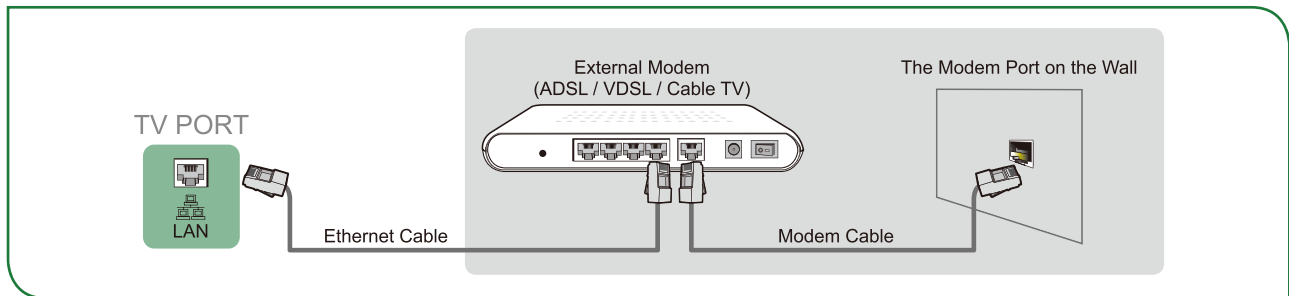# Connecting to a wired (Ethernet) network

You can attach your TV to your LAN in one of the three following ways:
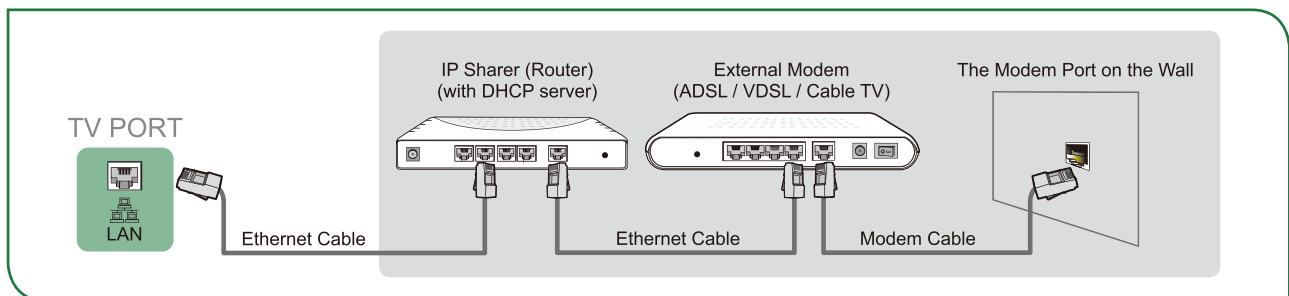
● **Option 1**

You can attach your TV to your LAN by connecting the **LAN** port on the back of your TV to an external modem using a Cat 5 LAN cable. See the illustration below.


TV PORT
LAN

External Modem
(ADSL / VDSL / Cable TV)

The Modem Port on the Wall

Ethernet Cable   Modem Cable

● **Option 2**

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

TV PORT
LAN

IP Sharer (Router)
(with DHCP server)

External Modem
(ADSL / VDSL / Cable TV)

The Modem Port on the Wall

Ethernet Cable   Ethernet Cable   Modem Cable

● **Option 3**

Depending on how your network is configured, you may be able to attach your TV to your LAN by connecting the **LAN** port on the back of your TV directly to a network wall outlet with an Ethernet cable. See the diagram below.

