

# OPERATION MANUAL

## Dear SHARP customer

Thank you for your purchase of the SHARP LCD colour TV product. To ensure safety and many years of trouble-free operation of your product, please read the Important Safety Precautions carefully before using this product.

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# Precautions for daily use

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## Observe the following items

### Maintenance of the cabinet

- When cleaning the cabinet, use a soft cloth (made of cotton, floss, etc.) to clean gently.  
Do not use a dry or damp rag mixed with chemicals, as this could cause the ingredients of the cabinet body to deteriorate or crack.
- Be careful not to use an abrasive cloth for cleaning or clean with excessive force, as this could scratch the surface of the cabinet.
- If the cabinet is greatly soiled, clean with a soft cloth (made of cotton, floss, etc.) soaked with a small amount of diluted neutral detergent and wrung out, and then clean with a soft dry cloth.
- Because the cabinet is made of plastic, solvents such as benzene, alcohol or thinner could cause it to deteriorate, or make its coating come off. Therefore do not use such solvents to clean the cabinet.
- Because plasticizer is included in the plastics, deterioration or the coating peeling off could occur when the cabinet comes into contact with some substances. Therefore keep it away from volatile substances such as insecticide. In addition, do not let it come into contact with objects made of rubber, resin, etc. for a long time.

### Maintenance of the LCD panel

- Before cleaning the LCD panel, be sure to turn off the TV set and unplug the power cord from the outlet.
- When cleaning the LCD panel, use a dry and soft cloth (made of cotton, floss, etc.) to clean the surface of the LCD panel gently. For protecting the LCD panel, do not clean with a dirty cloth, detergent, or a dry or damp rag mixed with chemicals, as this could cause peeling of the panel surface.
- Be careful not to clean with an abrasive cloth or with excessive force, as this could cause the panel surface to be scratched.
- If the LCD panel is greatly soiled, clean it gently with a soft cloth (made of cotton, floss, etc.) soaked with a small amount of water (Do not clean with excessive force, so as to avoid the scratch of the panel surface).
- If dust sticks on the surface of the LCD panel, clean the panel with a commercially available cleaning brush (anti-static brush).

# Important safety precautions

- **Cleaning** — Unplug the AC cord from the AC outlet before cleaning the product. Use a damp cloth to clean the product. Do not use alcohol cleaners, spray cleaners or chemical cloth when cleaning because these types of materials may damage the product.



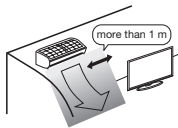
- **Water and moisture** — Do not use the product near water, such as bathtub, washbasin, kitchen sink, laundry tub, swimming pool and in a wet basement.



- **Do not place vases or any other water-filled containers on this product.** The water may spill onto the product causing fire or electric shock.



- **Do not place the product underneath the air-conditioner or nearby the humidifier, and the other situation with water.** The water may spill into the product causing fire or electric shock fault. Please keep more than 1 m distance with the air outlet of air conditioner.



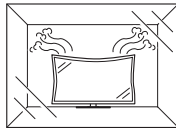
- **Stand** — Do not place the product on an unstable cart, stand, tripod or table. Doing so can cause the product to fall, resulting in serious personal injuries as well as damage to the product. Use only a cart, stand, tripod, bracket or table recommended by the manufacturer or sold with the product.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



- **When relocating the product placed on a cart, it must be moved with utmost care.** Sudden stops, excessive force and uneven floor surface can cause the product to fall from the cart.



- **Ventilation** — The vents and other openings in the cabinet are designed for ventilation. Do not cover or block these vents and openings since insufficient ventilation can cause overheating and/or shorten the life of the product. Do not place the product on a bed, sofa, rug or other similar surface, since they can block ventilation openings. This product is not designed for built-in installation; do not place the product in an enclosed place such as a bookcase or rack, unless proper ventilation is provided or the manufacturer's instructions are followed.



- **In case the product is dropped and the cabinet is damaged, be sure to turn off the power of the product, and unplug the power cord.** If you continue to use the product, it may cause fire or electric shock.

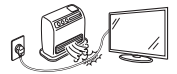


- **Do not open the rear cover of the cabinet to reconstruct the circuits.** There exists high voltage within the cabinet and it may cause electric shock and injury. If maintenance is required, contact your dealer.

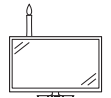
- **The LCD panel used in this product is made of glass.** Therefore, it can break when the product is struck forcefully or with a sharp object. If the LCD panel is broken, be careful not to be injured by broken glass.



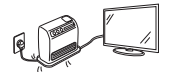
- **Heat sources** — Keep the product away from heat sources such as radiators, heaters, stoves and other heat-generating products (including amplifiers)



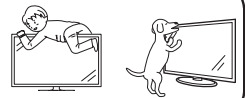
- **To prevent fire, never place any type of candle or naked flames on the top or near the TV set.**



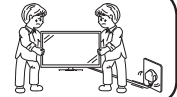
- **To prevent fire or shock hazard, do not place the AC power cord under the TV set or other heavy items.**



- **Do not place heavy objects on this product or stand on it.** Doing so could cause injury if the product overturns. Take special care near children and pets.



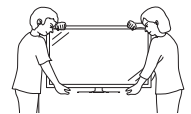
- **Unplug the power cord before you move the TV set.** If not unplugged beforehand, the power cord may become damaged and cause electric shock.



The LCD panel is a very high technology product, in which LC-43LE177H with 2,073,600 pixels. Due to the very large number of pixels, occasionally a few non-active pixels may appear on the screen as a fixed point of blue, green or red. This is within product specifications and does not constitute a fault.

## Precautions when transporting the TV

- **When transporting the TV, never carry it by holding or otherwise putting pressure onto the display.** Be sure to always carry the TV by at least two people holding it with two hands — one hand on each side of the TV.



- **Do not display a still picture for a long time, as this could cause an afterimage to remain.**

- **Install the product on the place where the AC cord can be unplugged easily from the AC outlet.**

## NOTE

- The above are pictures for reference only; the actual item might be different.





# Trademarks

- Manufactured under license from Dolby Laboratories. Dolby and the double-D symbol are trademarks of Dolby Laboratories.
- The terms HDMI and HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.
- MHL and the MHL logo are a trademark, registered trademark or service mark of MHL, LLC in the United States and/or other countries.
- MPEG Layer-3 audio coding technology licensed from Fraunhofer IIS and Thomson.

# Accessories

## Supplied accessories

Make sure the following accessories are provided with the product.

Remote control unit	“AAA” size battery (× 2)
 <p>Used with batteries inserted. Page 9 and 13</p>	 <p>Page 13</p>
Stand unit	Operation manual
 <p>Stand                      Screws (× 4)</p> <p>Page 6</p>	

- The illustrations and on-screen displays in this operation manual are for explanation purposes and may vary slightly from the actual operations.

# Preparation

## Attaching the stand unit

- When installing the stand, you need to put your TV on a flat surface. Before that, put a soft cushion on the surface.
- Before attaching (or detaching) the stand, unplug the AC power cord from the AC power outlet.
- Before performing work, spread cushioning over the surface on which you will be laying the TV. This will prevent it from being damaged.

### CAUTION

- **Attach the stand in the correct direction.**
- **Be sure to follow the instructions. Incorrect installation of the stand may result in the TV falling over.**

**1** Confirm that there are screws with the stand unit.

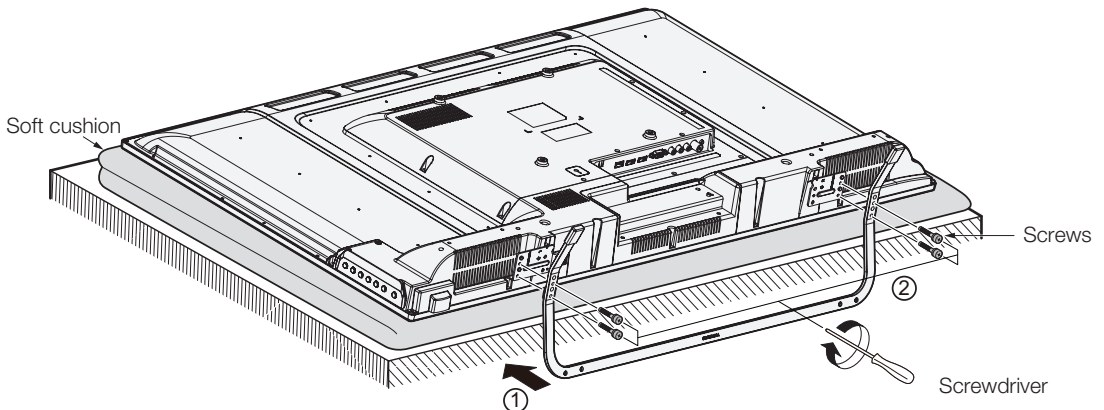
#### ( Four screws )

(Will be used in step 2)



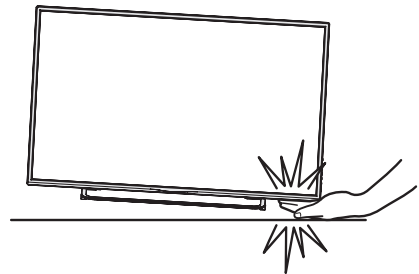
**2**

- ① Insert the base into the openings on the bottom of the TV (while holding the base to avoid it from falling over).
- ② Insert the four screws into the four holes on the bottom of the TV, and tighten them.



### NOTE

- To detach the stand unit, perform the steps in reverse order.
- The angle of the stand is not adjustable.
- A screwdriver is not supplied with this product.
- During installation, please be careful to avoid getting your hand trapped between the TV bottom and the floor.



## Preparation

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### Handling and precautions with the wall-mounted TV

- You can mount the TV on the wall using the optional bracket.
- For details, refer to the instructions supplied with the optional bracket.

#### CAUTION

- **This TV should be mounted on a wall only with a wall mount bracket recommended by SHARP. The use of other wall mount brackets may result in an unstable installation and may cause serious injuries.**
- **Installing the TV requires special skills that should only be performed by qualified service personnel. Customers should not attempt to do the work themselves. SHARP bears no responsibility for improper mounting or mounting that results in accident or injury.**

#### Using a SHARP recommended bracket to mount the TV

- You can ask a qualified service professional about using a SHARP recommended bracket to mount the TV to the wall.
- Carefully read the instructions that come with the bracket before beginning work.

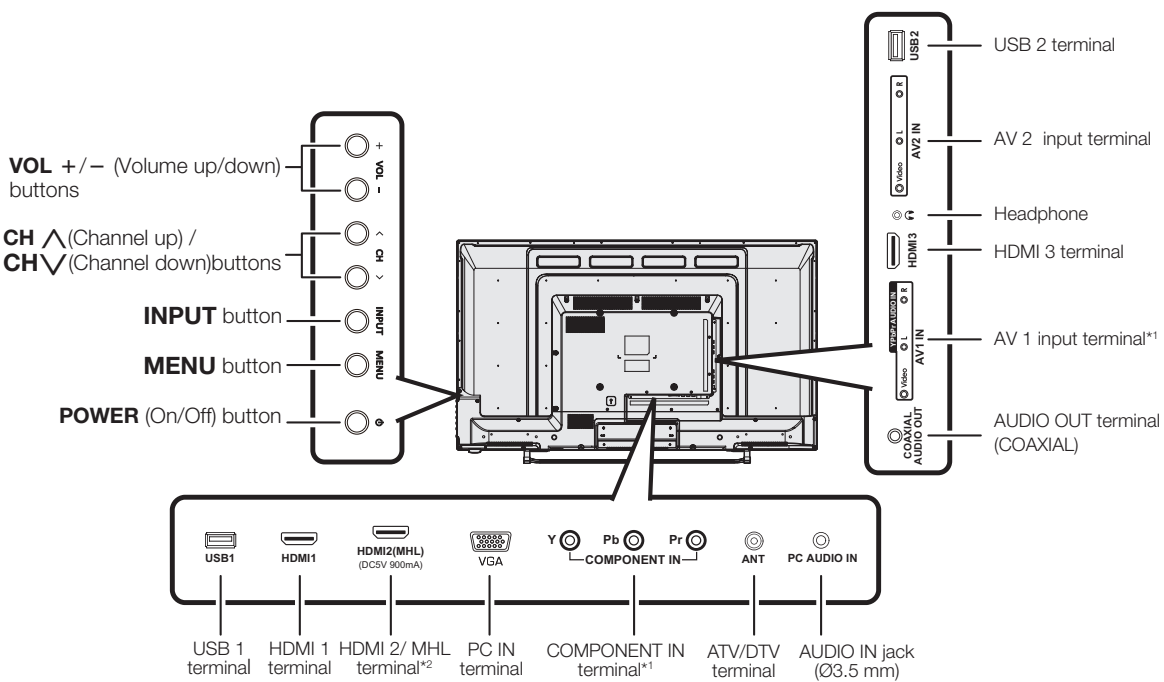
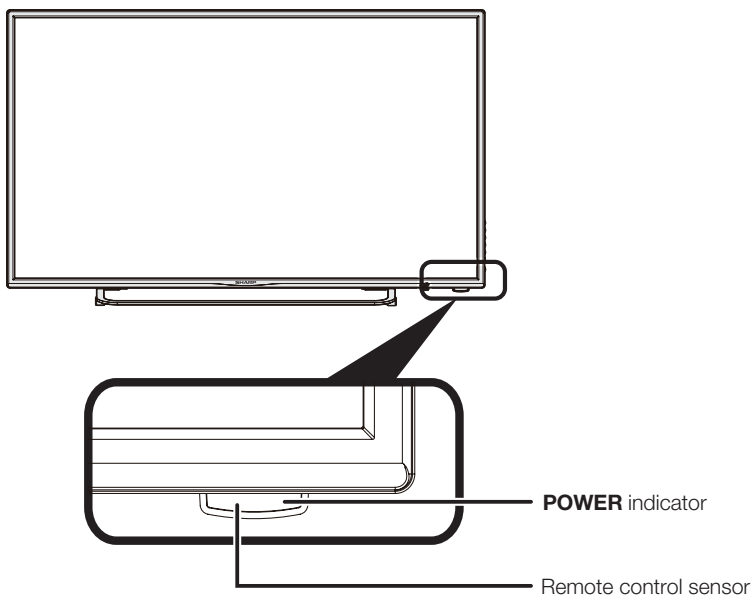
#### NOTE

- If you want to mount the TV on the wall, use the screws provided with the wall-mount bracket to affix the bracket to the rear of the TV.

# Preparation

## Part names

### TV (Front/Rear)



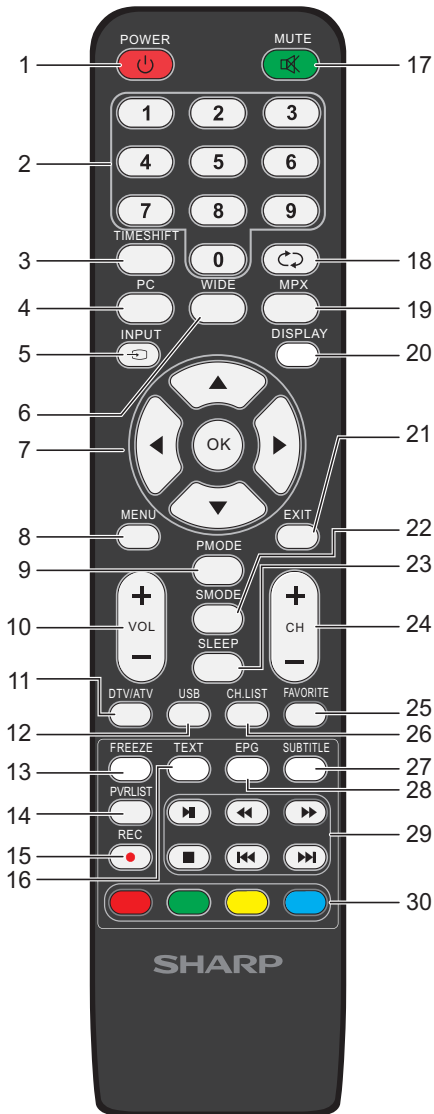
\* 1 The component terminal and AV 1 terminal share the same Audio terminal.

\* 2 Mobile High-Definition Link(MHL) can also be used. (see page 27.)



## Preparation

### Remote control unit



- 1 **POWER (Standby/On)**  
To switch the power on and off. (See page 14.)
- 2 **0 - 9**  
Set the channel.
- 3 **TIMESHIFT**  
DTV only: Press button to start Timeshift. (See page 24.)
- 4 **PC**  
Directly select the PC input.
- 5 **INPUT**  
Select an input source.
- 6 **WIDE**  
Change the wide image mode. (See page 17.)
- 7 **▲/▼/◀/▶ (Cursor)**  
Select a desired item on the setting screen.  
**OK**  
Execute a command.

- 8 **MENU**  
Display the menu screen.
- 9 **P.MODE**  
Select a picture mode. (See page 17.)
- 10 **VOL + / -**  
Set the volume.
- 11 **DTV (Digital TV)/ATV (Analogue TV)**  
Press to switch between digital TV mode and analogue TV mode.
- 12 **USB**  
Directly select the USB input.
- 13 **FREEZE**  
Freeze a motion picture on the screen. (See page 22.)
- 14 **PVRLIST**  
DTV only: To display the recorded programme list. (See page 24.)
- 15 **REC**  
DTV only: To record the programme you desired. (See page 24.)
- 16 **TEXT**  
For MHEG5 application when watching available digital channels. (See page 24.)
- 17 **Mute**  
Mute the sound. (See page 23.)
- 18 **↶ Flash Back**  
To return to the previous viewing channel. (See page 22.)
- 19 **MPX**  
To select the sound multiplex mode. (See page 23.)
- 20 **DISPLAY**  
Display the channel or input information. (See page 23.)
- 21 **EXIT**  
Turn off the On-Screen Display.
- 22 **S.MODE**  
Select a sound mode. (See page 19.)
- 23 **SLEEP**  
Set the sleep timer. (See page 23.)
- 24 **CH +/-**  
TV input mode: Select the channel.
- 25 **FAVORITE**  
Display the your favorite channel list. (See page 16.)
- 26 **CH.LIST**  
Display the channel list of DTV and ATV. (See page 23.)
- 27 **SUBTITLE**  
DTV only: To Display subtitle language selection menu.
- 28 **EPG**  
DTV only: To display EPG (Electronic Programme Guide) screen. (See page 22.)
- 29 **⏮ ⏪ ⏩ ⏭**  
Used for the USB Media Player.
- 30 **Colour (Red/Green/Yellow/Blue)**  
Follow the on screen instructions to use the colour button.

## Preparation

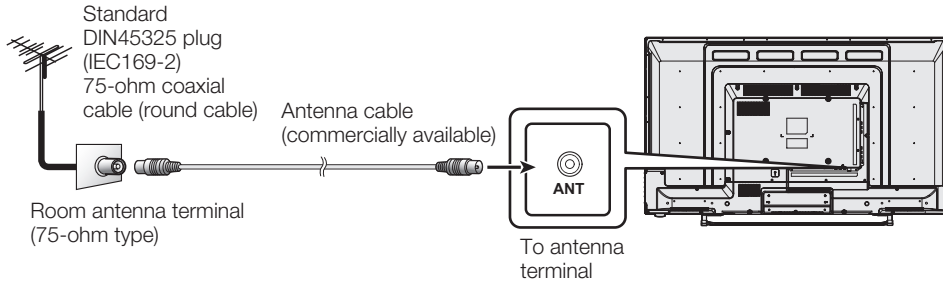
### Before turning on the power

#### Notes on installing the TV

- Avoid direct sunlight and place the TV in a well-ventilated location.
- Place the TV in a level location.
- Do not turn on the power of the TV before connecting the AC cord.
- If there are any protective plastic sheets on the TV cabinet, please take them off before connection.

#### 1 Connecting the antenna cable

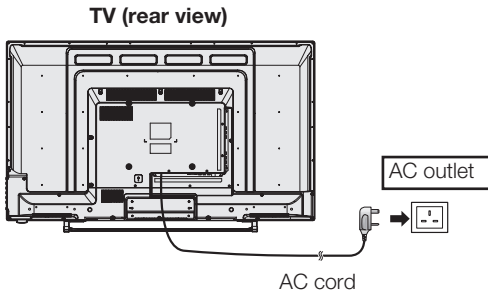
To enjoy a clearer picture, use an outdoor antenna. The following is a brief explanation of the types of connections that are used for coaxial cable.



#### 2 Connecting external devices

See page 11 for connecting external equipment, such as a VCR and DVD player.

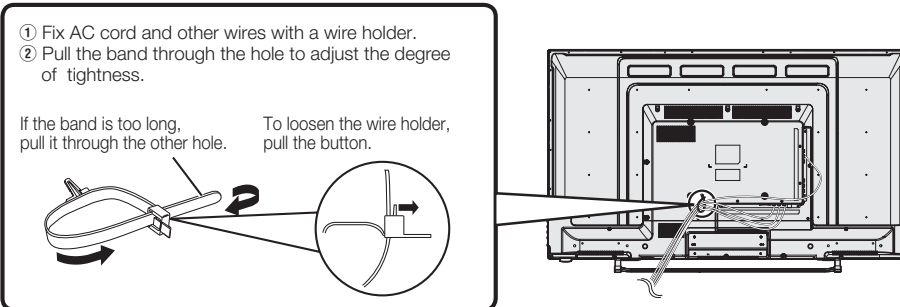
#### 3 Plug the AC cord into the AC outlet.



- Place the TV close to the AC outlet, and keep the power plug within reach.
- Disconnect the AC cord from the AC outlet if the TV will not be used for a long period of time.

#### 4 Bundling the cables

As the picture illustrated, insert the cable clip into the hole on the TV, and put the cable into the cable clip for banding.




#### CAUTION

- To prevent risk of electric shock, do not touch un-insulated parts of any cables with the AC cord connected.

## Preparation

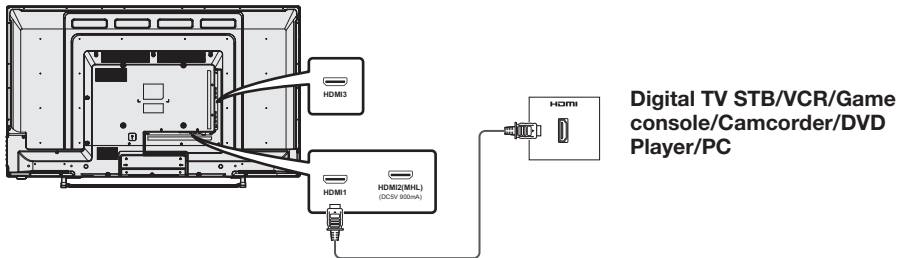
### Connecting external devices

You can connect many types of external equipment to your TV, like a VCR, game console, camcorder, DVD player, Digital TV Set Top Box (STB), PC. To view external source images, select the input source from  on the remote control unit or **INPUT** on the TV.

#### CAUTION

- To protect all equipment, always turn off the TV before connecting to a VCR, game console, camcorder, DVD player, Digital TV Set Top Box (STB), PC or other external equipment.
- Refer to the relevant operation manual (VCR, DVD player, etc.) carefully before making connections.

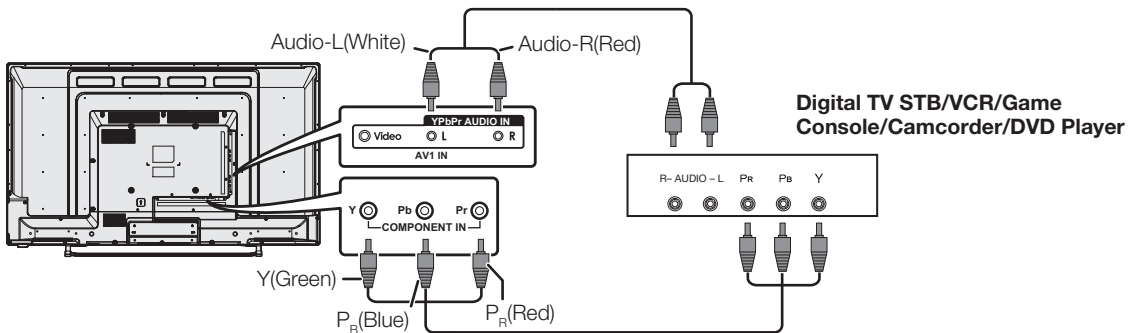
#### When using HDMI cable (commercially available)



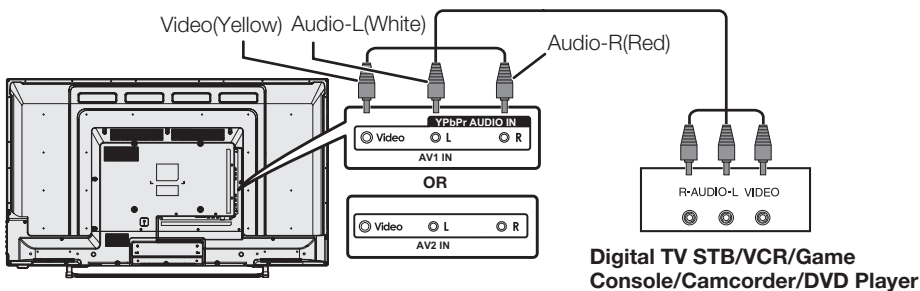
#### NOTE

- When using a TV set-top box to watch TV programs, use the set-top box remote control to switch channels.

#### When using component cable\* (commercially available)



#### When using composite cable\* (commercially available)



\* The component terminal and AV 1 terminal share the same Audio terminal.

#### NOTE

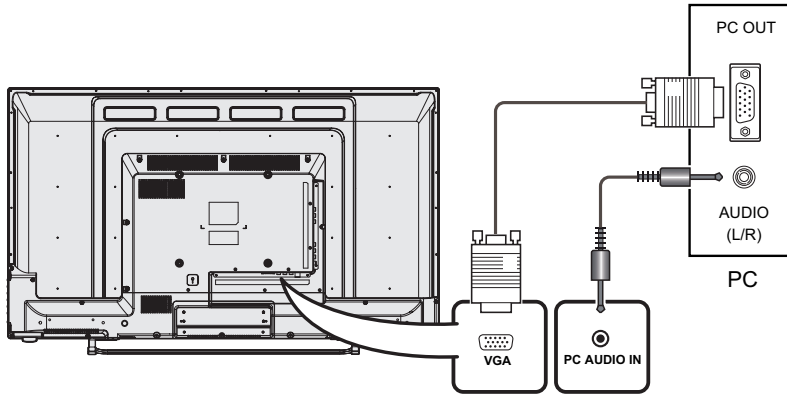
- Insert the terminals by colour.

## Preparation

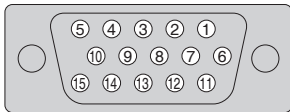
### Connecting a PC

Use the PC terminals to connect a PC.

#### When using VGA cable



#### Signal names for 15-pin mini D-sub connector



Pin No.	Signal name	Pin No.	Signal name	Pin No.	Signal name
①	R	⑥	GND (Ground)	⑪	Not connected
②	G	⑦	GND (Ground)	⑫	SDA
③	B	⑧	GND (Ground)	⑬	HD
④	Not connected	⑨	+5V	⑭	VD
⑤	CSYNC	⑩	GND (Ground)	⑮	SCL

#### NOTE

- Macintosh adaptor may be required for use for some Macintosh computers.

### PC compatibility chart

Resolution		Horizontal Frequency	Vertical Frequency	Analogue (D-Sub)	Digital (HDMI)	VESA Standard
VGA	640 x 480	31.469 kHz	60 Hz	✓	✓	✓
SVGA	800 x 600	37.879 kHz	60 Hz	✓	✓	✓
XGA	1024 x 768	48.363 kHz	60 Hz	✓	✓	✓
WXGA	1360 x 768	47.720 kHz	60 Hz	✓	✓	✓
SXGA	1280 x 1024	63.981 kHz	60 Hz	✓	✓	✓
SXGA+	1440 x 900	55.935 kHz	60 Hz	✓	✓	✓
UXGA	1600 x 1200	75.0 kHz	60 Hz	✓	✓	✓
1080p	1920 x 1080	67.5 kHz	60 Hz	✓	✓	—

#### NOTE

- This TV has only limited PC compatibility, correct operation can only be guaranteed if the video card conforms exactly to the VESA 60Hz standard. Any variations from this standard will result in picture distortions.

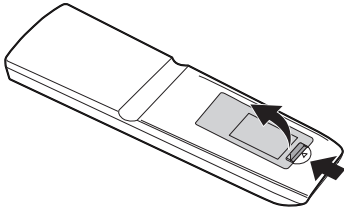
VGA, SVGA, XGA, WXGA, SXGA, SXGA+ and UXGA are registered trademarks of International Business Machines Corporation.

## Preparation

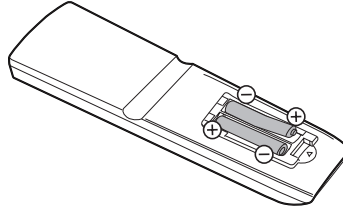
### Inserting the batteries

Before using the TV for the first time, insert two “AAA” size batteries (supplied). When the batteries become depleted and the remote control fails to operate, replace the batteries with new “AAA” size batteries.

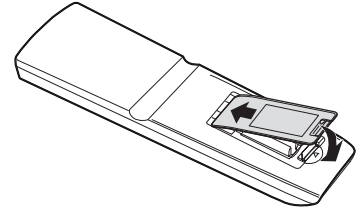
**1** Open the battery cover.



**2** Insert the two supplied “AAA” size batteries.



**3** Close the battery cover.



- Place batteries with their terminals corresponding to the (+) and (-) indications in the battery compartment.

### CAUTION

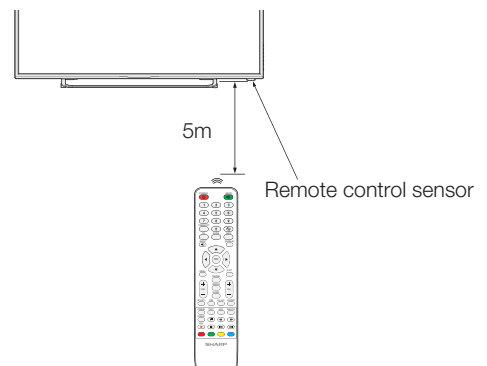
Improper use of batteries can result in chemical leakage or explosion. Be sure to follow the instructions below.

- Do not mix batteries of different types. Different types of batteries have different characteristics.
- Do not mix old and new batteries. Mixing old and new batteries can shorten the life of new batteries or cause chemical leakage in old batteries.
- Remove batteries as soon as they have worn out. Chemicals that leak from batteries can cause a rash. If you find any chemical leakage, wipe thoroughly with a cloth.
- The batteries supplied with this product may have a shorter life expectancy due to storage conditions.
- If you will not be using the remote control unit for an extended period of time, remove the batteries from it.
- Batteries shall not be exposed to excessive heat such as sunshine, fire or the like.

### Using the remote control unit

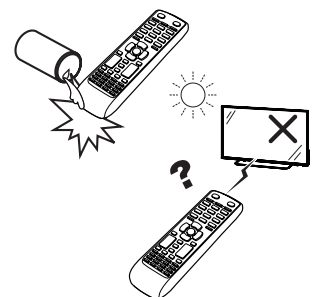
Use the remote control unit by pointing it towards the remote sensor window.

Objects between the remote control unit and sensor window may prevent proper operation.



### Cautions regarding the remote control unit

- Do not subject the remote control unit to shock. In addition, do not soak the remote control unit with liquids or place it in an area with high humidity.
- Do not install or place the remote control unit under direct sunlight. The heat may cause deformation of the unit.
- The remote control unit may not work properly if the remote sensor window of the TV is under direct sunlight or strong lighting. In such cases, change the angle of the lighting or TV, or operate the remote control unit closer to the remote sensor window.



## Preparation

### Turning the TV on/off

#### Turning on the power

Press **POWER** on the TV after inserting the power plug.

- The power indicator will turn blue, TV is switched on (after several seconds, an image appears with sound).
- You can switch the TV to standby by pressing **POWER** on the remote control, the power indicator turns red.
- Please refer page 8.

#### Turning off the power

If the TV is switched on, press **POWER** on the remote control.

- The TV be switched to standby, the image will disappear on the screen.
- Switch on the TV after press **POWER** on the remote control again, the power indicator turns blue.

#### Power indicator

light (Blue)	Power on.
light (Red)	TV is standby.

#### NOTE

- If you are not going to use this TV for a long period of time, be sure to remove the AC cord from the AC outlet.
- A small amount of electric power is still consumed even the TV is in standby mode or switch off by pressing **POWER** on the TV.
- If TV loses power in special circumstances such as power outage or grid fluctuations etc.), TV may not work well when TV is switched on again. Please try to power off the TV (by the **POWER** key in the TV's body) or unplug and replugin the AC cord to restart the TV.
- It is a normal phenomenon when the TV temperature rises in the process of watching TV.
- Please do not cut the power off casually in the process of switching on or switching off the TV, running updating, otherwise TV system could not work rightly.

### Initial auto installation

When the TV powers on for the first time after purchase, the initial auto installation wizard appears. Follow the menus and make the necessary settings one after another.

#### Confirm the following before turning on the power

- Is the antenna cable connected?
- Is the AC cord plugged in?

1

Press **POWER** on the TV.

- The initial auto installation wizard appears.

2

Press ◀▶ to select the desired language.

3

Press ▲/▼ to select "Auto Tuning", and then press ▶. The TV searches for, sorts and stores all the receivable TV stations according to their settings and the connected antenna.

- To abort the initial auto installation in progress, press **EXIT**.

#### NOTE

- If you select abort the initial auto tuning, the initial auto installation wizard does not appear. You can execute the auto tuning again from the "Channel Setting" menu. (See page 15.)

# Watching TV

You can set your TV as you desired by pressing **MENU**.

## Channel Setting



## Auto Tuning

You can run auto installation again, even after setting up the preset channels.

- 1 Press **MENU** and the MENU screen displays.
- 2 Press **◀/▶** to select “CHANNEL”.
- 3 Press **▲/▼** to select “Auto Tuning”, and then press **OK**.
- 4 The TV searches for, sorts and stores all the receivable TV stations according to their settings and the connected antenna.
  - To abort the initial auto installation in progress, press **EXIT**.

## DTV Manual Tuning

You can set some DTV channel items manually.

- 1 Press **MENU** and the MENU screen displays.
- 2 Press **◀/▶** to select “CHANNEL”.
- 3 Press **▲/▼** to select “DTV Manual Tuning”, and then press **OK**.
- 4 Press **◀/▶** to select the desired menu item, and then press **OK**.

### NOTE

- Bad, Normal and Good means signal intensity.

## ATV Manual Tuning

You can set some ATV channel items manually.

- 1 Press **MENU** and the MENU screen displays.
- 2 Press **◀/▶** to select “CHANNEL”.
- 3 Press **▲/▼** to select “ATV Manual Tuning”, and then press **OK**.
- 4 Press **▲/▼** to select the desired menu item, and then press **OK**.

Press **▲/▼** to select your desired item, and then press **◀/▶** to adjust the settings.

Item	Description
<b>Storage to [1~100]</b>	Save programme to your desired channel number. Press <b>R</b> to save.
<b>System</b>	Select the optimum sound system (Broadcasting system) to receive. (B/G, D/K, I, M) Press <b>R</b> to save.
<b>Current CH</b>	Select the channel you want to edit. <ul style="list-style-type: none"><li>• Selected channel will be automatically reflected in the background.</li></ul>
<b>Search</b>	Start searching from current channel. <ul style="list-style-type: none"><li>• Instead of pressing <b>◀/▶</b> to adjust the frequency, you can set by directly entering the frequency number of the channel with <b>0–9</b>, and then press <b>OK</b>.</li></ul> Press <b>R</b> to save.
<b>Fine-tune</b>	Tune the frequency of the stored channel to your desired position. <ul style="list-style-type: none"><li>• Adjust while checking the background picture as a reference.</li></ul> Press <b>R</b> to save.

### NOTE

- The frequency shown below is the real-time frequency of the displayed channel.

## Watching TV

### Programme Edit

Use this menu to delete, rename, move, skip or assign any programs as your favorite channels.

**1** Press **MENU** and the MENU screen displays.

**2** Press **◀/▶** to select "CHANNEL".

**3** Press **▲/▼** to select "Programme Edit", and then press **OK**.

**4** Press **▲/▼** to select the desire programme.

#### ■ Delete

Channels can be deleted individually.

Press **R(Red)** to erase the selected channel.

#### ■ Rename

Channel names can be renamed freely.

Press **G(Green)** to select the channel you want to rename.

Press **◀/▶** to select the letter, and press **▲/▼** to change the letter.

#### ■ Move

Change the position of channel.

Press **Y(Yellow)** to select the channel you want to move.

Press **▲/▼** to move it to the desired position, and then press **Y(Yellow)** again.

#### ■ Skip

Channels with "Skip" set to "On" are passed over when using **CH+/-** (on remote) or **CH▲/▼** (on TV) even if selected while watching the image from the TV.

Press **B(Blue)** to skip the selected channel, **⊙** will be showed on the right side of the program. Press **B(Blue)** again to cancel the skip, **⊙** will be disappeared.

#### ■ Favorite

Add the channel into your favorite channel list.

Press **▲/▼** to select the channel you want to add, then press **FAVORITE** to add it into favorite channel list, **♥** will be showed on the right side of the program. Press **FAVORITE** again to cancel, **♥** will be disappeared.

#### NOTE

- You can rename the channel in ATV only.

### Signal Information

To display the detail information of programme in DTV.

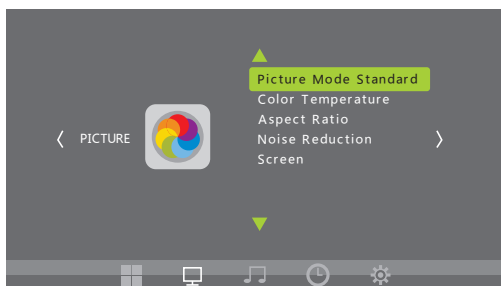
**1** Press **MENU** and the MENU screen displays.

**2** Press **◀/▶** to select "CHANNEL".

**3** Press **▲/▼** to select "Signal Information", and then press **OK** to select the information of programme.



## Picture Setting



### Picture Mode

The "Picture Mode" function enables you to select appropriate settings for audio and video to account for the system environment which can vary due to factors like room brightness, type of programme watched or the type of image input from external equipment.

- 1 Press **MENU** and the MENU screen displays.
- 2 Press **◀/▶** to select "PICTURE".
- 3 Press **▲/▼** to select "Picture Mode", and then press **OK**.
- 4 Press **◀/▶** to select the desired setting.  
Or you can press the **PMODE** key of the R/C.

Selected item	Description
<b>Standard</b>	For a highly defined image in a normally bright room.
<b>Mild</b>	Suitable for darker environments. The contrast of the TV display will be adjusted to lower level for better view.
<b>User</b>	Allows the user to adjust Contrast, Brightness, Color, Sharpness and Tint levels independently.
<b>Dynamic</b>	For a clear-cut image emphasising high contrast for sports viewing.

### NOTE

- You can select a different "Picture Mode" item for each input mode. (For example, select "Standard" for ATV input and "Dynamic" for VIDEO input.)

## Color Temperature

You can adjust the color temperature to your preference.

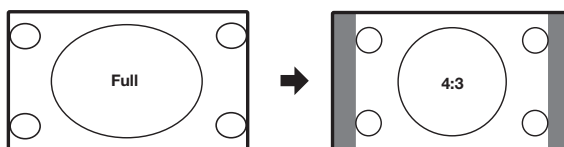
- 1 Press **MENU** and the MENU screen displays.
- 2 Press **◀/▶** to select "PICTURE".
- 3 Press **▲/▼** to select "Color Temperature", and then press **OK**.
- 4 Press **◀/▶** to select the desired setting. There are 4 color temperature modes: Cool, Medium, Warm and User.

## Aspect Ratio

You can select different picture sizes that account for the kind of each picture.

- 1 Press **MENU** and the MENU screen displays.
- 2 Press **◀/▶** to select "PICTURE".
- 3 Press **▲/▼** to select "Aspect Ratio", and then press **OK**.
- 4 Press **▲/▼** while the "Aspect Ratio" menu displays on the screen.
  - As you toggle down the options, each mode is immediately reflected on the TV.

Selected item	Description
<b>Auto</b>	Adjust the ratio of image automatically.
<b>Full</b>	For 16:9 squeeze pictures.
<b>4:3</b>	For 4:3 standard pictures. A side bar appears on each side.
<b>Just Scan</b>	Display with the High-Definition image adjusted optimally. Noise may appear on the edge of the screen with some programmes.



### NOTE

- Some picture sizes may not be displayable depending on the input signal.

## Watching TV

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### Noise Reduction

Reduce noise on screen and produces a clearer video image.

- 1 Press **MENU** and the MENU screen displays.
- 2 Press ◀/▶ to select "PICTURE".
- 3 Press ▲/▼ to select "Noise Reduction", and then press **OK**.
- 4 Press ▲/▼ to select "Off", "Low", "Middle" or "High".

### Screen (VGA Mode)

The screen option is only available when the input source is PC via VGA and your TV is receiving a computer signal. Select Auto Adjust for adjusting the settings automatically, or select Horizontal Pos., Vertical Pos., Size or Phase and adjust your preference.

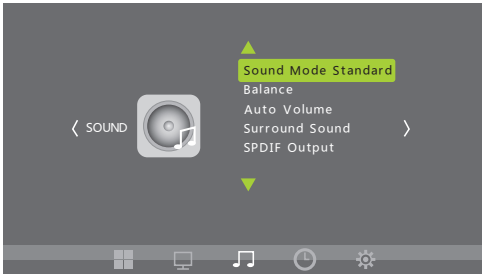
- 1 Press **MENU** and the MENU screen displays.
- 2 Press ◀/▶ to select "PICTURE".
- 3 Press ▲/▼ to select "Screen", and then press **OK**.
- 4 Press ▲/▼, ◀/▶ or **OK** to select and adjust the horizontal position, vertical position, size and phase here.

#### NOTE

- Screen only available in PC mode via VGA.

## Watching TV

### Sound Setting



### Sound Mode

You can select sound mode.

- 1 Press **MENU** and the MENU screen displays.
- 2 Press **◀/▶** to select "SOUND".
- 3 Press **▲/▼** to select "Sound Mode", and then press **OK**.
- 4 Press **◀/▶** to select the desired setting.  
Or you can press the **SMODE** key of the R/C.

Selected item	Description
<b>Standard</b>	Balances treble and bass. This setting is good for watching standard TV broadcasts.
<b>Music</b>	Preserves the original sound. This setting is good for listening to music.
<b>Movie</b>	Enhances treble and bass for a rich sound experience. This setting is good for watching DVDs, Blu-ray discs, and HDTV.
<b>Sports</b>	This setting is good for watching sports programme.
<b>User</b>	Allows the user manually adjust sound settings.

### Balance

Adjust the balance between left and right speakers to adapt to your listening position.

- 1 Press **MENU** and the MENU screen displays.
- 2 Press **◀/▶** to select "SOUND".
- 3 Press **▲/▼** to select "Balance", and then press **OK**.
- 4 Press **◀/▶** to adjust the balance between left and right speakers.

### Auto Volume

Different sound sources sometimes do not have the same volume level, such as a programme and its commercial breaks. The automatic volume control (Auto volume) reduces this problem by equalizing levels.

- 1 Press **MENU** and the MENU screen displays.
- 2 Press **◀/▶** to select "SOUND".
- 3 Press **▲/▼** to select "Auto Volume", and then press **OK** to select "On" or "Off".

### Surround Sound

The surround sound function produces a surround effect from the speakers.

- 1 Press **MENU** and the MENU screen displays.
- 2 Press **◀/▶** to select "SOUND".
- 3 Press **▲/▼** to select "Surround Sound", and then press **OK** to select "Off" or "Surround".

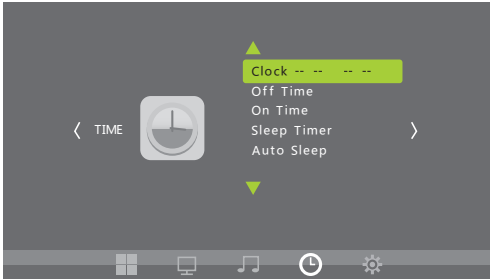
### SPDIF Output

The SPDIF output function allows user to select the digital audio output mode.

- 1 Press **MENU** and the MENU screen displays.
- 2 Press **◀/▶** to select "SOUND".
- 3 Press **▲/▼** to select "SPDIF Output", and then press **OK**.
- 4 Press **▲/▼** to select "PCM", "Auto" or "Off".

## Watching TV

### Time Setting



### Clock

You can set the current clock.

- 1 Press **MENU** and the MENU screen displays.
- 2 Press ◀/▶ to select "TIME".
- 3 Press ▲/▼ to select "Clock", and then press **OK**.
- 4 Press ▲/▼ and ◀/▶ to set the current clock.

#### NOTE

- The clock time will be set automatically after the DTV Channels are tuned.

### Off Time

Allows to set the time to power-off the TV automatically.

- 1 Press **MENU** and the MENU screen displays.
- 2 Press ◀/▶ to select "TIME".
- 3 Press ▲/▼ to select "Off Time", and then press **OK**.
- 4 Press ▲/▼ and ◀/▶ to set the off time.

### On Time

Allows to set the time to turn on the TV automatically.

- 1 Press **MENU** and the MENU screen displays.
- 2 Press ◀/▶ to select "TIME".
- 3 Press ▲/▼ to select "On Time", and then press **OK**.
- 4 Press ▲/▼ and ◀/▶ to set the on time.

### Sleep Timer

Auto power-off at a designated time. This function is conveniently used when, for instance, going to bed while watching TV.

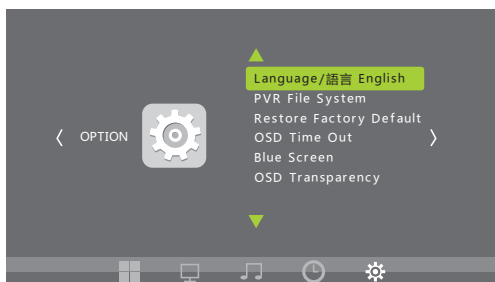
- 1 Press **MENU** and the MENU screen displays.
- 2 Press ◀/▶ to select "TIME".
- 3 Press ▲/▼ to select "Sleep Timer", and then press **OK**.
- 4 Press ▲/▼ to select the sleep time.

### Auto Sleep

Allows to turn on or turn off the auto sleep. If "Auto Sleep" is set to on, the TV will be automatically powered off if there is no signal within 5 minutes. In case of USB mode, the TV will be automatically powered off if there is no signal within 30 minutes.

- 1 Press **MENU** and the MENU screen displays.
- 2 Press ◀/▶ to select "TIME".
- 3 Press ▲/▼ to select "Auto Sleep", and then press **OK** to select the "Off" or "On".

## Option Setting



### Language / 語言

You can select a language from the setup menu. 3 languages are available: English, Simplified Chinese and Traditional Chinese.

- 1 Press **MENU** and the MENU screen displays.
- 2 Press **◀/▶** to select "OPTION".
- 3 Press **▲/▼** to select "Language/ 語言", and then press **OK**.
- 4 Press **▲/▼** to select the desired language listed on the screen.

### PVR File System

You need to set the PVR file system before you record programme you desired.

- 1 Press **MENU** and the MENU screen displays.
- 2 Press **◀/▶** to select "OPTION".
- 3 Press **▲/▼** to select "PVR File System", and then press **OK**.
- 4 Press **▲/▼**, **◀/▶** and **OK** to set the PVR File System.

Select Disk	c:
Check PVR File System	Start
USB Disk	
Format	
Time Shift Size	
Speed	
Free Record Limit	6 Hr.

MENU

#### NOTE

- This function only available in DTV mode.
- Before using Time Shift function or recording function, it is necessary to format USB storage clear first.
- All the data in the USB storage device will be deleted after formatting.
- The maximum supported storage capacity of hard disk is 1TB.

## Restore Factory Default

If complex adjustments are made and the settings can not be restored to normal, you can reset the settings to the factory preset values.

- 1 Press **MENU** and the MENU screen displays.
- 2 Press **◀/▶** to select "OPTION".
- 3 Press **▲/▼** to select "Restore Factory Default", and then press **OK**.
- 4 Press **◀/▶** to select "Yes" or "No".

## OSD Time Out

Allows to set the display time of the on-screen menu.

- 1 Press **MENU** and the MENU screen displays.
- 2 Press **◀/▶** to select "OPTION".
- 3 Press **▲/▼** to select "OSD Time Out", and then press **OK**.
- 4 Press **▲/▼** to select "Off", "10S", "20S", "30S", "40S", "50S", "60S", "70S", "80S" or "90S".

## Blue Screen

Allows to set the screen display in blue when there is no signal input.

- 1 Press **MENU** and the MENU screen displays.
- 2 Press **◀/▶** to select "OPTION".
- 3 Press **▲/▼** to select "Blue Screen", and then press **OK** select "On" or "Off".

## OSD Transparency

Allows to set the transparency of OSD menu.

- 1 Press **MENU** and the MENU screen displays.
- 2 Press **◀/▶** to select "OPTION".
- 3 Press **▲/▼** to select "OSD Transparency", and then press **OK**.
- 4 Press **▲/▼** to select "Off", "10%", "20%", "30%", "40%", "50%", "60%", "70%", "80%", "90%" or "100%".

## Watching TV

### EPG

An “EPG” (Electronic Programme Guide) is a programme schedule, which is displayed on the TV screen. The EPG is broadcasted together with DTV. The TV screen shows the EPG when the viewer presses **EPG** on the remote control, provided that the TV is receiving the digital broadcasting signal. The EPG enables you to check the schedule of DTV, view detailed information about them, tune to an event currently on-air and set a timer for future events.



**1** Press **EPG** to display EPG(Electronic Programme Guide) screen.

**2** Press **▲/▼** to select the desired channel, and then press **OK**.

- The selected channel displays.

The operation for EPG (Electronic Program Guide), can refer the guide which is displayed on the bottom of TV screen, The operation for the relative colour key is as follow:

**R (Red):** Display the menu of recorder. Press **R** again to exit.

**G (Green):** View detailed information of the present channel. Press **G** again to exit.

**Y (Yellow):** Display the timer list. Press **Y** again to exit.

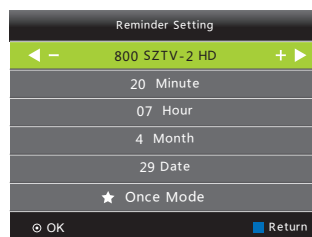
**B (Blue):** Reminder timer setting. You can schedule a reminder for future programmes. Channel will automatically change on time as scheduled.

### Reminder timer setting

**1** Press **EPG**.

**2** Press **▲/▼** to select the programme you want to watch.

**3** Press **B** to display reminder time and mode.



**4** Press **▲/▼** and **◀/▶** to set reminder timer and mode, and then press **OK**.

### NOTE

- The time displayed on the EPG is information sent by the TV station.

### The added instruction for R/C buttons

#### FREEZE

Freeze a moving image on the screen.

**1** Press **FREEZE**.  
A still image is captured from active image when you press **FREEZE**.

**2** You can press **FREEZE** to exit the still image.

### NOTE

- It will show “No still image display available” when the function doesn’t work .
- There is no such function in USB mode.

#### ↶ (Flash Back)

Press **↶** to switch the currently tuned channel to the previously tuned channel.

Press **↶** again to switch back to the currently tuned channel.

Press **↶** to toggle between the currently selected input source and the previously selected one.

## Watching TV

### MUTE

Using **MUTE** on the remote control unit to mute the current sound output.

- 1 Press **MUTE**.
  - The sound is silenced.
  - “**MUTE**” is displayed while the mute function is on.



- 2 Press **MUTE** again to cancel the mute.

### MPX

You can switch between multiple audio modes when watching a multiple audio or stereo broadcast programme.

Each time you press **MPX** the mode switches as follows.

#### In the NICAM TV broadcasts

Signal	Mode switch
When receiving a stereo signal	NICAM STEREO, FM mono
When receiving a bilingual signal	NICAM DUAL I, NICAM DUAL II, FM mono.
When receiving a monaural signal	NICAM MONO, FM mono

#### In the TV mode of A2 TV broadcasts

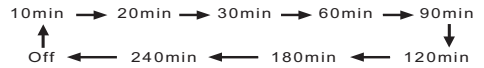
Signal	Mode switch
When receiving a stereo signal	NICAM STEREO, FM mono
When receiving a bilingual signal	NICAM DUAL I, NICAM DUAL II, FM mono.
When receiving a monaural signal	NICAM MONO, FM mono

### SLEEP

Auto power-off at a designated time. This function is conveniently used when, for instance, going to bed while watching TV.

- 1 Press **SLEEP**.
  - Remaining time displays when sleep timer has been set.

- 2 Each time you press **SLEEP**, the remaining time switches as shown below.



#### NOTE

- When the time has been set, countdown automatically starts.
- Thirty seconds before the preset of time expires, the remaining time will be displayed.
- Select “Off” by pressing **SLEEP** to cancel the sleep timer.

### DISPLAY

While watching DTV you can check the extended programme information on the screen using **DISPLAY** on the remote control.

- You can cancel this info by pressing **DISPLAY** again.

### CH.LIST

Display the channel list.

- 1 Press **CH.LIST**, and then display the “Channel List” of DTV and ATV on the screen.

- 2 Press **▲/▼** to select the desired channel, and then press **OK** to switch to the selected channel.
  - When received a encryption program that cannot be played, the “key” icon will be displayed .

## Watching TV

### TIMESHIFT

In DTV mode, insert a formatted USB storage device, then press **TIMESHIFT** to enter the timeshift mode.

**1** Press **TIMESHIFT** to enter the timeshift mode, the programme will be paused, **II** will be showed on the screen and the recording will begin.

**2** Press **◀/▶** to select the desired option, and then press **OK** to execute it.

- Press **▶||** to play or pause the programme you are recoding from the beginning.
- Press **■** to exit the timeshift mode.

### RECORDING

In DTV mode, insert a formatted USB storage device, then press **REC** to record the programme you are watching.

**1** Press **REC** to record the programme you are watching, the record menu will be showed on the bottom of the screen.

**2** Press **◀/▶** to select the desired option, and then press **OK** to execute it.

- Press **▶||** to play or pause the programme you are recoding.
- Press **■** to exit the record mode.

### PVRLIST

In DTV mode, press **PVRLIST** to display the Recorded List.

**1** Press **PVRLIST** to display the Record List.

**2** Press **▲/▼** to select the programme you have recorded, and then press **▶||** to play or pause the programme.

- Press **R (Red)** button to delete the selected programme.
- Press **G (Green)** button to display the information of the recorded programme.



### TEXT

MHEG-5 data broadcast is scheduled in Hong Kong. You can watch a MHEG-5 data broadcast by pressing **TEXT** button.

#### NOTE

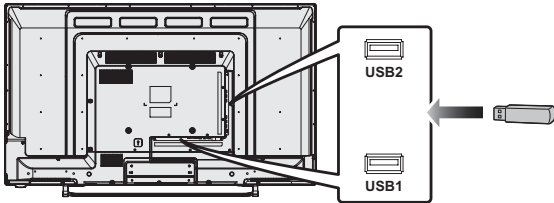
- This function only available after turning off the subtitle function.



# Connecting a USB memory device

## Connecting a USB memory device

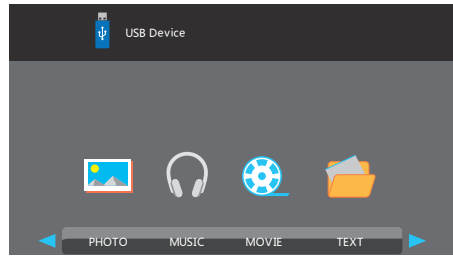
You can connect the TV to a USB memory device to enjoy viewing pictures, listening to music, and watching videos. Connect a commercially available USB to the USB port of the TV.



### NOTE

- Depending on the USB memory device, the TV may not be able to recognize the data.
- It may take time to read the data if the USB memory device contains many files or folders.
- Use only alphanumeric characters for naming files.
- File names over 17 characters (may vary depending on character set) may not be displayed.
- Do not connect and disconnect a USB from the TV repeatedly.
- Please follow these rule when the TV is displaying the signal from USB device:
  - Please do not turn off the TV.
  - Please don't disconnect the USB device.
  - Please be sure to exit from USB interface before pulling out the USB device, otherwise you maybe lose the data ,damage equipment or TV system could not work rightly.
- Please be sure to remove the USB device, then turn off the TV.
- Please connect a commercially available USB device after the TV power on.

## Playing back files on a USB memory device
























- 1 Select "USB" using (**INPUT SOURCE**) on the remote control unit or on the TV.
- 2 Press to select "PHOTO", "MUSIC", "MOVIE" or "TEXT", and then press **OK**.
- 3 Press to select the drive where you want to find your files, and then press **OK**.
- 4 Press to select the desired folder or directory, and then press **OK**.  
Press to select the desired file, and then press **OK**.
  - The document be selected by cursor will shown the preview image after several seconds.
  - Select the menu "Return" shown on screen, can enter into upper folder.
- 5 Press **B** (blue) to select/unselect all files. Function and its applicable mode in detail, please refer to below table and page 26.
- 6 Press **R** (red) after selecting a file, you can Delete, Copy or Paste it. Function and its applicable mode in detail, please refer to below table and page 26.

### List of file formats compatible with USB mode

Item	Supported Formats
Photo file format	JPG/JPEG, BMP, PNG
Movie file format	MPG, AVI, TS, MOV/MKV, DAT, MP4, VOB
Music file format	MP3, M4A/AAC
Text file format	TEXT

## Connecting a USB memory device

### Buttons for USB media operation

Button/ menu	Description	Photo mode	Music mode	Movie mode
	Play/Pause.	✓	✓	✓
	FB. Each time you press FB, the speed will change.	-	✓	✓
	FF. Each time you press FF, the speed will change.	-	✓	✓
	Go to the previous file.	✓	✓	✓
	Go to the next file.	✓	✓	✓
	Stop playback and return to the file selection screen.	✓	✓	✓
	Loop. Each time you press <b>OK</b> , the mode will switch between Repeat All , None and Once.	✓	✓	✓
	Loop from point A to B. Press <b>OK</b> to set the current playback time starting point. Press <b>OK</b> to set the loop end of the current playing time and start loop playback. Press <b>OK</b> to cancel the loop.	-	-	✓
	MUTE.	-	✓	-
	Play/cancel the background music. The background music should be saved in the same folder with the photo .	✓	-	-
	Playlist. Select a file from the playlist to start playback.	✓	✓	✓
	Display file information.	✓	✓	✓
	Slow-forward. Each time you press <b>OK</b> , the speed will change.	-	-	✓
	Step-forward. Each time you press <b>OK</b> , the picture will change to the next still picture.	-	-	✓
	Go to time. Set a start point of playing.	-	✓	✓
	Rotate the photo by 90 degrees to the right.	✓	-	-
	Rotate the photo by 90 degrees to the left.	✓	-	-
	Zoom in an image or photo.	✓	-	✓
	Zoom out an image or photo.	✓	-	✓
	Aspect Ratio. Set wide mode, Press <b>OK</b> to change between “Auto”, “4:3” and “Full”.	-	-	✓
	Move image up, down, left or right after zoom in. Press <b>OK</b> to exit.	✓	-	✓

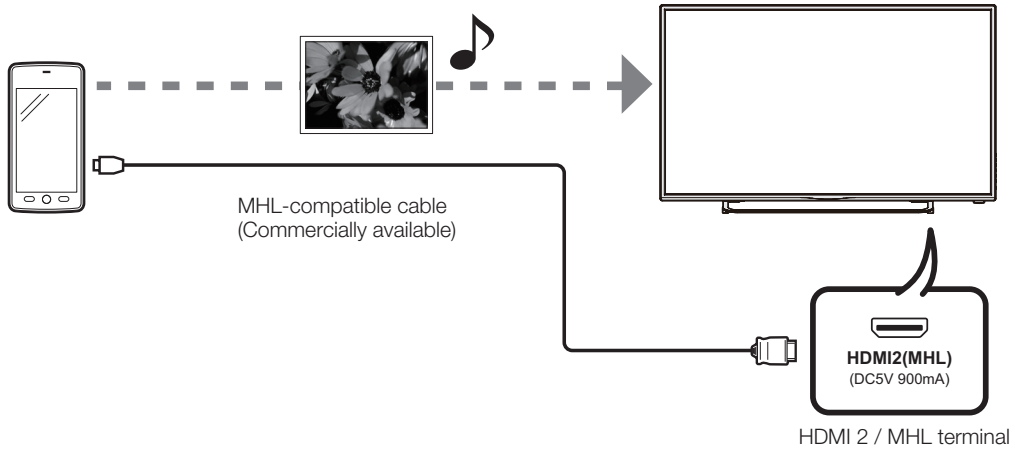
# Other useful features

## Using a Smartphone with the TV

This function enables you to connect the TV to a smartphone that supports Mobile High-Definition Link (MHL) using an MHL-compatible cable.

To connect the TV to your MHL-compatible smartphone, be sure to use an MHL-compatible cable (Commercially available).

- You can view pictures and video on a large screen.
- You can play back music files.



### NOTE

- A MHL-compatible portable device is required to use this function. Connect the device to the HDMI 2 / MHL terminal.

# Appendix

## Troubleshooting

The problems described below are not always caused by malfunctions. Check the TV again before having the TV serviced.

Problem	Possible solution
<ul style="list-style-type: none"> <li>No power.</li> </ul>	<ul style="list-style-type: none"> <li>Is the AC cord disconnected? (See page 10.)</li> <li>Has the power been turned on? (See page 14.)</li> <li>Check if you pressed <b>POWER</b> on the TV. If the indicator on the TV lights up red, please press <b>POWER</b> on the remote control unit.</li> </ul>
<ul style="list-style-type: none"> <li>Unit cannot be operated.</li> </ul>	<ul style="list-style-type: none"> <li>External influences such as lightning, static electricity, etc., may cause improper operation. In this case, operate the unit after first turning the power off the TV or unplugging the AC cord and re-plugging it in after 1 or 2 minutes.</li> </ul>
<ul style="list-style-type: none"> <li>Remote control unit does not operate.</li> </ul>	<ul style="list-style-type: none"> <li>Are batteries inserted with polarity (+, -) aligned? (See page 13.)</li> <li>Are batteries worn out? (Replace with new batteries.)</li> <li>Are you using it under strong or fluorescent lighting?</li> <li>Is a fluorescent light shining on the remote control sensor?</li> </ul>
<ul style="list-style-type: none"> <li>Picture is cut off.</li> </ul>	<ul style="list-style-type: none"> <li>Is the image position correct? (See page 17.)</li> <li>Are screen mode adjustments such as picture size made correctly? (See page 17.)</li> </ul>
<ul style="list-style-type: none"> <li>Strange colour, light colour, or dark, or colour misalignment.</li> </ul>	<ul style="list-style-type: none"> <li>Adjust the picture tone. (See pages 17.)</li> <li>Is the room too bright? The picture may look dark in a room that is too bright.</li> </ul>
<ul style="list-style-type: none"> <li>Power is suddenly turned off.</li> </ul>	<ul style="list-style-type: none"> <li>The unit's internal temperature has increased. Remove any objects blocking the vent or clean.</li> <li>Is the sleep timer, off time or Auto Sleep set? (See pages 20 and 23.)</li> </ul>
<ul style="list-style-type: none"> <li>No picture.</li> </ul>	<ul style="list-style-type: none"> <li>Is the connection to external equipment correct? (See pages 11 and 25.)</li> <li>Is the correct input selected? (See pages 9, 11 and 25.)</li> <li>Is the picture adjustment correct? (See pages 17 and 18.)</li> <li>Is the antenna connected properly? (See page 10.)</li> </ul>
<ul style="list-style-type: none"> <li>No sound.</li> </ul>	<ul style="list-style-type: none"> <li>Is the volume too low? (See page 9.)</li> <li>Check the sound system setting. (See page 15.)</li> <li>Is Mute work? (See page 23.)</li> <li>Is the headphones connected properly?</li> </ul>
<ul style="list-style-type: none"> <li>The TV sometimes makes a cracking noise.</li> </ul>	<ul style="list-style-type: none"> <li>This is not a malfunction. This happens when the cabinet slightly expands and contracts according to changes in temperature. This does not affect the TV's performance.</li> </ul>
<ul style="list-style-type: none"> <li>Cannot select the desired channel.</li> </ul>	<ul style="list-style-type: none"> <li>Switch between Digital TV and Analogue TV modes. (See page 9.)</li> </ul>

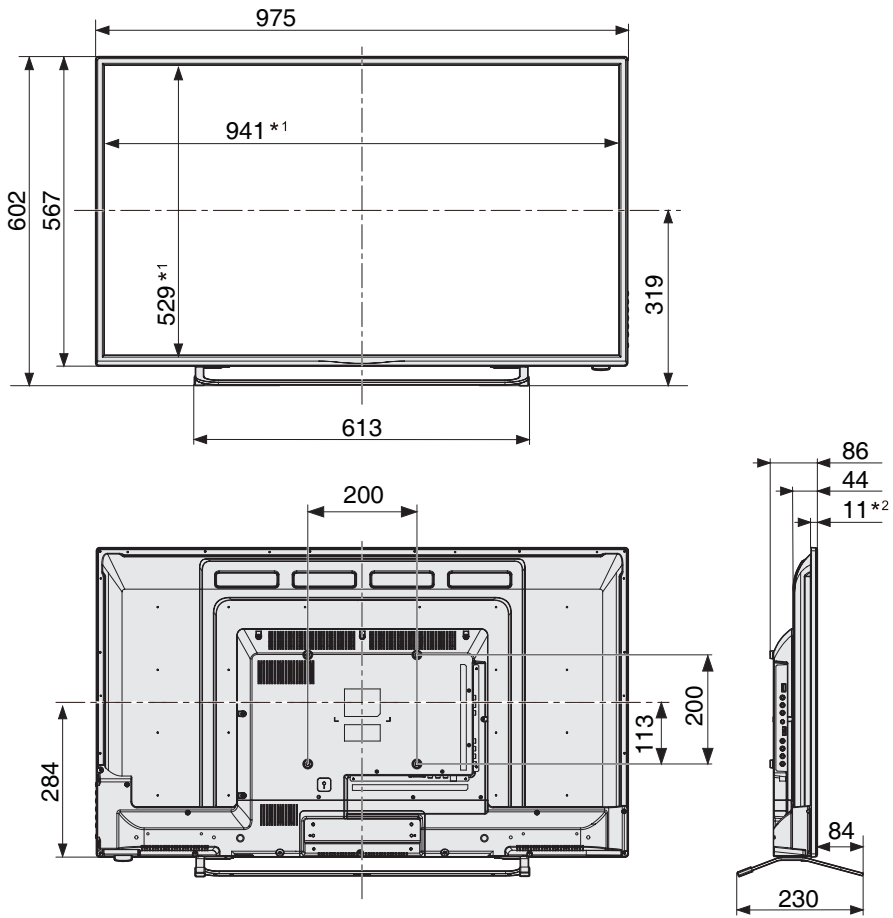
### Cautions regarding use in high and low temperature environments

- When the unit is used in a low temperature space (e.g. room, office), the picture may leave trails or appear slightly delayed. This is not a malfunction, and the unit will recover when the temperature returns to normal.
- Do not leave the unit in a hot or cold location. Also, do not leave the unit in a location exposed to direct sunlight or near a heater, as this may cause the cabinet to deform and the LCD panel to malfunction.  
Storage temperature: -20°C to +60°C.

Dimensional drawings

LC-43LE177H

Unit: mm



\*1 Active area  
\*2 Thinnest part

Specifications

Item		Model	LC-43LE177H
Resolution		2,073,600 pixels (1920 (H) × 1080 (V))	
Video colour system		PAL / NTSC 3.58 / NTSC 4.43 / PAL 60	
TV function	TV-Standard	Analogue	PAL: B/G, D/K, I NTSC: M
		Digital	DTMB
	Receiving channel	VHF/UHF	44.25MHz - 863.25 MHz
		CATV	S1-S41ch (including Hyperband)
	Digital terrestrial broadcast	52.5MHz - 866.0MHz	
STEREO/BILINGUAL	NICAM: B/G, I, D/K ; A2 stereo: B/G		
TV tuning system	Analogue	Auto preset 99 channel	
	Digital	Auto preset 999 channel	
Audio amplifier		6W x 2 (L / R)	
Speaker		(134 mm x 37 mm x 26 mm) x 2	
Terminals	Side	USB 2	USB 2.0
		AV INPUT 2	VIDEO in, AUDIO in
		Headphone	Ø 3.5 mm jack
		HDMI 3	HDMI (HDMI input) (480i, 576i, 480p, 576p, 720p/50Hz, 720p/60Hz, 1080i/50Hz, 1080i/60Hz, 1080p/50Hz, 1080p/60Hz, 1080p/24Hz)
		AV INPUT 1*	VIDEO in, AUDIO in
		AUDIO OUTPUT	Coaxial Out
	Bottom	USB 1	USB 2.0
		HDMI 1	HDMI (HDMI input) (480i, 576i, 480p, 576p, 720p/50Hz, 720p/60Hz, 1080i/50Hz, 1080i/60Hz, 1080p/50Hz, 1080p/60Hz, 1080p/24Hz)
		HDMI 2(MHL)	HDMI (HDMI input) (480i, 576i*, 480p, 576p*, 720p/50Hz, 720p/60Hz, 1080i/50Hz, 1080i/60Hz, 1080p/50Hz*, 1080p/60Hz*, 1080p/24Hz) (*MHL is not applicable)
		PC INPUT	D-Sub 15 Pin
		COMPONENT INPUT*	COMPONENT in (480i, 576i, 480p, 576p, 720p/50Hz, 720p/60Hz, 1080i/50Hz, 1080i/60Hz)
		ANTENNA	UHF/VHF 75 Ω Din type
		PC AUDIO IN	Ø 3.5 mm jack
		OSD language	English/Simplified Chinese/Traditional Chinese
Power requirement		AC 110-240 V, 50 Hz	
Power consumption (Standby)		74W (0.5W)	
Weight	Without stand	7.6kg	
	With stand	8.3kg	
Operating temperature		0 °C to +40 °C	
<ul style="list-style-type: none"> <li>As a part of policy of continuous improvement, SHARP reserves the right to make design and specification changes for product improvement without prior notice.</li> </ul>			

\* The component input terminal and AV1 input terminal share the same Audio terminal.