off)

Turn on/off or give permission to Samsung mobile phone devices to connect with and control the TV.

You must have a Samsung Mobile phone/device which supports Wireless Remote Control. For more details, refer to each device's manual.



□ Support Menu

📖 MENU  → Support → ENTER 

■ e-Manual

The **e-Manual** is built into your TV. Open the **e-Manual** to learn how to use your TV's many features.

📖 For the detailed information about the e-Manual Screen, refer to “How to view the e-Manual” in the Users Manual.

■ Self Diagnosis

- **Picture Test:** Use to check for picture problems. **Picture test** displays a high definition picture that you can examine for flaws or faults.

Yes: Select **Yes** if the test picture does not appear or there is noise or distortion in the test picture. There may be a problem with the TV. Contact Samsung's Call Center for assistance.

No: Select **No** if the test picture displays properly. There may be a problem with your external equipment. Please check your connections. If the problem persists, refer to the external device's user manual.

- **Sound Test:** Use the built-in melody to check for sound problems.
 - ☑ If you hear no sound from the TV's speakers, before performing the sound test, make sure **Speaker Select** is set to **TV Speaker** in the **Sound** menu, and then try the speakers again.
 - ☑ You will hear the melody during the test even if you have set **Speaker Select** to **External Speaker** or have muted the sound by pressing the **MUTE** button.

Yes: Select **Yes** if you can hear sound from only one speaker or from neither speaker during the sound test. There may be a problem with the TV. Contact Samsung's Call Center for assistance.

No: Select **No** if you can hear sound from the speakers. There may be a problem with your external equipment. Please check your connections. If the problem persists, refer to the external device's user manual.

- **Signal Information:** (digital channels only) The reception quality of over-the-air HD channels is either perfect or the channels are unavailable. **Signal Information** displays HD channel signal strength so you can adjust your antenna to increase signal strength and receive HD channels.
- **Troubleshooting:** Displays a troubleshooting guide organized into four symptom categories: Poor or Distorted Picture, Distorted Sound or No Sound, RF or PC Issues, and Other Issues. If your TV seems to be having a problem, access the troubleshooting guide for a solution.



■ Software Upgrade

The **Software Upgrade** menu lets you upgrade your TV's software to the latest version.

- **Current Version:** This is the software version already installed in the TV.



Upgrading to the Latest Version

You can upgrade in three ways:

- **By USB**
- **By Online**
- **By Standby Mode Upgrade**

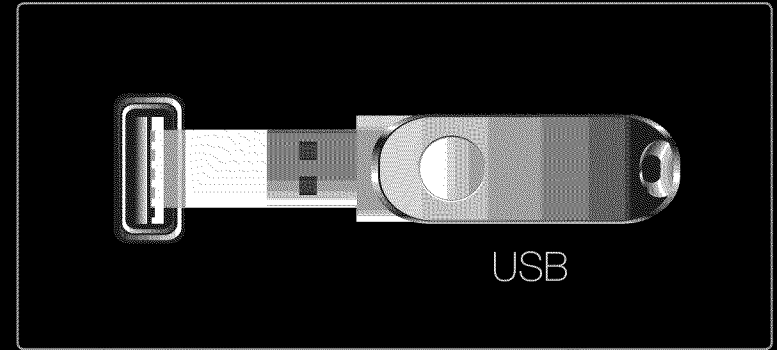
The three methods are explained in the following pages.

ⓘ Be careful not to turn off the power until the upgrade is complete. The TV will turn off and on automatically after completing the firmware upgrade. When you upgrade software, all video and audio settings you have made will return to their default settings. We advise you to write down your settings so that you can easily reset them after the upgrade.

By USB

To upgrade by USB, follow these steps:

1. Visit www.samsung.com.
2. Download the latest USB software upgrade exe archive to your computer.
3. Extracts the exe archive to your computer.
You should have a single folder with the same name as the exe file.
4. Copy the folder to a USB flash drive.
5. Turn on the TV, and then insert the USB flash drive into the USB port of the TV.



- The displayed image may differ depending on the model.

6. In the TV's menu, go to **Settings** → **Support** → **Software Upgrade**.

7. Select **By USB**.

 Please be careful not to remove the USB drive until the upgrade is complete.