TV PORT
LAN

The LAN Port on the Wall

Ethernet Cable
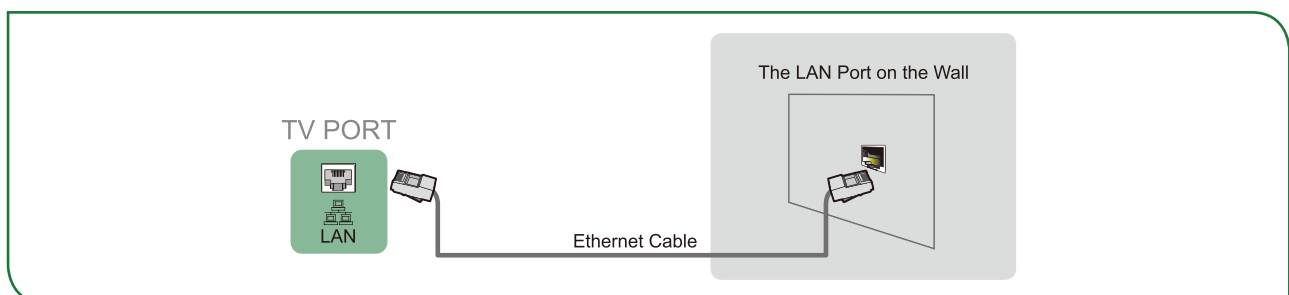
If you have a Dynamic Network, you should use an ADSL modem or router that supports Dynamic Host Configuration Protocol (DHCP). Modems and routers that support DHCP automatically provide the IP address, subnet mask, gateway, and DNS, so you don't have to enter them manually. Most home networks are Dynamic Networks.
