

# Panasonic<sup>®</sup>

Model No.:  
TH-32H410K  
TH-43H410K

## Operating Instructions LED TV



For the purpose of recycling to facilitate effective utilization of Resources, please return this product to a nearby authorized collection center, registered dismantler or recycler, or Panasonic service center when disposing of this product.

Thank you for purchasing this Panasonic product.  
Please read these instructions carefully before operating this product and retain them for future reference.

The images shown in this manual are for illustrative purposes only.

English

**HDMI**<sup>™</sup>  
HIGH DEFINITION MULTIMEDIA INTERFACE

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AUDIO

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### Note:

1. The graphics in this manual are only for reference.
2. Your TV may be slightly different from that shown in this manual.
3. Designs and specifications are subject to change without notice.
4. In dry environment due to static electricity, the product may restart and return to the main OSD interface, USB player interface or the previous source mode. It is normal and please continue to operate the TV.

# Introduction

## ⚠ Warning

### Handling the mains plug and lead

Insert the mains plug fully into the socket outlet. (If the mains plug is loose, it could generate heat and cause fire.)

Ensure that the mains plug is easily accessible.

Do not touch the mains plug with a wet hand. (This may cause electrical shock.)

Do not use any mains lead other than that provided with this TV. (This may cause fire or electrical shock.)

Do not damage the mains lead. (A damaged lead may cause fire or electrical shock.)

- Do not move the TV with the lead plugged in the socket outlet.
- Do not place a heavy object on the lead or place the lead near a high-temperature object.
- Do not twist the lead, bend it excessively or stretch it.
- Do not pull on the lead. Hold onto the mains plug body when disconnecting the lead.
- Do not use a damaged mains plug or socket outlet.

If you find any abnormality, remove the mains plug immediately!



100 - 240V ~ 50 / 60 Hz



- Mains plug types vary between countries.

### Power source

- This TV is designed to operate on
- 100 - 240V ~ 50/60 Hz
- Table-top use/Wall hanging

### Do not use External Voltage Stabilizer with the TV set

- Inferior Quality stabilizer may cause damage to the TV.
- Warranty is not valid if external stabilizer is used.

### Do not remove covers and NEVER modify the TV by yourself

- Do not remove the rear cover as live parts are accessible when it is removed. There are no user serviceable parts inside. (High-voltage components may cause serious electrical shock.)
- Have the TV checked, adjusted, or repaired at your local Panasonic dealer.
- Please refer the information on exterior back enclosure for electrical and safety information before installing or operating the apparatus.
- The mains plug is used as disconnect device, the disconnect device shall remain readily operable.

### Do not expose to rain or excessive moisture

- To prevent damage which might result in electric shock or fire, do not expose this TV to rain or excessive moisture. This TV must not be exposed to dripping or splashing water and objects filled with liquid, such as vases, must not be placed on top of or above the TV.

### Do not insert external objects into the TV

- Do not allow any objects to drop into the TV through the air vents. (Fire or electrical shock may result.)

### Do not place the TV on sloped or unstable surfaces, and ensure that the TV does not hang over the edge of the base

- The TV may fall off or tip over.

### Use only the dedicated pedestals / mounting equipment

- Using an unapproved pedestal or other fixtures may make the TV unstable, risking injury. Be sure to ask your local Panasonic dealer to perform setup.
- When mounting the product on a wall or ceiling, be sure to install the product according to the method recommended by the manufacturer. This is a safety feature.
- Only use attachments/accessories specified or provided by the manufacturer (such as the exclusive supply adapter, battery etc).

### Do not expose to direct sunlight and other sources of heat

- Avoid exposing the TV to direct sunlight and other sources of heat.



To prevent the spread of fire, keep candles or other open flames away from this product at all times.

## Use Environment

### ▲ Stability Hazard

A television set may fall, causing serious personal injury or death. Many injuries, particularly to children, can be avoided by taking simple precautions such as:

- ALWAYS use cabinets or stands or mounting methods recommended by the manufacturer of the television set.
- ALWAYS use furniture that can safely support the television set.
- ALWAYS ensure the television set is not overhanging the edge of the supporting furniture.
- ALWAYS educate children about the dangers of climbing on furniture to reach the television set or its controls.
- ALWAYS route cords and cables connected to your television so they cannot be tripped over, pulled or grabbed.
- NEVER place a television set in an unstable location.
- NEVER place the television set on tall furniture (for example, cupboards or bookcases) without anchoring both the furniture and the television set to a suitable support.
- NEVER place the television set on cloth or other materials that may be located between the television set and supporting furniture.
- NEVER place items that might tempt children to climb, such as toys and remote controls, on the top of the television or furniture on which the television is placed.

If the existing television set is being retained and relocated, the same considerations as above should be applied.

## Cleaning

- Do not spray water or detergent directly on TV screen for cleaning purpose. Leaking liquid substance will cause damage to TV.
- Be careful of cats, rats or other animals that may urinate on the TV (front and rear). It may lead to TV failure.
- Do not use sharp or hard objects (finger nails, knife and etc.) on TV screen. This may cause damage to the screen surface.



## Hanging the TV Set on the Wall

- Check that the wall can support the weight of the TV set and wall mount assembly.
- Follow the mounting instructions provided with the wall mount.
- The TV set must be installed on a vertical wall.
- Make sure to use only screws suitable for the material of the wall.
- Make sure that the TV set cables are placed so that there is no danger of tripping over them.

