❑ Changing the Preset Picture Mode

■ Picture Mode TOOLS

MENU → Picture → Picture Mode → ENTER

Select your preferred picture type.

- Dynamic: Suitable for a bright room.
- Standard: Suitable for a normal environment.
- Movie: Suitable for watching movies in a dark room.

■ Backlight / Contrast / Brightness / Sharpness / Colour / Tint (G/R)

Your television has several setting options for picture quality control.

NOTE

- In analogue **AV** modes of the PAL system, the **Tint (G/R)** function is not available.
- Settings can be adjusted and stored for each external device connected to the product.
- Lowering picture brightness reduces power consumption.

Picture Size

MENU → Picture → Picture Size → ENTER

Set the various picture options such as picture size and aspect ratio.

The available items may differ depending on the selected mode.

Depending on the input source, the picture size options may vary.

- Picture Size TOOLS: Your cable box/satellite receiver may have its own set of screen sizes as well. However, we highly recommend you use 16:9 mode most of the time.

  Auto Wide: Automatically adjusts the picture size to the 16:9 aspect ratio.

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

Wide Zoom: Magnifies the picture size more than 4:3.

- Adjusts the **Position** by using ▲, ▼ buttons.

Zoom: Magnifies the 16:9 wide pictures vertically to fit the screen size.

- Adjusts the **Zoom** or **Position** by using ▲, ▼ button.

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

- Do not watch in 4:3 format for a long time. Traces of borders displayed on the left, right and centre of the screen may cause image retention (screen burn) which are not covered by the warranty.

Screen Fit: Displays the full image without any cut-off when HDMI (720p / 1080i / 1080p) or Component (1080i / 1080p) signals are inputted.

- **Zoom/Position**: Adjust the picture size and position. It is only available in **Zoom**.
- **Position**: Adjust the picture position. It is only available in **Screen Fit** or **Wide Zoom**.

NOTE

- After selecting **Screen Fit** in HDMI (1080i / 1080p) or Component (1080i / 1080p) mode, you may need to centre the picture:
  1. Select the **Position**. Press the **ENTER** button.
  2. Press the ▲, ▼, ◄ or ► button to move the picture.
- If you want to reset the position you adjusted, select **Reset** in the **Position** screen. The picture will be set to its default position.
- If you use the **Screen Fit** function with HDMI 720p input, 1 line will be cut at the top, bottom, left and right as in the overscan function.

PIP TOOLS

MENU → Picture → PIP → ENTER

View two sources on the LED display at the same time.

NOTE

- If you turn the product off while watching in PIP mode, the PIP window will disappear.
- 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.

- PIP settings

Main picture	Sub picture
HDMI1, HDMI2/DVI	AV

- **PIP**: Activate or deactivate the PIP function.
- **Size** (/): Select a size for the sub-picture.
- **Position** (/ / /): Select a position for the sub-picture.
- **Sound Select**: You can choose the desired sound in **PIP** mode.

❑ Changing the Picture Options

■ Advanced Settings

MENU → Picture → Advanced Settings → ENTER

(available in Standard / Movie mode)

You can adjust the detailed setting for the screen including colour and contrast.

- Dynamic Contrast: Adjust the screen contrast.
- Black Tone: Select the black level to adjust the screen depth.
- Flesh Tone: Adjust the flesh tone colour.

- **RGB Only Mode**: Displays the Red, Green and Blue colour for making fine adjustments to the hue and saturation.
- **Colour Space**: Adjust the range of colours available to create the image.
- **White Balance**: You can adjust the colour temperature of the picture to make white objects look white, and the overall picture appear natural.

  2 Point: Controls the white balance in 2 point interval by adjusting the red, green, and blue brightness.

  - **R-Offset** / **G-Offset** / **B-Offset**: Adjusts each colour's (red, green, blue) darkness.
  - **R-Gain** / **G-Gain** / **B-Gain**: Adjusts each colour's (red, green, blue) brightness.
  - **Reset**: Resets the **White Balance** to its default settings.

- **Gamma**: Adjust the primary colour intensity.
- **Motion Lighting**: Reduce power consumption by brightness control adapted motion.
  - Only available in **Standard** mode.
  - When changing a setting value of **Backlight** / **Brightness** or **Contrast**, **Motion Lighting** will be set to **Off**.