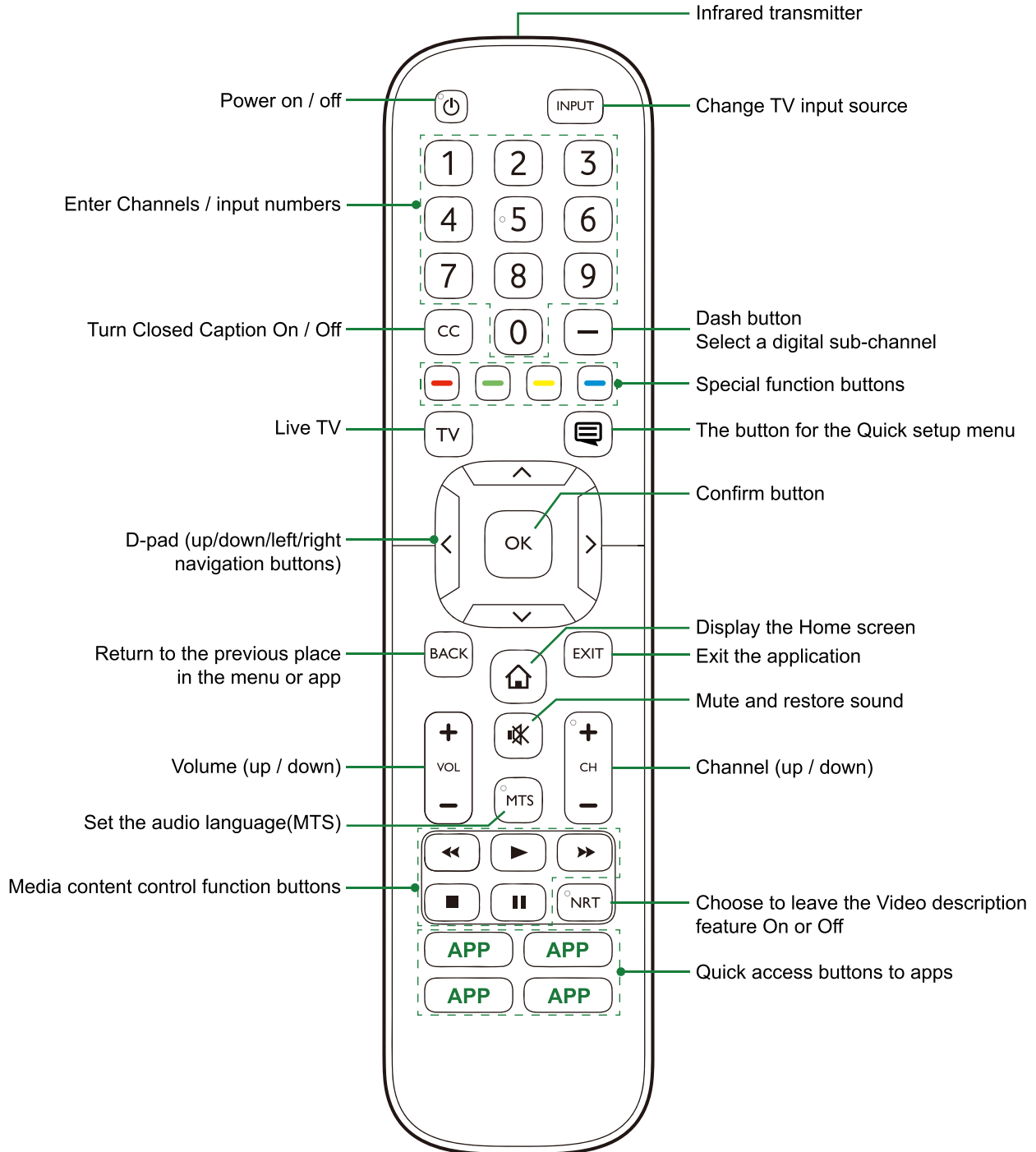
Some networks require a Static IP address. If your network requires a Static IP address, you must enter the IP address, subnet mask, gateway, and DNS values manually on your TV's Cable Setup Screen when you set up the network connection. To get the IP address, subnet mask, gateway and DNS values, contact your Internet Service Provider (ISP).
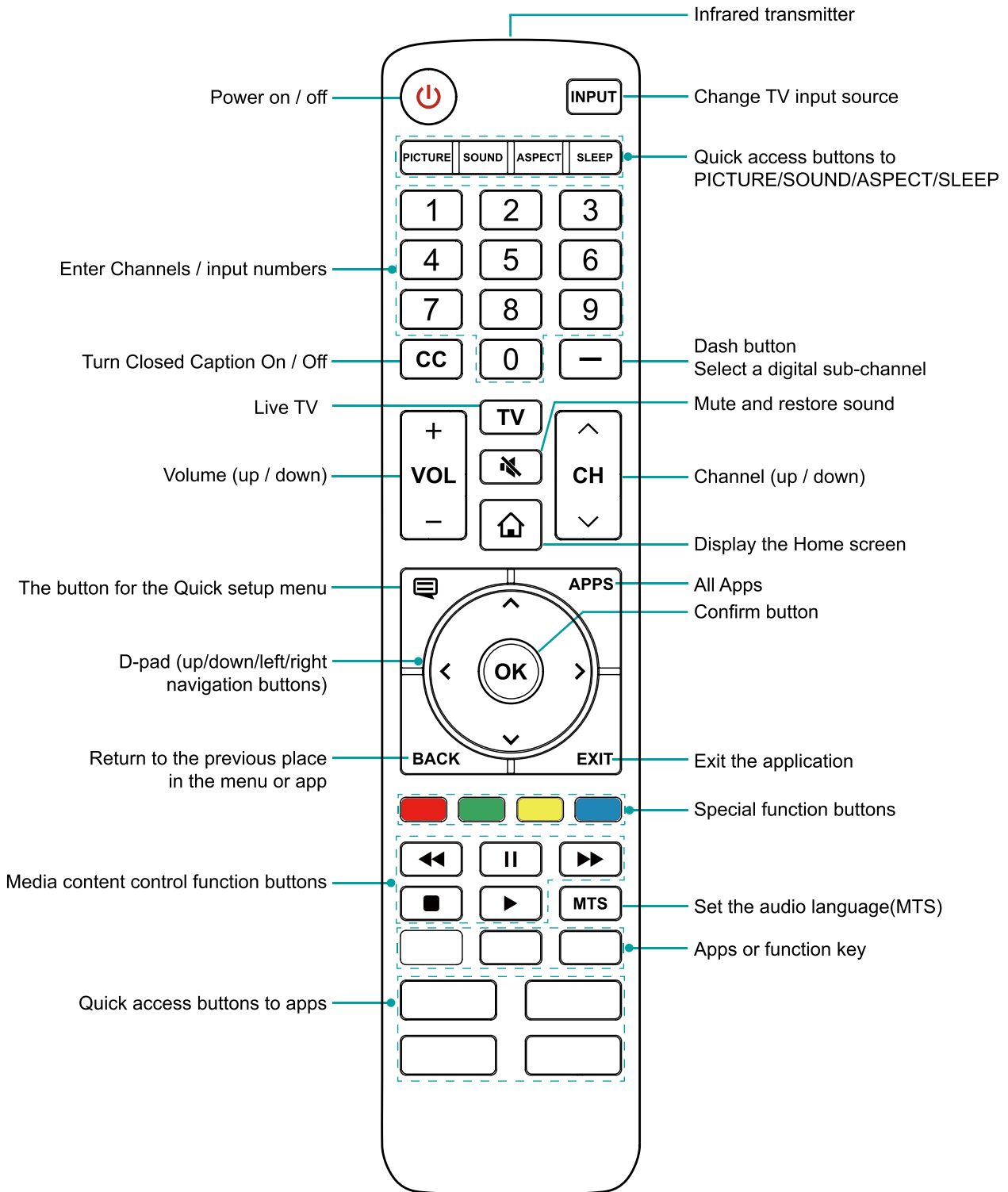
☑ **NOTE**