All other safety instructions about our TV sets are also applicable here.

Warning: This operation requires two people.

To ensure a safe installation, observe the following safety.

### ▲ Caution

1. **Read these instructions**—All operating instructions must be read and understood before the product is operated.

2. **Keep these instructions**—These safety and operating instructions must be kept in a safe place for future reference.

3. **Read all warnings**—All warnings on the product and in the instructions must be observed closely.

4. **Follow all instructions**—All operating instructions must be followed.

5. **Attachments**—Only use attachments/ accessories specified by the manufacturer. Do not use attachments not recommended by the manufacturer. Use of improper attachments can result in accidents.

6. **Power source**—This product is intended to be supplied by a listed power supply indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company. For added protection for this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the cable system.

Do not defeat the safety purpose of the polarized or grounding plug. A polarized plug has two blades with one wider than the other. A grounding plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

7. **Power cord protection**—Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

*Note: Where the mains plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.*

8. **Overloading**—Do not overload wall outlets, extension cords, or convenience receptacles on other equipment as this can result in a risk of fire or electric shock.

9. **Servicing**—Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

10. **Damage requiring service**—If any of the following conditions occurs, unplug the power cord from the AC outlet, and request a qualified service person to perform repairs.

- a. When the power cord or plug is damaged.
- b. When a liquid is spilled on the product or when objects have fallen into the product.

- c. When the product has been exposed to rain or water.  
d. When the product does not operate properly as described in the operating instructions.

Do not touch the controls other than those described in the operating instructions. Improper adjustment of controls not described in the instructions can cause damage, which often requires extensive adjustment work by a qualified technician.

- e. If the product has been dropped or the cabinet has been damaged in any way.  
f. When the product displays an abnormal condition or exhibits a distinct change in performance. Any noticeable abnormality in the product indicates that the product needs servicing.

**11. Replacement parts**---In case the product needs replacement parts, make sure that the service person uses replacement parts specified by the manufacturer, or those with the same characteristics and performance as the original parts. Use of unauthorized parts can result in fire, electric shock and/or other danger.

**12. Safety checks**---Upon completion of service or repair work, request the service technician to perform safety checks to ensure that the product is in proper operating condition.

**13. Stand**---Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. Do not place the product on an unstable trolley, stand, tripod or table. Placing the product on an unstable base can cause the product to fall, resulting in serious personal injuries as well as damage to the product. When mounting the product on a wall, be sure to follow the manufacturer's instructions. Use only the mounting hardware recommended by the manufacturer.



**14. Careful move**---When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over. Sudden stops, excessive force and uneven floor surfaces can cause the product to fall from the trolley. Never attempt to move the TV unless the AC power cord has been disconnected.

**15. Lightning**---Unplug this apparatus during lightning storms or when unused for long periods of time. For added protection for this television equipment during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna. This will prevent damage to the equipment due to lightning and power-line surges.

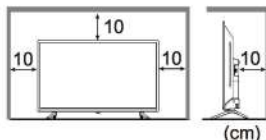
**16. Panel protection**---The display panel used in this product is made of glass. Therefore, it can break when the product is dropped or impacted upon by other objects. Be careful not to be injured by broken glass pieces in case the display panel breaks.

**17. Pixel defect**---The display panel is a very high technology product, giving you finely detailed pictures. Occasionally, a few non-active pixels may appear on the screen as a fixed point of blue, green or red. Please note that this does not affect the performance of your product.

**18. Do not block the rear air vents**

- Adequate ventilation is essential to prevent failure of electronic components.
- Ventilation should not be impeded by covering the ventilation openings with items such as newspapers, table cloths and curtains.
- We recommended that a gap of at least 10 cm is left all around this TV even when placed inside a cabinet or between shelves.
- When using the pedestal, keep the space between the bottom of the TV and the surface where the TV is set.
- If pedestal is not used, ensure the vents is the bottom of the TV are not blocked.
- Do not install this equipment in a confined or building-in space such as a book case or similar unit, and remain a well ventilation conditions at open site.

Minimum distance










*Note: The picture is only for reference.*

**19. Do not ingest the battery, Chemical Burn Hazard**---Keep new and used batteries away from children. If the battery compartment does not close securely, stop using the product and keep it away from children. If you think batteries might have been swallowed or placed inside any part of the body, seek immediate medical attention.

- 20. Listening---** Listening to music at high volume levels and for extended durations can damage one's hearing. In order to reduce the risk of damage to hearing, one should lower the volume to a safe, comfortable level, and reduce the amount of time listening at high levels.

## Symbol

- For the terminals marked with symbol of “⚡” may be of sufficient magnitude to constitute a risk of electric shock. The external wiring connected to the terminals requires installation by an instructed person or the used of ready-made leads or cords.
- If the product has the symbol  in its rating label and the power cord has two pins, it means that the equipment is a Class II or double insulated electrical appliance. It has been designed in such a way that it does not require a safety connection to electrical earth.
- The following information are recommended to be included where applicable:
  -  Refers to alternating current(AC).
  -  Refers to direct current(DC).
  -  Refers to ClassII equipment.
  -  Refers to stand-by.
  -  Refers to power ON.
  -  Refers to dangerous voltage.



- This lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of non-insulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock.
- To reduce the risk of electric shock. Do not remove cover (or back). No user serviceable parts inside. Refer to qualified service personnel.
- The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance instructions in the literature accompanying the appliance.