Picture Options

MENU → Picture → Picture Options → ENTER

- Colour Tone

  Warm1 or Warm2 will be deactivated when the picture mode is Dynamic.

  Settings can be adjusted and stored for each external device connected to an input on the product.

- Digital Clean View: Reduces picture noise to avoid distracting lines and flickering.

- **MPEG Noise Filter**: Reduces MPEG noise to provide improved picture quality.
- **HDMI Black Level**: Selects the black level on the screen to adjust the screen depth.

  Available only in **HDMI** mode (RGB signals).

- **Film Mode**: Sets the product to automatically sense and process film signals from all sources and adjust the picture for optimum quality.
  - Available in HDMI (1080i).
  - If the screen does not seem natural, change its option to **Off / Auto1 / Auto2** in **Film Mode**.
- **LED Clear Motion**: Removes drag from fast scenes with a lot of movement to provide a clear picture.
  - It will be deactivated when the picture mode is set to **Natural**.
  - The screen may become slightly darker when you play **LED Clear Motion**.

Picture Off TOOLS

MENU → Picture → Picture Off → ENTER

The screen is turned off but the sound remains on. Press any button except power and volume button to turn on the screen.

Reset Picture

MENU → Picture → Reset Picture → ENTER

Resets your current picture mode to its default settings.

❑ Changing the Preset Sound Mode

■ Sound Mode

MENU → Sound → Sound Mode → 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: Increase 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

■ Sound Effect

(standard sound mode only)

MENU → Sound → Sound Effect → ENTER

- **DTS TruSurround HD** (**DTS TruSurround**)

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

  DTS TruSurround HD and **DTS TruSurround** are functionally equivalent.

- **DTS TruDialog**

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

- **Equaliser**

  Use Equaliser to customize sound setting for each speaker.

  Balance: Adjusts the balance between the right and left speaker.

  100Hz / 300Hz / 1kHz / 3kHz / 10kHz (Bandwidth Adjustment): Adjusts the level of specific bandwidth frequencies.

  Reset: Resets the equaliser to its default settings.

If **Speaker Select** is set to **External Speaker**, **Sound Effect** is disabled.

Speaker Settings

MENU → Sound → Speaker Settings → ENTER

- **Speaker Select** TOOLS

  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 product 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**.

- **Device Speaker**: Off, **External Speaker**: On

When **Speaker Select** is set to **Device Speaker**.

- **Device Speaker**: On, **External Speaker**: On

If there is no video signal, both speakers will be mute.

Digital Audio Out

MENU → Sound → Digital Audio Out → ENTER

Digital Audio Out is used to provide digital sound, reducing interference going to speakers and various digital devices such as a DVD player.

- **Audio Format**: You can select the Digital Audio output format. The available Digital Audio output format may differ depending on the input source.
  - By connecting to 5.1ch speakers in a Dolby Digital setup, maximize your interactive 3D sound experience.
- **Audio Delay**: Correct audio-video sync problems, when watching product or video, and when listening to digital audio output using an external device such as an AV receiver (0ms ~ 250ms).

- **Auto Volume**

  To equalize the volume level on each channel, set to **Normal**.

  Night: This mode provides an improved sound experience compared to **Normal** mode, making almost no noise. It is useful at night.

  To use the volume control on the source device connected to the product, set **Auto Volume** to **Off** on the product. Otherwise, a change to the volume control of the source device may not be applied.

Reset Sound

MENU → Sound → Reset Sound → ENTER

Reset all sound settings to the factory defaults.

❑ Setting the Time

■ Time

MENU → System → Time → ENTER

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

- Clock Set: Set the Date and Time.
  - You can set the Date and Time directly by pressing the number buttons on the remote control.
  - If you disconnect the power cord, you have to set the clock again.

❑ Using the Sleep Timer

MENU → System → Time → Sleep Timer → ENTER

- Sleep Timer TOOLS: Automatically shuts off the product after a preset period of time. (30, 60, 90, 120, 150 and 180 minutes)

  Use the ▲/▼ buttons to select a period of time, and then press ENTER. To cancel the Sleep Timer, select Off.