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

Using Your TV Remote Control

Buttons on your TV remote

Infrared transmitter

Power on / off

INPUT

Change TV input source

Enter Channels / input numbers

1 2 3
4 5 6
7 8 9

Turn Closed Caption On / Off

CC 0 —

Dash button
Select a digital sub-channel

Special function buttons

Live TV

TV

The button for the Quick setup menu

Confirm button

OK

D-pad (up/down/left/right navigation buttons)

Display the Home screen

Return to the previous place in the menu or app

BACK EXIT

Exit the application

Mute and restore sound

Volume (up / down)

VOL CH

Channel (up / down)

MTS

Set the audio language(MTS)

Media content control function buttons

NRT

Choose to leave the Video description feature On or Off

APP APP
APP APP

Quick access buttons to apps

Infrared transmitter

Power on / off — ⏻   INPUT — Change TV input source

PICTURE | SOUND | ASPECT | SLEEP — Quick access buttons to PICTURE/SOUND/ASPECT/SLEEP

Enter Channels / input numbers — 1 2 3 4 5 6 7 8 9

Turn Closed Caption On / Off — CC   0   —   Dash button
Select a digital sub-channel

Live TV — TV   Mute and restore sound

Volume (up / down) — + VOL –   🔇   CH   Channel (up / down)

🏠   Display the Home screen

The button for the Quick setup menu —   APPS — All Apps
Confirm button

D-pad (up/down/left/right navigation buttons) —   OK

Return to the previous place in the menu or app — BACK   EXIT — Exit the application

Special function buttons

Media content control function buttons — ⏪ ⏸ ⏩ ■ ▶ MTS — Set the audio language(MTS)

Apps or function key

Quick access buttons to apps

☑ NOTE

• Check information according to the actual remote control in the accessory bag.

Remote control range information

● The remote control can work at a distance of up to 26 feet in front of the TV set.

● It can work at a 30 degree horizontal or vertical angle.
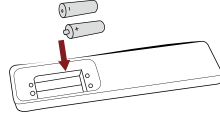
Begin using your remote

1. Slide the back cover to open the battery compartment of the remote control.
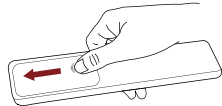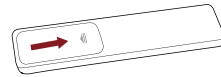

❶	❷	❸
Gently push and slide	Insert the batteries	Gently push and slide

2. Insert two AAA size batteries. Make sure to match the (+) and (-) ends of the batteries with the (+) and (-) ends indicated in the battery compartment.

3. Replace the battery compartment cover.

☑ NOTES

- Discard batteries in a designated disposal area. Do not throw them into a fire.
- Remove old batteries immediately to prevent them from leaking into the battery compartment.
- If you do not intend to use the remote control for a long time, remove the batteries.
- Battery chemicals can cause a rash. If the batteries leak, clean the battery compartment with a cloth. If chemicals touch your skin then wash it immediately.
- Do not mix old and new batteries.
- Do not mix alkaline, standard (carbon-zinc) or rechargeable (NiCd, NiMH, etc.) batteries.
- Do not continue using the remote if it gets warm or hot.
- Call our Support Center immediately on the support website.

