

E-MANUAL



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Model _____Serial No. ____

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☐ Using the Channel Menu

To access the **Channel** menu, press the **SMART HUB** button on your remote. After **Smart Hub** appears, use the arrow buttons on your remote to select **Channel**, and then press the **ENTER** button.



• The displayed image may differ depending on the model.

Schedule Manager

Press the **SMART HUB** button on your remote, and then select **Schedule Manager** to access the **Timer Viewing** function. **Timer Viewing** lets you display the channel you want at the time of your choice.

Using the Timer Viewing

You can set the TV to display a desired channel automatically on a day and at a time of your choice.

To use Timer Viewing, follow these steps:

- 1. Press the ENTER button to select Schedule Manager.
- 2. Press the ENTER button to add a scheduled viewing.
- 3. Press the ◀ / ▶ / ▲ / ▼ buttons to set Antenna, Channel, Repeat, and Start Time.

- Antenna: Select Air or Cable.
- Channel: Select the desired channel.
 - You can only select memorized channels.
- Repeat: Select Once, Manual, Sat~Sun, Mon~Fri or Everyday. If you select Manual, you can set the day you want.

Date: You can set a desired date.

Date is available only when you select **Once** in **Repeat**.

- **Start Time**: You can set the start time you want.
 - 2 On the **Information** screen, you can change or cancel a scheduled viewing.
- Cancel Schedules: Cancel a scheduled viewing.
- Edit: Change a scheduled viewing.
- **Return**: Return to the previous screen.

Channel List

The Channel List contains the channels your TV displays (Added Channels) when you press the CH LIST button on your remote. On the Channel List, you can view Added Channels, channel information, Favorites, and manage channels

When you press the **CH LIST** button on the remote control, the **Channel List** screen is displayed immediately.



 The displayed image may differ depending on the model.

- Added Channels: Shows all added channels.
- Favorites 1-5: Shows all favorite channels, in up to five groups.
 - ☑ If you want to view the list of favorite channels, press the CH LIST button, and then press the ► (CH Mode) button to display Favorites 1-5. Press the button to return to the Added Channels.
 - The TV displays **Favorites** only if you have added favorites using **Edit Favorites**.

Using the colored and function buttons with the Channel List.

- Red (Antenna): Switches the mode and display between Air or Cable.
- C Yellow (Program View / Channel View): For digital channels, switches the display between Program View and Channel View. When you select a digital channel in Channel View, press once to display a list of programs on that channel. Press again to redisplay the Channel List.
- (CH Mode / Channel): Toggles between the Favorites list (if you have added favorites using Edit Favorites) and the Added Channels.
- (Watch): Press to watch the channel you selected.
- \$\top (Page): Scrolls the Channel List to the to next or previous page.

Channel Status Display Icons

lcon	Operations
Α	An analog channel
Θ	A reserved program
	Locked channel

How to use Timer Viewing in Channel List (digital channels only)

You can use **Timer Viewing** in the **Channel List** to schedule a digital channel program for viewing. The TV will turn on and display the digital channel program when the program begins.

To schedule a digital program, follow these steps:

- 1. Press the CH LIST button, then select a desired digital channel.
- 2. Press the C (Program View) button.

- 3. Press the ▲ or ▼ buttons to select the desired program, and then press the INFO button.
- **4.** Press the ◀ or ▶ buttons to select **Timer Viewing**, and then press the **ENTER** ➡ button.
- **5.** Press **RETURN** to exit.
 - If you want to cancel **Timer Viewing**, follow Steps 1 through 3, and then select **Cancel Schedules**.

Channel

Using the **Channel** function, you can add channels, delete Added channels, set Favorite channels, use the program guide for digital broadcasts and change between the **All Channels** and **Added Ch.** screen. You can also change the antenna or channel settings by selecting the icons in the top right corner of the screen.



 The displayed image may differ depending on the model.

- Antenna: Toggle between Air or Cable. To access the Antenna function, use the arrow buttons to move the cursor to the Antenna icon on the top right corner of the screen.
- Edit Mode: Delete channels from the Favorites list and delete channels from the Channel List.
 - ② To select all the channels in the current page, select Select All at the top of the page, and then press ENTER →.
 - ☑ To change between All Channels and Added Ch., select All Channels or Added Ch. on the screen, and then press the ENTER → button.

- Edit Mode: Setting channels you watch frequently as favorites.
 - 1. Select the **Edit Mode** icon on the upper right of your screen, and then press the **ENTER** dutton.
 - 2. Press the arrow buttons to select a channel as a favorite, and then press ENTER . A check appears to the left of the channel.
 - 2 You can select more than one channel.
 - Pressing ENTER again deselects the channel.
 - 3. Select Edit Favorites at the bottom of your screen, and then press ENTER button. The Edit Favorites pop-up appears.
 - **4.** Highlight a group on the Favorites list, and then press **ENTER ...**
 - The **Edit Favorites** screen has five groups (Favorites 1, Favorites 2, etc.). You can add a favorite channel to any one of the groups. Select a group using the up and down arrows on your remote.
 - **5.** Select **OK**, press **ENTER ?**, and then press **ENTER ?** again.

- Using Edit Mode to Delete a Channel from the Channel List
 - 1. Select the Elit Mode icon on the upper right of your screen, and then press the ENTER dutton.
 - 2. Press the ◀ / ▶ / ▲ / ▼ buttons to select a channel, and then press ENTER ☑. A check appears to the left of the channel.
 - 2 You can select more than one channel.
 - Pressing ENTER again deselects the channel.
 - 3. Select **Delete** at the bottom of your screen, and then press **ENTER**. A pop-up appears asking if you want to delete the item.

- **4.** Select **OK**, press **ENTER** →, and then press **ENTER** → again. The channel is deleted from the **Channel List**.
- Using the TOOLS button with Channel

To use the **TOOLS** button functions, highlight a channel in the **Added Ch.** or **All Channels** list, and then press the **TOOLS** button.

 Add / Delete: Add a channel or delete an added channel from the Channel lists. When you use the Channel button on your remote to change channels, your TV only displays the channels on the Added Ch. List.

Ø NOTE

- Your TV lists all available channels, both added and deleted, on the All Channels menu.
- A gray-colored channel indicates the channel has been deleted.
- Add only appears if you have selected a deleted channel on the All Channels list.
- Delete only appears if you have selected an Added Channels on the Added Ch. or All Channels list.

• Edit Favorites: Setting channels you watch frequently as favorites.

To set channels as favorites, follow these steps:

- 1. Highlight a channel in the Added Channels list or All Channels list, and then press the TOOLS button.
- 2. Select Edit Favorites in the TOOLS menu, and then press the ENTER button.
 - Pressing ENTER again deselects the channel.
- **3.** Highlight a group on the **Edit Favorites** screen (Favorite 1, Favorite 2, etc.), and then press the **ENTER** button.
 - The **Edit Favorites** screen has five groups. You can add a favorite channel to any one of the groups. Select a group using the up and down arrows on your remote.
- **4.** Select **OK**, and then press the **ENTER** dutton. The channel is made a favorite and is assigned to the favorite group you selected.

- \mathbb{Z} The TV diplays the " \bigstar " symbol next to the channel, indicating it is a favorite.
 - Channel Name Edit (Appears only if you have selected an analog channel.): Assign a name of up to five characters to a channel. For example, History, Food, Golf, etc. This makes it easier to find and select the channel.
 - **Upcoming Program** (Appears only if you have selected a digital channel.): View details on the program being aired on the selected digital channel.

Channel Status Display Icons

Icon	Operations
Α	An analog channel.
✓	A selected selected.
*	A favorite channel

- □ Using the Favorite Channels
- Favorites

View all of your favorite channels.

Your favorite channels are organized in up
to five groups (**Favorites 1-5**). If you want to
move from one favorite group to another, follow
these steps:

- 1. Move the cursor to the group name displayed on the top of the screen, and then press the **ENTER** dutton. A list of groups appears.
- 2. Use the up or down arrow key to select a group, and then press the **ENTER** down. The group you select appears on the screen.



Functions on the Favorites Screen

To access the functions listed below, use the arrow buttons to move the cursor to the icon of your choice on the top right corner of the screen, and then press **ENTER**.

- View Mode: Toggles between the Text view and Thumbnail view of your favorite channels. Thumbnail view displays a picture of the program currently on.
- Antenna: Toggles between Air and Cable.
- Sort: Toggles between sorting favorites by Category and sorting by Title.
- Edit Mode: Delete channels from the Favorites list. For instructions, see the next page.

To use **View Mode**, **Antenna**, or **Sort**, select the appropriate icon as described above, and then press **ENTER .** Use the **<** or ▶ button to make your selection, and then press **ENTER .**

Using Edit Mode to Delete a Favorite

- Select the Elit Mode icon on the upper right of your screen, and then press the ENTER button.
- 2. Press the ◀ / ▶ / ▲ / ▼ buttons to select a channel, and then press ENTER ☑. A check appears to the left of the channel.
 - 2 You can select more than one channel.
 - Press ENTER again to deselect the channel.
- 3. Select **Delete** at the bottom of your screen, and then press **ENTER** . A popup appears asking if you want to delete the item.
- **4.** Select **OK**, press **ENTER** →, and then press **ENTER** → again. The channel is deleted from **Favorites**.
 - The Deselect function that appears with the Delete function lets you deselect all selected channels.
 - If you have assigned a channel to more than one favorite group (say Favorite 1 and Favorite 2), you must repeat this process in both groups to remove a channel entirely from your Favorites.

☐ Memorizing Channels

MENU → Channel → ENTER →

■ Antenna (Air / Cable) TOOLS 🗖

Your TV memorizes channels and adds the memorized channels to the **Added Channels** list. Before your TV can memorize channels, you must specify the signal source, either **Air** or **Cable**. If you select cable, when your start **Auto Program**, you must also specify the cable system type, **STD**, **HRC**, or **IRC**. If you don't know your cable system type, contact your local cable company for the information. Most cable companies use **STD**.

To select **Air** or **Cable**, follow these steps:

- 1. Push MENU → Channel → ENTER → on your remote.
- 2. Select Antenna, and then press ENTER ...
- **3.** Select the source of your TV signal, **Air** or **Cable**, and then press the **RETURN** button.

Auto Program

Scans for channels automatically and stores them in the TV's memory.

To start **Auto Program**, follow these steps:

- 1. Push MENU → Channel → ENTER → on your remote.
- 2. Select Auto Program, and then press ENTER ...
- 3. Select Air or Cable or both by highlighting and then pressing ENTER ...
 - If you selected Air or Cable or both on the Antenna screen, your choice will already be selected.
- 4. Select Next, and then press ENTER -.

- **5.** If you selected **Cable**, the Cable System screen appears. Select **Digital Cable System**, and then press **ENTER** .
 - If you selected **Antenna** only, **Auto Program** starts.
- **6.** Select **STD**, **HRC**, or **IRC**, and then press **ENTER** ...
- 7. Repeat for Analog Cable System.
- **8.** Select **NEXT**, and then press **ENTER** . Auto Program starts.
 - After all the available channels are stored, Auto Program removes scrambled channels. When done, the Auto Program menu then reappears. This process can take up to 30 minutes.

- □ Other Features
 - MENU → Channel → ENTER →
- Clear Scrambled Channel

This function filters out scrambled channels after **Auto Program** is completed. This process may take up to 30 minutes.

How to Stop the Clear Scrambled Channels function

- 1. Press the ENTER button to select Stop.
 - 2. Press the
 button to select Yes.
 - 3. Press the ENTER button.
 - This function is only available in **Cable** mode.

Fine Tune

(analog channels only)

If the reception is clear, you do not have to fine tune the channel, as this is done automatically during the search and store operation. If the signal is weak or distorted, fine tune the channel manually. Scroll to the left or right until the image is clear.

- Settings are applied to the channel you're currently watching.
- Fine tuned channels that have been saved are marked with an asterisk "*" on the right-hand side of the channel number in the channel banner.
- To reset fine-tuning, select **Reset**.

- ☐ Changing the Preset Picture Mode
 - MENU → Picture → Picture Mode → ENTER →
- Picture Mode TOOLS #

Picture modes apply preset adjustments to the picture. Select a mode using the up and down arrow keys, and then press the **ENTER** button.

- In **HDMI1/DVI** mode(when a PC is connected), you can only select **Entertain** and **Standard**.
- Dynamic: Suitable for a bright room.
- Standard: Suitable for a normal environment.
- Natural: Suitable for reducing eye strain.
- Movie: Suitable for watching movies in a dark room.
- Entertain: Suitable for watching movies and games.
 - It is available in **HDMI1/DVI** mode(when a PC is connected).

□ Adjusting Picture Settings

MENU → Picture → ENTER →

Samsung MagicAngle

MagicAngle lets you view optimal screen quality from almost any viewing position. By setting an appropriate value for each position, you can view a high quality picture, whether you are viewing the screen from an angle below, above, or on the side of the monitor.

- Samsung MagicAngle (Off / Lean Back Mode / Standing Mode): Select Lean Back if viewing below the screen and Standing if viewing above.
 - Mode (1-10): Determines the amount of adjustment. Numbers closer to 10 are best for lower viewing positions.

Backlight / Contrast / Brightness / Sharpness / Color / Tint (G/R)

Your television has several options for adjusting picture quality. Select an option using the up and down arrow keys, and then press **ENTER** . Use the arrow keys to adjust the option value or select an option setting. When done, press **ENTER** .

- When you make changes to **Backlight**, **Contrast**, **Brightness**, **Sharpness**, **Color** or **Tint** (G/R), the screen will be adjusted accordingly.
- In HDMI1/DVI mode(when a PC is connected), you can only make changes to Backlight, Contrast, Brightness, and Sharpness.
- 2 You can adjust and store Settings for each external device connected to the TV.
- Lowering picture brightness reduces power consumption.

- □ Changing the Picture Size
 - MENU → Picture → Screen Adjustment → ENTER

Screen Adjustment

Screen Adjustment provides various picture size and aspect ratio options. Select an option using the up and down arrow keys, and then press **ENTER**. Use the arrow keys to select an option in the sub-menu, and then press **ENTER**.

• **Picture Size**: If you have a cable box or satellite receiver, it may have its own set of screen sizes as well. However, we highly recommend you use your TV's 16:9 mode most of the time.

