

# Preparation for using your new TV

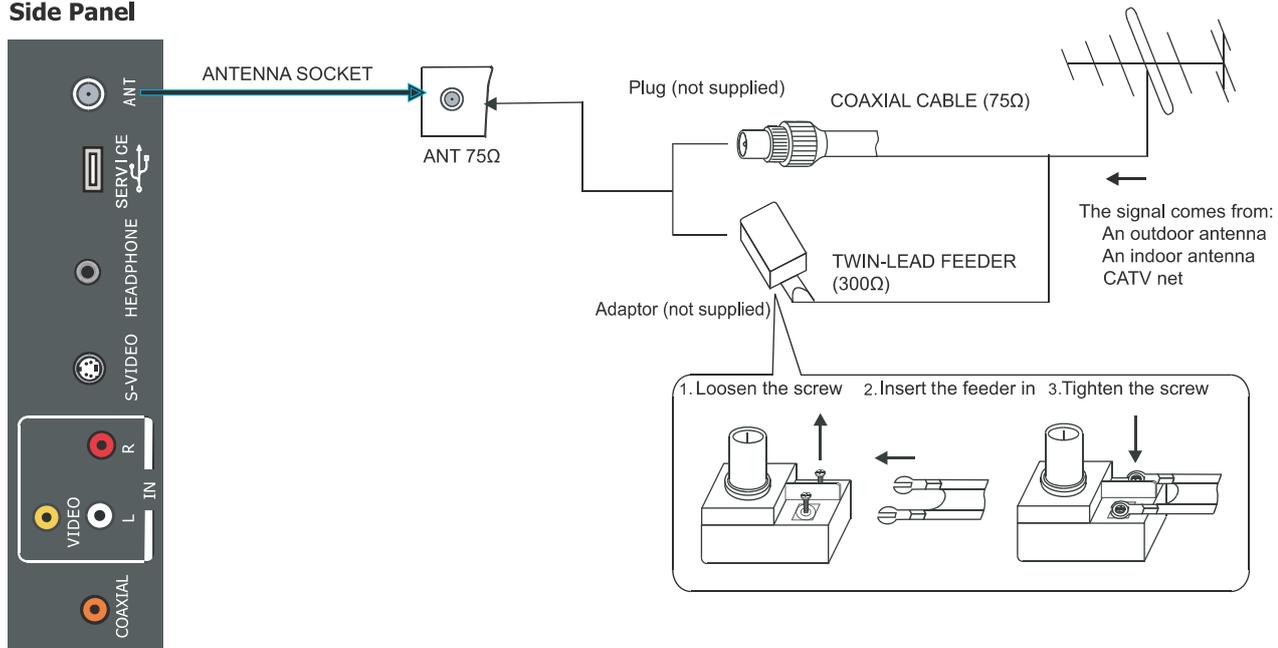
## Connecting your TV

Caution: Do not plug in the TV until you have finished connecting all of your equipment.

### Connecting to an antenna

To enjoy the television programs transmitted by your local TV stations, you need an indoor or outdoor antenna (not supplied). An outdoor antenna is necessary for superior picture quality. If you are a subscriber of your local cable network net, the outdoor or indoor antenna is not needed. Connect the equipment as shown below.

#### Side Panel



## Connecting Cable/ Satellite and A/V Equipment

To enjoy the multimedia features, you can connect your TV to A/V equipment such as VCR, DVD, Digital Video Recorder (DVR), Cable Set Top box, Satellite receiver, BluRay Camcorder, Audio amplifiers, etc., and select signal source using your remote control.

Connect audio cables to "R -AUDIO - L" on the rear of your set and the other ends to corresponding audio out connectors on the A/V device.

**NOTE:** 1. Headphones are not included.

2. No sound will be heard from the main unit speakers when a headphone mini-plug is connected into the headphone jack.

## Service jack

Connector for service only (do not connect any equipment here).