Program your universal cable or satellite remote control to operate your new television (only for USA)

If you would like to program your other household remote controls to your new television,please refer to the User's Manual supplied by your Cable or Satellite provider. The Cable or Satellite providers' User's Manuals should include instructions on how to program their remote to your television.

A list of codes for the most common Cable and Satellite providers are listed below. Use the code that is associated with your Cable or Satellite provider (if applicable).

DIRECTV

0178, 10178, 10019, 10748, 11314, 11660, 11710, 11780, 12049, 10171, 11204, 11326, 11517, 11564, 11641, 11963, 12002, 12183

Time Warner Cable

386, 0178, 10178, 400, 450, 461, 456, 0748, 1463, 0463, 10463

Comcast

0178, 10178, 10463, 11463, 10748, 11314, 11660, 10171, 11204, 11326, 11517, 11641, 11780, 11785, 11892, 11963, 12002

Cox Communications

0178, 10178, 1326, 1463

Dish Network

505, 627, 538, 720, 659

If the code associated with your Cable or Satellite provider is not listed, does not work or you cannot locate the instructions to program your remote, call your local Cable or Satellite provider's customer service center.

If your Cable or Satellite provider does not have a code available, please contact us.

Using your cable set-top box or satellite receiver remote as a 'universal' remote

If you prefer to use your Cable Set-top Box or Satellite Receiver Remote as a 'Universal Remote', then visit the Support page to view a list of the codes.

Completing the First-Time Setup Menu

Press the **[⏻]** button on the remote to turn on the TV.

After the splash screen that displays the logo appears, begin the first-time setup menu.

Screen	Task
Language and Location	Using the D-pad arrows of your remote, choose your Language, Country and Time Zone.
End User License Agreement	Choose **Decline** or **Agree**, then select **Confirm** icon and press **[OK]**.
TV Usage	Select **Home Mode**(which appears by default). ☑ **NOTE** • **Store Mode** should only be selected by Retailers who plan to demonstrate the TV.
Network Connection	If your TV does not automatically detect an Ethernet connection, then use a wireless network. Select your network from the list that displays, input the password. Also you can add a hidden network.
Select your Primary input source	Select how you receive your TV channels. Choose from one of the following sources below. • **HDMI** • **ANT/CABLE** • **AV** • **COMPONENT** • **NONE** ☑ **NOTE** • If you use an antenna to receive channels, then you must complete the first-time setup menu in order to run a channel scan.

Shortcuts Instructions

You can use shortcuts on the remote control for fast operation.

Turning your TV on or off

● To turn your TV on:

1. Connect the power cord to the back of the TV, then plug the power cord into an AC outlet.

2. When the TV is powered on, press the **[⏻]** button on the remote to turn on TV.

● To turn your TV off, press the **[⏻]** button on the remote.

☑ **NOTES**

- When your TV is in standby mode, it is still consuming power. To completely disconnect power, please remove the plug from the AC outlet.
- If your TV does not receive an input signal for several minutes, it automatically goes into standby mode.

Selecting the input source

Select the Input Source depending on the video device you have connected to your TV.

To select the input source:

1. Turn on your TV, then press the **[INPUT]** button on the remote, the list of Source appears.

2. Press the D-pad arrows of your remote to select the input source.

3. Press the **[OK]** button to confirm your selection.

Using the Live TV

To view broadcast programs, press the **[TV]** button on your remote.

Channel search guide

When you select ANT/CABLE as input, if no TV channels were saved before, you will be prompted to do a channel search. You can also go to **Setting** menu > **Channel** to change the channel settings.