## Precautions for Using Remote Control

- Use the remote control by pointing it towards the remote sensor. The items between the remote control and the remote sensor will interfere the normal operation.
- Do not make remote control vibrate violently. Also, do not splash liquid on the remote control, also do not put the remote control in high humidity place.
- Do not place remote control under direct sunlight which will cause deformation of the unit by heat.
- When the remote sensor is under direct sunlight or strong lighting, the remote control will do not work. If so please change the lighting or TV's position, or operate the remote control closer to the remote sensor.

## Standard Accessories

### Remote Control



### Pedestal (2)



### Screws (2/4)



32" : 2 PCS  
43" : 4 PCS

### Batteries (2) (AA size)



### Operating Instructions



#### Note:

- 1) The pictures are only for reference.
- 2) Accessories may not be placed all together. Take care not to throw them away unintentionally.
- 3) This product contains possibly dangerous parts (such as plastic bags), that can be breathed in or swallowed by young children accidentally. Keep these parts out of reach of young children.

## Optional Accessories

Please contact your local Panasonic dealer to purchase the recommended optional accessories. For additional details, please read the manual of optional accessories.

### Wall-hanging bracket

Please contact your local Panasonic dealer to purchase the recommended wall-hanging bracket.

#### • Screw Specifications

Screw Spec.	32"		43"	
	Top	Down	Top	Down
E "Diameter" (mm)	M4	M4	M6	M6
D "Depth" (mm)	Max.	9	15	15
	Min.	7	12	12
Quantity	2	2	2	2

#### • VESA

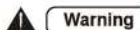
Size	32"	43"
a (mm)	200	200
b (mm)	200	200

Note: The graphics are only for reference.

### Warning

- Failure to use a Panasonic bracket or choosing to mount the unit yourself will be done at the risk of the consumer. Always be sure to ask a qualified technician to carry out set up. Incorrect fitting may cause equipment to fall, resulting in injury and product damage. Any damage resulting from not having a professional installer mount your unit will void your warranty.
- When any optional accessories or wall hanging brackets are used, always ensure that the instructions provided are followed fully.
- Do not mount the unit directly below ceiling lights (such as spotlights or halogen lights) which typically give off high heat. Doing so may warp or damage plastic cabinet parts.
- Take care when fixing wall brackets to the wall. Wall mounted equipment shall not be grounded by metal within the wall. Always ensure that there are no electrical cables or pipes in the wall before hanging bracket.
- To prevent fall and injury, remove the TV from its fixed wall position when it is no longer in use.

## Base Installation



### Warning

**Do not disassemble or modify the pedestal.**

- Otherwise the TV may fall over and become damaged, and personal injury may result.



### Caution

**Do not use any pedestal other than the one provided with this TV.**

- Otherwise the TV may fall over and become damaged, and personal injury may result.

**Do not use the pedestal if it becomes warped or physically damaged.**

- If you use the pedestal while it is physically damaged, personal injury may result. Contact your local Panasonic dealer immediately.

**During set-up, make sure that all screws are securely tightened.**

- If insufficient care is taken to ensure screws are properly tightened during assembly, the pedestal will not be strong enough to support the TV, and it might fall over and become damaged, and personal injury may result.

**Ensure that the TV does not fall over.**

- If the TV is knocked or children climb onto the pedestal with the TV installed, the TV may fall over and personal injury may result.

**Two or more people are required to install and remove the TV.**

- If two or more people are not present, the TV may be dropped, and personal injury may result.

**When removing the pedestal from the TV, do not remove the pedestal by the methods other than the specified procedure.**

- Otherwise the TV and / or pedestal may fall over and become damaged, and personal injury may result.

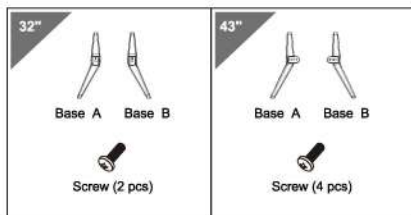
**Appearance of the product in illustrations may differ from your actual product, and is for reference purposes only.**

### Removing the pedestal from the TV

Be sure to remove the pedestal in the following way when using the wall-hanging bracket or repacking the TV.

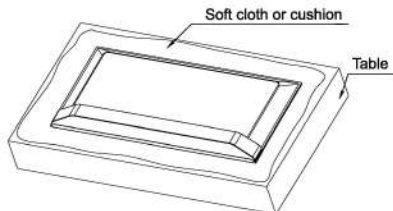
- 1 Remove the assembly screws from the TV.
- 2 Remove the pedestal from the TV.

1. Please take out the accessory bag from the package and check if all bellow parts exist without missing, if not, please contact your local dealer.

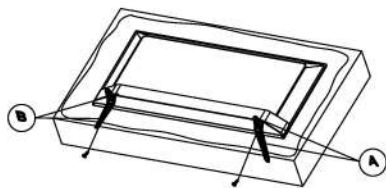


**Note:** The pictures are only for reference.

2. Take out the TV and carefully put it (screen downward) on a stable and flat table with a soft cloth or cushion on it.



3. Connect the TV and base by putting and fastening matched screws into the holes.



(32")

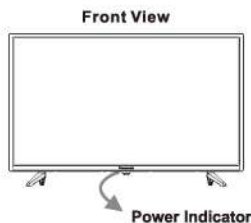


(43")



## TV Controls

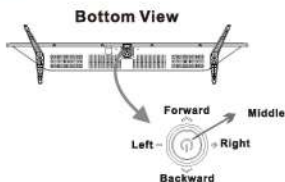
### ■ Power Indicator



*Note: The picture is only for reference.*

- Lit in red: Standby mode.
- Lit in green: Working status.
- Unlit: Powered off.