## Connecting component devices (DVD/DVR)

Connect Component video and audio cables to Component inputs ("PR/CR", "PB/CB", "Y") on the rear of your set and the other ends to corresponding component video out connectors on the DVR or DVD.

The Y, PB/CB and PR/CR connectors on your component devices (DVR or DVD) are sometimes labeled Y, B-Y and R-Y or Y, CB and CR (Colors for inputs and cables must correspond to both devices).

NOTE: Some devices such as a DVR or DVD players require 'Component/YPBPR' signal to be set via output in the devices settings. Please consult your device user manual for instructions.

# Preparation for using your new TV

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## Connecting HDMI

Supports digital connections between HDMI - enabled AV devices such as (DVRs, DVD, BluRay, HDDVD, AV receivers and digital devices). No sound connection is needed for an HDMI to HDMI connection.

NOTE: Some devices such as a DVR or DVD players require a HDMI signal to be set via the output in the devices' settings. Please consult your device user manual for instructions.

What is HDMI?

HDMI, or high-definition multimedia interface, is a next-generation interface that enables the transmission of digital audio and video signals using a single cable without compression.

"Multimedia interface" is a more accurate name for it because it allows multiple channels of digital audio (5.1 channels). The difference between HDMI and DVI is that the HDMI device is smaller in size, has the HDCP (High Bandwidth Digital Copy Protection) coding feature installed, and supports multi - channel digital audio.

Use the HDMI terminal for HDMI connection to a compatible device.

If your external device has DVI only, you should use a DVI-to-HDMI cable( or adapter) for the connection, and the "R -AUDIO - L" terminal on DVI for sound output.

## Connecting Computer

Connect the VGA cable to "VGA (VGA IN)" on the rear of your set and the other end to the Video Card of your computer.

Connect the stereo audio cable to "VGA AUDIO IN" on the rear of your set and the other end to "Audio Out" of the sound card on your computer.

This device may not be compatible with all PC video/graphic cards.

## Connecting AUDIO

Connect audio cables to "R -AUDIO - L" on the rear of your set and the other ends to corresponding audio in connectors on the Amplifier or DVD Home Theater.

## Connecting to a cable converter box

This television has an extended tuning range and can tune most cable channels without using a cable converter box. Some cable companies offer premium pay channels in which the signal is scrambled. Descrambling these signals for normal viewing requires the use of a descrambler device which is generally provided by the cable company.

# Preparation for using your new TV

- **For subscribers to Basic Cable TV Service**

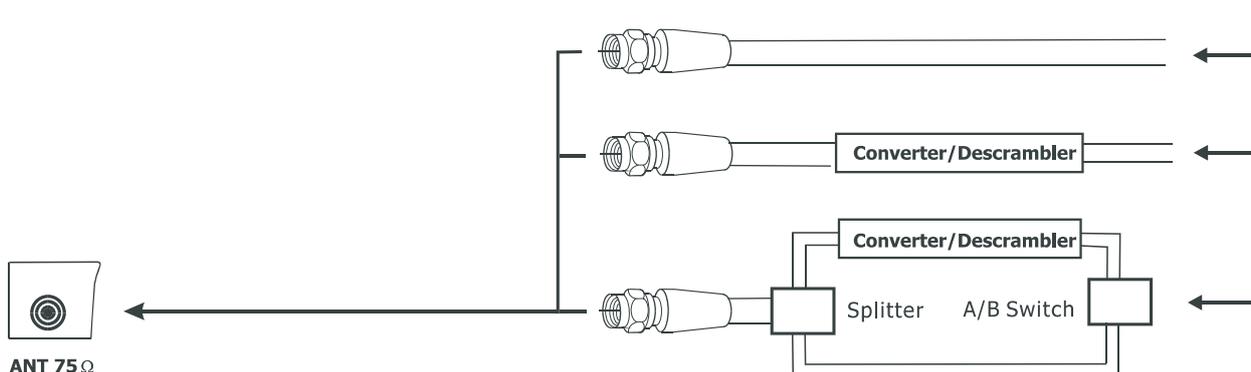
For basic cable service not requiring a Converter/Descrambler box, connect the CATV 75 ohm Coaxial Cable directly into the Antenna Jack on the back of the television.

