

CHAPTER 1. OPERATION MANUAL

[1] SPECIFICATIONS

Item			32" LCD COLOUR TV
LCD panel			32" Advanced Super View & BLACK TFT LCD
Resolution			2,073,600 pixels (1,920 × 1,080)
Video Colour System			PAL/SECAM/NTSC 3.58/NTSC 4.43/PAL 60
TV Function	TV-Standard	Analogue	CCIR (B/G, I, D/K, L/L')
		Digital	DVB-T (2K/8K OFDM)
	Receiving Channel	VHF/UHF	E2 - E69 ch, F2 - F10 ch, I21 - I69 ch, IR A - IR J ch (Digital: IR A ch - E69 ch)
		CATV	Hyper-band, S1 - S41 ch
	TV-Tuning System		Auto Preset 999 ch: non-Nordic / 9999 ch: Nordic (ATV: 99 ch), Auto Label, Auto Sort
	STEREO/BILINGUAL		NICAM/A2
Brightness			450 cd/m ²
Backlight life			60,000 hours (when "Backlight" is set to the default position)
Viewing angles			H: 176°, V: 176°
Audio amplifier			10 W × 2
Speaker			(40 mm × 110 mm) × 2
Terminals	Antenna		UHF/VHF 75 Ω Din type (Analogue & Digital)
	RS-232C		D-Sub 9 pin male connector
	EXT1		SCART (AV input, Y/C input, RGB input, TV output)
	EXT2		SCART (AV input/monitor output, Y/C input, AV Link)
	EXT3		COMPONENT IN: Y/P _B (C _B)/P _R (C _R), RCA pin (AUDIO R/L)
	EXT4		15 pin mini D-sub, Ø 3.5 mm jack*
	HDMI1 (EXT5)		HDMI
	HDMI2 (EXT6)		HDMI, Ø 3.5 mm jack*
	HDMI3 (EXT7)		HDMI
	EXT8		RCA pin (AV input)
	USB		USB
	DIGITAL AUDIO OUTPUT		Optical S/PDIF Digital audio output
	C. I. (Common Interface)		EN50221, R206001
	OUTPUT		RCA pin (AUDIO R/L)
	Headphones		Ø 3.5 mm jack (Audio output)
OSD language			Czech, Danish, Dutch, English, Estonian, Finnish, French, German, Greek, Hungarian, Italian, Latvian, Lithuanian, Norwegian, Polish, Portuguese, Russian, Slovak, Slovene, Spanish, Swedish, Turkish, Ukrainian
Power Requirement			AC 220-240 V, 50 Hz
Power Consumption (Method IEC62087)			142 W (0.5 W Standby)
Weight			12.0 kg (Without stand), 13.5 kg (With stand)
Operating temperature			0 °C to + 40 °C

* The HDMI2 and EXT4 terminals can both use the same audio input terminal.

- As a part of our 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.

NOTE

- Refer to the inside back cover for dimensional drawings.

Remote control unit

1 (Standby/On)

2 **Buttons for useful operations**

(Teletext)

ATV: Display analogue teletext.

DTV: Select MHEG-5 and teletext for DTV.

(Reveal hidden Teletext)

(Subtitle)

Switch subtitle languages on/off.

(Freeze/Hold)

Press to freeze a moving image on the screen.

Teletext: Stop updating teletext pages automatically or release the hold mode.

(Subpage)

(Top/Bottom/Full)

Set the area of magnification in teletext mode.

3 **0-9 numeric buttons**

Set the channel.

Enter desired numbers.

Set the page in teletext mode.

- When the five Nordic countries (Sweden, Norway, Finland, Denmark, or Iceland) are selected in the country setting from "Auto Installation", DTV services are four digits. When another country is selected, DTV services are three digits.

4 **(Flashback)**

Press to return to the previously selected channel or external input.

5 **DTV**

Press to access digital TV mode.

6 **ATV**

Press to access conventional analogue TV mode.

7 **(Sound mode)**

Select a sound multiplex mode

8 **(Volume)**

Increase/decrease TV volume.

