




OWNER'S MANUAL

■ Auto Program

 **MENU**  → Broadcasting → Auto Program → **ENTER** 

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

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

1. Select **Auto Program**, and then press **ENTER** .
2. Press the **ENTER**  button to select **Start**.
3. Select **Both**, **Air**, or **Cable** by highlighting and then pressing **ENTER** .







❑ Memorizing channels






Your TV memorizes channels and adds the memorized channels to the **Channel List** with the **Auto Program** function. Before your TV can memorize channels, you must specify the signal source, either **Air** or **Cable**. If you select cable, when you 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**.

📝 If you have connected your TV to a cable or satellite set top box, you do not need to run the **Auto Program** function.



4. If you selected **Cable**, you must specify your cable systems. First, select **Digital Cable System**, and then press **ENTER** .
 5. Select **STD**, **HRC**, or **IRC**, and then press **ENTER** .
 6. Repeat for **Analog Cable System**.
 7. Select **Scan**, 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.



How to Stop Auto Programming

1. Press the **ENTER**  button to select **Stop**.
2. A message will ask **Stop Auto Program?** Select **Yes** by pressing the ◀ or ▶ button.
3. Press the **ENTER**  button.
 -  If you select **Change Settings**, the antenna setting screen appears. You can re-set the antenna settings and start channel search again.
 -  Select **Scan Again**, and then press the **ENTER**  button to restart channel search.

■ Antenna

 **MENU**  → **Broadcasting** → **Antenna** → **ENTER** 



To change the source of your TV signal, follow these steps:

1. Select **Antenna**, and then press **ENTER** .
 2. Select the source of your TV signal, **Air** or **Cable**.
-  Selecting **Air** or **Cable** also changes the actual signal input from **Air** to **Cable** or **Cable** to **Air**.




□ Using the Channel menu

■ Channel List

 **MENU** → Broadcasting → Channel List → **ENTER** 




The **Channel List** contains the channels your TV displays (Added channels) when you press the channel button on your remote. On the **Channel List** screen, you can also view channel information, **Added Ch.**, and **Favorites 1-5**. Press the **▶(Mode)** button to change the channel mode.

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


Channel Mode






- **Antenna:** Switch between **Air** and **Cable**.
- **Edit Favorites:** Set channels you watch frequently as favorites. Add or delete a selected channel in **Favorites 1-5**.
 - ✎ For detailed information about using **Edit Favorites**, refer to “**Edit Favorites**”.
- **Favorites 1-5:** Show all favorite channels, arranged in up to five groups. Each group has a separate screen.
 - ✎ The TV displays **Favorites 1-5** only if you have added favorites using **Edit Favorites**.
- **Added Ch.:** Show all added channels.

■ Schedule Manager

 **MENU**  → Broadcasting → Schedule Manager → **ENTER** 

You can schedule the TV to display a channel automatically at a selected time. In addition, you can view, modify, or delete the scheduled viewing information.

 You must set the current time first using the **Time** → **Clock** function in the **System** menu to use this function.

1. Select **Schedule** on the **Schedule Manager** screen, and then press the **ENTER**  button. The **Schedule Viewing** menu appears.
2. Press the     buttons to set each menu option.
 - **Antenna:** Select the desired broadcasting signal.
 - **Channel:** Select the desired channel.



- **Repeat:** Select **Once**, **Manual**, **Sat~Sun**, **Mon~Fri** or **Everyday**. If you select **Manual**, you can set the day you want.

 A check (✓) mark indicates a day you selected.

- **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.





 If you want to edit or cancel a scheduled viewing, select the scheduled viewing on **Schedule Manager**. Then, press the **ENTER**  button and select **Edit** or **Delete**.

■ Edit Channel



 **MENU**  → Broadcasting → Edit Channel → **ENTER** 

You can add, edit, or delete channels from the **Channel List**.

Deleting a channel from the Channel List

- 1 Go to **Edit Channel** screen.
2. Press the ▲/▼ buttons to select a channel, and then press the **ENTER**  button. The (✓) mark indicates the channel you've selected.
 -  You can select more than one channel.
 -  Press **ENTER**  button again to deselect the channel.
3. Press the **B** (**Delete**) button. The selected channel is deleted from the **Channel List**.


Adding a channel to the Channel List

1. On the **Edit Channel** screen, press the **TOOLS** button, and then select **Category**.
2. Select **All** and press the **OK** button. The **All Channel List** appears.
 -  Your TV will display all channels, including channels you deleted from the **Channel List**, in the **All Channel List**.
 -  A gray-colored channel indicates the channel has been deleted from the **Channel List**.
3. Select a deleted channel, and then press the **B** (**Add**) button.



Using the colored and function buttons with **Edit Channel**.

- **B** Green (**Delete / Add**)
 - **Delete**: Deletes a channel from the channel list.
 - **Add**: Adds a deleted channel. It only appears when you select a deleted channel in **All**.
- **D** Blue (**Select All / Deselect All**): Selects or deselects all channels at once.
- **0~9** (**Go To**): Goes directly to a channel when you press the channel's numbers. For example, to go to Channel 12 press 1 then 2.
- **◇** (**Page**): Moves to the next or previous page.





-  (Tools): Displays the option menu. The option menu items that appear may differ depending on the channel status and type.
 - **Antenna:** Selects the broadcasting signal, air or cable.
 - **Category:** Changes the channel mode. Select **All**, **Added Ch.**, **Recently Viewed**, or **Mostly Viewed**. The channel mode you select is displayed.
 - **Edit Favorites:** Go to the **Edit Favorites** screen directly.
 - **Rename Channel** (analog channels only): Lets you assign a name of up to five characters to a channel. For example, Food, Golf, etc. This makes it easier to find and select the channel.
 - **Information:** Displays details of the selected program.