16:9: Sets the picture to 16:9 wide mode.

Zoom1: Use for moderate magnification. Cuts off the top and sides.

Zoom2: Use for a stronger magnification.

Wide Fit: Enlarges the aspect ratio of the picture so it fits the entire screen.

2 Available with HD 1080i / 720p signals in 16:9 mode.

4:3: Sets the picture to basic (4:3) mode.

Do not set your TV to 4:3 format for a long time. The borders displayed on the left and right, or top and bottom of the screen may cause image retention (screen burn) which are not covered by the warranty.

Screen Fit: When your TV inputs HDMI (720p / 1080i / 1080p) or Component (1080i / 1080p) signals, displays the full image without any cut-off.

Smart View 1: Reduces the 16:9 picture by 50%.

Smart View 2: Reduces the 16:9 picture by 25%.

- **Smart View 1** is enabled only in HDMI mode.
- Smart View 2 is enabled only in HDMI or DTV mode.
- The picture size can vary depending on the input resolution when you play content from **Videos** in **Smart Hub**.

- Position: Adjusts the picture position. Position is only available if Picture size is set to Zoom1, Zoom2, Wide Fit, or Screen fit.
 - To use the Position function after selecting Zoom1, Zoom2, or Wide Fit, follow these steps:
 - When you have set Double () mode in **PIP** (Picture-in-Picture), you cannot set the **Picture Size**.
 - 1. Press the

 <u>button to select Position.</u>
 - 2. Press the ENTER button.
 - 3. Press the ▲ or ▼ button to move the picture up or down.
 - **4.** Press the **ENTER** button.
 - 5. Select Close by pressing the ▼ and ▶ buttons sequentially. To reset the picture position, press Reset.

- To use the **Position** function after selecting **Screen Fit** in HDMI (1080i/1080p) or Component (1080i/1080p) follow these steps:
 - 1. Press the ▼ button to select Position.
 - 2. Press the ENTER button.
 - 3. Press the ▲, ▼, ◀ or ▶ button to move the picture.
 - 4. Press the ENTER button.
 - 5. Select Close by pressing the ▼ and ▶ buttons sequentially.
 - If you want to reset the pictures to its original position, select **Reset** in the **Position** screen. The picture will be set to its default position.

- HD (High Definition): 16:9 1080i/1080p (1920x1080), 720p (1280x720)
- You can adjust and store settings for each external device you have connected to an input on the TV.
- Picture Sizes available by Input Source:

Input Source	Picture Size
ATV, AV, Component (480i, 480p)	16:9, Zoom1, Zoom2, 4:3
HDMI (720p, 1080i, 1080p)	Smart View 1
DTV(1080i), HDMI (720p, 1080i, 1080p)	Smart View 2
DTV(1080i), Component (1080i, 1080p), HDMI (720p, 1080i, 1080p)	16:9, 4:3, Wide Fit, Screen Fit
HDMI1/DVI(when a PC is connected)	16:9, 4:3

- □ Changing the Picture Options
- Advanced Settings
 - MENU → Picture → Advanced Settings → ENTER →

(Advanced Settings are available in Standard / Movie mode)

Compared to previous models, new Samsung TVs have a more precise picture.

In HDMI1/DVI mode(when a PC is connected), you can only make changes to Gamma and Wihte Balance.



 The displayed image may differ depending on the model.

- Black Tone (Off / Dark / Darker / Darkest): Select the black level to adjust the screen depth.
- Dynamic Contrast (Off / Low / Medium / High): Adjusts the screen contrast.
- Shadow Detail (-2~+2): Increases the brightness of dark images.
- **Gamma**: Adjusts the primary color intensity.
- Expert Pattern (Off / Pattern1 / Pattern2): Use the Expert Pattern function to calibrate the picture. If the OSD menu disappears or a menu other than the Picture menu is opened, the TV saves the calibration and the Expert Pattern window disappears.

Off: Turns the Expert Pattern function off.

Pattern1: This test screen demonstrates the effect of the display settings on shades of grey and black.

Pattern2: This test screen demonstrates the effect of the display settings on colors.

- After selecting Pattern1 or Pattern2, you can adjust any of the advanced settings for the desired effect.
- While the **Expert Pattern** is running, the TV does not output sound.
- Only enabled in DTV, Component, and HDMI modes.
- RGB Only Mode (Off / Red / Green / Blue): Displays the Red, Green and Blue colors so you can make fine adjustments to hue and saturation.

- Color Space (Auto / Native / Custom): Adjusts the range and variety of colors (the color space) available to create images.
 - To adjust Color, Red, Green, Blue or Reset set Color Space to Custom.
- White Balance: Adjusts the red, green, and blue brightness so that the brightest point of a picture becomes white.

R-Offset / G-Offset / B-Offset: Adjusts each color's (red, green, blue) darkness.

R-Gain / G-Gain / B-Gain: Adjusts each color's (red, green, blue) brightness.

Reset: Resets the White Balance to its default settings.

• 10p White Balance (Off / On): Controls the white balance in 10 point intervals by adjusting the red, green, and blue brightness.

Available for all inputs when you set the **Picture Mode** to **Movie**.

Some external devices may not support this function.

Interval: Select interval to adjust.

Red: Adjust the red level.

Green: Adjust the green level.

Blue: Adjust the blue level.

Reset: Resets the **10p White Balance** to its default settings.

- Flesh Tone: Emphasizes pink "Flesh Tone."
- Edge Enhancement (Off / On): Emphasizes object boundaries.
- Motion Lighting (Off / On): Reduces power consumption by reducing screen brightness when the picture on the screen is in motion.
 - **2** 3D is not supported.
 - When you change the **Backlight**, **Contrast**, and **Brightness**, the TV sets **Motion Lightning** to **Off**.

Picture Options

h MENU \longrightarrow Picture \longrightarrow Picture Options \longrightarrow ENTER \bigcirc

Select an option using the up and down arrow keys, and the press **ENTER** . Use the arrow keys to change the setting, and then press **ENTER** .

- In HDMI1/DVI mode(when a PC is connected), you can only make changes to Color Tone.
- Color Tone (Cool / Standard / Warm1 / Warm2)
 - Warm1 or Warm2 will be deactivated when the Picture Mode is set to Dynamic.
 - You can adjust and store settings for each external device connected to an input on the TV.



 The displayed image may differ depending on the model.

- Digital Noise Filter (Off / Low / Medium / High / Auto / Auto Visualization):
 If the broadcast signal received by your TV is weak, you can activate the Digital
 Noise Filter feature to reduce any static and ghosting that may appear on the screen.
 - When the signal is weak, try all the Digital Noise Filter options until the TV displays the best picture.

Auto Visualization: Displays the signal strength of analog channels.

- ② Only available for analog channels.
- When the bar is green, you are receiving the best possible signal.
- MPEG Noise Filter (Off / Low / Medium / High / Auto): Reduces MPEG noise to provide improved picture quality.

- HDMI Black Level (Normal / Low): Lets you adjust the screen depth by selecting a black level.
 - Available only in HDMI mode.
- Film Mode (Off / Auto1 / Auto2): Sets the TV so that it senses and then processes film signals from all sources automatically and adjusts the picture for optimum quality.
 - 2 Available in TV, AV, COMPONENT (480i / 1080i) and HDMI (480i / 1080i).
- Auto Motion Plus (Off / Clear / Standard / Smooth / Custom / Demo):
 Removes blur and judder from scenes with large amounts of rapid movement to provide a clearer picture.

- The info screen on your TV displays the resolution and frequency of the incoming video signal (60 Hz). This displayed frequency is not the frequency of the picture the TV is displaying when you have **Auto Motion Plus** on.
- If noise occurs on the screen, please set Auto Motion Plus to Off. If you set Auto Motion Plus to Custom, you can control Blur Reduction and Judder Reduction manually and use Reset to reset both to their default settings.
- If you set **Auto Motion Plus** to **Demo**, you can compare the difference between a picture with **Auto Motion Plus** on and **Auto Motion Plus** off.

Blur Reduction: Adjusts the blur reduction level for signals input from all video sources.

Judder Reduction: Adjusts the judder reduction level for signals input from a video source through which you are playing a movie.

Reset: Reset Blur and Judder Reduction to their default settings.

Reset Picture (Yes / No)

Resets your current picture mode to its default settings.

☐ Using the TV with Your PC

Using Your TV as a Computer (PC) Display

Entering the Video Settings (Based on Windows XP):

For your TV to work properly as a computer display, you must enter the correct video settings.

Depending on your version of Windows and your video card, the procedure on your PC will probably differ slightly from the procedure presented here. However, the same basic information will apply in most cases. (If not, contact your computer manufacturer or Samsung Dealer.)

- 1. Click "Control Panel" on the Windows start menu.
- 2. Click "Appearance and Themes" in the "Control Panel" window. A display dialog-box will appear.
- 3. Click "Display". Another display dialog box will appear.
- **4.** Click the "Settings" tab on the display dialog-box.
 - On the Settings tab, set the correct resolution (screen size). The optimal resolution for this TV is 1920 x 1080.
 - If a vertical-frequency option exists on your display settings dialog box, select "60" or "60 Hz". Otherwise, just click "OK" and exit the dialog box.

- ☐ Changing the Preset Sound Modes
 - MENU → Sound → Sound Mode → ENTER →
- Sound Mode TOOLS #

Use the up and down arrow keys to select an option, and then press **ENTER** ...

- **Standard**: Selects the normal sound mode.
- Music: Emphasizes music over voices.
- Movie: Provides the best sound for movies.
- Clear Voice: Emphasizes voices over other sounds.
- Amplify: Incerases the intensity of high-frequency sound to allow a better listening experience for the hearing impaired.
- If Speaker Select is set to External Speaker, Sound Mode is disabled.

- □ Adjusting Sound Settings
 - MENU → Sound → ENTER →
- Sound Effect
 - If Speaker Select is set to External Speaker, Sound Effect is disabled.
 - Available only when Sound Mode is set to Standard.
 - SRS TruSurround HD (Off / On)
 - (standard sound mode only)

This function provides a virtual 5.1 channel surround sound experience through a pair of speakers using HRTF (Head Related Transfer Function) technology.

SRS TruDialog (Off / On)

(standard sound mode only)

This function allows you to increase the intensity of a voice over background music or sound effects so that dialog can be heard more clearly.

• SRS CS Headphone (Off / On): You can hear virtual 5.1ch surround sound over the headphones.

Equalizer

Adjusts the sound output.

- Balance L/R: Adjusts the balance between the right and left speaker.
- 100Hz / 300Hz / 1kHz / 3kHz / 10kHz (Bandwidth Adjustment): Adjusts the volume level of specific bandwidth frequencies.
- Reset: Resets the equalizer to its default settings.

3D Audio (Off / Low / Medium / High)

3D audio technology provides the immersive sound corresponding to the pop-up effect of 3D video by applying audio depth control in perspective.

2 Available only when you are watching a 3D image.

Broadcast Audio Options

Preferred Language

(digital channels only)

Use the up and down arrow keys to select a language, and then press **ENTER**.

Digital-TV broadcasts can simultaneously transmit many audio tracks (for example, simultaneous translations of the program into foreign languages).

2 You can only select a language from among the ones being broadcasted.

Multi-Track Sound (MTS) TOOLS ☐

(analog channels only)

Select an option using the up and down arrow keys, and the press **ENTER** ...

Mono: Choose for channels that are broadcasting in mono or if you are having difficulty receiving a stereo signal.

Stereo: Choose for channels that are broadcasting in stereo.

SAP: Choose to listen to the Separate Audio Program, which is usually a foreign-language translation.

Depending on the program being broadcast, you can listen to Mono, Stereo, or SAP.

SPDIF Output

SPDIF (Sony Philips Digital Interface) provides digital audio output to speakers and various digital devices such as A/V Receivers and Home Theaters which reduces interference and distortion.

- Audio Format (PCM / Dolby Digital): You can select the Digital Audio output (SPDIF) format. The available Digital Audio output (SPDIF) format may differ depending on the input source.
- Audio Delay: Lets you correct timing mismatches between the audio track and the video when you are watching the TV and listening to digital audio output from the TV through an external device such as an AV receiver. When you select Audio Delay, a slider appears. Use the left and right arrow buttons to adjust the slider. Press ENTER → when done (0ms ~ 250ms).

Speaker Settings

Speaker Select (External Speaker / TV Speaker)

A sound echo may occur due to a difference in decoding speed between the main speaker and the audio receiver. In this case, set the TV to **External Speaker**.

- When Speaker Select is set to **External Speaker**, the volume and **MUTE** buttons will not operate and the sound settings will be limited.
- When Speaker Select is set to External Speaker.
 - TV Speaker: Off, External Speaker: On
- When Speaker Select is set to TV Speaker.
 - TV Speaker: On, External Speaker: On
- If there is no video signal, both speakers will be mute.

Auto Volume (Off / Normal / Night)

Normal equalizes the volume level on each channel, so that when you change channels, the volume level is the same.

Night equalizes and decrease the volume level on each channel, so each channel is quieter. **Night** is useful at night, when you may want to keep the volume low.

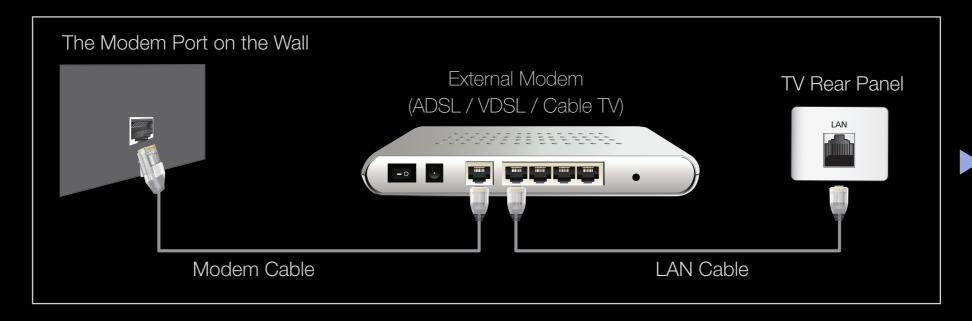
Reset Sound (OK / Cancel)

Reset all sound settings to the factory defaults. Select **Reset**, press **ENTER**, select **OK** in the pop-up, and then press **ENTER** again.