❑ Setting the On / Off Timer

MENU → System → Time → On Timer <or> Off Timer → ENTER

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

  Setup: Select Off, Once, Everyday, Mon~Fri, Mon~Sat, Sat~Sun or Manual to set at your convenience. If you select Manual, you can set up the day you want to activate the timer.

  The ✓ mark indicates the day you've selected.

  Time: Set the hour and minute.

  Volume: Set the desired volume level.

Source: To select the source of the content that will play when the product turns on. You can:

- Select **USB** and have the product play back photo or audio files from a USB device.
- Select a source on your product (**HDMI1**, **HDMI2/DVI**, **AV**, **Component**, etc.) that you have connected a set-top box to, and have the product display a channel from the set-top box.

The USB device must be connected to your product before you can select **USB**.

If you select a source other than **USB**, you must:

- Have a cable or satellite set-top box attached to that source
- Set the set-top box to the channel you want to watch when the product goes on
- Leave the set-top box turned on.

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

- If there is no music file on the USB device or the folder containing a music file is not selected, the timer function does not operate correctly.
- When there is only one photo file in the USB device, 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.

– It is recommended 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 these devices take a long time to be recognized.

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

  Setup: Select **Off**, **Once**, **Everyday**, **Mon~Fri**, **Mon~Sat**, **Sat~Sun** or **Manual** to set at your convenience. If you select **Manual**, you can set up the day you want to activate the timer.

  The ✓ mark indicates the day you've selected.

  Time: Set the hour and minute.

❑ Economical Solutions

■ Eco Solution

MENU → System → Eco Solution → ENTER

- Energy Saving: This adjusts the brightness of the product in order to reduce power consumption.
- Auto Power Off: If the product remains turned on for four hours without any user input, the product will automatically turn off to prevent overheating.

  In some areas, you can establish a period of up to 8 hours.

❑ Other Features

■ Menu Language

MENU → System → Menu Language → ENTER

Set the menu language.

■ Auto Protection Time

MENU → System → Auto Protection Time → ENTER

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

If the screen remains idle with a still image for a certain period of time defined by the user, the screen saver is activated to prevent the formation of ghost images on the screen.

General

MENU → System → General → ENTER

- Game Mode: When connecting to a game console such as PlayStation™ or Xbox™, you can enjoy a more realistic gaming experience by selecting game mode.

  NOTE

  - Precautions and limitations for game mode
    - To disconnect the game console and connect another external device, set Game Mode to Off in the setup menu.
    - If you display the product menu in Game Mode, the screen shakes slightly.

- After connecting the game console, set **Game Mode** to **On**. Unfortunately, you may notice reduced picture quality.
- If **Game Mode** is **On**:
  - **Picture Mode** is set to **Standard** and **Sound Mode** is set to **Movie**.

- **Panel Lock**: Lock or unlock all the keys on the panel at once. when Panel Lock is on, none of the keys on the panel will work.
- **Boot Logo**: Display Samsung logo when the product is turned on.

Change PIN

MENU → System → Change PIN → ENTER

Change your password required to reset the product.

- The PIN input screen appears before the reset screen.
- Enter your 4-digit PIN. Change the PIN using the **Change PIN** option.

DivX® Video On Demand

MENU → System → DivX® Video On Demand → ENTER

Shows the registration code authorized for the product. If you connect to the DivX web site and register with 10-digit registration code, you can download the VOD activation file.

Once you play it using **Videos**, the registration is completed.

For more information on DivX® VOD, visit http://vod.divx.com.

❑ Using the Source List

■ Source List

MENU → Applications → Source List → ENTER

When you press the **SOURCE** button, Source screen will be displayed at once.

You can only choose external devices that are connected to the product. In Source, connected inputs are highlighted.

For the detailed information, refer to User Manual.

❑ Connecting a USB Device

1. Turn on your product.
2. Connect a USB device containing photo, music and movie files to the USB port on the side of the product.
3. When USB is connected to the product, popup window appears. You can select the **Photos**, **Videos** or **Music** directly.

It might not work properly with unlicenced multimedia files.