■ Edit Favorites **TOOLS**


 **MENU**  → Broadcasting → Edit Favorites → **ENTER** 

You can add, edit, or delete favorite channels to or from one or more of 5 favorite lists.

Adding a channel to Favorites 1-5


1. Go to the **Edit Favorites** screen.
 2. Press the ▲/▼ buttons to select a channel, and then press the **ENTER**  button.
 3. Choose a specific favorite list among **Favorites 1-5** using the  (**Change Fav.**) button, and then press the  (**Add**) button. The selected channel is added to the favorites list you have chosen in **Favorites 1-5**.
-  A channel can be added to more than one of the five favorite lists in **Favorites 1-5**.

Deleting a channel from the Favorites 1-5

1. On the **Edit Favorites** screen, select a favorite list using **B** (**Change Fav.**) button.
2. Move to the favorite list, and then select the channel you want to delete.
3. Press the **D** (**Delete**) button. The selected channel is deleted from **Favorites 1-5**.
 -  If you want to change the favorite channel order, press the **A** (**Change order**) button, and then change the order using the ▲/▼ buttons.



Using the colored and function buttons with **Edit Favorites**.

- **A** Red (**Category / Change order**)
 - **Category**: Changes the channel mode to **Added Ch.**, **Recently Viewed**, or **Mostly Viewed**, and then displays the selected channel mode.
 - **Change order**: Changes the favorite channel order.
 -  (**Done**): Completes changing the channel order.
- **B** Green (**Change Fav.**): Changes the displayed favorite list.
- **C** Yellow (**Select All / Deselect All**): Selects or deselects all channels at once.
- **D** Blue (**Add / Delete**)
 - **Add**: Adds selected channels to **Favorites 1-5**.
 - **Delete**: Deletes a favorite channel from **Favorites 1-5**.

- **0~9 (Go To)**: Goes directly to a channel when you press the channel's numbers. For example, to go to Channel 12 press 1 then 2.
- **◊ (Page)**: Moves to the next or previous page.
- **🔧 (Tools)**: Displays the option menu. The option menu items that appear may differ depending on the channel status and type.
 - **Copy to Favorites**: Edits the selected favorite channel in **Favorites 1-5**. You can add to or delete from favorite lists.
 - **Rename Favorites**: Lets you assign names to favorite channels.
 - **Antenna**: Selects the broadcasting signal, air or cable.
 - **Edit Channel**: Go to the **Edit Channel** screen directly.
 - **Information**: Displays details of a selected program.

❑ Blocking Programs

■ Program Rating Lock

 **MENU**  Broadcasting → Program Rating Lock → **ENTER** 

Prevent unauthorized users, such as children, from watching unsuitable programs. Access blocked programs when you enter the default or a user defined 4-digit PIN code.

 The PIN input screen appears before the setup screen appears.

 Enter a 4-digit PIN. The default PIN is 0-0-0-0. Change the PIN using the **Change PIN** option.


- **Program Rating Lock: When On**, lets you block TV programs based on their ratings.

TV Rating: Lets you block TV programs based on their ratings. This function allows you to control which TV programs your children can watch. **TV Rating** displays a grid with locks. The following categories are on the left side:



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

The following categories are on top:

- **ALL** / **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 **TV-PG**, 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 (MPAA) 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 Canadian English 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.

 NOTE




- 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. Rating** 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.



❑ Other Features

■ Channel Settings

 **MENU**  → Broadcasting → Channel Settings → **ENTER** 

- Fine Tune

(analog channels only)

If the reception is clear, you do not have to fine tune the channel. This is done automatically during the search and store operation. If the signal is weak or distorted, fine tune the channel manually.





 Fine tuned channels that have been saved have an asterisk (*) on the right-hand side of the channel number in the channel banner.

 To reset the fine-tuning, select **Reset**.

- **Clear Scrambled Channel**

This function filters out scrambled channels after **Auto Program** is completed. This process may take 20~30 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.

■ Audio Options

 **MENU**  Broadcasting → Audio Options → **ENTER** 

- Preferred Language
(digital channels only)

Use the ▲/▼ buttons 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 other languages).

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

- **Multi-Track Sound** **TOOLS** 

Select an option using the ▲/▼ buttons, and then 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**.

 When the TV is tuned to a digital channel and you press the **TOOLS** button, you can select a language from among the ones being broadcast.

- **Visual Impaired**



(digital channels only)

Adds a verbal description to the main audio to help the visually impaired.


■ **Caption** **TOOLS**

(On-Screen Text Messages)

 **MENU**  → **Broadcasting** → **Caption** → **ENTER** 

- **Caption:** You can turn 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 or HDMI input jacks.
 - **Caption Mode:** You can select the desired caption mode.
 -  The availability of captions depends on the program being broadcasted.
- 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)

Size: Options include Default, Small, Standard, and Large.

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

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

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

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

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

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






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 **Font Opacity** and the **Background Opacity** to **Transparent**.




❑ Changing the Preset Picture Mode

■ Picture Mode **TOOLS**

 **MENU**  → Picture → Picture Mode → **ENTER** 

Picture modes apply preset adjustments to the picture. Select a mode using the ▲/▼ buttons, and then press **ENTER** .