- **For subscribers to Scrambled Cable TV Service**

If you subscribe to a cable service which requires the use of a Converter/Descrambler box, connect the incoming cable to the Converter/Descrambler box and connect the output of the box to the Antenna Jack on the back of the television. Follow the connections as shown below. Set the television to the output of the Converter/Descrambler box (usually channel 3 or 4) and use the Converter/Descrambler box to select channels.

- **For Subscribers to Unscrambled Basic Cable with Scrambled Premium Channels**

If you subscribe to a cable service in which basic cable channels are unscrambled and premium channels require the use of a Converter/Descrambled box, you may wish to use a two-set signal splitter (sometimes referred to as a two-set coupler) and an A/B Switch box from the cable installer or an electronics supply store. Follow the connections shown below. With the switch in the B position, you can directly tune any unscrambled channels on your TV. With the switch in the A position, tune your TV to the output of the Converter/Descrambler box (usually channel 3 or 4) and use the box to tune scrambled channels.



**Note:**

When you use a converter box with your TV, there may be features that you cannot program when using the remote control.

# Using the remote control

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## Preparing the remote control for use

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### Installing the remote control batteries

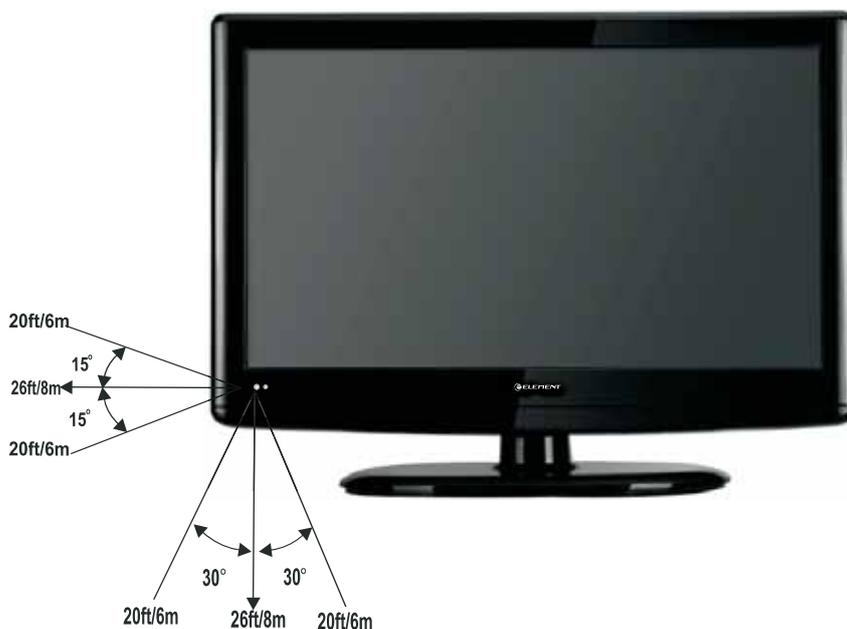
1. Open the battery cover on the back of the remote control.



2. Install two AAA size(1.5V) batteries. Match the + and - signs on the batteries to the signs on the battery compartment.
3. Close the battery cover.