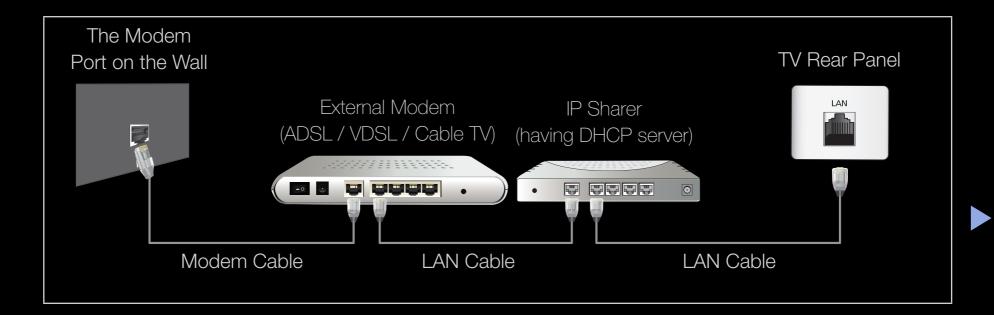
☐ Connecting to a Wired Network

There are three ways to attach your TV to your LAN using cable:

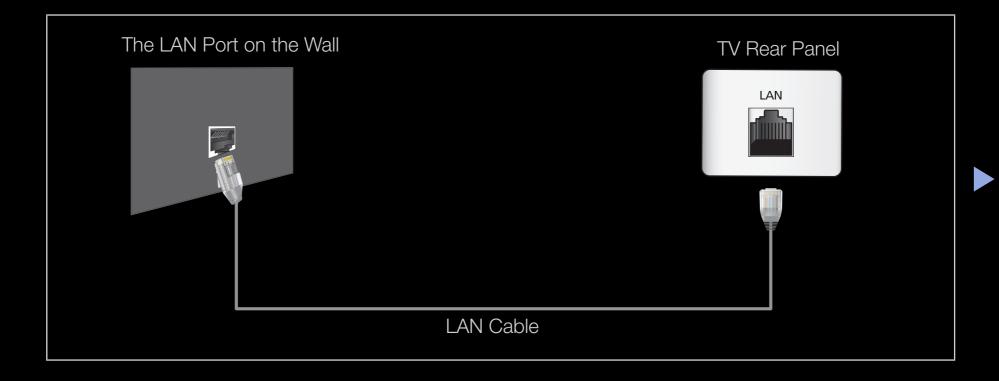
 You can attach your TV to your LAN by connecting the LAN port on the back of your TV to an external modem using a LAN cable. See the diagram below.



 You can attach your TV to your LAN by connecting the LAN port on the back of your TV to an IP Sharer (router) which is connected to an external modem. Use LAN cable for the connection. See the diagram below.



 Depending on how your network is configured, you may be able to attach your TV to your LAN by connecting the LAN port on the back of your TV directly to a network wall outlet using a LAN cable. See the diagram below. Note that the wall outlet is attached to a modem or router elsewhere in your house.



• If you have a Dynamic Network, you should use an ADSL modem or router that supports the Dynamic Host Configuration Protocol (DHCP). Modems and routers that support DHCP automatically provide the IP address, subnet mask, gateway, and DNS values your TV needs to access the Internet so you do not have to enter them manually. Most home networks are Dynamic Networks.

Some networks require a Static IP address. If your network requires a Static IP address, you must enter the IP address, subnet mask, gateway, and DNS values manually on your TV's Cable Setup Screen when you set up the network connection. To get the IP address, subnet mask, gateway, and DNS values, contact your Internet Service Provider (ISP). If you have a Windows computer, you can also get these values through your computer.

You can use ADSL modems that support DHCP if your network requires a Static IP address. ADSL modems that support DHCP also let you use Static IP addresses.

Network Settings

MENU → Network → Network Settings → ENTER →

Set up a network connection so you can use various Internet services such as **Smart Hub**, **AllShare™** and perform software upgrades.

Network Status

MENU → Network → Network Status → ENTER →

You can check the current network and Internet status.

AllShare Settings

MENU → Network → AllShare Settings → ENTER

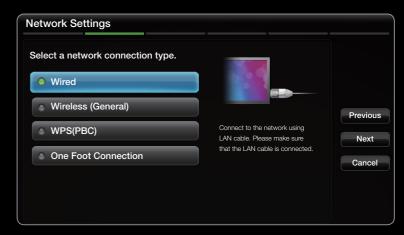
Lets you select whether to use the call arrivals text message contents and schedules set on the network. For details on set up options, refer to the "AllShareTM" instructions.

Automatic Network Setup

Use the Automatic **Network Settings** when connecting your TV to a network that supports DHCP. To set up your TV's cable network connection automatically, follow these steps:

How to set up automatically

- Go to the Network Settings screen.
 (MENU → Network → Network Settings → ENTER →)
- 2. Select Wired, press ENTER , and then press ENTER again.
- 3. The network test screen appears and verifies the network connection. When the connection has been verified, the "Internet connection successful." message appears.



 The displayed image may differ depending on the model.

- If the connection process fails, check the LAN port connection.
- If the automatic process cannot find the network connection values or if you want to set the connection manually, go to the next secton, Manual Network Setup.



• The displayed image may differ depending on the model.

Manual Network Setup

Use the Manual Network Setup when connecting your TV to a network that requires a Static IP address.

Getting the Network Connection Values

To view the Network connection values on most Windows computers, follow these steps:

- 1. Right click the Network icon on the bottom right of the screen.
- 2. In the pop-up menu that appears, click Status.
- 3. On the dialog that appears, click the Support tab.
- **4.** On the Support Tab, click the Details button. The Network connection values are displayed.

How to set up manually

To set up your TV's cable network connection manually, follow these steps:

- 1. Go to the Network Settings screen.
 (MENU → Network → Network Settings → ENTER →)
- 2. Select Wired, and then press ENTER. The network test screen appears and the verification process starts.
- **3.** Press **ENTER**. The verification process stops. Select **IP Setting** on the network connection screen. The **IP Settings** screen appears.



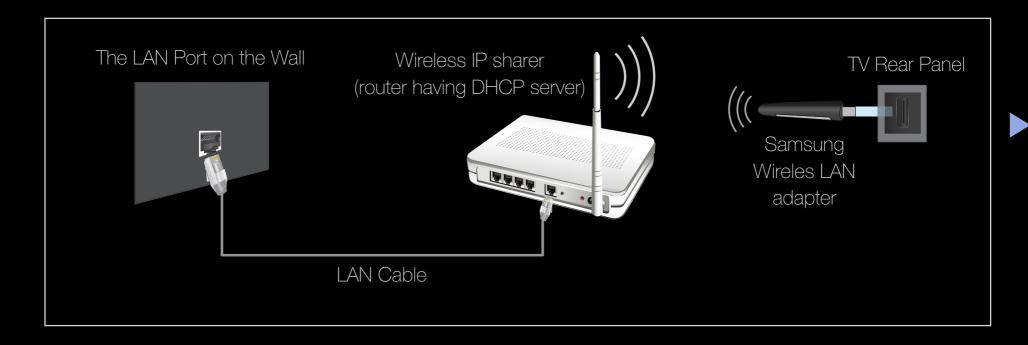
 The displayed image may differ depending on the model.

- **4.** Select the field at the top, press **ENTER**, and then set **IP Mode** to **Manual**.
- 5. Press the ▼ button on your remote to go to the IP Address entry field, and then press ENTER ♂.
- **6.** Enter the first portion of the **IP Address** (for example, 105) into the first entry field using the number keys on your remote. Press the right arrow button to go to the next field.
- 7. Enter the next portion of the **IP Address**. Press the right arrow button to go to the next field.
- 8. Repeat the entry process for each field in the IP Address.
 - If you make a mistake when entering a number, re-enter the number to correct it. You can also press the up or down arrow button to change the number one unit at a time.

- **9.** When done entering **IP Addres**, press **ENTER -**.
- **10.** Press the down arrow key to go to the **Subnet Mask** fields, and then press **ENTER**.
- 11. Repeat the same entry process for Subnet Mask, Gateway, and DNS Server.
- 12. When done, select **OK** at the bottom of the page, and then press **ENTER** . The network test screen appears and the verification process starts. When the connection has been verified, the "Internet connection successful." message appears.

□ Connecting to a Wireless Network

To connect your TV to your wireless network, you need a wireless router or modem and a Samsung Wireless LAN adapter (WIS09ABGN, WIS09ABGN2 or WIS10ABGN - sold separately), which you connect to your TV's back or side panel USB port. See the illustration below.



Samsung's Wireless LAN adapter is sold separately and is offered by selected retailers, Ecommerce sites, and Samsungparts.com. Samsung's Wireless LAN adapter supports the IEEE 802.11a/b/g and n communication protocols. Samsung recommends using IEEE 802.11n. When you play video over a IEEE 802.11b/g connection, the video may not play smoothly.

Ø NOTE

- You must use the "Samsung Wireless LAN adapter" (WIS09ABGN, WIS09ABGN2 or WIS10ABGN) to use a wireless network.
- The Samsung Wireless LAN Adapter and the USB extension Cable are sold separately and are offered by select retailers, Ecommerce sites, and Samsungparts.com.

- To use a wireless network, your TV must be connected to a wireless IP sharer (either a router or a modem). If the wireless IP sharer supports DHCP, your TV can use a DHCP or static IP address to connect to the wireless network.
- Select a channel for the wireless IP sharer that is not currently being used. If the channel set for the wireless IP sharer is currently being used by another device nearby, this will result in interference and communication failure.
- Your TV supports only the following wireless network security protocols:
 - Authentication Mode: WEP, WPAPSK, WPA2PSK
 - Encryption Type : WEP, TKIP, AES.

- If you select the Pure High-throughput (Greenfield) 802.11n mode and the Encryption type is set to WEP, TKIP or TKIP AES (WPS2Mixed) on your AP or wireless router, Samsung TVs will not support a connection in compliance with new Wi-Fi certification specifications.
- If your wireless router supports WPS (Wi-Fi Protected Setup), you can connect to the network via PBC (Push Button Configuration) or PIN (Personal Identification Number). WPS will automatically configure the SSID and WPA key in either mode.
- If your router, modem, or device is not certified, it may not connect to the TV via the "Samsung Wireless LAN adapter."

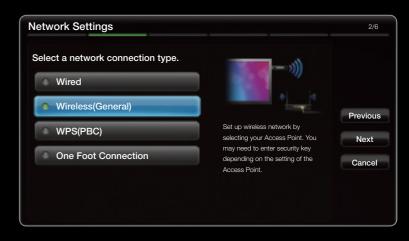
- Ensure the TV is turned on before you connect the Samsung Wireless LAN adapter.
- Connection Methods: You can setup the wireless network connection in five ways:
 - Auto Setup (Using the Auto Network Search function)
 - Manual Setup
 - WPS (PBC)
 - One Foot Connection
 - Plug & Access
- The TV may not recognize the Samsung Wireless LAN adapter if you connect it to the TV with a USB hub or USB extension cable other than the cable supplied with the TV.

Automatic Network Setup

Most wireless networks have an optional security system that requires devices that access the network to transmit an encrypted security code called an Access or Security Key. The Security Key is based on a Pass Phrase, typically a word or a series of letters and numbers of a specified length you were asked to enter when you set up security for your wireless network. If you use this method of setting up the network connection, and have a Security Key for your wireless network, you will have to enter the Pass Phrase during the automatic or manual setup process.

How to set up automatically

- Go to the Network Settings screen.
 (MENU → Network → Network Settings → ENTER →.
- 2. Select Wireless (General), press ENTER , and then press ENTER again.
- **3.** The **Network** function searches for available wireless networks. When done, it displays a list of the available networks.



• The displayed image may differ depending on the model.

- **4.** In the list of networks, press the ▲ or ▼ button to select a network, and then press the **ENTER** → button twice.
 - If the wireless router is set to Hidden (Invisible), you have to select **Add**Network and enter the correct Network Name (SSID) and Security key to establish the connection.

- 5. If the Enter Security Key screen appears, go to step 6. If you select a wireless router that does not have security, go to step 8.
- **6.** If the wireless router has security, enter the Security key (Security key or PIN).
 - When you enter the **Security key** (**Security key** or **PIN**), use the ▲ / ▼ / ◀ / ▶ buttons on your remote to select number/characters. Press the ENTER button to enter

the characters.



The displayed image may differ depending on the model.

- You can also enter numbers by pressing the number buttons on your remote.
- 7. When done, use the right arrow button to move the cursor to **Next**, and then press **ENTER** ...

- **8.** The network connection screen appears and the verification process starts. When the connection has been verified, the "Internet connection successful." message appears.
 - If the network does not accept the **Security key** (**Security key** or **PIN**), select **Retry** or select **IP Settings** to enter the settings manually.
 - If you want to set up the connection manually, select **IP Settings**. Then, go to the next section, "How to set up manually".

Manual Network Setup

Use the Manual Network Setup when connecting your TV to a network that requires a Static IP address or if the automatic connection process has failed.

Getting the Network Connection Values

To view the Network connection values on most Windows computers, follow these steps:

- 1. Right click the Network icon on the bottom right of the screen.
- 2. In the pop-up menu that appears, click Status.
- 3. On the dialog that appears, click the Support tab.
- **4.** On the Support Tab, click the Details button. The Network connection values are displayed.

How to set up manually

To set up your TV's cable network connection manually, follow these steps:

- 1. Go to the Network Settings screen.
 (MENU → Network → Network Settings → ENTER →)
- 2. Select Wireless (General), press the ENTER button, and then press ENTER again.
- **3.** The Network function searches for available wireless networks. When done, it displays a list of the available networks.



• The displayed image may differ depending on the model.

- **4.** In the list of networks, press the ▲ or ▼ button to select a network, and then press the **ENTER** → button twice.
 - If the Access Point (AP) is set to Hidden (Invisible), you have to select **Add**Network and enter the correct network Name (SSID) and Security key to establish the connection.
- **5.** If the Enter Security key screen appears, go to step 6. If you selected an AP that does not have security, go to step 8.