 When the TV is connected to a PC, you can only select **Entertain** and **Standard**.


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

 **Entertain** is only available when the TV is connected to a PC.

□ Adjusting Picture Settings

■ Cell Light / Contrast / Brightness / Sharpness / Color / Tint (G/R)

 **MENU**  → Picture → Cell Light → **ENTER** 

Your television has several options for adjusting picture quality. Select an option using the ▲/▼/◀/▶ buttons, and then press **ENTER** .







 NOTE

- When you make changes to **Cell Light**, **Contrast**, **Brightness**, **Sharpness**, **Color** or **Tint (G/R)**, the OSD will be adjusted accordingly.
- When the TV is connected to a PC, you can only make changes to **Cell Light**, **Contrast**, **Brightness**, and **Sharpness**.
- You can adjust and store settings for each external device connected to the TV.
- Lowering picture brightness reduces power consumption.



■ Picture Size **TOOLS**

 **MENU**  → Picture → Picture Size → **ENTER** 

Picture Size provides various picture size and aspect ratio options. Select an option using the ▲/▼/◀/▶ buttons, 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 screen mode.

Zoom1: Magnifies the picture moderately. Cuts off the top and sides.

Zoom2: Magnifies the picture more than **Zoom1**.

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


4:3: Sets the picture to **4:3** mode. For analog TV programs.




 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 is 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.







- **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:





1. Select **Position**, and then press the **ENTER**  button.
2. Select the **Position** button, and then press **ENTER** .
3. Press the **▲/▼** buttons to move the picture up or down.
4. Press the **ENTER**  button.

 If you want to reset the picture to its original position, select **Reset** in the **Position** screen, and then press **ENTER** . The picture will be reset to its default position.

 To use the **Position** function after selecting **Screen Fit** when connected to an HDMI (1080i/1080p) or Component (1080i/1080p) source, follow these steps:

1. Select **Position**, and then press the **ENTER**  button.
2. Select the **Position** button, and then press **ENTER** .
3. Press the **▲/▼/◀/▶** buttons to move the picture.
4. Press the **ENTER**  button.

 If you want to reset the picture to its original position, select **Reset** in the **Position** screen, and then press **ENTER** . The picture will be reset to its default position.

-  The picture size can vary depending on the input resolution when you play content using **Videos** in **Media Play**.
-  HD (High Definition) is: 16:9 - 1080i/1080p (1920x1080) or 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 are listed below:

Input Source	Picture Size
DTV (1080i, 1080p)	16:9, Wide Fit, 4:3, Screen Fit
DTV (720p)	16:9, Wide Fit, 4:3
DTV (480i, 480p)	16:9, Zoom1, Zoom2, 4:3
ATV, AV	16:9, Zoom1, Zoom2, 4:3
Component (1080i, 1080p)	16:9, Wide Fit, 4:3, Screen Fit
Component (720p)	16:9, Wide Fit, 4:3
Component (480i, 480p)	16:9, Zoom1, Zoom2, 4:3
HDMI (720p, 1080i, 1080p)	16:9, Wide Fit, 4:3, Screen Fit

■ PIP

 **MENU**  → **Picture** → **PIP** → **ENTER** 

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

NOTE

- For PIP sound, refer to the **Sound Select** instructions.
- If you turn the TV off while watching in the PIP mode, the PIP function is reset to off. When you turn your TV on, you must turn PIP on again to watch in the PIP mode.

- You may notice that the picture in the PIP window becomes slightly unnatural when you use the main screen to view a game or karaoke.
- When **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, HDMI	TV

- **PIP:** Activate or deactivate the PIP function.
- **Antenna:** 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 sub-picture.
- **Position:** Select a position for the sub-picture.
- **Sound Select:** You can choose to listen to the sound from the **Main** picture or the **Sub** picture.




❑ Changing the Picture Options

■ Advanced Settings

 **MENU**  → Picture → Advanced Settings → **ENTER** 

Advanced Settings are available in the **Standard** and **Movie** modes.

To use, select an option using the ▲/▼/◀/▶ buttons, and then press **ENTER** .

 When the TV is connected to a PC, you can only make changes to the **White Balance** and **Gamma**.

- **Dynamic Contrast:** Adjusts the screen contrast.
- **Black Tone:** Select the black level to adjust the screen depth.
- **Flesh Tone:** Adjusts the amount of red in skin tones.

- **RGB Only Mode:** Displays the **Red**, **Green**, and **Blue** color so you can make fine adjustments to hue and saturation.
- **Color Space:** Adjusts the range and variety of colors (the color gamut) available to create images.



To adjust **Color**, **Red**, **Green**, **Blue**, and **Reset**, set **Color Space** to **Custom**.

- **White Balance:** Adjusts the color temperature of the picture so that white objects look white (instead of, for example, slightly pink or slightly yellow) and the overall color of the picture looks natural.


2 Point: Adjust each color's luminosity with the offset menu and the brightness with the gain menu.

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

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

Reset: Restore 2 point white balance settings to default values.

10 Point: Controls the white balance by adjusting the red, green, and blue brightness over 10 specific levels.

 Available when the picture mode is set to **Movie**. The external input (source) can be set to any input.

 Some external devices may not support this function.

Level: Select a level to adjust 10 Point White Balance.

Red: Adjust the red level.

Green: Adjust the green level.

Blue: Adjust the blue level.

Reset: Restore current level's 10 Point White Balance to default values.