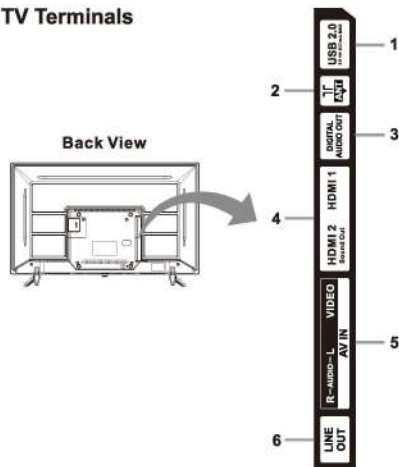
### ■ Rocker Button



*Note: The picture is only for reference.*

- **Press Middle:**
  1. In standby mode, press it to turn on the TV.
  2. Without OSD, short press it to access source menu; long press to turn the TV to standby mode.
  3. With OSD, short press it to confirm a selection; long press it to exit the OSD.
- **Push Left:** Decrease volume or go to left.
- **Push Right:** Increase volume or go to right.
- **Push Backward:** Channel up or go to above.
- **Push Forward:** Channel down or go to below.

### ■ TV Terminals



*Note: The picture is only for reference.*

#### 1. USB 1

Connect USB devices to the TV.

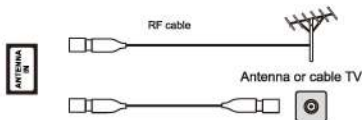


#### **Note:**

- 1) *The picture is only for reference.*
- 2) *Never remove the USB device or turn off the TV while using the USB device.*

#### 2. ANTENNA IN

Connect a coaxial cable to receive signal from the antenna or cable.



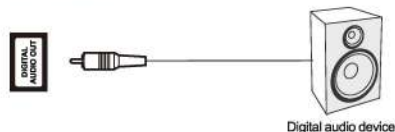
#### **Note:**

- 1) *The picture is only for reference.*
- 2) *Do not place the RF cable under the TV.*
- 3) *To obtain the optimum quality of picture and sound, the correct cable (75Ω coaxial) and the correct terminal are required.*
- 4) *If a community antenna system is used, you may require the correct connection cable and plug between the wall aerial socket and the TV.*

- 5) Your local Television Service Center or dealer may be able to assist you in obtaining the correct aerial system for your particular area and the accessories required.
- 6) Any matters regarding aerial installation, upgrading of existing systems or accessories required, and the costs incurred, are the responsibility of you, the customer.

### 3. DIGITAL AUDIO OUT

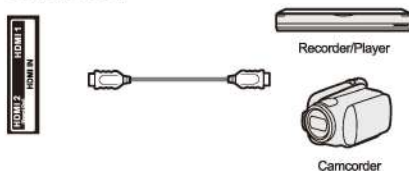
Output the TV's digital audio signal to a compatible audio receiver.



**Note:** The picture is only for reference.

### 4. HDMI 1/2

Receive HDMI input signal from signal source such as DVD.

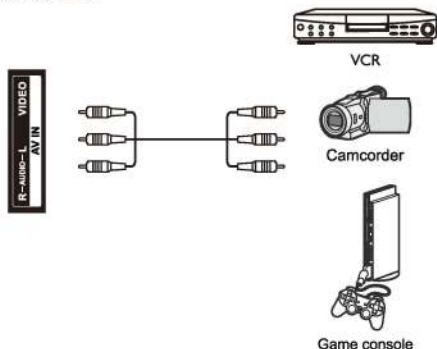


**Note:**

- 1) The picture is only for reference.
- 2) If the external device has a DVI output only, use a DVI to HDMI adapter cable to connect to the HDMI terminal.
- 3) For the audio receiver control Sound Out, firstly you must have a device which supports HDMI Sound Out, then connect it to the HDMI2 port. When "Sound Out" setting is enabled on your TV, the TV's speakers will be muted automatically and audio will be outputted on your sound device system.

### 5. AV IN

Receive audio and video signal from signal source such as DVD.



**Note:** The picture is only for reference.

### 6. LINE OUT

Speakers won't be muted, and sound level is fixed.



**Note:**

- 1) The picture is only for reference.
- 2) When using a headphone, adjust its volume to avoid excessive volume levels, as hearing damage may result.

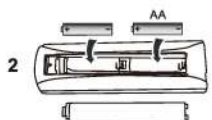
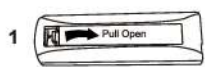
### ■ Power Connection



**Note:** The picture is only for reference.

Connect the power cord to the power outlet (100-240V ~ 50/60Hz).

## Installing/Removing Remote's Batteries



Match the correct polarity (+/-)

**Note:** The picture is only for reference.

### **Caution**

- Incorrect installation may cause battery leakage and corrosion, resulting in damage to the remote control.
- Do not mix old and new batteries.
- Replace only with same or equivalent type. Do not mix different battery types (such as alkaline and manganese batteries).
- Do not use rechargeable (Ni-Cd) batteries.
- Do not burn or break up batteries.
- Do not expose batteries to excessive heat such as sunshine, fire or the like.
- Make sure you dispose of batteries correctly.
- Ensure batteries are replaced correctly, there is danger of explosion and fire if battery is reversed.
- Do not disassemble or modify the remote control.