Launch Live TV

After channel tuning is done for the first time, the screen will display Live TV operating tips, including: how to load the channel list, how to Load info Bar and so on.
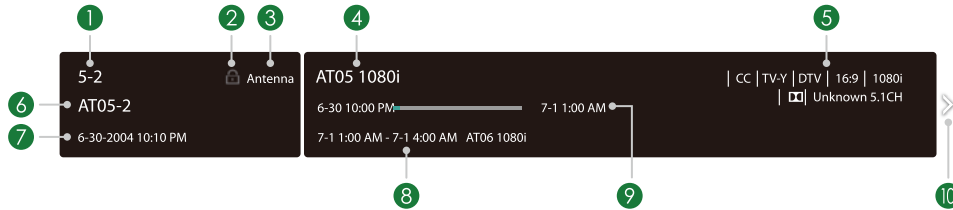
[Menu] Load more functions

[OK] Load Channel List

[∧] Load Info Bar

[BACK] Load previous channel

Viewing channel information

As you use the **[CH+ / CH-]** button on your remote to scroll through channels, an information banner appears on the top of the screen.

The information banner displays the following information:

1. Channel number
2. Lock status
3. Input
4. Program name
5. Show identification
6. Channel name
7. Current date and time
8. Beginning and end time of the next program
9. Start/Stop time progress bar of the current program
10. Prompt

If you are watching a particular channel, you can also press the up arrow button of your remote to view channel information.

Viewing a channel list

After you have done an automatic channel scan (if you're using an antenna) or are receiving your channels through a cable provider, you can view your list of channels by pressing **[OK]** on your remote.

You will see the channel list display on the right side of the screen.

Creating a Favorite List

To quickly access your most-watched channels, you can create a Favorite List.

To create your Favorite List:

1. Press the **[▤]** button on your remote.
2. Press the **[∨]** button to select **Settings**, and then press **[OK]** button to enter the Settings menu.
3. Select **Channel** > **Favorite List**.
4. Using the **[∧ / ∨]** buttons of your remote, select a channel and press **[OK]** button.

A heart-shaped indicator will appear beside the channel as confirmation that it has been successfully added.

Viewing your Favorite list

To view channels that you've added to your Favorite List simply press **[OK]** on your remote to call out the channel list.

The channel list appears on the right side of the screen and heart-shaped icons are shown next to the channels that make up your Favorite List. You can press **[< / >]** buttons to switch the channel list (**Antenna** or **Cable**) , **Favorite** and **History** list.

Using the Menu Function

To quickly access menu function, press the **[🖂]** button on your remote.

Accessibility

You can set **Menu Audio**, **Video Description** and **High Contrast Menu** on or off. The function can be used to meet the needs of visually impaired people.

When the **Menu Audio** is set on, the contents of each menu display can be broadcast out.

When the **Video Description** is set on, you can hear the introduction of relevant programs.

When the **High Contrast Menu** is set on, the comparison of menu items is more vivid.

Number Pad

You can press digital keys on the left of the screen, to get the relevant channels easily.

Picture Mode

If you'd like to configure the settings for your picture, then there are seven types of picture modes available: **Vivid**, **Standard**, **Energy Saving**, **Theater**, **Game**, **Sport** and **Calibrated**.

Sound Mode

Select a preset sound mode to suit the type of content you are listening to: **Standard**, **Theater**, **Music**, **Speech** and **Late Night**.

Aspect Ratio

Adjust the Aspect Ratio to stretch or zoom in on your picture. You can choose from the following settings: **Auto**, **Normal**, **Zoom**, **Wide**, **Direct**, **Dot-By-Dot**, **Panoramic** or **Cinema**.

CC

You can switch between **CC Off**, **CC On** and **CC On When Mute.**

Audio Language(MTS)

You can choose the audio language in DTV mode and you can set MTS for Mono, Stereo or SAP in ATV mode.

Audio Only

When you select this option, the screen will not display the picture. You can only listen the audio. Press any button except the **[⏻]** button, **Volume [+/-]** buttons and **[🔇]** button to restore operation.

Settings

The Settings Menu consists of the following settings: Picture, Sound, Network, Channel, Accessibility, System and Support.