- **Gamma:** Adjusts the primary color intensity.
- **Motion Lighting:** Reduces power consumption by reducing screen brightness when the picture on the screen is motionless.
 - ☞ This function is not supported in **3D** mode. **for PDP 4900 series**
 - ☞ When you change the **Cell Light**, **Contrast**, or **Brightness**, the TV sets **Motion Lighting** to **Off**.
 - ☞ Only available in **Standard** mode.



■ Picture Options

 **MENU**  → **Picture** → **Picture Options** → **ENTER** 

Select an option using the ▲/▼/◀/▶ buttons, and then press **ENTER** .


 When the TV is connected to a PC, you can only make changes to **Color Tone**.

- **Color Tone**

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


 You can adjust and store settings for each external device connected to an input on the TV.

- **Digital Clean View:** If the broadcast signal received by your TV is weak, you can activate the **Digital Clean View** feature to reduce any static and ghosting that may appear on the screen.

 When the signal is weak, try each option in **Digital Clean View** until the TV displays the best picture.

Auto Visualization: When you change from one analog channel to another, displays the signal strength.

 Only available for analog channels.

 When you press the **INFO** button, the TV displays the signal strength bar.

 When the bar is green, you are receiving the best possible signal.


- **MPEG Noise Filter:** Reduces MPEG noise to provide improved picture quality.

- **HDMI Black Level:** Lets you select the black level on the screen to adjust the screen depth.
 - ☞ Available only in HDMI mode (RGB signals).
- **Film Mode:** Sets the TV so that it senses and then processes film signals from all sources automatically and adjusts the picture for optimum quality.
 - ☞ The **Cinema Smooth** function is only activated when an HDMI 24Hz signal is inputted.
 - ☞ Available in TV mode and all external input modes which support SD (480i / 576i) and HD (1080i) signals except when connected to a PC.
 - ☞ If the screen does not seem natural, change the **Film Mode** option to **Off, Auto1, or Auto2.**

- **Black optimizer:** Deepens blacks on the screen and improves the contrast ratio.
 - ☒ When the TV is connected to a PC, **Black optimizer** is deactivated.
 - ☒ When the TV is operating other features, **Black optimizer** is deactivated.
(ex. **Media Play**, **PIP**)



■ Picture Off

 **MENU**  **Picture**  **Picture Off**  **ENTER** 

The screen is turned off but the sound remains on. Press any button except the 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 Modes

■ Sound Mode




 **MENU**  → Sound → Sound Mode → **ENTER** 

Use the ▲/▼ buttons 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:** Increase the intensity of high-frequency sounds 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

 **MENU**  → Sound → Sound Effect → **ENTER** 

(standard sound mode only)

Use the ▲/▼ buttons to select an option, and then press **ENTER** .

- **DTS TruSurround**

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

- **DTS TruDialog**

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.

- **Equalizer**

Use **Equalizer** to customize the sound setting for each speaker.

Balance: 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.

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



■ 3D Audio

for PDP 4900 series

 **MENU**  → Sound → 3D Audio → **ENTER** 

3D audio technology that provides an immersive sound corresponding to the effect of 3D video by utilizing audio depth control in perspective.

 Available in only when the TV is displaying 3D images.




■ Speaker Settings


 **MENU**  → Sound → Speaker Settings → **ENTER** 

- Speaker Select

If you are listening to the sound track of a broadcast or movie through an external receiver, you may hear a sound echo caused by the difference in decoding speed between the TV's speakers and the speakers attached to your audio receiver. If this occurs, set the TV to **External Speaker**.

 When you set **Speaker Select** to **External Speaker**, the TV's speakers are turned off. You will hear sound through the external speakers only. When you set **Speaker Select** to **TV Speaker**, both the TV's speakers and the external speakers are on. You will hear sound through both.

 When **Speaker Select** is set to **External Speaker**, the **VOLUME** and **MUTE** buttons will not operate and the sound settings will be limited.

 If there is no video signal, both the TV's speakers and the external speakers will be mute.

- **Auto Volume**

When you change channels, video sources, or content, **Auto Volume** automatically adjusts the TV's volume level so that the volume level remains the same for all sources. For example, if you switch from a streaming video application to a Blu-ray player or a favorite TV channel, **Auto Volume** can modify the volume up to 12db to equalize the sound.

The **Auto Volume** function has two settings: **Normal** and **Night**. **Normal** applies a normal level of volume adjustment. **Night** applies a slightly lower volume level and is ideal for late-night TV viewing. If you want to use the volume control of a connected source device to control the sound, deactivate the **Auto Volume** function. When you use the **Auto Volume** function with a source device, the device's volume control may not function properly.


■ Digital Audio Out

 **MENU**  → Sound → Digital Audio Out → **ENTER** 

Digital Audio Out outputs an uncompressed digital audio signal when you connect the digital audio out jack on the back of the TV to a digital audio in jack on a receiver or home theater.




- **Audio Format:** You can select the Digital Audio output format. The available Digital Audio output 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 ◀/▶ buttons to adjust the slider, from 0ms ~ 250ms. Press **ENTER**  when done.



■ Reset Sound

 **MENU**  → Sound → Reset Sound → **ENTER** 

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



❑ Executing initial setup

■ Setup

 **MENU**  → System → Setup → **ENTER** 

Configure and memorize channels and set the time when you set up the TV for the first time or when you reset the TV.

 To execute the initial setup, follow the instructions displayed on the TV screen.