9 **(Mute)**

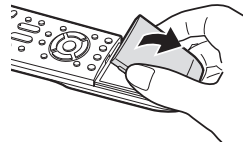
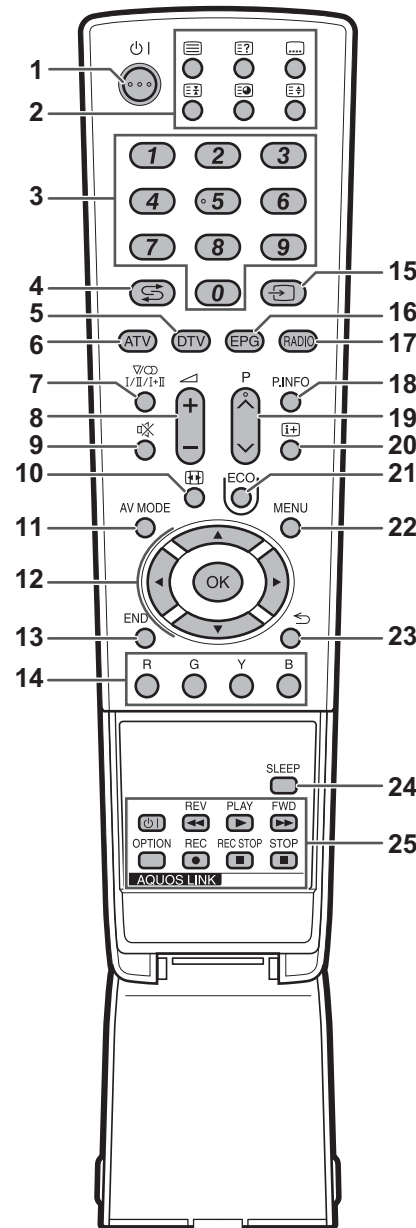
TV sound on/off.

10 **(WIDE MODE)**

Select a wide mode.

11 **AV MODE**

Select a video setting.



12 **(Cursor)**

Select a desired item on the setting screen.

OK

Execute a command within the "MENU" screen.

ATV/DTV: Display the programme list when no other "MENU" screen is running.

13 **END**

Exit the "MENU" screen.

14 **R/G/Y/B (Colour) buttons**

The coloured buttons are correspondingly used to select the coloured items on the screen (e.g. EPG, MHEG-5, Teletext).

15 **(INPUT SOURCE)**

Select an input source.

16 **EPG**

DTV: Display the EPG screen.

17 **RADIO**

DTV: Switch between Radio and Data mode.

- When only data broadcasting (no radio broadcasting) is transmitted by DVB, the radio broadcasting will be skipped.

18 **P. INFO**

Press to display programme information which is transmitted through digital video broadcasting in the upper left corner of the screen (DTV only).

19 **P ^/∨**

Select the TV channel.

20 **(Display information)**

Press to display the station information (channel number, signal, etc.) in the upper right corner of the screen.

21 **ECO (Standard/Advanced/Off)**

Select "Energy Save" setting.

22 **MENU**

"MENU" screen on/off.

23 **(Return)**

Return to the previous "MENU" screen.

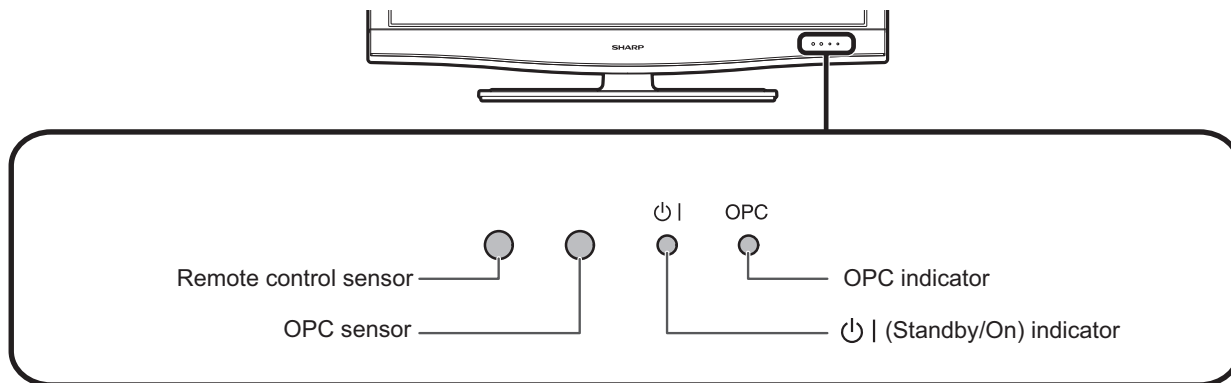
24 **SLEEP**

Press to schedule a time for the TV to automatically standby.