Need-to-Know List before using Media Contents

- MTP (Media Transfer Protocol) is not supported.
- Supported file systems are FAT,exFAT and NTFS.
- Certain types of USB Digital camera and audio devices may not be compatible with this product.
- Media Play only supports sequential jpeg format.
- Media Play only supports USB Mass Storage Class (MSC) devices. MSC is a Mass Storage Class Bulk-Only Transport device. Examples of MSC are Thumb drives, Flash Card Readers (USB HUB are not supported). Devices should be connected directly to the product's USB port.

- Before connecting your device to the product, please back up your files to prevent them from damage or loss of data. SAMSUNG is not responsible for any data file damage or data loss.
- 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.
- For unsupported or corrupted files, the “Not Supported File Format” message is displayed.
- The scene search and thumbnail functions are not supported in the **Videos**.

- MP3 files with DRM that have been downloaded from a non-free site cannot be played. Digital Rights Management (DRM) is a technology that supports the creation, distribution and management of the content in an integrated and comprehensive way, including the protection of the rights and interests of the content providers, the prevention of the illegal copying of contents, as well as managing billings and settlements.
- PTP connection mode is fully available only with digital cameras. When connecting a smartphone or tablet to the product using PTP mode, it may not be recognised.
- A USB device that requires high power (more than 500mA or 5V) may not be supported. The HDD (Hard Disk Drive) connected to USB is not supported.
- If the product has been no input during time set in **Auto Protection Time**, the screen saver will run.

- If a USB extension cable is used, the USB device may not be recognized or the files on the device may not be read.
- If a USB device connected to the product is not recognised, the list of files on the device is corrupted or a file in the list is not played, connect the USB device to the PC, format the device and check the connection.
- If a file deleted from the PC is still found when Media Contents is run, use the “Empty the Recycle Bin” function on the PC to permanently delete the file.
- If the number of files and folders saved on a USB storage device is approximately over 4000, the files and folders may not appear and some folders may not be opened.

Disconnecting a USB Device

1. Press the **SOURCE** button.
2. Select a desired USB device, and then press the **TOOLS** button. The **Tools** menu appears.
3. Select **Disconnect USB Device**, and then wait until the selected USB device is disconnected. You can remove a USB device from the product.

To remove a USB device from the product, we recommend use **Disconnect USB Device** function.

❑ Using the Media Contents

MENU → Applications → Media Play → ENTER

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

1. Press the **MEDIA.P** button.
2. Press ◄/► button to select desired menu (**Photos**, **Videos**, **Music**), then press the **ENTER** button.
3. Press ◄/► button to select desired device, then press the **ENTER** button again.
4. Press the ▲/▼/◄/► button to select the desired file in the list, then press the **ENTER** button or ► (Play) button.

Playing the selected files

1. Press the ▲ button to select **Options** at the top of each main screen and select **Play Selected**.
2. Select the desired files.
   - The check box appears to the left of the selected files.
   - Press **ENTER** button again to deselect the file.
3. Press the ▲ button to select **Play**.
   - You can select or deselect all files pressing the **Select All / Deselect All**.

❑ Playing the Photos / Videos / Music

During playing a file, press the ▲/▼/◄/► button to select the desired menu.

- When the option menu is not displayed, press the **TOOLS** button or **ENTER** button.
- You can also use ►/❚❚/■/◄◄/►► buttons on the remote control during playback.
- If you press the **INFO** button during playback, you can view the playback information.

Playback menu

Button	Operation	Photos	Videos	Music
❮ / ❯	Previous / Next	●		
▶ / ⏸	Start Slide Show / Stop Slide Show	●		
	Play / Pause	Mini Player*	●	●
⏮ / ⏭	Previous / Next	Mini Player*	●	●
⏪ / ⏩	Rewind / Fast Forward		●	●

* When setting the Background Music to Mini Player in Photos, these buttons appear.

Photos

Button	Operation	
	Slideshow Settings	You can set the Speed and Effects during the slide show.
	Zoom	You can zoom the image.
	Rotate	You can rotate images in full screen mode.
	Background Music / Mini Player	You can set background music when watching a slide show. / You can control simple playback menus.
	Settings	Picture Mode / Sound Mode: You can adjust the picture or sound setting. Information: You can see detailed information about the played file.

- During the slide show, all files in the file list will be displayed in order.
- When you press the ▶ (Play) button (or ▲ button → **Options** → **Slide Show**) in the file list, slide show will be started immediately.
- During the slide show, you can adjust the slide show speed using ◀◀ (REW) or ▶▶ (FF) button.