❑ Setting the Time

■ Time

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

 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:** The TV sets the current time automatically using the time from a digital channel.
 - ☞ You must have cable or an antenna connected to the TV to have the TV set the time automatically.
- **Manual:** Set the current time manually.
 - ☞ Depending on the broadcast station and signal, **Auto** may not set the time correctly. If this occurs, 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 or the **▲/▼** buttons to enter numbers. Use the **◀/▶** buttons to move from one entry field to the next. Press **ENTER**  when done.

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

DST: Switches the DST (Daylight Saving Time) function on or off.


 This function is only available when the **Clock Mode** is set to **Auto**.



Time Zone: Select your time zone.

 This function is only available when the **Clock Mode** is set to **Auto**.


Time Offset **for PDP 4900 series**: Adjusts the time when your TV receives the time information via Internet. Set the right time by selecting an offset.


 The current time will be set through a network if the TV fails to receive the time information including the broadcast signal from TV stations. (ex: Watching TV via set-top box, Satellite receiver, or etc)



❑ Using the Sleep Timer

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

- **Sleep Timer** : Automatically shuts off the TV after a preset period of time. (30, 60, 90, 120, 150, or 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** 

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.

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

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


 The ✓ mark indicates days you've selected.

Time: Set the hour, minute, am/pm. Use the number buttons or the ▲/▼ buttons to enter numbers. Use the ◀/▶ buttons to change entry fields.

Volume: Set the desired volume level. Use the ◀/▶ buttons to change the volume level.

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

- Select **TV** and have the TV display a specific air or cable channel.
- Select **USB** and have the TV play back photo or audio files from a USB device.
- Select a source on your TV that you have connected a set-top box to, and have the TV display a channel from the set-top box.







 A USB device must be connected to your TV before you can select **USB**.

- ✎ If you select a source other than **TV** or **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 TV goes on
 - Leave the set-top box turned on.
- ✎ When you select a source other than **TV** or **USB**, the **Antenna** and **Channel** options will disappear.

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 the music or photo files you want to play when the TV turns on automatically.

-  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.
-  A folder with a name that is too long cannot be selected.
-  Each USB device you use is assigned its own folder. When using more than one of the same type of USB device, make sure the folders assigned to each USB device have different names.
-  We recommend that you use a USB memory stick or a multi card reader as your USB source when using **On Timer**.
-  The **On Timer** function may not work with USB devices that have 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.

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

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




 The ✓ mark indicates days you've selected.

Time: Set the hour, minute, and am/pm. Use the number buttons or the ▲/▼ buttons to enter numbers. Use the ◀/▶ buttons to change entry fields.



□ Economical Solutions


■ Eco Solution

 **MENU**  → System → Eco Solution → **ENTER** 

- **Energy Saving:** Lets you adjust the brightness of the TV to reduce power consumption.
- **Eco Sensor:** To enhance your power savings, the picture settings will automatically adapt to the light in the room.

 If you adjust **Cell Light** in the Picture menu, **Eco Sensor** is set to **Off**.

Min Cell Light: When **Eco Sensor** is **On**, lets you manually adjust the minimum screen brightness.

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

- **No Signal Power Off** : Sets how quickly the TV switches to standby mode if it is receiving no signal.

 This function is disabled when an attached PC is in power saving mode.




- **Auto Power Off:** The TV will automatically turn off if you don't press a button on the remote control or touch a button on TV's front panel for 4 hours.

❑ Other Features

■ Menu Language

 **MENU**  → System → Menu Language → **ENTER** 

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 **English, Español, or Français.**

■ Screen Burn Protection

 **MENU**  System → Screen Burn Protection → **ENTER** 

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

Your TV has the following screen burn protection functions:

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

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

 Available Pixel Shift Settings and Optimum Settings

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

 The **Pixel Shift** value may differ depending on the TV's size (in inches) and the mode.

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

- **Auto Protection Time:** If the screen displays a still image for a period of time you define, the TV activates the screen saver to prevent the formation of burnt in ghost images on the screen.

- **Scrolling:** This function removes after-images on the screen by illuminating all the pixels on the screen according to a pattern. Use this function when there are after images or symbols on the screen, especially when you displayed a still image on the screen for a long time.



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



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

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


■ Change PIN

 **MENU**  → System → Change PIN → **ENTER** 

When you access Change PIN, the PIN input screen appears. Enter the current or default PIN. Then, the **Change PIN** screen appears. Choose any 4 digits for your PIN and enter them in **Enter New PIN**. Re-enter the same 4 digits in **Confirm New PIN**. When the Confirm screen appears, press the **Close** button. The TV has memorized your new PIN.

 Whenever you access the **Change PIN** function, the PIN input screen appears. Enter the current or default PIN.

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

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

■ General

 **MENU**  → System → General → **ENTER** 

- **Game Mode:** 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.

NOTE

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

- **Game Mode** is not available when you've set the input source to **TV**.
- 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**.
- **Panel Lock**: Lock or unlock all the keys on the panel.
- **Boot Logo**: Enable/disable the logo that displays when the TV starts up.



■ DivX® Video On Demand

 **MENU**  System → DivX® Video On Demand → **ENTER** 

Shows the registration code authorized for the TV. 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 Media Play, the registration is complete.

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



❑ Using the Source List

■ Source List







 **MENU**  → Applications → Source List → **ENTER** 


 When you press the **SOURCE** button, the **Source** screen is displayed immediately.


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

 For detailed information, refer to “Changing the Input Source” in the paper User Manual.