Basic Settings

Your TV comes with many TV setting features to allow you to customize the picture based on your viewing preference and environment. As you navigate throughout different screens to access settings, some of the indicators appear as words On and Off.

Using the Settings Menu

You can press the **[🖳]** button to access the **Menu**, press the **[∨]** button on the D-pad to select **Settings**, and then press **[OK]** button to enter the **Settings Menu**.

The **Settings Menu** consists of the following settings:

- **Picture**
- **Sound**
- **Network**
- **Channel**
- **Accessibility**
- **System**
- **Support**

In each menu, you can:

- Press the **[∧ / ∨]** buttons to select an item.
- Press the **[OK]** buttons to enter the sub-menu or to set on or off.
- Press the **[< / >]** buttons to adjust the value.
- Press the **[BACK]** button to return to the previous menu.
- Press the **[EXIT]** button to exit the menu.

Picture Menu

● **Backlight:** Some models have a **Dynamic Backlight Control** setting that you can turn Off and set to High,Middle or Low. Some models have a **AquoDimming** setting is available that will enable the TV to automatically adjust the backlight by sections according to the changes in the image and increase the contrast. The **Backlight Level** setting enables you to adjust how bright you want images to appear, lower settings create darker images. In addition, an **Automatic Light Sensor** setting is available that will enable the TV to automatically adjust the picture settings according to the amount of ambient light in your room. The **Minimum Backlight** setting enables you to adjust the lower point of the dynamic backlight adjustment scope. This is a money-saving feature because it reduces power consumption.

Picture

Set the overall brightness of the screen.

Backlight

Picture Mode: Energy Saving

● Contrast: 50
● Brightness: 50
● Color: 55
● Tint: 0
● Sharpness: 10

Aspect Ratio: wide

Advanced Picture Options

● **Picture Mode:** If you'd like to configure the settings for your picture, then there are seven types of picture modes available: **Vivid**, **Standard**, **Energy Saving**, **Theater**, **Game**, **Sport** and **Calibrated**.

Once you choose the mode, you can adjust the picture based on the following settings:

● **Contrast:** Adjust the Contrast level to increase or decrease how bright images appear.

● **Brightness:** Adjust the Brightness level to generate lighter or darker images.

● **Color:** Adjust the color intensity of the picture for a more vibrant image.

● **Tint:** Adjust the colors from a green to magenta tint to view the natural skin tones of people on the screen.

● **Sharpness:** Adjust how sharp or soft edges of images appear.

● **Aspect Ratio:** Adjust the Aspect Ratio to stretch or zoom in on your picture. You can choose from the following settings: **Auto**, **Normal**, **Zoom**, **Wide**, **Direct**, **Dot-By-Dot**, **Panoramic** or **Cinema**.

● **Advanced Picture Options:** Adjust advanced picture settings based on your viewing preference.

   • **Overscan:** Change the video size settings to slightly crop the edges of the displayed image.

   • **Color Temperature:** Select a preset color temperature. Adjust how warm(red) or cool(blue) the white areas of an image appears.

   • **AquoMotion Enhancement:** This setting minimizes afterimages that are left on the screen when viewing fast-moving objects. You can adjust it from Smooth, Standard (Some models don't support this function), Clear or Off. A Smooth setting will produce a smoother picture whereas a Clear setting will result in a picture that has less judder (shaking).

   ☑ **NOTE**
     • Some models don't support this function.

   • **Digital Noise Reduction:** Improve how clear the picture appears by reducing noise.

   • **HDMI Dynamic Range:** Adjust the HDMI signal range to be more suitable for the content.

   • **Active Contrast:** Automatically darken dark areas and lighten light areas of images to see more details.

   • **Color Space:** Change the range of colors the TV displays.

   ☑ **NOTE**
     • Some models don't support this function.

● **Expert Settings:**

   • **Color Tuner:** Adjust the Hue, Saturation and Brightness of color settings.

   • **White Balance:** Adjust the intensity of red, green and blue lights to view the true colors of all images in the picture.