By Online

The **By Online** function lets you download the upgrade software directly from the Internet into your TV and then upgrade the software in one operation. To use **By Online**, you must have configured your TV to connect to your network and the TV must be connected to the Internet. See the Network Connection instructions.

To upgrade by Online, follow these steps:


1. Select **By Online**, and then press the **ENTER**  button. The Connecting to Server message appears.

2. If there is a download available, the Download pop-up appears with a progress bar and the download starts.
3. When the download is complete, the Upgrade Query window appears with three choices: **Upgrade Now**, **Upgrade Later**, or **Don't Upgrade**.
4. If you select **Upgrade Now**, the TV upgrades the software, turns off, and then turns on automatically.
5. If you do not make a selection in one minute or select **Upgrade Later**, the TV stores the new upgrade software. You can upgrade the software later using the **Alternative Software** function.
6. If you select **Don't Upgrade**, the TV cancels the upgrade.

Alternative Software

The **Alternative Software** option lets you upgrade using a file the TV downloaded earlier, but you decided not to install immediately, or a file downloaded by the TV in **Standby Mode** (See Standby Mode Upgrade on the next page).

To upgrade By **Alternative Software**, follow these steps:

1. If upgrade software has been downloaded, you will see the software version number to the right of **Alternative Software**.
2. Select **Alternative Software**, and then press the **ENTER**  button.
3. The TV displays a message asking if you want to upgrade. Select **Yes**. The TV begins the upgrade.
4. When the update is complete, the TV turns off automatically, and then turns on.

Standby Mode Upgrade


You can set the **Standby Mode Upgrade** function so that the TV downloads new upgrade software when it is in Standby mode. In Standby mode, the TV is off, but its Internet connection is active. This allows the TV to download upgrade software automatically, when you are not using it. Because the TV is turned on internally, the screen may glow slightly. This phenomenon may continue for more than 1 hour until the software download is complete.

To set **Standby Mode Upgrade**, follow these steps:

1. Press the arrow buttons to select **Upgrade** in **Standby Mode**, and then press the **ENTER**  button.

2. Select **On** or **Off**.

- **Off**: If you select **Off**, the TV will notify you with a pop up message when new upgrade software is available.
- **On**: If you select **On**, the TV will automatically download new upgrade software when it is in Standby mode with the power off. If it downloads new upgrade software, the TV will ask you if you want to install it when you turn the TV on.

 To use the **Standby Mode Upgrade** function, your TV must be connected to the Internet.

■ Contact Samsung

View this information when your TV does not work properly or when you want to upgrade the software. You can find information regarding our call centers and how to download products and software.



□ 3D

🖱️ MENU  → Picture → 3D → ENTER 

■ Using the 3D function

for PDP TV

This exciting new feature enables you to view 3D content. To fully enjoy this feature, you must purchase a pair of Samsung 3D Active Glasses (SSG-3100GB, SSG-3300GR, SSG-3300CR, SSG-3700CR) to view 3D video. Samsung 3D Active Glasses are sold separately. For more detailed purchasing information, contact the retailer where you purchased this TV.

IMPORTANT HEALTH AND SAFETY INFORMATION FOR 3D PICTURES.





Read and understand the following safety information before using the TV's 3D function.

WARNING

- Some viewers may experience discomfort while viewing 3D TV such as dizziness, nausea and headaches. If you experience any such symptom, stop viewing 3D TV, remove the 3D Active Glasses and rest.
- Watching 3D images for an extended period of time may cause eye strain. If you feel eye strain, stop viewing 3D TV, remove your 3D Active Glasses and rest.

- A responsible adult should frequently check on children who are using the 3D function. If there are any reports of tired eyes, headaches, dizziness, or nausea, have the child stop viewing 3D TV and rest.
- Do not use the 3D Active Glasses for other purposes (such as general eyeglasses, sunglasses, protective goggles, etc.)
- Do not use the 3D function or 3D Active Glasses while walking or moving around. If you use the 3D function or 3D Active Glasses while walking or moving about you can injure yourself by running into objects, tripping, and/or falling.

- **3D Mode:** Select the 3D input format.
 - ☑ If you want to experience the 3D effect fully, put the 3D Active Glasses on first, and then select the **3D Mode** from the list below that provides the best 3D viewing experience.

3D Mode		Operation
	Off	Turns the 3D function off.
	2D → 3D	Changes a 2D image to 3D.
	Side by Side	Displays two images next to each other.
	Top & Bottom	Displays one image above another.

✎ Some file format may not supported the “2D → 3D.”

✎ “Side by Side” and “Top & Bottom” are available when the resolution is 720p, 1080i and 1080p in DTV, HDMI and USB mode or when you set the TV’s source to PC and your PC is connected through an HDMI/DVI cable.

- **3D Perspective (-5 ~ +5)**: Adjust overall 3D perspective of on-screen image.
- **Depth (1 ~10)**: Adjust overall depth.
- **L/R Change (L/R Image / R/L Image)**: Swap the left and right pictures.
- **3D → 2D (Off / On)**: Displays the image for the left eye only.

✎ This function is deactivated when **3D Mode** set to “2D → 3D” or **Off**.

Support resolution (16:9 only)

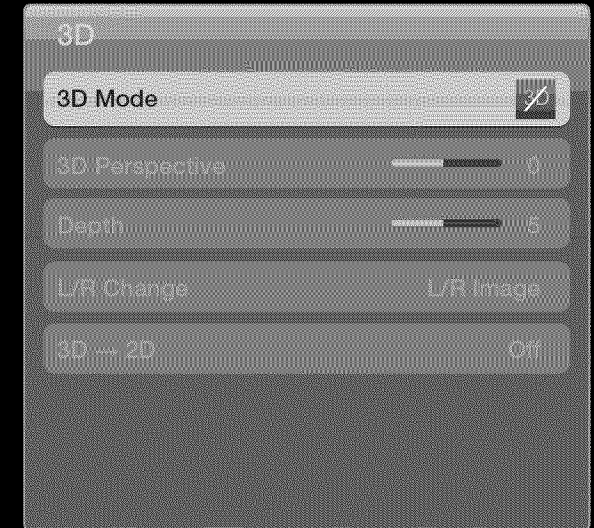
Resolution	Frequency (Hz)
1280 x 720p	60Hz
1920 x 1080i	60Hz
1920 x 1080p	24 / 30 / 60Hz Resolution

Resolution supported for HDMI PC mode


The optimal resolution for the HDMI PC mode is 1920 x 1080. If the input resolution is not 1920 x 1080, the TV may not display images properly in 3D display or full screen mode.

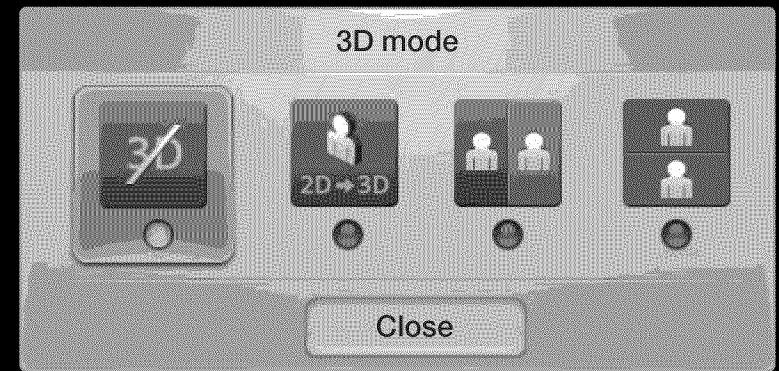
How to watch the 3D images

- ☞ Some 3D modes may not be available depending on the format of the image source.
 - ☞ To watch in 3D, you must wear 3D Active Glasses and turn the glasses on by pressing the power button.
1. Press the **MENU** button on your remote, use the ▲ or ▼ button to select **Picture**, and then press the **ENTER** button.
 2. Use the ▲ or ▼ button to select **3D**, and then press the **ENTER** button.



- The displayed image may differ depending on the model.

3. Use the ▲ or ▼ button to select **3D Mode**, and then press the **ENTER**  button.
4. Using the ◀ or ▶ buttons on your remote control, select the **3D Mode** of the image you want to view.



- The displayed image may differ depending on the model.

Supported formats and operating specifications for Standard HDMI 3D

- ☑ The 3D formats listed below are recommended by the HDMI association and must be supported by 3D TVs.

Source signal format	Standard HDMI 1.4 3D
1920x1080p@24Hz x 2	1920x2205p@24Hz
1280x720p@60Hz x 2	1280x1470p@60Hz

Read These Notes Before Using the 3D Function...

NOTE

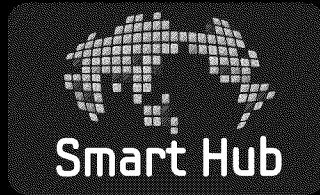
- **3D Mode** is set to **Off** automatically when you access **Smart Hub** or **e-Manual** functions.
- **3D Mode** is set to its memorized configuration value automatically when you change the input source
- Some **Picture** functions are disabled in **3D** mode.
- **PIP** is not supported in **3D** mode.

- 3D Active Glasses from Samsung's previous product (IR type) or other manufacturers not be supported.
- When the TV is initially powered on, it may take some time until the 3D display is optimized.
- The 3D Active Glasses may not work properly if there is any other 3D product or electronic devices turned on near the glasses or TV. If there is a problem, keep other electronic devices as far away as possible from the 3D Active Glasses.


- Be sure to stay within the viewing angle and optimum TV viewing distance when watching 3D pictures. Otherwise, you may not be able to see 3D effects properly.
- The ideal 3D viewing distance is three times or more the height of the screen. For example, if your screen is two feet high, you should sit at least six feet from the screen. We recommend sitting so that your eyes are level with the screen.



□ Smart Hub



Using **Smart Hub**, you can stream movies, videos, and music from the Internet, access various for pay or free-of-charge applications and view them on your TV. Application content includes news, sports, weather forecasts, stock market quotes, maps, photos, and games.

 You can also start this function by pressing the **SMART HUB** button on the remote control.



- The displayed image may differ depending on the model.

Smart Hub at a Glance



NOTE


- Samsung Electronics takes no legal responsibility for any interruption of the Smart Hub service caused by the service provider for any reason.
- The Smart Hub service downloads and processes data via the Internet so that you can enjoy the Internet contents on your TV screen. If the Internet connection is unstable, the service may be delayed or interrupted. Furthermore, the player may turn off automatically in response to conditions on the Internet. If this occurs, check the Internet connection and try again.
- ◀ • Application services may be provided in English only and the contents available ▶ may vary, depending on your area.

- For more information about a Smart Hub service, visit the web site of the applicable service provider.
- The services provided are subject to change by the Smart Hub service provider without notice.
- The Smart Hub service contents may differ depending on the player's firmware version.
- For pay DivX contents with copy protection can only be played through a composite, a component or an HDMI cable.




Starting Smart Hub the First Time

To start Smart Hub for the first time, follow these steps :

1. Press the **SMART HUB** button.
2. The **Smart Hub** screen appears. In a few cases, the **Country** screen appears immediately after.
3. If the **Country** screen has appeared, press the ▲ / ▼ / ◀ / ▶ buttons to select your country, then press the **ENTER**  button.

◀  Certain applications are available only in certain countries. ▶

4. The **General Disclaimer** screen appears. Press the ◀ / ▶ buttons to select **Agree**, then press the **ENTER**  button.

 Screens can take a few seconds to appear.

5. The **Internet Privacy Policy** screen appears. Press the ◀ / ▶ buttons to select **Agree**, then press the **ENTER** ↵ button.
6. The **Service Update** screen appears and installs a number of services and applications. When done, it closes. The applications and services downloaded are displayed on the **Smart Hub** screen. This may take some time.
 - ☒ Smart Hub may close momentarily during the installation process.
 - ☒ A number of screens may appear after installation. You can press the **ENTER** ↵ button to close them or let them close on their own.
7. To start an application, press the ▲ / ▼ / ◀ / ▶ buttons to highlight a application, then press the **ENTER** ↵ button.

Using the Keypad

Through your remote, you can use the On-Screen Keypad to enter letters, numbers, and symbols.

- Entering Text, Numbers and Symbols

To enter text, press the number button on the remote that corresponds to the letter you want to enter. Press the button rapidly to enter a letter that is not the first letter listed on the On-Screen keypad button. For example, if you want to enter the letter b, press the **2** button on your remote rapidly twice. To enter the first letter listed on a button, press, release, and then wait.

To move within the text, use the arrow buttons. To delete text, move the cursor to the right of the character you want to delete, and then press the **PRE-CH** button. To change case or enter numbers or punctuation, press the **-** button.








Creating an Account

To establish your own, exclusive, configuration of Smart Hub, create your own Smart Hub account.






Note







- You must use an e-mail address as an ID.
- You can register up to 10 User Accounts.
- You do not need an account to use **Smart Hub**.

To create an account, follow these steps:

1. Press the  button on your remote control. The Login screen appears.
2. Press the  /  /  /  buttons to select **Create Account**, and then press the **ENTER**  button.
3. On the next screen, select **Smart TV Account**, and then press the **ENTER**  button. An entry screen and keypad appear.
4. Use the keypad to enter your e-mail address. This will serve as your ID.




5. When done, press the **ENTER**  button to select **OK**, and then press the **ENTER**  button again. The Login screen re-appears.
6. Select **Password**, and then press the **ENTER**  button. The Password screen and a keyboard appear.
7. Use the keypad to enter a password. The password can be any combination of letters, numbers, and symbols.
 -  Press the  button on your remote to show or hide the password as you enter it.

8. When done, press the **ENTER**  button to select **OK**, and then press the **ENTER**  button again. The Login screen re-appears.
9. Select **Confirm**, and then press the **ENTER**  button.
10. Repeat Steps 7 and 8.
11. When the Login screen re-appears, select **Create Account**, and then press the **ENTER**  button. The Confirmation window appears.
12. Select **OK**, and then press the **ENTER**  button. The Continue to Register Service window appears.
13. Select **Connect Service**, and then press the **ENTER**  button.

14. The Register Service Account Window appears.





- ☑ If you have existing accounts with any of the listed providers, you can associate the provider account and the provider account password with your Smart Hub account.






Registration makes it easier to access the providers web site. For registration instructions, go to Step 2 in **Account Management** under **Settings** in the “Setting Up Smart Hub” section of this manual.

- ☑ If you don't have existing provider accounts or do not want to register existing accounts at this time, select **OK**, and then press the **ENTER**  button. You can also let the window close on its own in about a minute.

Account Log In

To log in to your **Smart Hub** account, follow these steps:

1. With the **Smart Hub** main screen displayed on your TV, press the  button on your remote. The Login screen appears.
2. Select the  next to the **Smart TV ID** field, and then press the **ENTER**  button.
3. Select your ID from the list that appears, and then press the **ENTER**  button. The Login screen re-appears.



4. Select **Password**, and then press the **ENTER**  button. The Password window and a keypad appears.
5. Using the keypad and your remote, enter your password. When done, press the **ENTER**  button, select **OK**, and then press the **ENTER**  button again.
 -  If you want Smart Hub to enter your password automatically, select **Remember my Smart TV ID and password** after you have entered your password, and then press the **ENTER**  button. A check appears. Smart Hub will now enter your password automatically when you select or enter your ID.

□ Setting up Smart Hub

■ Settings

The Settings Menu Screen gives you access to account management, account reset, and account properties functions.

To access the **Settings** Menu, and then select a menu item, follow these steps:

1. Press the  button on your remote.
2. Press the ◀ / ▶ to select a menu item, and then press the **ENTER**  button.

The functions on the **Settings** Menu screen are described below.


- **Account Management**


The **Account Management** Menu contains functions that let you register your service provider accounts, change your Smart Hub password, and delete or deactivate your Smart Hub account.




Register Service Account: If you have existing accounts with any of the providers listed by the **Register Service Account** function, you can associate the provider account and the provider account password with your Smart Hub account. If you associate the account, you will be able to log onto the account through Smart Hub easily, without entering your account name or password.

To use the **Account Management** function, follow these steps:



1. In the **Account Management** menu, select **Register Service Account**, and then press the **ENTER**  button. The Register Service Account Window appears.

2. Press the ▲ / ▼ arrow buttons to select a Service Provider you want to associate with your Smart Hub account, and then press the **ENTER**  button.

 If you have a Samsung account and you want to use the **Samsung Apps** function in Smart Hub, you must register your Samsung Apps account here.

3. Using your remote and the on-screen Keypad, enter your site ID and password. When done, press the **ENTER**  button.

 This is the ID and password you normally use to access your account on this site.

4. If you have entered the ID and password correctly, the **Registered Successfully** message appears, asking you if you want to add another service provider. If you do, press the **ENTER**  button. If not, press the **RETURN** button and return to the **Settings** Menu.
5. If you pressed **ENTER** , repeat Steps 2 through 4 to associate another Service Provider.
6. When you are done, press the **RETURN** button.