❑ Connecting a USB Device

1. Turn on your TV.
2. Connect a USB device containing photo, music, or movie files to the USB port on the side of the TV.
3. A pop-up window appears. Select **Photos**, **Videos**, or **Music**, and then press the **ENTER**  button.
4. The Content screen appears, listing the contents of the device. Depending on how the contents are arranged, you will see either folders, individual files, or both.
5. If necessary, use the /// buttons to select a folder, and then press the **ENTER**  button.

6. Select a file to view or play, and then press the **ENTER**  button.
7. For information about controlling playback, go to "Using Media Play" in the e-Manual.
8. Press the **RETURN** button to exit a current screen and go to the previous screen. Press the **EXIT** button to exit to the TV screen.
9. To disconnect the USB device, go to "Disconnecting a USB Device" in the e-Manual.

 Even though the player will display folders for all Content Types, it will only display files of the Content Type (**Photos**, **Videos**, or **Music**) you selected in Step 3. For example, if you selected Music, you will only be able to see music files. You can change this by pressing the **RETURN** button until you are back at the Content Type Selection screen, and then selecting a different Content Type (**Photos**, **Videos**, or **Music**).

 The TV may not be able to play unlicensed multimedia files properly.

 What you need to know before using a USB Device.


- MTP (Media Transfer Protocol) is not supported.
- The TV supports the FAT and exFAT file systems.
- Certain types of USB Digital camera and audio devices may not be compatible with this TV.
- The TV only supports the sequential jpeg format.
- The TV only supports USB Mass Storage Class (MSC) devices. MSCs are Mass Storage Class Bulk-Only Transport devices. Examples of MSCs 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.
- Do not disconnect the USB device while it is loading or transferring files.
- 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.
- The TV displays the “Not Supported File Format” message when it encounters unsupported or corrupt files.
- The USB Videos function does not support the scene search and thumbnail functions.

- MP3 files with DRM that you have downloaded from a commercial site cannot be played. Digital Rights Management (DRM) is a technology that supports the creation, distribution, and management of content in an integrated and comprehensive way. This includes protecting the rights and interests of the content providers, preventing illegal copying of contents, and managing billing and settlements.
- PTP connection mode is fully available only with digital cameras. When connecting a smartphone or tablet to the TV using PTP mode, it may not be recognized.
- A USB device that requires high power (more than 500mA or 5V) may not be supported. The TV does not support HDDs (Hard Disk Drives) connected to the USB port.
- If the TV receives no input during the time set in **Auto Protection Time**, the screen saver will run.

- The power-saving mode of some external hard disk drives may be released automatically when connected to the TV.
- If you use a USB extension cable, the TV may not recognize the USB device or may not be able to read the files on the device.
- If a USB device connected to the TV is not recognized, the list of files on the device is corrupted, or a file in the list is not played, connect the USB device to a PC, re-format the device, and then copy the files onto the device again.
- If a file you deleted from your PC is still found on the USB device, re-attach the USB device to your PC, delete the file, and then 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 over approximately 4000, some files and folders may not appear, and the TV may may not be able to open some of the folders.

Disconnecting a USB Device


1. Press the **SOURCE** button.
 2. Select the USB device, and then press the **TOOLS** button. The **Tools** menu appears.
 3. Select **Remove USB**, and then wait until the USB device is disconnected. After the device is disconnected, remove the USB device from the TV.
-  To remove a USB device from the TV, we recommend that you use the **Remove USB** function.





❑ Using Media Play


 **MENU**  → Applications → Media Play → **ENTER** 

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

1. Insert a USB device into the USB jack on the side of the TV.
2. Press the **MEDIA.P** button on your remote or select **Media Play** in the TV's menu.
3. The Content Type screen appears. Select **Photos**, **Videos**, or **Music**, and then press the **ENTER**  button.
4. The Content screen appears, listing the contents of the device. Depending on how the contents are arranged, you will see either folders, individual files, or both.

5. If necessary, use the ▲/▼/◀/▶ buttons to select a folder, and then press the **ENTER**  button.
6. Select a file to view or play, and then press the **ENTER**  or ▶ button on your remote.
7. For information about controlling playback, go to "Playing selected files" and "Controlling Photo / Video / Music Playback" in the e-Manual.
8. Press the **RETURN** button to exit a current screen and go to the previous screen. Press the **EXIT** button to exit to the TV screen.
9. To disconnect the USB device, go to "Disconnecting a USB Device" in the e-Manual.









 Even though the player will display folders for all Content Types, it will only display files of the Content Type (**Photos**, **Videos**, or **Music**) you selected in Step 3. For example, if you selected Music, you will only be able to see music files. You can change this by pressing the **RETURN** button until you are back at the Content Type Selection screen, and then selecting a different Content Type (**Photos**, **Videos**, or **Music**).




Playing selected files (Creating a play list)

These instructions apply to all content, **Photos**, **Videos**, and **Music**.


1. On a screen displaying content, press the ▲ button to select **Options** at the top right of the screen, and then select **Play Selected**.
2. Select the desired files.
 -  A check appears to the left of each selected file.
 -  Press the **ENTER**  button again to deselect the file.
3. Press the ▲ button to select **Play** at the top of the screen, and then press the **ENTER**  button. The files you selected play.
 -  You can select or deselect all files by selecting **Select All / Deselect All**, and then pressing the **ENTER**  button.

❑ Controlling Photo / Video / Music Playback

When playing a video or photo file, press the **ENTER**  button to display the playback controls. The playback controls for music are displayed at the bottom left of the screen automatically when you play a music file.





 If the option menu is not displayed, press the **TOOLS** button.

 You can also use  /  /  /  /  buttons on the remote control during playback to control playback.