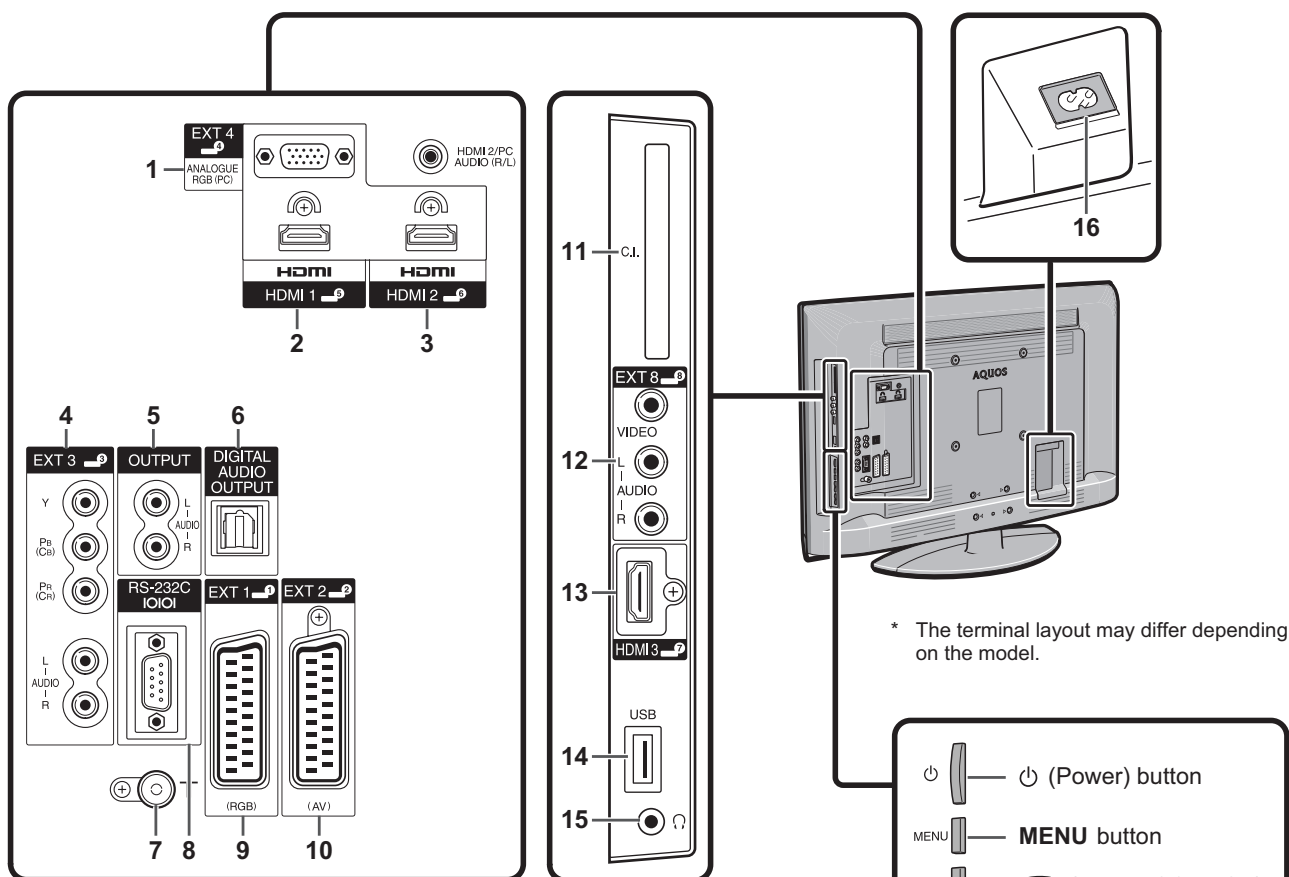
25 **AQUOS LINK buttons**

If external equipment such as a AQUOS BD Player is connected via HDMI cables and is AQUOS LINK compatible, you can use these AQUOS LINK buttons.

TV (Front view)



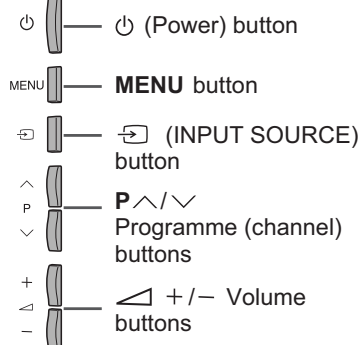
TV (Rear view)



WARNING

- Excessive sound pressure from earphones and headphones can cause hearing loss.
- Do not set the volume at a high level. Hearing experts advise against extended listening at high volume levels.