   • **Gamma Adjustment:** Adjust the Gamma to choose how the TV will respond to the content grayscale. In a dark room choose a Higher number like 2. In a brighter area select a Lower number like 0. In general, 1 is normally recommended.

   ☑ **NOTE**
     • Some models don't support this function.

- **RGB Only Mode:** View images based on default settings or choose the color red,blue or green.

● **Apply Picture Settings:** Adjust current picture mode to apply to all sources or just current source.

● **Reset Picture Settings:** Reset all the picture settings in the current picture mode to the factory default values.

Sound Menu

● **Sound Mode:** Select a preset sound mode to suit the type of content you are listening to: **Standard**, **Theater**, **Music**, **Speech** and **Late Night**.

Once you choose the mode, you can adjust the audio based on the following settings:

● **Total Sonics™ Total Sonics:** Optimizes overall sound quality by increasing bass, making dialog clear and natural, and widening the sound field.

● **Total Surround™ Total Surround:** Provides surround sound experience with psycho-acoustic processing to place sounds beside, behind, and above the viewer. For best results use with Total Sonics.

● **Total Volume™ Total Volume:** Maintains consistent loudness levels from wide dynamic range programs, loud commercials, and channel or input changes.

● **Wall Mount setup:** Automatically optimize the sound based on the position of the TV.

● **Advanced Audio Settings:** Tune the audio settings and quality of the TV.

- **Balance:** Adjust the left and right speaker strength to optimize audio for a specific location.
- **TV Speaker:** Disable the TV speaker when you are using a sound bar, ARC or any other external audio amplifier.
- **Digital Audio Out:** Select the digital audio output format that best suits the audio device type. For example, choose **RAW** (which is uncompressed audio in RAW form) if you have 5.1 Channel Surround Sound Speaker set up. Choose **PCM** if you have an amplifier that does not support Dolby Digital technology.
- **Digital Audio Delay:** Adjust the digital audio output delay time to sync sound from an external speaker with the images on the TV.
- **Lip Sync:** Synchronize the displayed image with the audio output.
- **Equalizer:** Boost the volume at different frequencies.
- **Preferred Audio Language:** Set the default audio output language for the type of digital broadcast content that you're viewing.
- **Audio Out:** Change the way audio is sent through the type of device that's connected to your TV Audio Out port.

● **Reset Default Audio Settings:** Reset all of the audio settings in current audio mode to the factory default values.
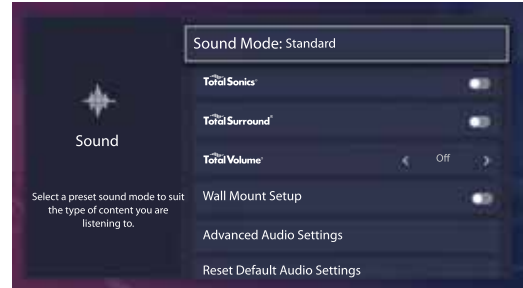
Network Menu

● **Network Configuration:** Set up the network to gain full access of Smart TV features.

When the Connection Type is **Ethernet**, means you choose a wired network connection to access the Internet.

• **IP Setting:** Configure the IP setting for your network connection.

When the Connection Type is **Wireless**, means you choose a wireless network connection to access the Internet.

• **Refresh:** Refresh wireless network.

• **Add:** You can add wireless network.

• **Advanced Settings:** Configure the advanced wireless network settings for the TV.

● **Connection Test:** Start a network connection test.

● **Network Information:** View information about your network connection.

● **Wake on Wireless Network:** Using a wireless connection, turn on your TV with a screencast feature inside an app.

● **Wake on LAN:** Using an Ethernet connection, turn on your TV with a screencast feature inside an app.

Channel Menu

● **Tuner Mode:** Select if you receive TV channels over the air (antenna) or through a cable set top box.

● **Auto Channel Scan:** Automatically scan for channels to view programming from your TV source.

● **Manual Scan:** Type in a channel to add it manually to your TV.

● **Channel Skip:** Skip a channel that your TV picked up during a previous channel scan search.

● **Favorite List:** Quickly access your most-watched channels by adding them to the Favorite list.