 If you press the **INFO** button during playback, you can view the playback information.

Playback controls

These buttons appear on the bottom of the screen when you press the **TOOLS** button while playing back photos or videos. Some are displayed automatically when you play a music file.






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 you set **Background Music** to **Mini Player** in **Photos**, these buttons appear.

Content Settings buttons

- Photos

These buttons appear on the bottom of the screen when you press the **ENTER**  button while playing back photos.





Button	Operation	
	Slideshow Settings	Lets you set the Speed and Effects during the slide show.
	Zoom	Lets you zoom into (enlarge) images in full screen mode.
	Rotate	Lets you rotate images in full screen mode.
	Background Music	Lets you set background music when watching a slide show.
	Settings	Picture Mode / Sound Mode: Lets you select the picture or sound mode. (Dynamic, Standard, etc./Standard, Movie, etc.) Information: Lets you see detailed information about the file being played.


-  During a slide show, all files in the file list are displayed in order.
-  When you press the ► (Play) button (or ▲ button → **Options** → **Slide Show**) on a screen displaying photos, the slide show starts immediately.
-  During the slide show, you can adjust the slide show speed using the ◀◀ (REW) or ▶▶ (FF) button.
- Supported Photo Formats
 -  For the details, refer to “Specifications” in the paper user's manual.






● Videos

These buttons appear on the bottom of the screen when you press the **ENTER**  button while playing back videos.

Button	Operation	
	Search	<p>Search Titles: Lets you select and start other video files directly.</p> <p>Search Time bar: Lets you search the video at one minute intervals using the ◀ and ▶ buttons or by entering a time value directly.</p> <p> The Search Time bar may not be supported depending on the input source.</p>
	Repeat Mode	Lets you automatically play movie files repeatedly.
	Picture Size	Lets you adjust the picture size to your preference.

Button	Operation	
	Settings	<p>Subtitle Settings: Lets you play a video with subtitles. This function only works if the subtitles have the same file name as the video. For example, Bats.mp4 and Bats.smi.</p> <p>Picture Mode / Sound Mode: Lets you select the picture or sound mode (Dynamic, Standard, etc./Standard, Movie, etc.)</p> <p>Information: Lets you see detailed information about the file being played.</p>







-  If video time information is unknown, play time and the progress bar are not displayed.
-  In video playback mode, you can watch movie clips contained in a game, but you cannot play the game itself.
- Supported Subtitle / Video Formats
 -  For the details, refer to “Specifications” in the paper user's manual.




● Music

These buttons appear automatically on the bottom left of the screen when you play a music file.

Button	Operation	
	Repeat	Lets you automatically play music files repeatedly.
	Shuffle	Lets you play the music files randomly.
	Sound Mode	Lets you select the sound mode (Standard , Movie , etc.).

 The TV only displays the files with supported music 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 music files, adjust the **Equalizer** in the **Sound** menu. (An over-modulated music file may cause a sound problem.)

● Supported Music Formats

 For the details, refer to “Specifications” in the paper user's manual.

Setting the Encoding language

Set the encoding language if the text you want to view does not appear correctly.

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



❑ Using the 3D function

for PDP 4900 series

Viewing TV using the 3D function

IMPORTANT HEALTH AND SAFETY INFORMATION FOR 3D PICTURES.

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

⚠ WARNING

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

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

Before using the 3D function...


- 3D Active Glasses from Samsung's previous product (IR type) or other manufacturers are not supported.
- After the TV is initially powered on, it may take some time until the 3D display is optimized.


- The 3D Active Glasses may not work properly if there is any other 3D product or electronic devices turned on near the glasses or TV. If there is a problem, keep other electronic devices as far away as possible from the 3D Active Glasses.
- Be sure to stay within the viewing angle and optimum TV viewing distance when watching 3D pictures. Otherwise, you may not be able to enjoy proper 3D effects.
- The ideal viewing distance is three times or more the height of the screen. We recommend sitting with your eyes level with the screen.
- If you cannot play 3D videos on your Blu-ray player, take out the disk and then put it in again, or restart the Blu-ray player.


■ 3D

 **MENU**  **Picture**  **3D**  **ENTER** 

This exciting new feature enables you to view 3D content.






 "Full HD 3D Glasses™" Logo indicates compatibility between display products and 3D Glasses which are compliant with the "Full HD 3D Glasses™" format, and does not indicate the picture quality of display products.

 Some 3D modes may not be available depending on the format of the image source.

 When you watch 3D images under flickering lighting such as a fluorescent lamp (50Hz ~ 60Hz) or a 3 wavelength lamp, you may notice some screen flickering. If this occurs, dim or turn off the light.

- **3D Mode**

If you want to feel the 3D effect fully, please put on the 3D Active Glasses first, and then select a **3D Mode** from the list below that provides the best 3D viewing experience.

3D Mode		Operation
	Off	Turns the 3D function off.
	2D → 3D	Changes a 2D image to 3D.  Some file formats may not be supported.
	Side by Side	Displays two images next to each other.
	Top & Bottom	Displays one image above another.

 **3D Mode** is set to **Off** automatically when you access **Media Play** or the **e-Manual** functions.

 **3D Mode** is set to a memorized configuration value automatically when you change the input source.

- **3D Perspective:** Adjust the overall 3D perspective of the on-screen image.
- **Depth:** Adjust overall depth.
- **L/R Change:** Swap the left and right pictures.
- **3D → 2D:** Displays the image for the left eye only.




This function is deactivated when 3D Mode set to “” or “”.