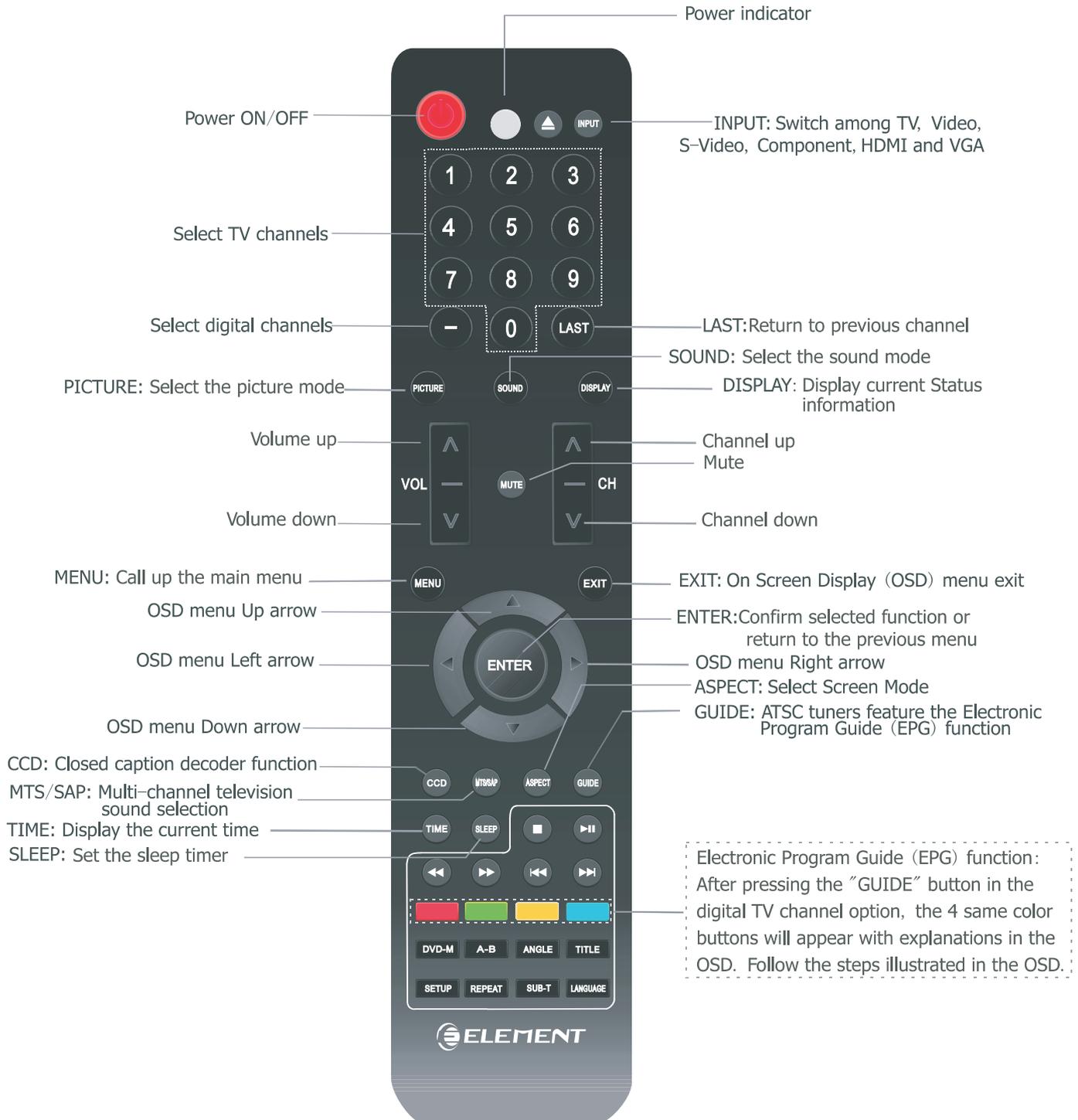
Note:

1. Dispose of your batteries in a designated disposal area. Do not throw batteries into fire.
2. Do not mix battery types or combine used batteries with new ones.
3. Remove dead batteries immediately to prevent battery acid from leaking into the battery compartment.
4. If you do not use the remote control for a long time, remove the batteries.
5. The effective range of the remote control is demonstrated by the following figure:



# Using the remote control

## Learning about the remote control



# Understanding the TV features

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- **Multimedia** - All in one TV receiver, Video Monitor and PC display.
- **Wider viewing angle** for 16:9 and 4:3 display screens - over a 160 degree viewing angle and a 16:9 display panel.
- **Digital display device** - Irrespective of magnetic or geomagnetic effects, this device accurately reproduces images without any distortion or blur.
- **Closed caption decoder** - You may view specially labeled (cc) TV programs, movies, news, prerecorded tapes, etc. with either a dialogue caption or text display added to the program.
- **V-chip** - Enables parents to prevent their children from watching inappropriate programs on TV.
- **User adjustable Sleep timer**
- **Multi-language capabilities**

## Basic Operation

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### Menu operation

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#### Power ON/OFF

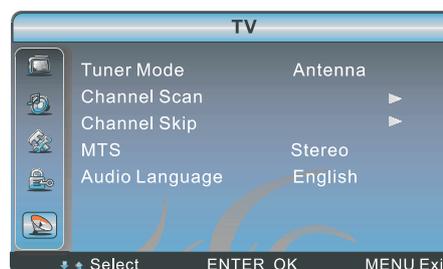
1. Connect the TV to a power outlet. If the power indicator is red, it means that the TV is switched off. Press the Power button on the front control or on the remote control to switch on the TV. Once the Power button is switched on, the power indicator will be displayed as blue. Several seconds later, the TV picture will be displayed on the screen.
2. Press the Power button on the front control or on the remote control to turn the TV off temporarily.
3. Always remove the AC power plug from the outlet when not using this TV for a long period of time.

#### Signal source selection

Press the **[INPUT]** button to select TV, AV, S-Video, Component, VGA and HDMI inputs. There are two ways to select the source: One is to press the **[INPUT]** button continuously, while the other is to use the **[ARROW]** and **[ENTER]** buttons to confirm the source.

#### TV Settings

1. Press **MENU** to open the OSD option
2. Press **▲** or **▼** to highlight TV, then press **▶** to enter the TV menu.
3. Press **▲** or **▼** to highlight an option, then press **◀** or **▶** to adjust the option. You can adjust:



- **Tuner Mode** - Select the TV signal source. You can select **Antenna** or **Cable**.
- **Channel Scan** - Scans for channels that have signals and stores the channels information in memory. When you press **◀** or **▶**, your TV skips any channels that do not have a signal.
- **Channel Skip** - Deletes a channel stored in memory. When you press **CH+** or **CH-**, your TV skips the channel you deleted. You can still tune to the channel using the number buttons on the remote control.
- **MTS** - Selects the sound mode. You can select Mono, Stereo, or SAP (second audio program).
- **Audio Language** - Selects the audio language for a program.

#### Select channels

Please use **[CH+ /CH-]** button on the remote to select channels. **[CH+]** indicates channel number up; **[CH-]** indicates channel number down. Press **[CH▲ /Ch▼]** button on the side panel of the TV to select the channels. If you want to choose any of the skipped channels, press the number directly on the remote.

## Basic operation

### Use [Mute] button

Press the [Mute] button to mute the sound. Press the [Mute] button again to resume the sound.

### Select picture modes

Press the [PICTURE] button to select the picture mode from four options: Standard, Movie, User and Vivid. In the "User" mode you can adjust the picture mode based upon your personal preference.

### Select sound modes

Press the [sound] button to select sound modes from Standard, Speech, User, and Music. In the User Mode, you can adjust the audio mode based upon your personal preference.

### Select screen modes

Press the [ASPECT] button to select the aspect ratio between picture width and picture height (High Definition 16:9 pictures will be displayed in original format 16:9, named Wide). The options for SD (Standard Definition 4:3) are Normal, Wide, Zoom and Cinema

- 1 Normal  
The original 4:3 aspect ratio (1.33:1 signal) is preserved, so black bars are added to the left and right of the image. Standard TV broadcasts are displayed with a 4:3 aspect ratio.



- 2 Wide  
When watching a standard broadcast or full-frame movie in this mode, the display image is stretched proportionately to fill the TV screen. When watching a widescreen (1.78:1 signal) program or movie, the display image fills the TV screen.