- Supported Photo Formats
  - For the details, refer to User Manual.

Videos

Button	Operation	
	Search	Search Titles: You can move the other file directly. Search Time Bar: You can search the video using ◀ and ▶ button at one minute interval or entering the number directly. It may not be supported depending on the input source.
	Repeat Mode	You can play movie files repeatedly.
	Picture Size	You can adjust the picture size to your preference.

Button	Operation	
	Settings	Subtitle Settings: You can play the video with subtitles. This function only works if the subtitles are the same file name as the video. Picture Mode / Sound Mode: You can adjust the picture or sound setting. Audio Language: You can change the audio language if the video has more than one language. Information: You can see detailed information about the played file.

- If video time information is unknown, play time and progress bar are not displayed.
- In this mode, you can enjoy movie clips contained on a Game, but you cannot play the Game itself.

- Supported Subtitle / Video Formats
  - For the details, refer to User Manual.

Music

Button	Operation	
	Repeat	You can play music files repeatedly.
	Shuffle	You can play the music randomly.
	Sound Mode	You can adjust the sound setting.

Only displays the files with supported music file extension. Other file extensions are not displayed, even if they are saved on the same USB device.

If the sound is abnormal when playing music files, adjust the **Equaliser** in the **Sound** menu. (An over-modulated music file may cause a sound problem.)

- Supported Music Formats

  For the details, refer to User Manual.

Setting the Encoding language

Set the encoding language if the text is not supported.

1. Press the ▲ button to select **Options** at the top of music main screen and select **Encoding**.
2. Select the desired encoding language.

Support resolution (16:9 only)

For the details, refer to User Manual.

- Videos / Photos (In **Media Play**)
  For the details, refer to User Manual.

❑ Viewing the e-Manual

■ e-Manual

MENU → Support → e-Manual → ENTER

You can read the introduction and instructions about the product features stored in your product.

For the detailed information, refer to User Manual.

❑ Using the Self Diagnosis

■ Self Diagnosis

MENU → Support → Self Diagnosis → ENTER

Self Diagnosis might take few seconds, this is part of the normal operation of the product.

- Picture Test: Use to check for picture problems.
- Sound Test: Use the built-in melody sound to check for sound problems.

  If you hear no sound from the product's speakers, before performing the sound test, make sure Speaker Select is set to Device Speaker in the Sound menu.

- The melody will be heard during the test even if **Speaker Select** is set to **External Speaker** or the sound is muted by pressing the **MUTE** button.

- **Reset**: Reset all settings to the factory defaults except network settings.
  - The PIN input screen appears before the reset screen.
  - Enter your 4-digit PIN. Change the PIN using the **Change PIN** option.

❑ Updating the Software

■ Software Update

MENU → Support → Software Update → ENTER

The Software Update menu lets you upgrade your product's software to the latest version.

When software is upgraded, 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.

- **Update now**

  The product's firmware can be updated through USB connection.

  – By USB: Insert a USB drive containing the firmware upgrade file, downloaded from “www.samsung.com” into the product.

    Please be careful not to disconnect the power or remove the USB drive until upgrades are complete. The product will be turned off and on automatically after completing the firmware upgrade.

❑ Changing the Use Mode

■ Use Mode

MENU → Support → Use Mode → ENTER

Select the Use Mode suitable for your place. We strongly recommend you select Home Use.

- Home Use: Home Use is the default setting.
- Store Demo: Store Demo is for retail environments only. If you select Store Demo, some functions will not work, and the picture settings will be reset every 5 minutes.

❑ Viewing the Contact Samsung

■ Contact Samsung

MENU → Support → Contact Samsung → ENTER

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

❑ Using the Football Mode

■ Football Mode TOOLS

MENU → Applications → Football Mode → ENTER

This mode provides optimized condition for watching sports games.

- A (Zoom): Pause playback and divide the picture into 9 parts. Select a part to zoom it in. Press this button again to resume.

When the Football Mode is on, the picture and sound modes are set to Stadium automatically.

If you turn the product off while watching Football Mode, the Football Mode will be disable.

Zoom doesn't operate in the following modes:

- PIP On
- Media play videos