Supported resolutions (16:9 only)

- HDMI

Source	Resolution	Frequency (Hz)
	1280 x 720p	59.94 / 60 Hz
	1920 x 1080i	59.94 / 60 Hz
	1920 x 1080p	23.98 / 24 / 29.97 / 30 / 59.94 / 60 Hz
Frame Packing	1280 x 720p	59.94 / 60 Hz
	1920 x 1080i	59.94 / 60 Hz
	1920 x 1080p	23.98 / 24 / 29.97 / 30 Hz

- Components & DTV

Source	Resolution	Frequency (Hz)
Components	1280 x 720p	59.94 / 60 Hz
	1920 x 1080i	59.94 / 60 Hz
	1920 x 1080p	23.98 / 24 / 29.97 / 30 / 59.94 / 60 Hz
DTV	1280 x 720p	59.94 / 60 Hz
	1920 x 1080i	59.94 / 60 Hz

- Videos / Photos (In Media Play)


For the details, refer to “Specifications” in the paper user's manual.

□ Viewing the e-Manual

■ e-Manual

 **MENU**  → Support → e-Manual → **ENTER** 




Provides instructions that explain how to use the features of your TV.

 For detailed information about using the e-Manual Screen, refer to “How to view the e-Manual” in the paper user's manual.



❑ Using Self Diagnosis

■ Self Diagnosis

 **MENU**  → Support → Self Diagnosis → **ENTER** 

- **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 to check for sound problems. Sound test plays a built-in melody that tests both speakers.
 - ☞ If you hear no sound from the TV's speakers, make sure **Speaker Select** is set to **TV Speaker** in the **Sound** menu, and then try the speakers again before performing the sound test.
 - ☞ 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.
- **Reset:** Reset all settings to the factory defaults except network settings.
 - ☞ The PIN input screen appears before the setup screen.
 - ☞ Enter your 4-digit PIN or the default PIN (0000) if you have not set your own PIN. You can change the PIN using the **Change PIN** option. (**MENU** → **System** → **Change PIN** → **ENTER** )

□ Updating the Software

■ Software Update

 **MENU**  → Support → Software Update → **ENTER** 

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

Current ver.: This is the software version already installed in the TV.

- **Update now:** You can perform a **Software Update** by downloading the latest firmware from www.samsung.com to a USB memory device, attaching the device to your TV, and then selecting **Update now**.

To upgrade the software, follow these steps:

1. Visit www.samsung.com.
2. Click **SUPPORT** on the top right of the page.
3. Enter the product's model number into the search field. As you enter the model number, a drop down will display products that match the model number.
4. Left click your product's model number in the drop down list.
5. On the page that appears, scroll down to and then click **Firmware Manuals & Downloads**.
6. Click **Firmware** in the center of the page.
7. Click the ZIP button in the File column on the right side of the page.
8. Click Send in the first pop-up that appears. Click **OK** in the second pop-up to download and save the firmware file to your PC.


9. Unzip the zip archive to your computer. You should have a single folder with the same name as the zip file.
10. Copy the folder to a USB flash drive.
11. In the TV's menu, go to **Support** → **Software Update**.
12. Select **Update now**.
13. The TV searches for the software on the USB drive. When it finds the software, the **Update Request** pop-up appears.
14. Select **OK**. The TV upgrades the software, turns off, and then turns on automatically.




Be careful not to turn off the power until the update is complete. The TV will turn off and on automatically after completing the firmware update. When you update 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 update.

❑ Changing the Use Mode

■ Use Mode

 **MENU**  → Support → Use Mode → **ENTER** 

Select the **Use Mode** suitable for the location in which you will use the TV. We strongly recommend you select **Home Use**.

 If your TV has been unintentionally set to **Store Demo**, you can change the mode with this option.

- **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 30 minutes.

❑ Viewing Contact Samsung

■ Contact Samsung

 **MENU**  → Support → Contact Samsung → **ENTER** 

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






❑ Using the Soccer Mode

■ Soccer Mode

 **MENU**  Applications → Soccer Mode → **ENTER** 

This mode provides optimized condition for watching games.

- **A** (**Zoom**): Pause playback and divide the picture into 9 parts. Select a part to zoom it in.
-  This functions is not available in the U.S. and Canada.
-  When the **Soccer Mode** is **On**, the picture and sound modes are set to **Stadium** automatically.
-  If you turn the TV off while watching **Soccer Mode**, the **Soccer Mode** will be disable.

❑ Using the Wireless Network

for PDP 4900 series

 For the details, go to www.samsung.com → **GET SUPPORT** → Find Product Support.

On the Support page, enter your TV's model number.

Select your model from the drop down list that appears, and then press the Enter button.

On the Support page for your model, enter Wireless Network into the Search FAQs and How-Tos field, and then press the Enter button.

❑ Managing the Network Connected Devices

for PDP 4900 series

✍ For the details, go to www.samsung.com → **GET SUPPORT** → Find Product Support.

On the Support page, enter your TV's model number.

Select your model from the drop down list that appears, and then press the Enter button.

On the Support page for your model, enter Network Connected Devices into the Search FAQs and How-Tos field, and then press the Enter button.

❑ Using the DLNA Functions (AllShare™)

for PDP 4900 series

 For the details, go to www.samsung.com → **GET SUPPORT** → Find Product Support.

On the Support page, enter your TV's model number.

Select your model from the drop down list that appears, and then press the Enter button.

On the Support page for your model, enter either DLNA functions or AllShare into the Search FAQs and How-Tos field, and then press the Enter button.