- 3 Zoom  
Stretches the 4:3 aspect ratio image vertically and horizontally to fill the screen at 1:1.78 aspect ratio.



- 4 Cinema  
Stretches the 4:3 aspect ratio image vertically and horizontally to fill the screen at 1:2.35 aspect ratio.



## Basic operation

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### Use [GUIDE] button

Press the [GUIDE] button to display features of the ATSC program and the EPG function.

### Use [DISPLAY] button

Press the [DISPLAY] button to view current source information.

### Use [EXIT] button

Press the [EXIT] button to exit the OSD menu.

### Select channels by numbers

To select a channel: Press the channel number you would like to go to. For example, to select channel number 120, press buttons 1, 2 and 0, respectively.

### Use [MENU] button

Press the [MENU] button to display the TV OSD menu.

### Use [LAST] button

Press the [LAST] button to return to the previous channel.

### Use [ENTER] button

Press the [ENTER] button to select a particular item.

### Adjust Volume

Press [VOL+ /VOL-] button to adjust the volume.

### Use [CCD] button

Press the [CCD] button to change the CCD mode. Using this button will set the Closed Caption mode when viewing a DTV or TV channel.

**Note:** For DTV the options are CC1, CC2, CC3, CC4, Service1 or Service2. For TV and AV, the options are On or Off. Additionally, this button stops the CD, DVD or VCR when the component is activated with the remote control.

### Use [MTS/SAP] button

Press the [MTS/SAP] button to change the sound mode (Mono, Stereo, SAP). This button will select the MTS options of Stereo, SAP, or Mono in TV mode, alternate audio channels, and when available, in DTV mode.

### Use [SLEEP] button

Press the [SLEEP] button repeatedly to set the sleep time, which can be set to: 5 Mins, 10 Mins, 15 Mins, 30 Mins, 45 Mins, 60 Mins, 90 Mins, 120 Mins, 180 Mins, 240 Mins, and Off.

### Use [TIME] button

Press the [TIME] button to obtain the current time.

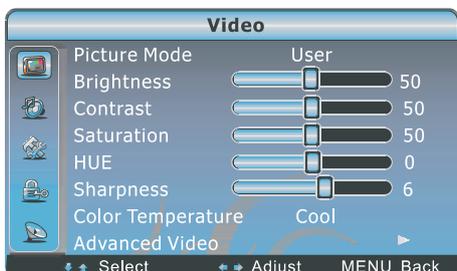
# Basic operation

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## Video mode adjustment

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1. Press **MENU** to open the OSD option
2. Press **▲** or **▼** to highlight Video, then press **▶** to enter the Video menu"Refer to page 12 "Select picture mode



3. Press **▲** or **▼** to highlight an option, then press **◀** or **▶** to adjust the option. You can adjust:
  - **Picture Mode** - Adjusts the Picture Mode. You can select Standard, Movie, User, or Vivid.
  - **Brightness** - You can increase or decrease the brightness of the picture. Increasing the brightness can add more light to dark areas of the picture, while decreasing the brightness can add more darkness to light areas of the picture.
  - **Contrast** - You can increase or decrease the contrast of the picture. Increase the contrast to adjust the white areas of the picture or decrease the contrast to adjust the black areas of the picture.
  - **Saturation** - Adjusts the intensity of the colors.
  - **HUE** - Adjusts the overall color of the picture.
  - **Sharpness** - You can increase the sharpness level for clearer images or decrease the sharpness level for smoother images.
  - **Color temperature** - Changes the color temperature. You can select the color temperature from three options: Cool, Standard or Warm.
  - **Advanced Video** - Accesses advanced video settings such as DNR, Black Level, Extender, White Peak Limiter and Flesh Tone.

## Audio mode adjustment

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1. Press **MENU** to open the OSD option
2. Press **▲** or **▼** to highlight **Audio**, then press **▶** to enter the **Audio** menu.



3. Press **▲** or **▼** to highlight an option, then press **◀** or **▶** to adjust the option. You can adjust: