

SHARP AQUOS



TINS-H375WJZZ

4T-C60CH1X LED BACKLIGHT TV OPERATION MANUAL

HDMI



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.

Supplied accessories

- | | | |
|-----------------------------|---------------------|-----------------|
| 1. Remote control unit | 3. Operation manual | 5. Screws (× 4) |
| 2. "AAA" size battery (× 2) | 4. Stand base | |

Important Safety Precautions

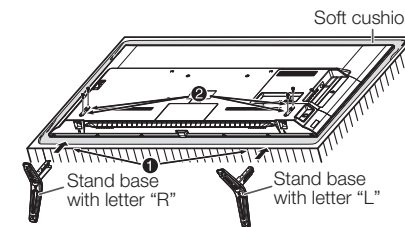
- Stand base must be attached to prevent the TV set from falling down and cause injuries.
- Cleaning — Unplug the AC cord from the AC outlet before cleaning the product. Use a soft damp cloth to clean the product. Do not use liquid cleaners, aerosol cleaners or chemical cloth to clean it, as such materials 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.
- 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.
- 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.
- The LCD panel is a very high technology product with 8,294,400 pixels, giving you fine picture details. 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 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 or from the AC INPUT terminal on the rear of the product.
 - If a television is not positioned in a sufficiently stable location, it can be potentially hazardous due to falling. Many injuries, particularly to children, can be avoided by taking simple precautions such as:
 - Using cabinets or stands recommended by the manufacturer of the television.
 - Only using furniture that can safely support the television.
 - Ensuring the television is not overhanging the edge of the supporting furniture.
 - Not placing the television on tall furniture (for example, cupboards or bookcases) without anchoring both the furniture and the television to a suitable support.
 - Not standing the televisions on cloth or other materials placed between the television and supporting furniture.
 - Educating children about the dangers of climbing on furniture to reach the television or its controls.
- Do not install the TV in a location in which it will be subject to water drops such as underneath an air conditioning unit or in the vicinity of a humidifier.
 - Water drops falling onto the TV and water entering inside it may result in fire, electric shock, or malfunctions.
 - We recommend that you install the TV at least 1m away from the outlet of an air conditioner.

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Attaching the stand

- Before attaching (or detaching) the stand, unplug the AC cord from the AC outlet.
- Before performing work spread cushioning over the base area to lay the TV on. This will prevent it from being damaged.

- 1 Confirm the screws supplied with the TV.
Screws (× 4)
①①①①
- 2 Insert the stand assembly into the openings on the bottom of the TV. (①)
- 3 Insert and tighten the screws into the holes on the rear of the TV. (②)



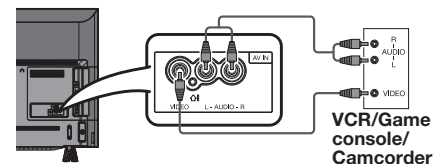
Connecting external devices

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

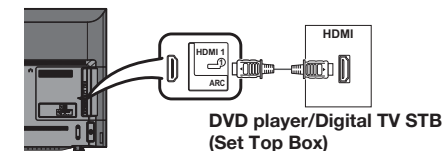
CAUTION

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

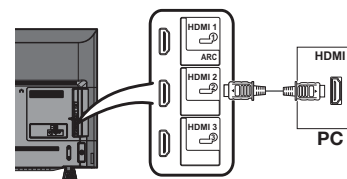
Using composite cable



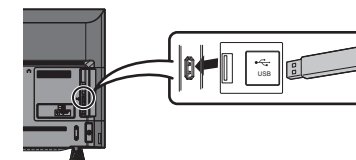
Using HDMI-certified cable



Connecting a PC



Connecting a USB device



CAUTION

- Do not disconnect a USB device from the TV while transferring files, when a screen is in "USB" mode.

Symbols placed on equipment

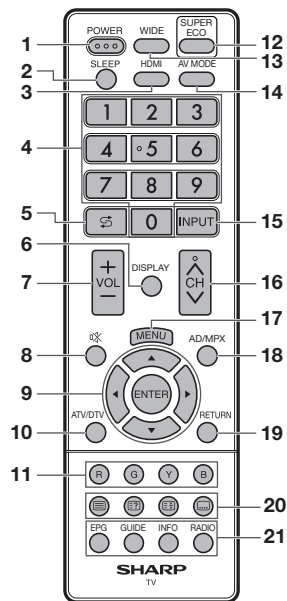


- This mark indicates the product operates on AC Voltage.



- This mark indicates a class II or double insulated electrical appliance wherein the product does not require a safety connection to electrical earth (ground).

Remote control unit



1 POWER (STANDBY/ON)

To switch the power on and off.

2 SLEEP

Set the Sleep timer.

0 hr. 30 min. → 1 hr. 00 min. → 1 hr. 30 min.
Off ← 2 hr. 30 min. ← 2 hr. 00 min.

3 HDMI

Select the HDMI input mode.

4 0 - 9

Set the channel.
TELETEXT mode: Set the page. (See page 12.)

5 S (Flashback)

Press S to return to the previous selected channel or external input mode.

6 DISPLAY

Display the channel or input information.

7 VOL + /VOL -

Set the volume.
(VOL +) Increase the volume.
(VOL -) Decrease the volume.

8 Mute

Press Mute → Mutes sound.

Press Mute again → Restores sound.

Mute will be cancelled after 30 minutes. However, the TV will not suddenly output loud sound as the volume level will be set to 0 automatically. Increase the volume level by pressing VOL +.

9 ▲/▼/◀/▶ (Cursor)

Select a desired item on the setting screen.

ENTER

Execute a command.

10 ATV/DTV

Press to switch between ATV and DTV mode. After switching from ATV or DTV, radio or external input mode to ATV and DTV mode, the TV jumps to the most recently viewed ATV and DTV channel.

11 Colour (Red/Green/Yellow/Blue)

The coloured buttons are correspondingly used to select the coloured items on the screen.

TELETEXT mode: Select a page. (See page 12.)

12 SUPER ECO

Reduce overall power consumption based on user preferences.

13 WIDE

Change a wide image mode. (See page 9.)

14 AV MODE

Select an audio and video setting. (See page 8.)

15 INPUT (INPUT SOURCE)

Select an input source.

16 CH▲/CH▼

TV input mode: Select the channel.

(CH▲) Increase the channel number.

(CH▼) Decrease the channel number.

TELETEXT mode: Select a page. (See page 12.)

17 MENU

Display the menu screen.

18 AD/MPX

Select the sound multiplex mode and audio description.

19 RETURN

MENU mode: Return to the previous menu screen.

20 (TELETEXT), (Reveal hidden for TELETEXT), (Hold), (SUBTITLE for TELETEXT)

Use for TELETEXT mode. (See page 12.)

21 EPG

DTV mode: An "EPG (Electronic Programme Guide)" is a programme schedule, which is displayed on the TV screen. The EPG is broadcasted together with DTV.

GUIDE

DTV mode: Display the programme channel list.

INFO

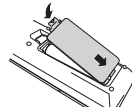
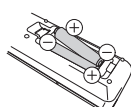
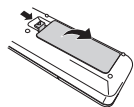
DTV mode: Display the programme information.

RADIO

Press to switch from DTV to radio mode. The TV will jump to the most recently tuned radio channel.

Inserting the batteries

- 1 Open the battery cover.
- 2 Insert the two supplied "AAA" size batteries.
- 3 Close the battery cover.



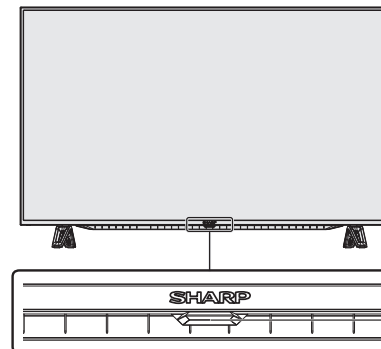
- Place batteries with their terminals corresponding to the (+) and (-) indications in the battery compartment.

CAUTION

- Batteries (battery pack or batteries installed) shall not be exposed to excessive heat such as sunshine, fire or the like.

Part names

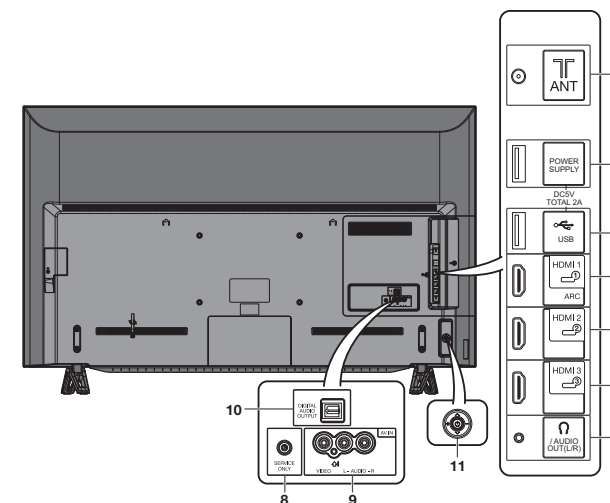
TV (Front)



Remote control sensor / POWER indicator

Light off	Power off.
Lighted (Red)	The TV is in standby mode.
Lighted (Green)	The TV is on.

TV (Rear)



- 1 Antenna input terminal
- 2 POWER SUPPLY terminal*
- 3 USB terminal**
- 4 HDMI 1 (HDMI/ARC) terminal
- 5 HDMI 2 (HDMI) terminal
- 6 HDMI 3 (HDMI) terminal
- 7 A/AUDIO OUT (L/R) terminal
- 8 SERVICE ONLY terminal***
- 9 AV IN terminals
- 10 DIGITAL AUDIO OUTPUT terminal
- 11 JOG-KEY

* POWER SUPPLY terminal use for USB charger.

** USB terminal use for USB media player. (See page 12.)

*** Usually do not connect anything to this terminal as it reserved only for service personnel.

JOG-KEY	BASIC FUNCTION
▲	CH UP
▼	INPUT
+	VOL UP
-	VOL DOWN
⏻	POWER

- The illustrations and on-screen displays in this operation manual are for explanation purposes and may vary slightly from the actual operations.
- Some features differ depending on the selected country.

Easy setup

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

- 1 Press **POWER** on the remote control.
 - The initial auto installation wizard appears. Press **ENTER** to start the wizard.
- 2 Select language → country → **ENTER**. Select "Home" or "Store" → **ENTER**.

Home:

 - "STANDARD" will be the default value for the "AV mode" setting.

Store:

 - "DYNAMIC (Fixed)" will be the default value for the "AV mode" setting. If the "AV mode" is changed, the TV will automatically switch back to "DYNAMIC (Fixed)" when there is no further change to TV setting for 30 minutes.
 - To change the Store mode to Home mode, please refer to page 7 to reset the unit.
- 3 Select "DTV", "ATV" or "DTV + ATV" → **ENTER**.
 - Auto installation will be executed.
 - You do not need to do anything during the auto search.
 - If you select "Others" country, some of DTV channel may not tune properly.
 Select "Start" or "Cancel" → **ENTER**.

NOTE

- In the setting of some country, selecting of "DTV", "ATV" or "DTV + ATV" may not be shown.
- A region or service selection screen may display depending on the country settings or cable providers selections. Follow the screen prompts to make the selections.

Digital setting

You can reconfigure DTV services settings automatically or manually.

Auto search

Use this menu to add new services automatically after auto installation has been completed.

- Press ▲/▼ to select "DTV" or "DTV+ATV".

Manual search

Add new services within a specified channel band.

- Press ◀/▶ to find the channel and then press **ENTER**.

Signal information

Use this menu to check signal information depends on receiving channel.

Analogue setting

You can reconfigure the TV channel settings automatically or manually using **Auto search** or **Manual adjust**.

Auto search

You can also automatically search by performing the procedure below. This is the same function as programme auto search in auto installation.

Manual adjust

You can set some channel items manually.

Item	Description
Current CH	Select the channel you want to edit. <ul style="list-style-type: none"> • Selected channel will be automatically reflected in the background.
Sound system	Select the optimum sound system (Broadcasting system) to receive. (B/G, D/K, I, M)
Colour system	Select the optimum colour system to receive. (NTSC 3.58, NTSC 4.43, PAL, SECAM)
Search	Start searching from current channel. <ul style="list-style-type: none"> • Press ◀/▶ to auto search.
Fine-tune	Tune the frequency of the stored channel to your desired position. <ul style="list-style-type: none"> • Instead of pressing ◀/▶, you can set by directly entering the frequency number of the channel with 0-9 and then press ENTER to adjust while checking the background picture as a reference.

NOTE

- The frequency shown below the On-Screen Display shows the real-time frequency of the displayed channel.

Menu operation



- 1 Press **MENU** and the MENU screen displays.
- 2 Press ◀/▶ to select the desired menu. (Initial setup, Information, Picture settings, Audio settings, System options)
- 3 Press ▲/▼ to select the desired menu item. Press **ENTER** to proceed if necessary.
- 4 Press ▲/▼ or ◀/▶ to select the desired item or adjust the item to the desired level. Press **ENTER** if necessary.
- 5 Press **RETURN** as necessary to return to the previous MENU. Press **MENU** to exit the MENU.

Initial setup

Time setting

This function can display the time, data on screen and channel's timetable with updated time info.

Time adjustment

This function allows you to set the clock manually.

NOTE

- If you select "On" in "Auto synchronization" the TV will try to get the time for the broadcast. It will only be selectable when "Auto synchronization" is set to "Off".
- "Time zone" enables you to select your local time zone. It will only be selectable when "Auto synchronization" is set to "On".

Time display

This function allows you to display the clock time in the lower-right corner of the screen.

Selected item	Description
Off	Hides the clock time.
On	Displays the clock time.

Language

Select from among 13 languages: English, Simplified Chinese, Arabic, French, Portuguese, Russian, Persian, Thai, Vietnamese, Indonesian, Hebrew, Hindi and Malay.

Child lock

Allows you to use a password to protect certain settings from being accidentally changed.

Lock system

If the password is not set, the "Lock system" is invalid.

Please make sure the "Lock system" is set to "On" before the Child lock is set. (Off, On).

Set password

NOTE

- To view a locked channel, you must enter a password. When you select a locked channel, "Child lock has been activated" is displayed.
- Press **ENTER** to display the password input window.

Block programme

The "Block programme" can be select after "Lock system" is set to "On".

Parental rating

This function allows TV channels to be restricted. It prevents children from watching violent or sexual scenes that may be considered inappropriate.

Selected item	Description
Off	Cancel the blocking.
Age xx years	Select desired age to block. (Example) If age 14 is selected, programmes rated for ages of 15 or more are blocked.

Programme edit

Use this menu to set up a channel individually.

Selected item	Description
Erase	Channels can be erased individually. Press ▲/▼ to select "Yes" or "No", and then press ENTER to erase the selected channel.
Label	You can change channel names individually. Maximum 5 alphanumerics can be input. Press ENTER to start labelling. Press ▲/▼ to select a character, press ◀/▶ to select next character, and then press ENTER to save.
Sort	Channel position can be sorted freely.
Skip	Channels can be skip by select "Off" or "On".

Quick start mode

When this function is activated, you can reduce the TV's start-up time or even let the TV in standby mode start displaying images and so on via the connected equipment on the network. (Off, On).

NOTE

- Setting "Quick start mode" to "On" consumes more power.

Input settings

HDMI auto view (HDMI input mode only)

Selected item	Description
Enable/Disable	Set whether or not to use the Auto Selection of WIDE MODE based on signal recognition received from the HDMI signal.

HDMI type selection (HDMI input mode only)

Sets the HDMI type for HDMI INPUT 1 and 2 terminals. Set to "Full" when an HDMI 4K60P 4:4:4 device is connected, and set to "Limited" when an HDMI 4:2:0 device is connected.

Digital audio

This function allows you to select the digital audio signal type. (Off, Bitstream, PCM)

Audio output select

You can select which device is used for outputting audio.

Option	Description
Headphone	Output audio through headphones.
Audio out	Output audio through an A/V receiver or surround audio controller.

NOTE

- If you select "Headphone" when a cable is inserted in the AUDIO output terminal, the TV speakers are muted and all Audio menu items cannot be adjusted.
- If you select "Audio out", sound via the AUDIO output terminal is not adjustable and constantly outputs.

Initial setup (Continued)

Regarding the headphone jack

- Use headphones with a stereo mini plug (ϕ 3.5 mm).
- Be sure to unplug headphones from the jack when they are not in use.

Volume display when headphones are plugged in



CAUTION

- AUDIO output terminal is also used for headphones. Reduce the volume before using headphones. Overwhelming sound may damage your hearing.

Colour system

You can change the colour system to one that is compatible with the image on the screen. (Auto, PAL, SECAM, NTSC 3.58, NTSC 4.43, PAL-60)

NOTE

- If "Auto" is selected, colour system for each channel is automatically set. If an image does not display clearly, select another colour system (e.g. PAL, NTSC 4.43).
- "Colour system" is selectable only when inputting a composite signal.

Link setup

Link operation

Using the HDMI CEC (Consumer Electronics Control) protocol, with Link operation you can interactively operate compatible system equipment (e.g. DVD), by connecting the link operation-compatible devices with HDMI-certified cables to the TV. Link operation allows you to operate the HDMI-connected equipment and the TV by using a single remote control unit. (Off, On)

Auto power on

If this is activated, the one touch play function is enabled. While the TV is in standby mode, it automatically turns on and plays back the image from the HDMI source. (Off, On)

Speaker select

You can select to listen to the TV sound only from the LINK-compatible audio system. (Internal speakers, External device)

Audio return channel

If this function is set to "Auto", the TV can send audio data for video content shown on the TV to a connected audio device with just one ARC-compatible cable. Using this function eliminates the need to use a separate digital or analogue audio cable. (Off, Auto)

Connection for using "Audio return channel"

You need to use ARC-compatible cables/devices and connect to the HDMI 1 terminal to activate this function.

NOTE

- The ARC (Audio return channel) function works only when using the HDMI 1 terminal.
- When you use an audio system compatible with the ARC function of the TV, you do not need to connect an optical audio cable to the TV.

Reset

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

NOTE

- If you execute "Reset", all the settings such as "Picture settings", "Audio settings" and "Initial setup" will be reset to the factory preset values.

Information

Identification

You can check the current version of the software on the screen.

Software update

This is used to upgrade the system software to enhance the TV functions.

Manual update

Updates the software using a USB memory device containing the update file.

Auto update setting

OAD update

- This function is for automatically download the data for the version update software over digital broadcasts when the "OAD update" is set to "On".
- To download, follow the instructions when the download message appears during a digital broadcast.
- Once the software upgrade is done, the TV will automatically go to standby state with Red LED.

OAD scan

- This function is for manually download the data for the version update software over digital broadcasts.

CAUTION

- **Do not disconnect the AC cord when the software upgrade is in progress, as this may cause the upgrade to fail. If problem arises ask a qualified service personnel before the software upgrade period expires.**

Software license

You can read the software license on the screen.

Picture settings

Selecting a preset AV mode

"AV mode" gives you several viewing options to choose from to best match 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.

Selected item	Description
STANDARD	For a highly defined image in a normally bright room.
MOVIE	For a movie.
PC	For PC (Available only when inputting an HDMI or PC signal).
USER	Allows you to customise settings as desired. You can set the mode for each input source.
DYNAMIC	For a clear-cut image emphasising high contrast for sports viewing.
DYNAMIC (Fixed)	Changes the image and sound settings to the factory preset values. No adjustments are allowed.
COMFORT MODE	Reduce the blue light of the TV.
SUPER ECO	Reduce the backlight brightness.

NOTE

- You can select a different AV mode item for each input mode. (For example, select STANDARD for TV input and DYNAMIC for VIDEO input.)

Adjustment items

Selected item	◀ button	▶ button
Backlight	The screen dims	The screen brightens
Contrast	For less contrast	For more contrast
Brightness	For less brightness	For more brightness
Colour	For less colour intensity	For more colour intensity
Tint	Skin tones become reddish	Skin tones become greenish
Sharpness	For less sharpness	For more sharpness
HDR gamma	For less HDR gamma	For more HDR gamma

Advanced

This TV provides various advanced functions for optimising the picture quality.

Digital noise reduction

Reduces noise on screen and produces a clearer video image. (Off, Low, Medium, High, Auto)

AquoMotion Lite*

"AquoMotion Lite" technology provides superior solutions for display picture quality removing motion blur. (Off, High, Advance)

Colour Temp.

Adjusts the colour temperature to give the best white image. (High, Mid-High, Middle, Mid-Low, Low)

Contrast Enhancer

Enhance the image for greater contrast. (Off, On)

NOTE

- * This effect is greater on fast moving images.
- * This function will have no effect in the following cases.
 - 1) The type of signal received is a PC signal.
 - 2) An OSD is being displayed.
 - 3) Teletext is activated.
- * If images appear blurred or flickering, set to "Off".
- "Picture settings" cannot be changed during "DYNAMIC (Fixed)" mode.
- For resetting all "Picture settings" items to factory preset values, press ▲/▼ to select "Reset", press **ENTER**, press ▲/▼ to select "Yes", and then press **ENTER**.

Audio settings

You can adjust the sound quality to your preference with the following settings.

Selected item	◀ button	▶ button
Treble	For weaker treble	For stronger treble
Bass	For weaker bass	For stronger bass
Balance	Decrease audio from the right speaker	Decrease audio from the left speaker

Surround

The surround function produces surround effect from the speakers. (Off, On)

Bass enhancer

This function allows you to enjoy bass-enhanced sound.

Selected item	Description
On	Bass enhancer function is on.
Off	Outputs the normal sound.

NOTE

- If distorted bass sound is heard, set to "Off".

Auto volume

Different sound sources, fairly often do not have the same volume level, for example the changing from movie to the advertisements. Auto volume solves this problem and equalises the volume levels. (Off, On)

NOTE

- For resetting all "Audio setting" items to factory preset values, press ▲/▼ to select "Reset", press **ENTER**, press ▲/▼ to select "Yes", and then press **ENTER**.

System options

Power control

Power control setting allows you to save energy.

No signal off

You can set the TV to automatically power off in about 15 minutes after the TV goes into a state of receiving no programme signals. (Enable, Disable)

- Five minutes before the power shuts down, the remaining time displays every minute.

NOTE

- When a TV programme finishes, and the TV receives signal input, this function may not operate.

No operation off

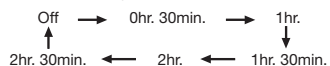
You can set the TV to automatically power off when no TV operation is performed for more than 3 hours. (Disable, 3 hours, 30 min.)

- Five minutes before the power shuts down, the remaining time displays every minute.

Sleep timer

Allows you to set a time when the TV automatically switches to standby.

Set the Sleep timer.



NOTE

- When it is 5 minutes before the time expires, the remaining time will start to keep appearing every minute.

View option

Wide mode

You can manually select the size of a picture appeared on your screen.

Selectable picture size varies with the type of signal received.

Press ▲/▼ while the wide mode menu displays on the screen.

- As you toggle down the options, each mode is immediately reflected on the TV.

Item (for SD [Standard-Definition] signals)	
Normal	Keeps the original aspect ratio in a full screen display.
Zoom 14:9	For 14:9 letterbox pictures. A thin side bar appears on each side, and you may also see bars on the top and bottom with some programmes.
Panorama	In this mode, the picture is stretched toward each side of the screen. The picture may appear similar to "Full" depending on broadcast signals.
Full	For 16:9 squeeze pictures.
Cinema 16:9	For 16:9 letterbox pictures. Bars may appear on the top and bottom with some programmes.
Cinema 14:9	For 14:9 letterbox pictures. Bars may appear on the top and bottom with some programmes.

Item (for HD [High-Definition] signals)	
Full	Displays with an overscan image. Crops all sides of screen.
Underscan	Display with an Underscan image only when receiving a 720p/1080p/1080i signal. Display with the High-Definition image adjusted optimally. Noise may appear on the edge of the screen with some programmes.
Dot by Dot	Displays an image with the same number of pixels on the screen.

NOTE

- "Zoom 14:9" and "Cinema 14:9" will appear only for TV mode.
- Some items do not appear depending on the type of received signal.

System options (Continued)

4:3 mode (DTV input mode only)

The 4:3 mode allows you to select between "Normal" and "Full".

Selected item	Description
Normal	Normal range keeping 4:3 or 16:9 aspect ratio.
Full	Wide image without side bars.

Auto wide (DTV input mode only)

The "Auto wide" allows the TV to switch automatically among the different picture size. (Off, On)

NOTE

- Use "Wide mode" if an image does not switch to the appropriate picture size. When the broadcast signal contains no aspect ratio information, the function will not work even if enabled.

Change audio

MPX

Allows you to change the audio when multiple audio is available for the programme you are watching. (Auto, MONO)

Bilingual

Select from among 3 kinds of mode: DUAL I, DUAL II and DUAL I + II.

Audio only

When listening to music from a music programme, you can turn the screen off and enjoy audio only.

Selected item	Description
Off	Both screen images and audio are output.
On	Audio is output without screen image.

NOTE

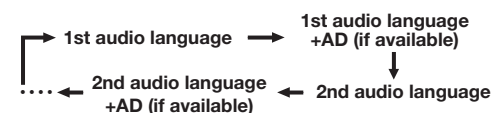
- When you make operations that change the picture on the TV such as by changing the input source, the "Audio only" function is set to "Off".

Audio description (DTV input mode only)

This function allows you to adjust volume output of audio description if the TV receives a signal including audio description.

Switching the multi audio languages

Each time you press **AD/MPX** on the remote control, the audio language switches.

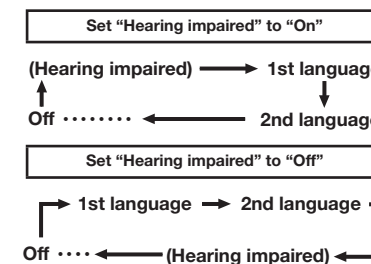


NOTE

- This function is valid only if broadcaster is transmitting audio description.

Hearing impaired (DVB subtitle)

Each time you press **CC** on the remote control, the subtitle switches when the broadcast contains subtitle information.



NOTE

- This function is valid only if broadcaster is transmitting multilingual subtitles.

Digital audio language

Set up to two preferred multi audio languages to display if the audio languages are available. (1st language, 2nd language)

NOTE

- If audio for the selected languages is not included in a received broadcast, audio will not be output for that language.

Change subtitle

You can display subtitles for the hearing impaired in the Teletext broadcast if the subtitle languages are available. (1st language, 2nd language)

NOTE

- If subtitles for the selected language are not included in a received broadcast, subtitles will not be shown for that language.

Text language

Select from among 5 kinds of language: West Europe, East Europe, Cyrillic, Arabic and Farsi.

NOTE

- Teletext can display only when it is sent by a network. Not used to convert between languages.

Demo (store mode only)

When "Store mode" is set to "On", after all the settings are completed, the Feature demo screen is displayed if there is no operation for 30 seconds.

Switching the analogue audio format

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

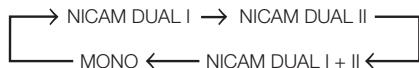
PAL broadcast signal

In the NICAM TV broadcasts

Stereo mode

NICAM STEREO ↔ MONO

Bilingual mode



Monaural mode

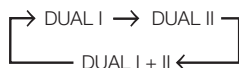
NICAM MONO ↔ MONO

In the TV mode of A2 TV broadcasts

Stereo mode

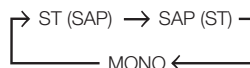
STEREO ↔ MONO

Bilingual mode



NTSC broadcast signal

Stereo + SAP mode



MONO + SAP mode

MONO ↔ SAP

Stereo mode

STEREO ↔ MONO

NOTE

- On-screen display in this operation manual are for explanation purpose and may vary slightly from actual on-screen display.

PC compatibility chart

Resolution		Horizontal Frequency	Vertical Frequency	VESA Standard	Analogue (D-Sub)	Digital (HDMI)
VGA	640 × 480	31.5 kHz	60 Hz	✓	✓	✓
SVGA	800 × 600	37.9 kHz	60 Hz	✓	✓	✓
XGA	1024 × 768	48.4 kHz	60 Hz	✓	✓	✓
WXGA	1360 × 768	47.7 kHz	60 Hz	✓	✓	✓
1080P	1920 × 1080	67.5 kHz	60 Hz		✓	✓

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 Power Management is a registered trademark of Sun Microsystems, Inc.
 VGA, SVGA, XGA and WXGA are registered trademarks of International Business Machines Corporation.

Teletext function

What is Teletext?

Teletext broadcasts pages of information and entertainment to specially equipped television sets. News, weather reports, sports information, stock exchange prices and programme previews are among the many services available.

NOTE

- If you select a programme with no Teletext signal, "No Teletext available." is displayed.
- The same message displays during other modes if no Teletext signal is available.

Button functions

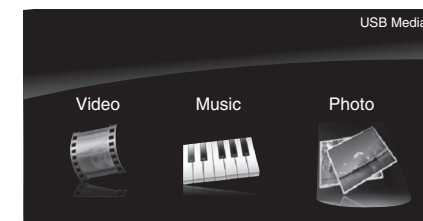
Buttons	Description
CH (▲/▼)	Increase or decrease the page number.
Colour (Red/Green/Yellow/Blue)	You can select a group or block of pages displayed in the coloured brackets at the bottom of the screen by pressing the corresponding Colour (Red/Green/Yellow/Blue) on the remote control unit.
0 - 9	Directly select any page from 100 to 899 by using 0 - 9.
ⓘ (Reveal hidden for TELETEXT)	To reveal hidden information such as an answer to a quiz.
⏸ (Hold)	To stop updating Teletext pages automatically or release the hold mode.
⏴ (Subtitle for TELETEXT)	Display the subtitle during Teletext page. <ul style="list-style-type: none"> Subtitle will not be displayed when the service does not contain subtitle information.

NOTE

- Teletext can display only when it is sent by a network. Not used to convert between languages.

USB Media Player

Selecting modes



- Press **INPUT** to select the "USB" mode.
- Press **◀/▶** to select "Video", "Music" or "Photo", and then press **ENTER**.
- Press **◀/▶** to select your USB directory, and then press **ENTER**.
- Press **▲/▼/◀/▶** to select the desired folder, and then press **ENTER**.

NOTE

- "Wide mode" is fixed during "Photo" and "Music".
- Depending on the USB device, the TV may not be able to recognise the contained data.
- A file name with more than 10 characters may not be displayed all (depending on the character set).
- Files in USB 1.1 devices may not be played properly.
- Operation using USB hubs is not guaranteed.
- The compatibility of USB HDDs may not be guaranteed.
- USB only support device up to DC5V 2A.

USB Media Player (Continued)

Control panel for photo/music/video mode operations

- Press **B** to display the control panel below.

Button/menu	Description	Photo	Music	Video
ENTER	When selecting a folder icon: Enter this directory. When selecting a thumbnail: Play the selected file.	✓	✓	✓
	Play/Pause.	✓	✓	✓
	Rewind. Each time you press rewind, the speed will change (2x, 4x, 8x, 16x).	-	✓	✓
	Fast-forward. Each time you press fast-forward, the speed will change (2x, 4x, 8x, 16x).	-	✓	✓
*G /	Play the previous file.	✓	✓	✓
*Y /	Play the next file.	✓	✓	✓
RETURN /	Stop playback and return to the list of files.	✓	✓	✓
	Loop. Each time you press ENTER , the mode will switch between Repeat 1 → Repeat All → Repeat None	✓	✓	✓
	Play/cancel the background music.	✓	-	-
	Mute. Press ENTER to toggle between mute and unmute.	-	✓	✓
	Two loop. Press ENTER to set the current playback time starting point. Press ENTER to set the loop end of the current playing time and start loop playback. Press ENTER button to cancel the loop.	-	-	✓
	Slow-forward. Each time you press slow-forward, the speed will change.	-	-	✓
	Step forward. Each time you press ENTER , the picture will change to the next still picture.	-	-	✓
	Rotate clockwise 90°.	✓	-	-
	Rotate counterclockwise 90°.	✓	-	-
	Zoom in an image. Select to display larger image size.	✓	-	-
	Zoom out an image. Select to display smaller image size.	✓	-	-
	Select playback length of a slideshow.	✓	-	-
	Select photo display interval.	✓	-	-
	Slide effect.	✓	-	-
R	Select subtitle to On or Off subtitle.	-	-	✓

NOTE

- * The button **G** and **Y** does not work during control panel display.
- Files in folder which are not related to a selected mode cannot be accessed.
- "Unsupported file" alert will pops up for a selected file of invalid format.

USB Media Player (Continued)

List of files compatible with USB mode

USB device/File system	USB Memory/FAT32
Photo file format	JPEG (.jpg)/PNG/BMP
Music file format (Files may not be playable depending on the bitrate)	MP3 (.mp3) Bitrate: 32 k, 40 k, 48 k, 56 k, 64 k, 80 k, 96 k, 112 k, 128 k, 160 k, 192 k, 224 k, 256 k, 320 kbps

Video file format			
File extension	Container	Video	Audio
*.avi	AVI	H.264 MPEG4 Motion Jpeg	Dolby Digital Plus LPCM ADPCM Dolby Digital
*.mkv	MKV	H.264 MPEG4	Dolby Digital Plus MPEG Dolby Digital
*.mp4 *.mov	MP4	H.264 MPEG4 Motion Jpeg	Dolby Digital Plus MPEG Dolby Digital
*.vob	MPEG2 - PS	MPEG2	LPCM Dolby Digital
.mpg/.mpeg	MPG MPEG	MPEG2 MPEG1	LPCM MPEG Dolby Digital
.ts/.trp/*.tp	TS	H.264 MPEG2	Dolby Digital Plus LPCM MPEG Dolby Digital

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Appendix

Troubleshooting

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

Problem	Possible Solution
• No power.	<ul style="list-style-type: none"> Check if you pressed POWER on the remote control unit. If the indicator on the TV lights up red, press POWER. Is the AC cord disconnected? Has the power been turned on?
• Unit cannot be operated.	<ul style="list-style-type: none"> 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.
• Remote control unit does not operate.	<ul style="list-style-type: none"> Is battery inserted with polarity (+, -) aligned? (See page 3.) Is battery worn out? (Replace with new battery.) Are you using it under strong or fluorescent lighting? Is a fluorescent light shining on the remote control sensor?
• Picture is cut off.	<ul style="list-style-type: none"> Are screen mode adjustments such as picture size made correctly? (See page 9.)
• Strange colour, light colour, or dark, or colour misalignment.	<ul style="list-style-type: none"> Adjust the picture tone. (See page 8.) Is the room too bright? The picture may look dark in a room that is too bright. Check the colour system setting. (See pages 5 and 7.) Check the HDMI auto view setting. (See page 6.)
• Power is suddenly turned off.	<ul style="list-style-type: none"> The unit's internal temperature has increased. Remove any objects blocking the vent or clean. Check the "Power Control" setting. (See page 9.) Is the sleep timer set? (See page 3.)
• No picture.	<ul style="list-style-type: none"> Is the connection to external equipment correct? (See page 2.) Is the correct input selected? Is the "Picture settings" correct? (See page 8.) Is the antenna connected properly? Is "On" selected in "Audio only"? (See page 9.)
• No sound.	<ul style="list-style-type: none"> Is the volume too low? (See page 3.) Make sure that headphones are not connected.
• The TV sometimes makes a cracking sound.	<ul style="list-style-type: none"> 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.

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.

Clearing the password

If you forget the password, clear the password using the following procedure.

- Press **MENU** to display the MENU screen, and then press ◀▶ to select "Initial setup".
- Press ▲/▼ to select "Child lock", and then press **ENTER** and the password input screen display.
- If you enter "3001" using **0-9**, the "Child lock" setting menu will be displayed.
- Enter the 4-digit number as a password using **0-9**. The new password is now set.

Specifications

Item	Model	4T-C60CH1X	
LCD panel		153 cm	
Resolution		8,294,400 pixels (3840 × 2160)	
Video colour system		PAL/SECAM/NTSC 3.58/NTSC 4.43/PAL 60	
TV function	TV-standard	Analogue	PAL: B/G, D/K, I SECAM: B/G, D/K, K/K NTSC: M
		Digital	DVB-T2
	Receiving channel	VHF/UHF	44.25 – 863.25 MHz
		CATV	S1 – S41 ch (including Hyperband)
	TV-tuning system	Auto Preset 99 ch	
	STEREO/BILINGUAL	NICAM: B/G, I, D/K A2 stereo: B/G MTS: M	
Viewing angles		H : 176° V : 176°	
Audio amplifier/Speakers		10 W × 2 / 2.6 × 9 cm 2pcs	
Terminals	Antenna input	UHF/VHF 75 Ω DIN type	
	SERVICE ONLY	φ 3.5 mm jack	
	HDMI 1 (HDMI/ARC)	HDMI input, ARC	
	HDMI 2 (HDMI)	HDMI input	
	HDMI 3 (HDMI)	HDMI input	
	AV IN	VIDEO in, AUDIO in	
	AUDIO OUT	AUDIO out, Headphone (φ 3.5 mm stereo)	
	USB	USB shared with POWER SUPPLY (DC5V total 2A output)	
	DIGITAL AUDIO OUTPUT	Optical S/PDIF digital audio output	
OSD language		English/Simplified Chinese/Arabic/French/Portuguese/Russian/Persian/Thai/Malay/Vietnamese/Indonesian/Hebrew/Hindi	
Power requirement		AC 110 – 240 V, 50/60 Hz	
Power consumption		184 W (0.5 W Standby)	
Dimensions	without stand	1358 (W) × 799 (H) × 83 (D) mm	
	with stand	1358 (W) × 864 (H) × 300 (D) mm	
Weight without stand (with stand)		17.5 kg (18.5 kg)	
Operating temperature		0°C – 40°C	

- As a part of policy of continuous improvement, SHARP reserves the right to make design and specification changes for product improvement without prior notice. The performance specification figures indicated are nominal values of production units. There may be some deviations from these values in individual units.
- Specification may differ depending on the selected country.

CAUTION

- Installing the Liquid Crystal Television requires special skill 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.
- Carefully read the instructions that come with the bracket before beginning work.

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