## Remote Control



1. **POWER:** Turn on the TV or turn it to standby mode.
2. **AV:** Select the input source.
3. **MEDIA PLAYER:** Access the interface of media player.
4. **TV:** Change to the TV source.
5. **MENU:** Access the main menu.
6. **GUIDE:** Access the electronic program guide.
7. **TEXT:** Turn on or turn off the teletext function.
8. **STTL/AD:** Turn on or turn off the function of subtitle or audio description.
9. **INFO:** Show the detailed information.
10. **EXIT:** Exit the current operation.
11. **Navigation Buttons (▲/▼/◀/▶):** Navigate the menu.
12. **OK:** Enter, confirm or execute your selection.
13. **OPTION:** Access the quick menu.
14. **RETURN:** Back to the upper-level menu.
15. **Color Buttons (RED/GREEN/YELLOW/BLUE):**  
Execute the prompt function in specific mode.
16. **VOL +/-:** Increase or decrease the sound volume.
17. **CH ▲/▼:** Change to the next or previous channel.
18. **ASPECT:** Select the aspect ratio.
19. **MUTE:** Mute or restore the sound.
20. **Number Buttons (0~9) or Letter Buttons (a~z):**  
Input the numbers or alphabetical letters.
21. **STILL:** Freeze or unfreeze the picture.
22. **LAST VIEW:** Return to the previously-viewed channel.

**Note:** The picture is only for reference.

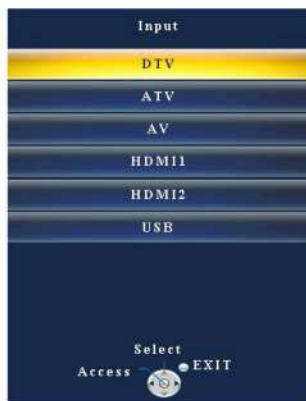
# Watching TV

## Turning on or off the TV

1. Connect the power cord to the power outlet.
2. In standby mode, press **POWER** button to turn on the TV.
3. In working status, press **POWER** button to turn the TV to standby mode.
4. Disconnect the power cord to power off the TV completely.

## Selecting the Input Source

1. Press **AV** button to access the list of input sources.
2. Press **▲/▼** or **AV** button to select the desired input source.
3. Press **OK** button to access the selected input source.



*Note: The picture is only for reference.*

## Selecting the Channel

1. Press **Number Buttons (0-9)** to change to the desired channel directly.
2. Press **CH ▲/▼** button to change to the next or previous channel.
3. While watching DTV programs, press **GUIDE** button to access the program guide which will show the program list of different channels of eight days from the current date on.
  - Press **YELLOW** button to change to the previous day.
  - Press **BLUE** button to change to the next day.
  - Press **▲/▼** button to select the desired channel.
4. While watching TV programs, press **OK** button to access the channel list. Press **▲/▼** button to select the desired channel.

## Main Menu Operation

- Step 1:** Press **MENU** button to access the main menu.
- Step 2:** Press **▲/▼** button to select a submenu: **Picture**, **Sound**, **Timer**, **Setup**, **Lock** or **Channel**, and press **OK** button to enter.
- Step 3:** Press **▲/▼** button to select an item, and press **OK** button to enter.
- Step 4:** Press **▲/▼** or **◀/▶** button to adjust the selected item.
- Step 5:** Press **RETURN** button to back to the upper-level menu.
- Step 6:** Press **EXIT** button to exit the main menu operation.

*Note: Some items may not be available for some countries, some models or some sources.*

## Picture Menu



*Note: The pictures are only for references.*

#### ■ Picture Mode

Select the desired picture mode. Choices are **Standard**, **Mild**, **User** and **Dynamic**. It will automatically skip to "User" mode if you adjust one of the following 6 items including **Contrast**, **Brightness**, **Colour**, **Tint**, **Sharpness** and **Backlight**.

#### ■ Contrast

Adjust the difference between light and dark areas of the picture.

#### ■ Brightness

Adjust the lightness of the picture.

#### ■ Colour

Adjust the colour richness of the picture.

#### ■ Tint

Adjust the colour tint of the picture. It is only available for NTSC system.

#### ■ Sharpness

Adjust the edge of the picture.

#### ■ Backlight

Adjust the brightness of the screen.

#### ■ Colour Temperature

Adjust the overall colour tone of the picture. Choices are **Medium**, **Warm** and **Cool**.

#### ■ Aspect Ratio

Select the desired aspect ratio. The choices differ by different input sources.

- For **DTV**, choices are: 16:9/Zoom1/Zoom2/Auto/4:3.
- For **ATV & AV**, choices are 16:9/Zoom1/Zoom2/4:3.
- For **HDMI**, choices are 16:9/Zoom1/Zoom 2/4:3/Just Scan.
- For **USB**, the choices are 16:9/4:3/Auto.

#### ■ Noise Reduction

Reduce the noise in the picture signal. Choices are **Middle**, **High**, **Off** and **Low**.

#### ■ MPEG Noise Reduction

Reduce the noise created while converting or compressing MPEG picture signal. Choices are **Middle**, **High**, **Off** and **Low**.

#### ■ Reset to Defaults

Reset picture settings of the current source to default values.

## Sound Menu



*Note: The picture is only for reference.*

#### ■ Sound Mode

Select the desired sound mode. Choices are **Standard**, **News**, **User**, **Music** and **Movie**. It will automatically skip to "User" mode if you adjust one of the following 3 items including **Bass**, **Treble** and **Balance**.

#### ■ Bass

Adjust the lower frequency of the sound.

#### ■ Treble

Adjust the higher frequency of the sound.

#### ■ Balance

Control the balance between left and right speakers.

#### ■ Auto Volume

Turn on to adjust the sound volume depending on the input signal.

#### ■ Surround

Help to create rich and wider sound from stereo sound sources.

#### ■ SPDIF MODE

Select the desired SPDIF mode between **PCM** and **Auto**.

#### ■ Reset to Defaults

Reset all sound settings to the default values.

## Timer Menu



*Note: The picture is only for reference.*

### ■ Time Zone

Select the time zone.

### ■ Auto Sync

Select to adjust the TV clock automatically or manually.

### ■ Clock

Setup or display the date and time.

### ■ Sleep Timer

Setup the timer to turn off the TV automatically. Choices are **Off**, **15min**, **30min**, **45min**, **60min**, **120min** and **180min**.

### ■ Auto Sleep

Setup the timer to turn off the TV automatically when there is no operation during the selected time. Choices are **Off**, **4Hours**, **6Hours** and **8Hours**.

### ■ OSD Timer

Select the time to keep the menu display without disappearing. Choices are **5S**, **10S**, **20S**, **25S** and **30S**.

## Setup Menu



*Note: The picture is only for reference.*

### ■ OSD Language

Select the desired OSD language.

### ■ Audio Languages

Select the primary and secondary audio languages. It is only available for DTV source.

### ■ Subtitle Languages

Select the primary and secondary subtitle languages. It is only available for DTV source.

### ■ Restore Factory Default

Reset all menu settings to the default values.

*Note: All user data will be lost after operating this function.*

### ■ Link

Setup to control the connected HDMI device.

- **HDMI Link:** Turn on or turn off the HDMI link function.
- **Sound Out:** Turn on or turn off the function of Sound Out in HDMI2.
- **Auto Standby:** Turn the connected HDMI device to standby mode automatically when you turn off the TV.
- **Device List:** Display the list of HDMI devices connected to the TV.

### ■ Location

Select the TV environment between **Shop** and **Home**.

- **Home Mode:** You would be able to view the standard settings for Picture and Sound modes.
- **Shop Mode:** You can enjoy enhanced setting for Picture and Sound modes.

### ■ Software Update (USB)

Update the TV software system by connecting an USB device with new software.

### ■ Input

Select the input sources.

### ■ Standby Auto Tuning

Search for DTV programs automatically when the TV turns standby. It is only available for some countries.

## Lock Menu



*Note: The picture is only for reference.*

### ■ Lock System

Turn on or turn off the lock system.

### ■ Set Password

Change the password as you like. The default password is 0000.

*Note: If you change the password and forget it, you can use the super password 8899 to enter the lock system.*

### ■ Channel Lock

Restrict unauthorized access to specific channels based on the channel information. Password is needed to view locked channels. It is only available for TV source.

### ■ Key Lock

Disable the function of rocker button.

### ■ Parental Guidance

Restrict unauthorized access to programs which are not suitable for children based on age rating. Password is needed to view locked programs. It is only available for TV source.

## Channel Menu



*Note: The picture is only for reference.*

### ■ Auto Tuning

Search for channels automatically. Before searching, you may need to adjust some settings ( select tune type, select your country or input your local postal codes) which may vary by different countries. Press **EXIT** button select whether or not to exit auto tuning. The searched channels will be saved in the TV automatically after auto tuning is finished.

### ■ DTV Manual Tuning

Search for DTV channels Manually. Before searching, you may need to select the channel number. The search stops automatically when a program is found and the program will be saved in the selected channel position automatically. Press **EXIT** button to exit DTV Manual Tuning.

### ■ ATV Manual Tuning

Search for ATV channels manually. Before searching, you may need to select the channel number (**Storage To & Current CH**) or **Sound\_Standard**. Select **Scan Search** and press **◀/▶** button to start the search.

- Press **◀** button to search towards the lower frequency.
- Press **▶** button to search towards the higher frequency.

The search stops automatically when a program is found and press **RED** button to save the program. Press **EXIT** button to exit ATV Manual Tuning.

- ◆ **Fine Tuning:** Select a ATV channel you want, press **◀/▶** button to make small adjustments until the picture and sound are as good as you like. Fine tune is not necessary under normal conditions. However, in area of inferior broadcast conditions where adjustments are necessary for a better picture and sound, please use fine tune.

### ■ Programme Edit

Press color buttons to edit the programs.

- Press **RED** button to delete a program.
- Press **GREEN** button to rename a program. This is only available for ATV source.
- Press **YELLOW** button to move a program.
- Press **BLUE** button to skip a program.

### ■ Signal Information

Show the detailed information of current signal. It is only available for DTV source.

### ■ Software Update (OAD)

Turn on to update the TV software system by OAD code stream over the air. It is only available for DTV source.

### ■ OAD Scan

Scan for available OAD code stream. It is only available when **Software Update (OAD)** is turned on. It is only available for DTV source.

### ■ EWS Local Postal Codes

Use number buttons (0~9) to input your local postal codes. It is only available for Indonesia.

# Using Media Player

## Preparation

- Insert your USB device on the TV to view compatible photo and movie on the TV screen or play compatible music through the TV.
- If the connected USB hard disk does not have an external power source, it may not be detected. Be sure to connect the external power source.
- To avoid losing the data on your USB device or damaging your USB device, it is recommended that you back up all data on your USB device.
- The control menu displays in media player may differ by different regions or models. And please take your actual TV as the standard.
- If you want to pull out your USB device, please exit USB mode firstly.
- For instructions on using your USB device, refer to the owner's manual of your USB device.
- Never remove the USB device or turn off the TV while using the USB device. Doing so may result in loss of data or damage to the USB device or the TV.
- Certain types of USB devices may not be compatible with the TV.

## Media Operation



**Note:** The picture is only for reference.

- Step 1:** Press **MEDIA PLAYER** button to enter the interface of media player. Or select **USB** source in input source list and press **OK** button to enter.
- Step 2:** Press **◀/▶** and **OK** buttons to select and enter a media type: **PHOTO**, **MOVIE** or **MUSIC**.
- Step 3:** Press **▲/▼/◀/▶** and **OK** buttons to select the desired media file with the same type as you have selected in **Step 2**.
- Step 4:** Press **OK** button to start playing the media file.
- Step 5:** Press **EXIT** button to exit the playing.

## Photo Control Menu

While browsing a photo, press **OK** button to display the photo control menu, and press **▼** button to exit it. Press **◀/▶** button to select the icon of desired function and press **OK** button to execute it.









	or	Play / Pause
		Go to the previous / next photo.
		Stop playing.
		Repeat mode selection. Highlight this icon and continue pressing OK to select Repeat 1, Repeat ALL or Repeat NONE.
		Display the current photo information.
		Rotate the photo clockwise / counterclockwise by 90 degrees every time the button is pressed.
		Zoom in / zoom out the photo.
		Move View (left, right, up, down). You can use Move View only when the photo is magnified.

**Note:** The pictures are only for references.

## Movie Control Menu

While watching a movie, press **OK** button to display the movie control menu, and press **▼** button to exit it. Press **◀/▶** button to select the icon of desired function and press **OK** button to execute it.









	Play / Pause
	Fast backward / fast forward.
	Go to the previous / next movie.
	Stop playing.
	Repeat mode selection. Highlight this icon and continue pressing OK to select Repeat 1, Repeat ALL or Repeat NONE.
	Display the current movie file information.
	Input the time you want and skip to play from the input time.
	Setup the aspect ratio.

**Note:** The pictures are only for reference.

## Music Control Menu

While playing music, press **OK** button to display the music control menu, and press **▼** button to exit it. Press **◀/▶** button to select the icon of desired function and press **OK** button to execute it.

	Play / Pause
	Fast backward / fast forward.
	Go to the previous / next music.
	Stop playing.
	Repeat mode selection. Highlight this icon and continue pressing OK to select Repeat 1, Repeat All or Repeat None.
	Display the current music file information.

**Note:** The pictures are only for reference.

### Note:

- Under the following conditions, this system cannot decode the file and the file cannot be played normally:
  - The parameters of file, such as the pixel of picture, code rate of audio and video file, sampling rate of audio file, exceed the limit of the system;
  - The format of file is not matched or the file is harmed.
 Note: The code rate this system supports does not exceed 20Mbps.
- Hot plug: Do not disconnect when the system is reading or transmitting data, avoid damaging the system or the device.
- Pay attention to the power supply of the device when you are using a mobile hard disk or a digital camera. If the power supply is not sufficient or not stable, you may encounter problems during operating or can not operate at all. In this case, please restart the device, or unplug the device and plug it again, and ensure that its power supply is normal.
- The system supports standard USB1.1 and USB2.0 devices, such as standard U-disks, MP3 players, mobile hard disks, etc..
- For obtaining better audio and video quality, It is suggested to use the external device which accords with USB2.0 standard.
- When playing the video with high compression ratio, these phenomenons, such as picture standstill and menu long time response, are normal.
- For some USB device with power supply, such as large size hard disk, MP4, etc., Suggest using it with power to avoid electric power shortage.
- The file may not be played normally because its parameters, such as the pixel of picture, code rate of audio and video file, sampling rate of audio file, exceed the limit of the system.

# Technical Information

## Supported File Format in Media Player

### Video:

Container	Video Codec(file type)	File Extension Name	Sampling rate SPEC	Bit Rate	Profile
MPG	Mpeg1, Mpeg2	.dat .mpg.mpeg	1080P @ 30fps	20Mbps	Main Profile
MPEG					
MPEG2-PS	MPEG2	.vob	1080P @ 30fps	20Mbps	MPEG2: MP@HL
MP4	Mpeg4	.mp4	1080P @ 30fps	20Mbps	Simple Profile and Advanced Simple Profile @Level 5
	H.264				Main Profile and High Profile@Level 4.0
	Motion JPEG				
MKV	Mpeg1,2,4	.mkv	1080P @ 30fps	20Mbps	MPEG2: MP@HL MPEG4: Simple Profile and Advanced Simple Profile @Level 5
	H.264				Main Profile and High Profile@Level 4.0
	Motion JPEG				
AVI	Mpeg2,4	.avi	1080P @ 30fps	20Mbps	MPEG2: MP@HL MPEG4: Simple Profile and Advanced Simple Profile @Level 5
	H.264				Main Profile and High Profile@Level 4.0
	Motion JPEG				
			680X480 @ 30fps	10Mbps	

### Audio:

Audio Codec(file type)	File Extension Name	Bit Rate
MPEG1 Layer2	.MP3	32Kbps ~ 448Kbps(Bit rate) 32KHz ~ 48KHz(Sampling rate)
MPEG1 Layer3		32Kbps ~ 320Kbps(Bit rate) 32KHz ~ 48KHz(Sampling rate)
AAC, HEAAC	.m4a.aac	24Kbps ~ 384Kbps(Bit rate) 8KHz ~ 48KHz(Sampling rate)
LPCM	N/A (work with video files only)	Bitrate: 64Kbps ~ 1.5Mbps Sampling Rate: 8KHz ~ 48KHz
IMA-ADPCM/MMS-ADPCM		Bitrate: 384Kbps Sampling Rate: 8KHz
AC3		Bitrate: 32Kbps ~ 640Kbps Sampling Rate: 32KHz,44.1KHz , 48KHz
EAC3		Bitrate: 32Kbps ~ 6Mbps Sampling Rate: 32KHz,44.1KHz , 48KHz

## Photo:

Container	File Extension Name	Photo	Resolution
JPEG	.jpeg	Base-line	15360x9640 (1920X8 1080X8)
		Progressive	1024x768
	.jpg	Base-line	15360x9640 (1920X8 1080X8)
		Progressive	1024x768
PNG	.png	non-Interface	9600x6400
		Interface	1200x800
BMP	.bmp		9600x6400

### Note

- Some files may not be played back even if they fulfil these conditions.
- The device may become unusable with this TV if the file or folder names are changed.

## Maintenance

First, remove the mains plug from the socket outlet.

### Regular care:

Gently wipe the surface of the display panel, cabinet, or pedestal by using a soft cloth to clean the dirt or fingerprints.

### For stubborn dirt:

First clean the dust on the surface. Dampen a soft cloth with clean water or diluted neutral detergent ( 1 part detergent to 100 parts water).

Wring the cloth and wipe the surface.

Finally, wipe away all the moisture.

### Mains plug

Wipe the mains plug with a dry cloth at regular intervals. Moisture and dust may lead to fire or electrical shock.



### Caution

Do not use a hard cloth or rub the surface too hard, otherwise this may cause scratches on the surface.

- Take care not to subject the TV' surfaces to water or detergent Liquid inside the TV could lead to product failure.
- Take care not to subject the surface to insect repellent, solvent, thinner or other volatile substances. This may degrade surface quality or cause peeling pf the paint.
- The surface of the display panel is specially treated and may be easily damaged. Take care not to tap or scratch the surface with your fingernail or other hard objects.
- Do not allow the cabinet and pedestal to make contact with a rubber or PVC substance for a long time. This may degrade surface quality.

## Troubleshooting

Most problems you encounter with your TV can be corrected by consulting the following troubleshooting list.

### No picture, no sound

- Check if the fuse or circuit breaker is working.
- Plug another electrical device into the outlet to make sure it is working or turned on.
- Power plug is in a bad contact with the outlet.
- Check the signal source.

### No colour

- Adjust the saturation.

### Remote control does not work

- Change the batteries.
- Batteries are not installed correctly.
- Main power is not connected.

### No picture, normal sound

- Adjust the brightness and contrast.

### Normal picture, no sound

- Press the Vol+ button to increase volume.
- Volume is set to mute, press the mute button to restore sound.

### Radio frequency interference

This interference produces moving ripples or diagonal streaks, and in some case, loss of contrast in the picture. Find out and remove the radio interference source.

## Specifications

Model No.		TH-32H410K	TH-43H410K
Power Source		100 - 240 V ~ 50/60 Hz	100 - 240 V ~ 50/60 Hz
Power Consumption	Power Rating	60 W	74 W
	Standby Condition	< 0.5W	< 0.5W
Display Panel	Visible Screen Size	80 cm	109 cm
	Resolution	1366 X 768	1920 X 1080
Dimensions (L X B X H)	with Pedestal TV only	732 X 178 X 479 mm 732 X 83 X 439 mm	968 X 212 X 608 mm 968 X 90 X 562 mm
	Net Weight	3.6 kg (with Pedestal) 3.5 kg (TV only)	6.3 kg (with Pedestal) 6.2 kg (TV only)
Gross Weight		5.1 kg	8.8 kg
Sound	Speaker	6 Ω	6 Ω
	Audio Output	8 W + 8 W	8 W + 8 W
TV System		DTV: DVB-T/T2 ATV: PAL BG/DK/I	
Connection Terminals	AV IN	AUDIO L/R RCA PIN Type x 2 VIDEO RCA PIN Type x 1	
	ANT.	Aerial Connector x 1	
	HDMI	HDMI Connector x 2	
	USB	USB 2.0 TYPE A Connector x 1 DC 5 V, Max. 500mA	
	DIGITAL AUDIO OUT	Coaxial x 1	
	LINE OUT	Analog audio output x 1	

### Note

- Design and Specifications are subject to change without notice. Weight and Dimensions shown herein are approximate.

### **Customer's Record**

The model number and serial number of this product may be found on its rear panel. You should note this serial number in the space provided below and retain this book, plus your purchase receipt, as a permanent record of your purchase to aid in identification in the event of theft or loss, and for Warranty Service purposes.

**Model Number**

**Serial Number**

**Panasonic Corporation**

Web Site: <http://www.panasonic.com>