- 6. Enter the Security key (Security key or PIN).
 - When you enter the Security key (Security key or PIN), use the ▲ / ▼ / ◀
 / ▶ buttons on your remote to select numbers/characters. Press ENTER 달
 to enter the characters.
 - You can also enter numbers by pressing the number buttons on your remote.
 - 2 You should be able to find the Pass Phrase on one of the set up screens you used to set up your router or modem.
- 7. When done, use the button to move the cursor to **Next**, and then press the **ENTER** button.

- **8.** The network connection screen appears and the verification process starts. Press **ENTER** to cancel. Select **IP Setting** on network connection screen. The **IP Settings** screen appears.
- **9.** Select the field on the top, press **ENTER** , and then set **IP Mode** to **Manual**.
- **10.** Press the ▼ button on your remote to go to the IP Address entry field, and then press **ENTER** ❖.
- **11.** Enter the first portion of the **IP Address** (for example, 105) into the first entry field using the number keys on your remote. Press the ▶ button to go to the next field.
- **12.** Enter the next portion of the **IP Address**. Press the ▶ button to go to the next field.

- **13.** Repeat the entry process for each field in the **IP Address**.
 - Ø If you make a mistake when entering a number, re-enter the number to correct it. You can also press the ▲ or ▼ button to change the number one unit at a time.
- **14.** When done entering the **IP Address**, press **ENTER** ...
- **15.** Press the ▼ button to go to the **Subnet Mask** fields, and then press **ENTER** ...
- **16.** Repeat the same entry process for **Subnet Mask**, **Gateway**, and **DNS Server**.
- 17. When done, select **OK** at the bottom of the page, and then press **ENTER**. The network connection screen appears and the verification process starts. When the connection has been verified, the "Internet connection successful." message appears.

WPS(PBC) Network Setup

How to set up using WPS(PBC)

If your router has a **WPS (PBC)** button, follow these steps:

- Go to Network Setting screen.
 (MENU → Network → Network Settings → ENTER →).
- 2. Select WPS(PBC), press ENTER , and then press ENTER again.
- 3. Press the WPS(PBC) button on your router within 2 minutes. Your TV automatically acquires all the network setting values it needs and connects to your network.

 The displayed image may differ depending on the model.

 The displayed image may differ depending on the model.
- **4.** The network connection screen appears, and network set up is done.



One Foot Connection Network Setup

The **One Foot Connection** function lets you connect your Samsung TV automatically to a Samsung wireless router. 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 the **Network Settings** screen.

```
(MENUⅢ → Network → Network Settings → ENTER ♣).
```

3. Select One Foot Connection, and 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 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 **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 non-Samsung AP 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 \rightarrow on).
- **3.** Wait a minute, 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 AP, a pop-up window appears on the screen notifying you of the failure. If you want to try using **Plug & Access** again, reset the AP, 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.

Ad-Hoc Network Setup

You can connect to a mobile device supporting Ad-hoc connections without a wireless router or wireless router 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 WPS(PBC)

- 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. The existing network system may have limited functionality. 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.
 - 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.

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 → Time → ENTER →
- Time
 - The current time will appear every time you press the **INFO** button.
 - Clock: Set the clock to use the 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.

2 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 TOOLS : 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

 $^{\textcircled{h}}$ MENU \longrightarrow System \rightarrow Time \rightarrow ENTER \checkmark

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 the 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.

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.

Ø 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 1 / Off Timer 2 / Off Timer 3:
 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



 The displayed image may differ depending on the model.

you select **Manual**, you can choose the days you want **Off Timer** to turn off your TV.

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.

□ 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 your PIN (personal identification number) before you
can set or change any of the Program Rating Lock restrictions.

- $\ensuremath{\mathbb{Z}}$ A press of **INFO** button in a locked channel brings $\ensuremath{\square}$ on the top of the screen.
- Program Rating Lock is not available in HDMI, Component or HDMI1/ DVI mode(when a PC is connected).

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
- Program Rating Lock is not available in HDMI, Component or HDMI1/ DVI mode(when a PC is connected).
- ${\Bbb Z}$ The default PIN number for a new TV set is "0-0-0-0".

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 locks 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 French 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.



- If information is not downloaded from the broadcasting station, the
 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 ENTER 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 V-Chip. 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 (power off) mode, which resets the PIN to "0-0-0-0": $MUTE \rightarrow 8 \rightarrow 2 \rightarrow 4 \rightarrow POWER$ (on).

- ☐ Economical Solutions
- Eco Solution
 - MENU → System → Eco Solution → ENTER →
 - Energy Saving (Off / Low / Medium / High / Picture Off): Lets you adjusts
 the brightness of the TV 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.

- 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): Saves power by turning the TV off automatically if you dont' press a button on the remote or otherwise operate the TV within 4 hours.

☐ Picture In Picture (PIP)

MENU → System → PIP → ENTER →

PIP TOOLS,

Using PIP, you can watch a program whose signal passes through the TV's tuner (any signal that is input through the TV's Antenna In or Cable In jacks) and video from one external video source simultaneously. For example, if you have a cable box connected to the Cable In jack (whose signal passes through the tuner) and a Blu-ray player connected to the HDMI In jack, you can use PIP to watch a program from the cable box and a movie from the Blu-ray player.



- 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 Smart Hub or Program Rating Lock is on, you cannot use PIP.

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, HDMI1/DVI, HDMI2	TV

- PIP (Off / On): Activate or de-activate 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.
 - In Double () mode, you cannot select Position.
- 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) Lets you adjust digital options.
 When done, select Close. If you want to reset the Digital Caption Options, select Default.

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: Lets you adjust the opacity of the text. Options include **Default, Transparent, Translucent, Solid** and Flashing.

Background Opacity: Lets you adjust the opacity of the caption background. Options include **Default**, **Transparent**, **Translucent**, **Solid** and Flashing.

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

Ø 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.

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

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.

General

- Max. Power Saving (Off / On): When the monitor is attached to a PC, conserves power by turning the monitor off when the PC is not used for a period of time you specify.
- 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): 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 My Contents, the registration is completed.

Programme For more information about DivX® VOD, visit "http://vod.divx.com".

Network Remote Control (On / Off)

Turn on to give permission to Samsung mobile phones 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.

Profestive Description Formation 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 trouble shooting 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.
 - The current version is displayed in the following format: Year/Month/Day_ Version number.

Upgrading to the Latest Version

You can upgrade in four ways:

- By USB
- By Online
- Alternative Software
- Standby Mode Upgrade

The four 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.** Extract the exe archive to your computer. You should have a single folder with the same name as the exe file.



• The location of the USB port may differ depending on the model.

- **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.
- **6.** In the TV's menu, go to **Support** → **Software Upgrade**.
- 7. Select By USB.
- Do not 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 upgrade 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 **Standby Mode Upgrade** in Software upgrade menu, and then press the **ENTER** → button.
- 2. Select On or Off.
 - Off: If you select Off, the TV will not automatically download upgrade software, but 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.

- ☐ Using the 3D function
 - MENU → Picture → 3D → ENTER →
- **3**D

This feature allows you to view 3D content such as 3D broadcasts or movies. You can view 3D content using SyncMaster-dedicated Samsung 3D glasses.

- You can purchase SyncMaster-dedicated 3D glasses (model name: SSG-M3750CR) separately. Contact the dealer you purchased this product from for details about purchasing the 3D glasses.
- This product may not be compatible with 3D glasses other than the model specified above.
- Power off the 3D glasses when you are not using them. Leaving the glasses on drains the battery and decreases the battery's life span.

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 dizziness, nausea, or headache when viewing 3D video. If this occurs, stop viewing 3D TV immediately, take off the 3D glasses, and rest.
- Watching 3D video for an extended period of time may cause eye fatigue. If eye fatigue occurs, stop viewing 3D TV immediately, take off the 3D glasses, and rest.
- Children need to be checked frequently by adults when using the 3D function. If your child shows any symptom such as eye fatigue, headache, dizziness, or nausea, have the child stop watching 3D TV immediately 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 glasses while moving. You may trip or fall and become injured.
- 3D Mode: Select the 3D input format.
- Put on the 3D glasses, and select a 3D mode that offers the best 3D effect from the following 3D modes under **3D Mode**.

3D Mode		Functions
3/2	Off	Turns the 3D function off.
2D→3D	2D → 3D	Changes a 2D image to 3D.
* *	Left & Right	Displays the left and right images overlapping each other to allow you to experience the 3D effect.
•	Top & Bottom	Displays the top and bottom images overlapping each other to allow you to experience the 3D effect.

- ${\Bbb Z}$ Some file formats may not support "2D \rightarrow 3D."
- The and modes are only available when a PC is connected via the HDMI IN 1 (DVI) port or when the resolution of the content from a DTV broadcast, a device connected via the HDMI port, or a USB storage device connected via a USB port, is 720p, 1080i, or 1080p.
- 3D Perspective (-5 ~ +5): Adjust overall 3D perspective of the 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.
 - \mathbb{Z} This function is deactivated when **3D Mode** set to "2D \rightarrow 3D" or **Off**.

Supported Resolutions in HDMI PC Mode

HDMI PC Mode is optimized to 1920 x 1080 input. If the resolution is not 1920 x 1080, the 3D picture is not properly displayed and you cannot watch the 3D picture in full screen.

Watching 3D Video

Some **3D Mode**s may not be available depending on the format of the image source.

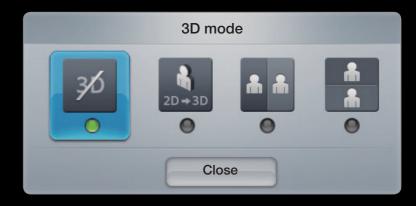
To select a 3D mode, follow these steps:

- Turn the glasses on by pressing the power button.
- MENU button → ▲ / ▼ button → Picture →
 ENTER → button.
- 2. \triangle or \vee button \rightarrow 3D \rightarrow ENTER \square button.



 The displayed image may differ depending on the model.

- 3. ▲ or ▼ button → 3D Mode → ENTER → button.
- 4. ◀ or ▶ buttons → Select a mode from 3DMode.



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 3D
1920x1080p@24Hz	1920x2205p@24Hz
1280x720p@60Hz	1280x1470p@60Hz

- Provided For the Standard HDMI 3D format with 24Hz, the TV is optimized as follows:
 - To optimize the resolution of a video: Select Off, Clear, or Standard in Auto
 Motion Plus mode.
 - To view a natural video without shaking: Select Smooth or configure
 Custom in Auto Motion Plus mode.

Resolution compatible with PC input (connected via the HDMI IN 1 (DVI) port)

PC input is optimized for video in the 1920 x 1080 resolution. Videos with a resolution other than 1920 x 1080 will not be viewable in 3D or full screen mode.

Playing a 3D Game on a PC

To play a 3D game on your PC, you must install the **SyncMaster 3D Game Launcher (TriDef 3D)** program.

- SyncMaster 3D Game Launcher (TriDef 3D) is a game driver that allows you to play PC games in 3D.
- **1.** Set your monitor as the default monitor for the PC.
- 2. Install the SyncMaster 3D Game Launcher (TriDef 3D) program provided on a CD.
 - Follow the instructions displayed on the screen.

To set up TriDef 3D to play 3D games, follow these steps:

- Select Start -> All Programs -> TriDef 3D, and run SyncMaster 3D Game Launcher (TriDef 3D).
- 2. Press the "Search" button. Compatible games will be added to **SyncMaster** 3D Game Launcher (TriDef 3D). You can also add games using the following methods:
 - Drag the icon or execution file of a game on the desktop into the SyncMaster 3D Game Launcher (TriDef 3D) window.
 - Go to "File" and select "Add Games..."

To play a game in 3D mode, follow these steps:

- 1. Double-click the game icon or select the game and click "Start."
- 2. Play the game wearing 3D glasses.
 - Activate the 3D function on the product, and enjoy the game wearing the 3D Active Glasses.
- Problem Refer to "Online Help" for PC system requirements and details about how to use SyncMaster 3D Game Launcher (TriDef 3D).
- If you start a game from the desktop and not from **SyncMaster 3D Game Launcher (TriDef 3D)**, the game will not be displayed in 3D.
- A game whose system requirements exceed the capabilities of your PC cannot be started.

- The minimum PC system requirements may vary depending on the 3D game. For details, refer to the home page or user guide for the 3D game you want to play.
- SyncMaster 3D Game Launcher (TriDef 3D) does not support PCs that are based on Macintosh or Linux operating systems.
- **Example 2** Further Information
 - For further details about TriDef 3D Games for SyncMaster (TriDef 3D),
 contact DDD USA Inc. (www.tridef.com).
 - For further details about the product, contact Samsung Electronics.

TriDef® 3D and all related indicia are trademarks of DDD Group PLC. © 2010. All Rights Reserved.

Precautions when viewing 3D video

- The 3D effect may be experienced differently depending on the viewer. You may not notice the 3D effect at all if you have a prescription for one eye that is very different from the other eye.
- When viewing a 3D video under a fluorescent lamp or 3-wavelength lamp, you
 may notice a small amount of screen flickering.
- Interference may cause the 3D glasses to malfunction if there is any other
 3D product or electromagnetic device (a microwave or a device that uses
 2.4 Ghz-bandwidth frequency such as an Internet router) turned on nearby.
 Even if the 3D function not works properly, it is best to remove other nearby electromagnetic devices or wireless communications devices.

- Visually-sensitive viewers may notice a slight screen flickering when viewing bright images in 50 Hz 3D video.
- As the TV turns on, the left and right sides of 3D pictures may overlap more than usual. It may take time until the picture quality is optimized.
- 3D Mode is set to Off automatically when the input source is changed or when you access Smart Hub or e-Manual functions.
- PIP is not supported in 3D mode.
- Some **Picture** functions are disabled in **3D** mode.

☐ 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

You can search for various types of content that can be used on your TV. Enter a keyword to search for media, various applications, or online information that you can use on the TV.

TV Screen: Displays the current image from the content you are viewing.



Information: Displays notices, new applications, and advertisements brought to you by Samsung product introductions.

Exit: Exits SMART HUB.

Samsung Apps: You can download various for pay or free-of-charge application services.

Recommended: Displays recommended contents managed by Samsung.

My Applications: Displays your personal gallery of applications which you can add to, modify, and delete.

Controls:

- Red (Login): To log in to Smart Hub.
- **B** Green (**Sort by**): To sort the applications.
- C Yellow (Edit Mode): To edit the applications.
- D Blue (**Settings**): To change the settings of Smart Hub.
- The colored buttons may work differently depending on the application.

MOTE

- 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, component, or 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 **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.
 - 2 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 an application, and 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.

Ø Note

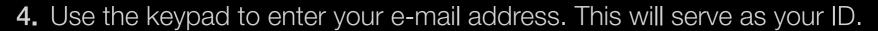
- You must use an e-mail address as an ID.
- You can register up to 10 User Accounts.
- You do not need an account to use Smart Hub.

To create an account, follow these steps:

- 1. Press the A 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 **Create Account** and then press the **ENTER** → button. An entry screen and keypad appear.



• The displayed image may differ depending on the model.



- **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 A 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 password.**, 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** dutton. The Confirmation window appears.
- **12.** Select **OK**, and then press the **ENTER** button. The Continue to Register Service window appears.
- **13.** Select "Go Register", 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 **A** button on your remote. The **Login** screen appears.
- 2. Select the

 next to the Smart TV ID field, and then press the ENTER

 button.

 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** dutton. The Password window and a keypad appears.
- **5.** Using the keypad and your remote, enter your password. When done, press the **ENTER** dutton, select **OK**, and then press the **ENTER** dutton 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 D button on your remote.
- 2. Press the \checkmark / by to select a menu item, and then press the ENTER \checkmark 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.



• The displayed image may differ depending on the model.

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.

Change Password: The Change Password function lets you change your Smart Hub password. To change the password, follow these steps:

- **1.** Select **Change Password**, and then press the **ENTER W** button.
- 2. Enter your current password. The next screen appears.
- **3.** On the next screen, enter a new password on the first line. Enter it again on the second line to confirm.
- **4.** The **Changing Password Complete** message screen appears. Press the **ENTER** button or wait for the screen to close about 5 seconds.

Remove from TV Account List: The Remove From TV Account List function cancels all your current registered Service Accounts that you registered on the Register Service Account screen.

Deactivate Account: The Deactivate Account function deactivates your Smart TV ID and deletes it and all your account settings entirely from Smart Hub.

Service Manager

Ticker Autorun: You can set **Ticker Autorun** to come on when powering on the TV.

- The **Ticker** application provides useful News, Weather, and Stock Market information. The **Ticker** application on **Smart Hub** must be downloaded to use this feature.
- Depending on your country, the **Ticker** application may offer a different service or not be supported.

Channel Bound Service (Off / On): Some channels support applications such as an Internet data service, allowing you to access the Internet service while watching TV.

 ${\Bbb Z}$ Only available if supported by the broadcaster.

• Reset: The Reset function initializes all downloaded applications, erases all user accounts and settings from the player, and resets all Smart Hub settings to the factory default settings. It then restarts Smart Hub as if it were starting for the first time. Your account, however, remains on the Smart Hub server. To log into your account, enter your ID and password on the Login screen.

To use the **Reset** function, follow these steps:

1. In the Account Management menu, select Reset, and then press the ENTER button. The Reset screen appears.

- 2. Enter your security password.
 - The default password is "0-0-0."
- **3.** After a few moments, **Smart Hub** automatically resets. The screen may go black, then **Smart Hub** re-appears. In a few moments, it starts the re-initialization procedure.
- 4. To complete the re-initialization, go to Step 4 in Starting Smart Hub for the First Time.

Properties

The Properties menu item lists two functions that display information about Smart Hub.

Detail: Lists information about **Smart Hub** including version number, the number of services installed, memory usage, and the unique product ID.

Terms of Service Agreement: Display the Terms of Service Agreement.

Edit Mode

The functions in the **Edit Mode** menu let you manipulate the applications in the My Applications section of the **Smart Hub** screen. Using these functions, you can lock and unlock access to some applications, create folders and move applications to them, rename folders, delete applications, and change the position of applications on the screen. To access the **Edit Mode** Menu, and then select a menu item, follow these steps:

- 1. Press the c button on your remote. The **Edit Mode** menu bar appears on the bottom of the screen.
- 2. Press the ▲ / ▼ / ◀ / ▶ to select a menu item, and then press the ENTER → button.

The functions in the **Edit Mode** Menu bar are described below.

MOTE

- Some menu items may not appear on the screen. To see these items, press
 the ◀ / ▶ to move to the screen edge, and then press one more time to
 reveal the items.
- You can close the bar by highlighting the X on the bottom right side, and then pressing the ENTER button.

Move

The **Move** function lets you change the screen position of an application. To use the **Move** function, follow these steps:

- 1. Press the **c** button on your remote.
- 2. Select an application, and then press the ENTER → button. A ✓ appears above the application.

- 3. Press the ▲ / ▼ / ◀ / ▶ to select Move, and then press the ENTER → button. A position change icon appears above the application.
- **4.** Press the ▲ / ▼ / ◀ / ▶ to move the icon. Press the **ENTER** → button when the icon is in the position of your choice. The application moves to its new location.

New Folder

The **New Folder** function lets you create and name new folders. Once you have created a folder, you can move applications into it.

To use the **New Folder** function, follow these steps:

- 1. Press the C button on your remote.
- 2. Press the ▲ / ▼ / ◀ / ▶ to move the cursor to **New Folder**, and then press the **ENTER** → button. The **New folder** window and a keypad appear.

- **3.** Use the keypad to enter the name of the folder.
- **4.** Select **OK**, and then press the **ENTER** button. The **New Folder** screen closes and the **New Folder** appears on the **Smart Hub** screen.

Move to Folder

The **Move to Folder** function lets you move an application to a folder. To use the **Move to Folder** function, follow these steps:

- 1. Press the c button on your remote.
- 2. Select an application, and then press the ENTER button.

- 3. Press the ▲ / ▼ / ◀ / ▶ to select Move to Folder, and then press the ENTER → button. The Move to Folder window opens.
- **4.** Press the ▲ / ▼ / ◀ / ▶ to select a folder, and then press the **ENTER** → button. The **Moved to Folder** message appears, and then closes. The application has been moved to the folder.

To access application in a Folder

- 1. Close the Edit Mode menu.
- 2. In My Applications, press the ▲ / ▼ / ◀ / ▶ to select a folder, and then press the ENTER → button. The folder opens.
- **3.** Select an application, and then press the **ENTER** button. The application service starts.

To Edit Items in a Folder

Select a folder, and then press the **ENTER** button. The folder opens. Press the **c** button on your remote. The Edit buttons appear at the bottom of the screen.

These buttons work the same as the **Edit Mode** menu buttons on the main screen. For example, to move an application back to the My Applications main screen:

- 1. Select the application.
- 2. Select Move to Folder, and then press the ENTER button. The Move to Folder window appears.
- 3. Select My Applications, and then press the ENTER → button. The Move to Folder window closes and the application returns to the main My Applications screen.

Rename Folder

The **Rename Folder** function lets you rename folders. To use the **Rename Folder** function, follow these steps:

- 1. Press the c button on your remote.
- 2. Press the ▲ / ▼ / ◀ / ▶ to select a folder, and then press the ENTER ☐ button.
- 3. Press the ▲ / ▼ / ◀ / ▶ to select Rename Folder, and then press the ENTER → button. The Rename Folder window and a keyboard appears.
- **4.** Use the key board to enter a new name.
- **5.** Press the **ENTER** dutton. The Rename window closes and the new name appears below the folder.

Lock

The **Lock** function lets you lock some application in My Applications so they can not be opened without entering your password.

To use the **Lock** function, follow these steps:

- 1. Press the c button on your remote.
- 2. Press the ▲ / ▼ / ◀ / ▶ to select an application, and then press the ENTER → button. If the application can be locked, the Lock menu item darkens.
- 3. Press the ▲ / ▼ / ◀ / ▶ to select Lock, and then press the ENTER → button. The Security window appears.
- **4.** Enter your password. If you have not created a password, enter "0-0-0".
- **5.** Press the **ENTER** button. The **Lock Service** window appears confirming the lock, and then closes. A lock symbol appears next to the application.

Unlock

- 1. Press the C button on your remote.
- 2. Press the ▲ / ▼ / ◀ / ▶to select a locked application, and then press the ENTER → button.
- 3. Press the ▲ / ▼ / ◀ / ▶ to select Unlock, and then press the ENTER ☐ button. The Security window appears.
- **4.** Enter your password. If you have not created a password, enter "0-0-0".
- **5.** Press the **ENTER** button. The **Service lock released.** window appears confirming the lock has been release, and then closes.

Delete

The **Delete** function lets you delete applications from My Applications. To use the **Delete** function, follow these steps:

- 1. Press the c button on your remote.
- 2. Press the ▲ / ▼ / ◀ / ▶ to select an application, and then press the ENTER → button.
- 3. Press the ▲ / ▼ / ◀ / ▶ to select **Delete**, and then press the **ENTER** → button. The message, "**Do you want to delete selected item(s)?**" appears.
- **4.** Select **Yes**, and then press the **ENTER** button. The application is deleted.

Sort by

The functions in the Sort Menu let you sort the applications in My Applications by **Name**, **Date**, **Frequency** (of use), and **Category**. If you manually change the position of an application, the Sort Menu automatically highlights **User Defined** when you start it.

To sort the applications in My Applications, follow these steps:

- **1.** Press the **B** button on your remote.
- 2. Press the ▲ / ▼ / ◀ / ▶ to select a sorting method, and then press the ENTER → button. Smart Hub sorts the applications by the method you have chosen.

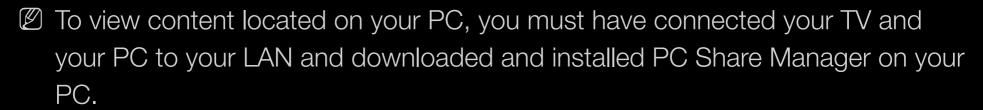
☐ Using Smart Hub

Enjoy photos, music and/or movie files saved on a USB Mass Storage Class (MSC) device.

- 1. Press the **SMART HUB** button.
- Press the ▼ or ▲ button to select Videos,
 Photos, or Music, and then press the
 ENTER ➡ button.
- To view content on a USB device, you must plug the device into a USB jack on the TV.



• The displayed image may differ depending on the model.



□ Connecting a USB Device

- **1.** Turn on your TV.
- 2. Connect a USB device containing recorded TV, photo, music, and/or movie files to the USB 1 or USB 2 (HDD) port on the back or side panel of the TV.
- 3. When a USB device is connected to the TV, the Connected Device window appears. Select a connected device, and then press ENTER .



• The position of the USB port may differ depending on the model.

Read this information before using Smart Hub with a USB device.

- The USB function might not work properly with unlicenced multimedia files.
- MTP (Media Transfer Protocol) is not supported.
- The file system supports FAT16, FAT32, and NTFS. Note that the supported maximum file size is 2GB for FAT16 and 4GB for FAT32.
- Some digital cameras or audio devices may not be compatible with this product.
- Smart Hub supports only the Sequential jpeg format. It does not support the Progressive jpeg format.
- Smart Hub only supports USB Mass Storage Class (MSC) devices. MSC is a Mass Storage Class Bulk-Only Transport device. Examples of MSC devices are Thumb Drives and Flash Card Readers. (USB HUBs are not supported). Devices should be connected directly to the TV's USB port.

- Before connecting your device to the TV, please back up your files to protect them from damage or loss of data. SAMSUNG is not responsible for any data file damage or data loss.
- Connect a USB HDD to the dedicated USB 2 (HDD) port.
- Do not disconnect the USB device while it is loading.
- The higher the resolution of the image, the longer it takes to display on the screen.
- The maximum supported JPEG resolution is 15360 X 8640 pixels.
- If a file is corrupted or the TV does not support the file type, the "Not Supported File Format." message apears.
- If you sort the files using Folder View, the TV can display up to 1,000 files in each folder.

- The TV cannot play MP3 files with DRM that have been downloaded from a for pay site. Digital Rights Management (DRM) is a technology that supports the creation, distribution, and management of digital content in an integrated and comprehensive way, including protecting the rights and interests of content providers, preventing illegal copying of contents, and managing billings and settlements.
- If you connect more than 2 PTP devices, you can only use one at a time.
- If you connect more than two MSC devices, the TV may not recognize some of them. A USB device that requires high power (more than 500mA or 5V) may not be supported.
- If an over-power warning message appears while you are connecting or using a USB device, the TV may not recognize the device or the device may malfunction.

- If the TV has no input during the time set in Auto Protection Time, the Screensaver will run.
- The power-saving mode of some external hard disk drives may be released automatically when you connect them to the TV.
- If you connect a USB device with a USB extension cable, the TV may not recognize the USB device or read the files on the device.
- If a USB device you connect to the TV is not recognized, the files on the device are corrupted, or a file in the list is not played, connect the USB device to a PC, format the device and check the connection.
- If a file you deleted from the PC is still found when you run **Smart Hub**, use the "Empty the Recycle Bin" function on the PC to permanently delete the file.

☐ Connecting to a PC through a network

You can play pictures, music, and videos saved in your PC through a network connection in the **AllShare** mode.

- Programme For more information on how to configure your TV and connect it to your network, see 'Network Connection'.
- To view content located on your PC, you must have connected your TV and your PC to your LAN and downloaded and installed PC Share Manager on your PC.
- We recommend you locate both your TV and PC in the same network subnet. IP addresses have four parts, separated by periods (111.222.333.444). If your TV and PC are in the same subnet, the first 3 parts of the TV IP address and the PC IP address (111.222.333) will be the same and only the last part (the host address) will be different.

- The following Smart Hub functions are not supported when you are playing media from a PC connected through a network:
 - The Background Music and Background Music Setting functions.
 - Sorting files by preference in the Photos, Music, and Videos folders.
- Divx DRM, Multi-audio, and embedded captions are not supported.
- Set your PC firewall program so that Samsung PC Share Manager is a permitted program.

- Depending on the Internet server, when you use My Contents through a network connection:
 - The sorting method may vary.
 - The Scene Search function may not be supported.
 - The **Resume** function, which resumes playing of a video, may not be supported.
 - The **Resume** function does not support multiple users. (It memorizes only the point where the most recent user stopped playing a video.)
 - The ◀ or ▶ button may not work depending on the content information.
- You may experience file stuttering while playing a video in Smart Hub through a network connection.

□ Screen Display

Move to the file you want to play using the ▲ / ▼ / ◀ / ▶ buttons, and then press the **ENTER** → or ▶ (Play) button. The file is played.

Device name: Displays the name of the connected device

File List Section: Displays files sorted according to your criteria.



Home: Return to content home

Change Content/Device: Changes the content type or connected device.

Sorting: Displays sort criteria. Sort criteria differ, depending on the content.

Edit Mode: Select and play multiple files or assign them to My Playlist. This function is available only for Music.

Videos

Playing a Video

- 1. Press the ◀/ ▶ / ▲ / ▼ button to select the desired video in the file list.
- 2. Press the **ENTER** button or (Play) button.
 - The file name appears on the top with its playing time.
 - If video time information is unknown, the playing time and progress bar are not displayed.
 - During video playback, you can search using the

 and buttons.



 The displayed image may differ depending on the model.

- Press the RETURN button to exit the movie
- In this mode, you can play movie clips contained in a game, but you cannot play the game itself.
- Supported Video Subtitle Formats (for language subtitles, etc.)

Name	File extension	Format	
MPEG-4 time-based text	MPEG-4 time-based text .txt		
SAMI	.smi HTML		
SubRip	.srt	string-based	
SubViewer	.sub	string-based	
Micro DVD	Micro DVD .sub or .txt string-based		

Supported Video Formats

File Extension	Container	Video Codec	Resolution	Frame rate (fps)	Bit rate (Mbps)	Audio Codec
*.avi AVI *.mkv MKV		Divx 3.11 / 4.x / 5.1 / 6.0	1920x1080	6 ~ 30	8	MP3 / AC3 / LPCM / ADPCM / DTS Core
	A) /I	XviD	1920x1080	6 ~ 30	8	
		H.264 BP / MP / HP	1920x1080	6 ~ 30	25	
	IVII (V	MPEG4 SP / ASP	1920x1080	6 ~ 30	8	
		Motion JPEG	1920x1080	6 ~ 30	8	
*.asf ASF		Divx 3.11 / 4.x / 5.1 / 6.0	1920x1080	6 ~ 30	8	MP3 / AC3 / LPCM / ADPCM / WMA
		XviD	1920x1080	6 ~ 30	8	
	ASF	H.264 BP / MP / HP	1920x1080	6 ~ 30	25	
		MPEG4 SP / ASP	1920x1080	6 ~ 30	8	
	Motion JPEG	800x600	6 ~ 30	8		
*.wmv	ASF	Window Media Video v9	1920x1080	6 ~ 30	25	WMA
*.mp4	MP4	H.264 BP / MP / HP	1920x1080	6 ~ 30	25	MP3 /
		MPEG4 SP / ASP	1920x1080	6 ~ 30	8	ADPCM /
		XVID	1920x1080	6 ~ 30	8	AAC

File Extension	Container	Video Codec	Resolution	Frame rate (fps)	Bit rate (Mbps)	Audio Codec
*.3gp 3GPP	2000	H.264 BP / MP / HP	1920x1080	6 ~ 30	25	ADPCM / AAC / HE-
	MPEG4 SP / ASP	1920x1080	6 ~ 30	8	AAC / HE-	
* vro	VRO VOB	MPEG1	352x288	24 / 25 / 30	30	AC3 / MPEG / LPCM
		MPEG2	1920x1080	24 / 25 / 30	30	
*.mpg *.mpeg		MPEG1	352x288	24 / 25 / 30	30	AC3 / MPEG
	PS	MPEG2	1920x1080	24 / 25 / 30	30	/ LPCM /
		H.264	1920x1080	6 ~ 30	25	AAC
*.ts *.tp *.trp	TS	MPEG2	1920x1080	24 / 25 / 30	30	AC3 / AAC /
		H.264	1920x1080	6 ~ 30	25	MP3 / DD+ /
		VC1	1920x1080	6 ~ 30	25	HE-AAC

Other Restrictions

Ø NOTE

- Video content will not play, or not play correctly, if there is an error in the content or the container.
- Sound or video may not work if the contents have a standard bitrate/frame rate above the compatible Frame/sec listed in the Supported Video Formats table.
- If a file's Index Table is defective, the Seek (Jump) function will not work.
- You may experience file stuttering while playing a video through a network connection.

- The menu may take longer to appear if the video's bit rate exceeds 10Mbps.
- Some USB/digital camera devices may note be compatible with the player.

Video Decoder	Audio Decoder
Supports up to H.264, Level 4.1	Supports up to WMA 7, 8, 9, STD
 H.264 FMO / ASO / RS, VC1 SP / MP / AP L4 and AVCHD are not supported. XVID, MPEG4 SP, ASP: 	 WMA 9 PRO does not support 2 channel excess multi channel or lossless audio. WMA sampling rate 22050Hz mono is not
- Below 1280 x 720: 60 frame max	supported.
 Above 1280 x 720: 30 frame max 	
GMC 2 over is not supported.	

Using the Play Continuously Function (Resume Play)

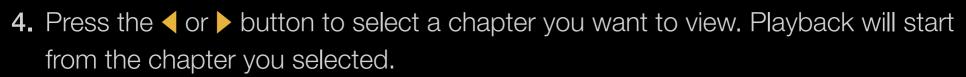
If you exit a movie when it is playing, you can play the movie later from the point where you stopped it.

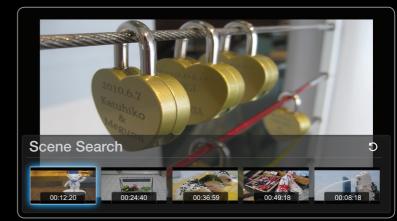
- The Resume function does not support multiple users. (It only memorizes the point where the most recent user stopped playing.)
- Select the movie file you stopped and want to resume by pressing the ◀ or ▶ button.
- 2. Press the (Play) or ENTER button.
- **3.** Select **Resume** (Resume Play). The Movie will begin to play from where you stopped it.
 - Play) is only available when you resume playing a movie you had stopped.

Using the Scene Search function

Scene Search divides a video into five chapters during playback. You can then restart playback from the chapter you select.

- If the index information is damaged or unsupported, you will not be able to use the Scene Search function.
- **1.** Select the movie file you want to play from the file list section.
- 2. Press the (play) or ENTER button.



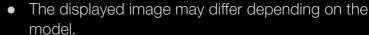


Music

Playing Music

- 1. Press the ◀/ ▶ / ▲ / ▼ button to select the desired music file in the file list.
- 2. Press the **ENTER** button or (Play) button.
 - When the music is playing, you can search using the <
 (REW) and ►► (FF) button.
 - Smart Hub only displays files with MP3 file extensions. Other file extensions are not displayed, even if they are saved on the same USB device.
 - If the sound is abnormal when you play MP3 files, adjust the **Equalizer** in the **Sound** menu. (An over-modulated MP3 file may cause a sound problem.)





Creating My Playlist

- 1. On the **Music** screen in the **Smart Hub** menu, press the ◀ / ▶ / ▲ / ▼ button to select **Edit Mode**, and then press the **ENTER** → button.
 - A check box appears to the left of the files.
- 2. Press the ◀/ ▶ / ▲ / ▼ button to select the tracks you want to add, and then press the ENTER → button.
 - A check appears in the check box.
- 3. Repeat Step 2 to select additional tracks.
 - ② To select all the files in the current page, select Select All at the top of the page, and then press ENTER

 ③.

- 4. Press the
 - Note that selecting Clear My Playlist will return My Playlist to the default playlist and remove all the tracks you added.
- 5. Press the ENTER button. The message "Selected items were added to My Playlist." is displayed.
- **6.** The newly created or updated playlist will be in the main **Music** page.

Playing My Playlist

- Select the **My Playlist** folder and it will play automatically. Press the ▲ or ▼ button to play a different music file within the play list.
 - ☑ To delete a file from My Playlist, select the recycle bin icon next to the file you
 want to delete by using the direction buttons, and then press ENTER . The file
 will be deleted from My Playlist.

Playing Selected Music Files

- 1. On the **Music** screen in the **Smart Hub** menu, press the ◀ / ▶ / ▲ / ▼ button to select **Edit Mode** on the far right side of the screen, and then press the **ENTER** → button.
- 2. Press the ◀/▶/▲/▼ button to select the desired music file in the file list, and then press the ENTER → button.
- 3. Repeat Step 2 to select additional tracks.
 - To select all the files in the current page, select **Select All** at the top.
 - ☑ To cancel a selection, press the ENTER → button again.
- **4.** Press the **◄** / **▶** / **▼** button to select **Play** at the bottom of the screen, and then press **ENTER ◄**. The selected music files play.

Photos

Viewing a Photo (or Slide Show)

- 1. Press the ◀/ ▶ / ▲ / ▼ button to select the desired file in the file list.
- 2. Press the ENTER button.
 - To view files manually, one at a time, press the ◀ or ▶ arrow buttons.
 - To start the slide show, press the ENTER
 button when the file you selected is displayed.



Friends.jpg

1024 X 768

2011/01/03

▶ Normal

 The displayed image may differ depending on the model.

 During the slide show, all files in the file list are displayed in order, starting from the file you selected

- During a Slide show, press the **TOOLS** button to access additional functions such as **Slide Show Speed**, **Background Music**, **Zoom**, and **Rotate**.
- You can add background music to a slide show if you have music files on your USB device or PC by setting Background Music to On in the Tools menu, and then selecting music files to play.
- The Background Music (BGM) Mode cannot be changed until the BGM has finished loading.
- 2 You can use the Pause, Stop, and Play buttons on the bottom of your remote during a slide show.
- When you press the Stop or Return button, the slide show stops and the main photo screen re-appears.

☐ Smart Hub - Additional Functions

Sorting the file lists

To sort files in the file lists, select the (Sorting) icon in the top right of the screen by using the ✓/ ► / ▼ button. Then, press the ENTER → button. The checks below indicate which media the sort criteria apply to.

Sort Criteria	Operation	Videos	Music	Photos
Folder View	Displays the whole folder. You can view the file name and thumbnail by selecting the folder.	~	~	~
Title	Sorts and displays the file title in Symbol/Number/ Alphabet/Special order.	~	~	~
Latest Date	Sorts and shows files by the latest date.	~		~
Earliest Date	Sorts and shows files by the earliest date.	~		~

Sort Criteria	Operation	Videos	Music	Photos
Artist	Sorts the music file by artist in alphabetical order.		~	
Album	Sorts the music file by album in alphabetical order.		~	
Genre	Sorts music files by the genre.		~	
Monthly	Sorts and shows photo files by month.			~

Videos/Music/Photos Play Option menu

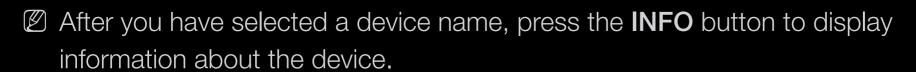
When playing video, music, or photo files, you can press the **TOOLS** button to display an Options menu. Below are a series of tables listing the options available and the media each option applies to.

Option Name	Operations	Videos	Music	Photos
List	Return to the file list.	~	~	~
Previous / Next	Go to previous / next photo file.			~
Shuffle	You can play the music sequentially or randomly.		~	
Resume	You can restart a movie file from where you stopped it.	~		
Scene Search	You can use the Scene Search function during playback to view or start a movie from the scene of your choice.	~		

Option Name	Operations	Videos	Music	Photos
Title Search	You can move directly to another Title.	~		
Time Search	You can search the movie using ◀ and ▶ buttons at intervals of 10 seconds.	~		
Subtitle	You can view a subtitle. You can select a specific language if the subtitle file contains multiple languages.	~		
Repeat Mode	You can play movie and music files repeatedly.	~	~	
Picture Size	You can adjust the picture size to your preference.	~		
Picture Mode	You can change the Picture Mode .	<u> </u>		~

Option Name	Operations	Videos	Music	Photos
Sound Mode	You can change the Sound Mode .	~	~	~
Audio Language	You can enjoy video in one of the supported languages as required. The function is only enabled when you play stream-type files which support multiple audio formats.	~		
Subtitle Setting	Displays the Subtitle Setting . You can set up a subtitle option.	~		~
Start Slide Show / Stop Slide Show	You can start or stop a slide show. Alternatively, use the or button on the remote.			~
Slide Show Speed	You can select the slide show speed during the slide show. Alternatively, use the or button on the remote.			~

Option Name	Operations	Videos	Music	Photos
Slide Show Effect	You can set various slide show effects.			~
Background Music On / Off	You can start or stop background music.			~
Background Music Setting	You can set and select background music when watching a photo file or slide show.			~
Zoom	You can zoom into images in full screen mode.			~
Rotate	You can rotate images.			~



After you have selected a file, press the INFO button to display information about the file.

☐ Using Samsung Apps

Samsung Apps

Samsung Apps is a store from which you can download applications to use on Samsung TV/AV equipment.

You can enjoy a variety of contents such as videos, music, photos, games, useful information etc. using the downloaded applications.

New applications are added regularly.

- Using the colored buttons with Samsung Apps.
 - Red (**Login**): To log in to the Internet service.
 - B Green (List View / Thumbnail View):
 To toggle the view between List and Thumbnail.
 - If the view mode is set to List View, will be highlighted.



 The displayed image may differ depending on the model.

If the view mode is set to **Thumbnail View**, **\textsquare** will be highlighted.

- Blue (Sort by): To sort the applications by Recommended, Most downloaded, Most recent, or Name.
 - 2 You can sort all categories except What's New?.
- (Page): Move to previous or next page.
- Description
 Return: Moves to previous menu.

Using the Samsung Apps by category

The following categories are available:

- What's New?: Displays newly registered applications.
- Video: Displays apps that provide video media such as movies, TV shows, and short length videos.
- Game: Displays various game apps such as sudoku and chess.
- **Sports**: Displays apps that provide sports content such as game results, images, and short length video.
- Lifestyle: Includes apps that provide lifestyle media services such as music, personal photo management tools, and social networking such as Facebook and Twitter.

- Information: Includes apps that provide information content such as news, financial information, stock quotes, weather, etc.
- Other: Includes other miscellaneous apps.
- **My Account**: Displays the application list and your cyber cash balance.
 - Starting in the middle of 2010 (US and Korea only), you can purchase cybercash you can use to buy applications through tv.samsung.com.
- **Help**: If you have questions about **Smart Hub**, check this section first.

Social TV



(May not be available, depending on your country.)

Share your TV viewing experience with your friends via social networking services (SNS). Using the Social TV function provided by the Smart Hub, you can use an SNS function such as Twitter, Facebook or Google Talk while watching TV in the same way you use it on a PC. For detailed information about using a service, refer to the corresponding website.

To use the **Social TV** function, you have to sign in uniformly first. If you don't have a **Smart Hub** account, create a **Smart Hub** ID and log in first. If the Smart Hub account is not linked with the user account of the SNS, you have to register the SNS account in **Smart Hub** to use the service through Smart Hub. For more information about registering a service site, refer to "How to create a Smart Hub ID"

- To open Social TV, press the ◀ / ▶ / ▲ / ▼ buttons to select Social TV, and then press the ENTER → button.
- 2. Enjoy your social network service through Social TV.

Using the colored and function buttons with Social TV

- Red (Login / Logout): To log into or logout of the Smart Hub account.
- B Green (Refresh): Refresh the application.
- C Yellow (Comment): Displays the Comment screen.
 - $oldsymbol{\mathbb{Z}}$ The function for this button may change depending on the service.
- D Blue (Change View): Change the view mode. Select Overlay, PIG, or Hide mode.
- TOOLS: Displays the Service Setting. You can activate or deactivate the service.
- **Description** Return to the previous screen.

Search



(May not be available, depending on your country.)

Easily search for and access content from diverse sources (e.g. applications, Your Video, AllShare)

- Usable while using SMART HUB
- For easy access, use the SEARCH button on the remote control.
- For detailed instructions to use the Search function, please visit www.samsung.
 com.

Basic Search instructions:

- 1. To open Search, press the ◀ / ▶ / ▲ / ▼ buttons to select Search, and then press the ENTER → button.
- 2. If you want to input a search term directly, press the ENTER button. A keypad screen appears. Enter the search term using the remote control.
 - ∅ If you want to select a category, press the ▼ button. Use the
 √ buttons to select a category, and then press ENTER .

Your Video: Personalize your movie-watching with a customized video on demand (VOD) recommendation service.

Most Searched: You can search for a video or other content by selecting a key word in the key word list. The key word list displays words you frequently use for searches

Top Application: You can select top applications and Internet services from a list.

Search History: You can search for a video or other content by selecting a word in the Search History list. The Search History list contains words and terms from your previous searches.

Your Video



(May not be available, depending on your country.)

Provides recommendations for videos based on your tastes.

- Lets you see movie recommendations based on your previous preferences.
- Lets you select a movie, displays a list of VOD (Video on Demand) providers that have the movie, and then lets you choose a provider for streaming. (Streaming is unavailable in some areas.)
- For detailed instructions to use Your Video, please visit www.samsung.com.

Basic Your Video instructions:

- 1. To open Your Video, press the ◀/▶/▲/▼ buttons to select Your Video, and then press the ENTER → button.
- Use the
 / ▶ buttons to select Recommended, New Releases, Top 20 Movies, Top 20 TV Shows, and recommendations by Friends. Then, use the
 /
 / ♦ / ▶ buttons to highlight and the ENTER
 button to select. You can also search by name or genre.

[Legal Statement]

Due to the various capabilities of products featuring the Samsung Smart Hub - Content Service, as well as limitations in the available content, certain features, applications, and services may not be available on all devices or in all territories.

Some features on Smart Hub may also require additional peripheral devices or membership fees that are sold separately. Please visit http://www.samsung.com for more information on specific device information and content availability. The services and availability of content through Smart Hub are subject to change from time to time without prior notice.

□ About AllShare™

AllShare™ connects your TV and compatible Samsung mobile phones/ devices through a network. On your TV, you can view call arrivals and SMS messages received by your mobile phones. In addition, you can play media contents including videos, photos, and music saved on your mobile phones or the other devices (such as your PC) by controlling them on the TV via the network. Additionally, you can use your TV for browsing web pages on your mobile phones.

Por more information, visit "www.samsung.com" or contact the Samsung call center. Mobile devices may need additional software installation. For details, refer to each device's user's guide.

- If your Samsung TV connects to a non-Samsung DLNA server, a compatibility issue may occur during video playback.
- By connecting your Samsung TV to a network via AllShare™, you can use Samsung's original functions as follows:
 - Playback of various video formats (DivX,XVID, MP4, 3GPP, AVI, ASF, MKV, etc.)
 - Video thumbnail feature
 - Bookmark function (to resume video playback)
 - Auto-chaptering (scene navigation)
 - Digital content management
 - Compatibility with various subtitle formats (SRT, SMI, SUB, TXT, TTXT)
 - Search with file names
 - And many others

- □ Setting Up AllShare™
 - MENU → Network → AllShare Settings → ENTER
- AllShare Settings
 - Media (On / Off): Enables or disables the media function. When the media function is on, you can control Media contents play using mobile phones or other devices that support DLNA DMC.
 - Message (On / Off): Enables or disables the message function (for call arrivals and SMS messages received by your mobile phones).



 The displayed image may differ depending on the model.

Media / Message

Shows a list of mobile phones or connected devices which have been set up to use the **Media** or **Message** function with this TV.

- The **Media** function is available in all devices which support DLNA DMC.
- Allowed / Denied: Allows/Blocks the devices.
- **Delete**: Deletes the devices from the list.
 - This function only deletes the name of the device from the list. If the deleted device is turned on or tries to connect to the TV, it may appear on the list again.

Using the Message Function

You can view call arrivals and SMS messages received by your mobile mobile phone through the alarm window while watching TV.

Ø NOTE

- To disable the alarm window, set Message to Off in the AllShare Settings.
- Whether you select **OK** or not after a message has appeared once, the message will be deleted from the alarm window.
- If the TV displays a message from an unknown mobile phone and you don't want to give it access, select the mobile phone in the Message menu in AllShare Settings, and then select Denied to block the phone.

Message View

If a new SMS message arrives while you are watching TV, the alarm window appears. If you select **OK**, the contents of the message are displayed.

- 2 You can configure the view settings for SMS messages on your mobile phones. For the procedures, refer to the mobile phone manual.
- 2 Some types of characters may be displayed as blank or broken characters.

Call Arrival Alarm

If a call arrives while you are watching TV, the alarm window appears.

Schedule Alarm

You can view scheduled events in the alarm window while you are watching TV.

- 2 You can configure view settings for scheduled contents on your mobile phones. For the procedures, refer to the mobile phone manual.
- 2 Some special characters may be displayed as blank or broken characters.

Using the Media Function

An alarm window appears informing you that media contents (videos, photos, music) sent from a mobile phone will be displayed on your TV. The contents are played automatically 3 seconds after the alarm window appears. If you press the **RETURN** or **EXIT** button when the alarm window appears, the media contents are not played.

Ø NOTE

• The first time a device accesses your TV through the media function, a warning popup window appears. Press the **ENTER** button to select **Allow**. This permits the phone to access the TV freely and use the **Media** function to play content.

- To turn off media contents transmissions from a mobile phone, set Media to
 Off in the AllShare Settings.
- Contents may not play on your TV depending on their resolution and format.
- The ENTER → and / > buttons may not work depending on the type of media content.
- Using the mobile device, you can control the media play. For details, refer to each mobile's user's guide.

What is Anynet+? TOOLS♬

Anynet+ is a function that enables you to control all connected Samsung devices that support Anynet+ with your Samsung TV's remote. The Anynet+ system can be used only with Samsung devices that have the Anynet+ feature. To be sure your Samsung device has this feature, check if there is an Anynet+ logo on it.

Ø NOTE

- You can only control Anynet+ devices using the TV's remote control, not the buttons on the TV.
- The TV remote control may not work under certain conditions. If this occurs, reselect the Anynet+ device.
- The Anynet+ functions do not operate with other manufacturers' products.

- For instructions explaining how to connect Anynet+ external devices, refer to the device's user manual. You must connect an Anynet+ device using an HDMI cable.
 Some HDMI cables may not support Anynet+ functions.
- Anynet+ works when the AV device supporting Anynet+ is in the Standby or On status.
- Anynet+ supports up to 12 AV devices in total. Note that you can connect up to 3 devices of the same type.

- However, you can connect only one Anynet+ Home Theater. To connect an Anynet+ Home Theate, connect the Home Theater to the TV using an HDMI cable then:
 - To hear sound from the Home Theater's Front, Left and Right speakers, and the subwoofer only, connect a Digital Optical cable between the **DIGITAL AUDIO** OUT (OPTICAL) jack on your TV and the Digital Audio Input on the Home Theater.
 - To hear 5.1 channel audio, connect HDMI cables to your Anynet+ DVD player, satellite box, etc. Then, connect the **DIGITAL AUDIO OUT (OPTICAL)** jack on your DVD player, Satellite Box, etc. (i.e. Anynet + Device 1 or 2) directly to the Home Theater, not the TV.

Anynet+ Menu

The Anynet+ menu changes depending on the type and status of the Anynet+ devices connected to the TV.

Anynet+ Menu	Description
View TV	Changes Anynet+ mode to TV broadcast mode.
Device List	Shows the Anynet+ device list.
(device_name) MENU	 Shows the connected device menus. E.g. if a DVD player is connected, the disc menu of the DVD player will appear.
(device_name) Tools	 Shows the tools menu of the connected device. E.g. if a DVD player is connected, the play menu of the DVD player will appear. Depending on the device, this menu may not be available.
(device_name) Title Menu	 Shows the title menu of the connected device. E.g. If a DVD player is connected, the title menu of the movie in the DVD player will appear. Depending on the device, this menu may not be available.
Receiver	Sound is played through the receiver.

- ☐ Setting Up Anynet+
 - MENU → System → Anynet+ (HDMI-CEC) → ENTER →
- Anynet+ (HDMI-CEC) (Off / On)

To use the Anynet+ Function, **Anynet+ (HDMI-CEC)** must be set to **On**.

When the **Anynet+ (HDMI-CEC)** function is disabled, all the Anynet+ related operations are deactivated.

Auto Turn Off (No / Yes)

Set an Anynet+ Device to turn off automatically when the TV is turned off.

- If **Auto Turn Off** is set to **Yes**, running external devices will turn off at the same time as the TV powers off.
- This function may not be enabled depending on the device.

☐ Switching between Anynet+ Devices

- 1. Press the TOOLS button, select Anynet+ (HDMI-CEC), and then press ENTER .
- 2. Select **Device List**, and then press the **ENTER** button.
 - If you cannot find a device you want, select **Refresh** to refresh the list.
- **3.** Select a device, and then press the **ENTER** button. You can switch to the selected device.

- The Device List menu appears only when you set Anynet+ (HDMI-CEC) to On in the System menu.
- Switching to the selected device may take up to 2 minutes. You cannot cancel the operation during the switching operation.
- If you have selected an Anynet+ device by pressing the SOURCE button and then selecting its input source, you cannot use the Anynet+ function.
 Make sure to switch to an Anynet+ device by using the **Device List**.

☐ Listening through a Receiver

You can listen to sound through a receiver (i.e Home Theater) instead of the **TV Speaker**.

- 1. Select **Receiver** and set to **On**.
- **2.** Press the **EXIT** button to exit.
 - If your receiver supports audio only, it may not appear in the device list.
 - The receiver will work when you have properly connected the Optical in jack of the receiver to the **DIGITAL AUDIO OUT (OPTICAL)** jack of the TV.
 - When the receiver (i.e Home Theater) is set to On, you can hear sound output from the TV's Optical jack. When the TV is displaying a DTV (air) signal, the TV will send out 5.1 channel sound to the receiver. When the source is a digital component such as a DVD player and is connected to the TV via HDMI, you will hear only 2 channel sound from the receiver.

Using the ARC function

You can listen to sound through a receiver connected using an HDMI cable without the need for a separate optical cable.

- 1. Select Receiver and set to On.
- **2.** Press the **EXIT** button to exit.
- To use the ARC function, a receiver which supports the HDMI-CEC and ARC features must be connected to the **HDMI IN 2 (ARC)** port.
- To disable the ARC function, set the **Receiver** to **Off**. Even if the TV transmits the ARC signal continuously, the receiver will be blocked from receiving the signal.

☐ Troubleshooting for Anynet+

Problem	Possible Solution
Anynet+ does not work.	 Check if the device is an Anynet+ device. The Anynet+ system supports Anynet+ devices only. You can connect only one receiver (home theater). Check if the Anynet+ device power cord is properly connected. Check the Anynet+ device's Video/Audio/HDMI cable connections. Check whether Anynet+ (HDMI-CEC) is set to On in the Anynet+ setup menu. Check whether the TV remote control is in TV mode. Check whether the remote control is Anynet+ compatible. Anynet+ doesn't work in certain situations. (Searching channels, operating Smart Hub or Plug & Play (initial setup), etc.) If you have removed and then reconnected the HDMI cable, please make sure to search devices again or turn your TV off and on again.
	Check if the Anynet+ function of the Anynet device is set on.

I want to start Anynet+.	 Check if the Anynet+ device is properly connected to the TV and check if the Anynet+ (HDMI-CEC) is set to On in the Anynet+ Setup menu. Press the TOOLS button to display the Anynet+ menu and select a menu you want.
I want to exit Anynet+.	Select View TV in the Anynet+ menu.
	 Press the SOURCE button on the TV remote control and select a
	non- Anynet+ device.
	 Press ➤ CH and PRE-CH to change the TV mode. (Note that the channel button operates only when a tuner-embedded Anynet+ device is not connected.)
The message "Connecting to	You cannot use the remote control when you are configuring
Anynet+ device" appears on	Anynet+ or switching to a view mode.
the screen.	 Use the remote control after the TV has completed Anynet+
	configuration or has finished switching to Anynet+.
The Anynet+ device does not	 You cannot use the play function when Plug & Play (initial setup) is
play.	in progress.

The connected device is not	Check whether or not the device supports Anynet+ functions.
displayed.	 Check whether or not the HDMI cable is properly connected.
	 Check whether Anynet+ (HDMI-CEC) is set to On in the Anynet+
	setup menu.
	 Search Anynet+ devices again.
	 Anynet+ requires an HDMI connection. Make sure the device is connected to your TV with an HDMI cable.
	 Some HDMI cables may not support Anynet+ functions.
	 If the connection is terminated because there has been a power failure or the HDMI cable has been disconnected, please repeat the device scan.
The TV sound is not output	Connect the optical cable between TV and the receiver.
through the receiver.	 The ARC function enables digital output of sound using the HDMI IN 2(ARC) port and can only be operated when the TV is connected to an audio receiver that supports the ARC function.

☐ TroubleShooting

If your TV seems to have a problem, first review this list of issues and solutions. If none of these troubleshooting tips apply, please visit "www. samsung.com," and then click on Support, or contact the Samsung call center.

Issues	Solutions and Explanations
Picture Quality	First, perform the Picture Test and to see if your TV is properly displaying the test image.
	Go to MENU - Support - Self Diagnosis - Picture Test
	If the test image is properly displayed, the poor picture may be caused by the source or signal.

Issues	Solutions and Explanations
The TV image does not look as good as it did in the store.	 Store displays are all tuned to digital, HD (high definition) channels. If you have an analog cable/set top box, upgrade to a digital set top box. Use HDMI or Component cables to deliver HD (high definition) picture quality. Cable/Satellite subscribers: Try HD channels from the channel line up. Air/Cable Antenna connection: Try HD channels after performing an Auto program. Many HD channels are up scaled from SD (Standard Definition) contents. Look for a channel that is broadcasting true HD content. Adjust the Cable/Sat box video output resolution to 1080i or 720p.
The picture is distorted: macro block error, small block, dots, pixelization	 The compression of video contents may cause picture distortion especially in fast moving pictures such as sports and action movies. A weak or bad quality signal can cause picture distortion. This is not a TV issue. Mobile phones used close to the TV (within 3.3 ft) may cause noise in the picture on analog and digital channels.

Issues	Solutions and Explanations
Color is wrong or missing.	 If you're using a Component connection, make sure the component cables are connected to the correct jacks. Incorrect or loose connections may cause color problems or a blank screen.
The color is poor or the picture is not bright enough.	 Adjust the Picture options in the TV menu (go to Picture Mode / Color / Brightness / Sharpness) Adjust the Energy Saving option in the TV menu (go to MENU – System – Eco Solution – Energy Saving) Try resetting the picture to view the default picture settings (go to MENU - Picture - Reset Picture)

Issues	Solutions and Explanations
There is a dotted line on the edge	 If the picture size is set to Screen Fit, change it to 16:9.
of the screen.	Change the cable/satellite box resolution.
The picture is black and white.	 If you are using an AV composite input, connect the video cable (yellow) to the Green jack of Component Input 1 on the TV.
When changing channels, the picture freezes or is distorted or delayed.	 If the TV is connected to a cable box, try to reset the box. (Disconnect and then reconnect the AC cord and wait until the cable box reboots. It may take up to 20 minutes.)
	 Set the output resolution of the cable box to 1080i or 720p.

Issues	Solutions and Explanations
3D	
The 3D Active Glasses are not working correctly	 Make sure the glasses are turned on. 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.
The screen seems to flicker slightly when you watch 3D images.	 You may notice a small amount of screen flickering when watching 3D images under a fluorescent lamp (50Hz ~ 60Hz), a 3 wavelength lamp, or a strobe light. If this occurs, dim the light or turn it off entirely.
The 3D images don't look quite right.	 The ideal viewing distance is three times or more the height of the screen. We also recommend sitting with viewer's eyes on a level with the screen
The batteries in the 3D glasses don't last	 Turn off 3D glasses while not using them. If you leave 3D glasses on, battery lifespan is shortened

Issues	Solutions and Explanations
Sound Problem	First, perform the Sound Test to determine if your TV audio is operating properly. • Go to MENU - Support - Self Diagnosis - Sound Test If the audio is OK, the sound problem may caused by the source or
	signal.
There is no sound or the sound is too low at maximum volume.	 Please check the volume of the device (Cable/Sat Box, DVD, Blu-ray etc.), connected to your TV.

Issues	Solutions and Explanations
The picture is good but there is	Set the Speaker Select option to TV Speaker in the Sound menu.
no sound.	 If you are using an external device, check the device's audio output option. (Ex. You may need to change your cable box's audio option to HDMI if you have the box connected to your TV using an HDMI cable.)
	 If you are using an external device, check the device's audio output option (Ex. You may need to change your cable box's audio option to HDMI if you have the box connected to the TV using an HDMI cable.)
	 If you are using a DVI to HDMI cable, a separate audio cable is required.
	 If your TV has a headphone jack, make sure there is nothing plugged into it.
	 Reboot the connected device by disconnecting, and then reconnecting device's power cable.

Issues	Solutions and Explanations
The speakers are making an inappropriate noise.	 Check cable connections. Make sure a video cable is not connected to an audio input. For antenna or Cable connections, check the signal information. A low signal level may cause sound distortion. Perform the Sound Test as explained on a previous page.
RF (Cable/Antenna) Connection	
The TV is not receiving all channels.	 Make sure the coaxial cable is connected securely. Run Auto Program to add available channels to the channel list. Go to MENU - Channel - Auto Program then select Auto and make sure to select the correct Cable TV signal type. There are 3 options, STD, HRC and IRC. Most cable systems use STD. Verify the antenna is positioned correctly.

Issues	Solutions and Explanations
No caption on digital channels.	 Check the Caption Setup menu. Try changing Caption Mode Service1 to CC1. Some channels may not have caption data.
The picture is distorted: macro block error, small block, dots, pixelization.	 The compression of video contents may cause picture distortion, especially with fast moving pictures such as sports and action movies. A weak signal can cause picture distortion. This is not a TV problem.
PC Connection	
A "Mode Not Supported" message appears.	 Set your PC's output resolution so it matches a resolution supported by the TV.
"PC" is always shown on the source list, even if a PC is not connected.	This is normal. "PC" is always shown in the source list, regardless of whether a PC is connected.
The video is OK but there is no audio.	 If you are using an HDMI connection, check the audio output setting on your PC.

Issues	Solutions and Explanations
Network Connection	
The wireless network connection failed.	 The Samsung Wireless USB dongle is required to use a wireless network.
	 Make sure the Network Connection is set to Wireless.
	 Make sure the TV is connected to a wireless IP sharer (router).
Software Upgrade over the network fails.	Run Network Test in the Network menu to confirm the connection.
	 If you have the latest Software (SW) version, the SW upgrade will not proceed.
Others	
Purple/green rolling horizontal bars and buzzing noise from the TV speakers with a Component	 Remove the left and right audio connections from the set-top- box. If the buzzing stops, this indicates that the set-top-box has a grounding issue. Replace the Component video cables with an HDMI

connection.

cable connection.

Issues	Solutions and Explanations
The picture won't display in full screen.	 HD channels will have black bars on either side of the screen when displaying up scaled SD (4:3) contents. Black bars will appear on the top and bottom of the screen when you watch movies that have aspect ratios different from your TV.
	 Adjust the picture size options on your external device or the TV to full screen.
A "Mode Not Supported" message appears.	 Check the supported resolution of the TV, and adjust the external device's output resolution accordingly. Refer to the resolution settings in the device's User manual.
Caption on TV menu is greyed out.	 You cannot select Caption menu if you have selected a source connected to the TV via HDMI or Component. The external device's Caption function must also be activated.

Issues	Solutions and Explanations
There is a plastic smell from the TV.	This smell is normal and will dissipate over time.
The TV Signal Information is unavailable in the Self Diagnosis menu.	This function is only available for digital channels the TV receives from an Antenna / RF/Coax connection.
The TV is tilted to the side.	Remove the base stand from the TV and reassemble it.
The channel menu is greyed out (unavailable).	The Channel menu is only available when you select the TV source.
Your settings are lost after 30 minutes or every time the TV is turned off.	 If the TV is in the Store Demo mode, it will reset audio and picture settings every 30 minutes. Change the setting from Store Demo mode to Home Use mode using the Plug & Play procedure. Press the SOURCE button to select TV mode, and go to MENU → System → Plug & Play → ENTER .

Issues	Solutions and Explanations
You have intermittent loss of	Check the cable connections and reconnect them.
audio or video.	 Loss of audio or video can be caused by using overly rigid or thick cables. Make sure the cables are flexible enough for long term use. If mounting the TV to a wall, we recommend using cables with 90 degree connectors.
You see small particles when you	This is part of the product's design and is not a defect.
look closely at the edge of the	
frame of the TV.	
The PIP menu is not available.	 PIP functionality is only available when you are using an HDMI, PC, or Component source.
POP (TV's internal banner ad)	Select Home Use under Plug & Play mode. For details, refer to the
appears on the screen.	Plug & Play Feature.

☐ Anti-theft Kensington Lock

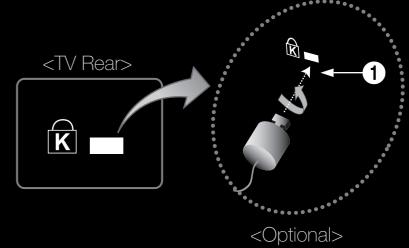
A Kenisngton Lock is a device you can use to physically fix your TV in place when using it in a public place. You wrap the Kensington Lock's cable around a large, immobile object and then attach the lock to the Kensington slot on the back of the TV.

The appearance and locking method may differ from the illustration below depending on the manufacturer. Refer to the manual provided with the Kensington Lock for additional information on proper use. The Kensington Lock is not supplied by Samsung.

Please find a "

icon on the rear of the TV. The Kensington slot is beside the "

icon.



To lock the product, follow these steps:

- **1.** Wrap the Kensington Lock cable around a large, stationary object such as desk or chair.
- 2. Slide the end of the cable with the lock attached through the looped end of the Kensington Lock cable.
- 3. Insert the locking device into the Kensington slot on the product 10.
- 4. Lock the lock.
- These are general instructions. For exact instructions, see the User manual supplied with the locking device.
 - The locking device has to be purchased separately.
 - The location of the Kensington slot may be different depending on the TV model.

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ABOUT DIVX VIDEO: DivX® is a digital video format created by DivX, Inc. This is an official DivX Certified® device that plays DivX video. Visit www.divx.com for more information and software tools to convert your files into DivX video.

ABOUT DIVX VIDEO-ON-DEMAND: This DivX Certified® device must be registered in order to play purchased DivX Video-on-Demand (VOD) movies. To obtain your registration code, locate the DivX VOD section in your device setup menu. Go to vod.divx.com for more information on how to complete your registration.

Covered by one or more of the following U.S. patents: 7,295,673; 7,460,668; 7,515,710; 7,519,274

Open Source License Notice

In the case of using open source software, Open Source Licenses are available on the product menu. Open Source License Notice is written only English.

☐ How to view the e-Manual

You can find instructions about your TV's features in the e-Manual in your TV. To use the e-Manual, press the **E-MANUAL** button on your remote. Move the cursor using the ▲ / ▼ / ◀ / ▶ buttons to highlight a category, then a topic, and then press the **ENTER** → button. The e-Manual displays the page you want to see.



You can also access it through the menu:

- MENU → Support → e-Manual → ENTER →
- If you want to return to the e-Manual, press the **E-MANUAL** button on remote.
- 2 You can't use the **Try Now** function if the menu is not activated.

Screen Display



Using the Help

Display the e-Manual Guide & the Product Guide by pressing Help.





<e-Manual Guide>

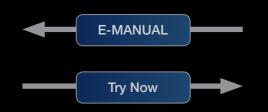
The e-Manual guide appears as above.

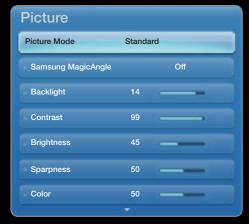
<Product Guide>

The product guide appears as above.

How to toggle between an e-Manual topic and the corresponding menu(s).







 The displayed menu may differ depending on the model.

Method 1
 Select Try Now, if you want to execute the corresponding menu(s).
 To return to the e-Manual screen, press the E-MANUAL button.
 To return to the e-Manual screen, press the ENTER button when viewing a topic. The "Do you want to execute this?" is displayed. Select Yes and then press the ENTER button. The OSD window will be displayed.
 To return to the e-Manual screen, press the E-MANUAL button.

Viewing the Contents



Contents Area: Contains the topic contents if you selected a sub-menu. To move to the previous or next page, press the ◀ or ▶ button.

Try Now: Displays the OSD menu that corresponds to the topic.

Home: Moves to the e-Manual home screen.

Zoom: Magnifies a screen.

Index: Displays the index screen.

Using the Zoom mode

Select **Zoom**, and then press **ENTER** → to magnify the screen. You can scroll through the magnified screen by using the → or ▼ buttons.

To return the screen to normal size, press the **RETURN** button.



How to search for a topic on the index page

- To search for a topic, press the ◀ or ▶ arrow button to select a letter, and then press
 ENTER ☑. The Index displays a list of topics and keywords that begin with the letter you selected.
- 2. Press the ▲ o ▼ button to select a keyword or topic, and then press the ENTER → button.



- **3.** The e-Manual page with the topic appears.
 - To close the **Index** screen, press the **Close** button.





Cinema-quality 3D experience

3-Dimensional TVs add new depth and dimension to create larger-than-life experiences. 3D Active Glasses sync up with the 3D TV to produce 3D images that virtually leap off the screen. Favorite shows can even be transformed to 3D in real time for the ultimate "reality" TV.



SMART TV

Smart TV with Samsung Apps

Samsung Apps are a growing collection of apps specifically built for your TV that connects you to your favorite digital content like videos, sports, games, social networking and much more. With web-connected apps on your Samsung Smart TV, you can stream movies from Netflix or Blockbuster, TV shows from Hulu, videos from YouTube, Next Level sports information from ESPN, music from Pandora and view updates on your Facebook or Twitter accounts. It's the apps that matter to you, now available on your TV.



Sync media from multiple devices with AllShare

AllShare™ syncs your digital devices so you can enjoy music, movies and photos from your PC, camera and mobile devices, on your larger TV screen. Connects you to multiple PCs, as well.