- | | |
|--|--------------------------|
| 1 EXT4 (ANALOGUE RGB/AUDIO) terminals* | 7 Antenna terminal |
| 2 HDMI1 (HDMI) terminal | 8 RS-232C terminal |
| 3 HDMI2 (HDMI/AUDIO) terminals* | 9 EXT1 (RGB) terminal |
| 4 EXT3 (COMPONENT/AUDIO) terminals | 10 EXT2 (AV) terminal |
| 5 OUTPUT (AUDIO) terminals | 11 COMMON INTERFACE slot |
| 6 DIGITAL AUDIO OUTPUT terminal | 12 EXT8 terminals |
| | 13 HDMI3 (HDMI) terminal |
| | 14 USB terminal |
| | 15 Headphones |
| | 16 AC INPUT terminal |



- * The HDMI2 and EXT4 terminals can both use the same audio input terminal. However, the proper item must be selected in the "PC Audio Select" menu.

Attaching the stand unit

- Before attaching (or detaching) the stand, unplug the AC cord from the AC INPUT terminal.
- Before performing work, spread cushioning over the surface on which you will be laying the TV. This will prevent it from being damaged.

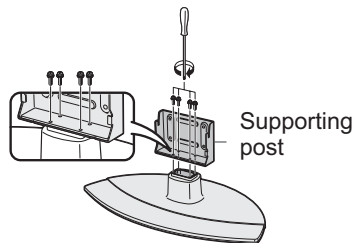
CAUTION

- **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 eight screws with the stand unit.

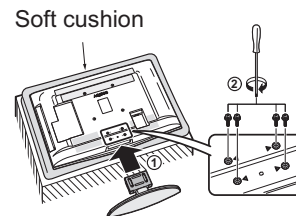


- 2** Attach the supporting post for the stand unit onto the base using the four screws with the screw driver (supplied) as shown.



- 3** Inserting the stand.

- ① Insert the stand into the openings on the bottom of the TV (Hold the stand so it will not drop from the edge of the base area).
- ② Insert and tighten the four screws into the four holes on the rear of the TV.



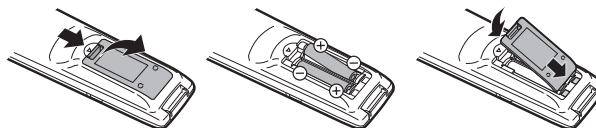
NOTE

- To detach the stand unit, perform the steps in reverse order.

Inserting the batteries

Before using the TV for the first time, insert two supplied "AAA" size zinc-carbon batteries. When the batteries become depleted and the remote control unit fails to operate, replace the batteries with new "AAA" size batteries.

- 1 Open the battery cover.
- 2 Insert two supplied "AAA" size zinc-carbon batteries.
 - Place batteries with their terminals corresponding to the (+) and (-) indications in the battery compartment.
- 3 Close the battery cover.



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.
- When replacing the batteries, use zinc-carbon batteries instead of alkaline ones.

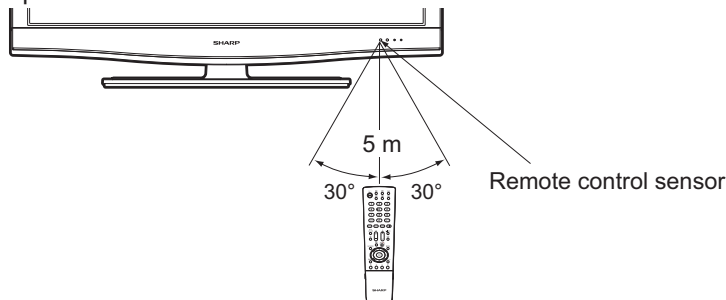
Note on disposing batteries:

The batteries provided contain no harmful materials such as cadmium, lead or mercury.

Regulations concerning used batteries stipulate that batteries may no longer be thrown out with the household rubbish. Deposit any used batteries free of charge into the designated collection containers set up at commercial businesses.

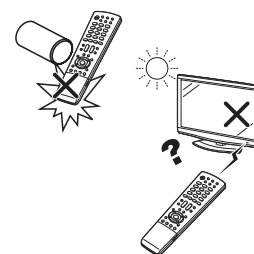
Using the remote control unit

Use the remote control unit by pointing it towards the remote control sensor. Objects between the remote control unit and sensor may prevent proper operation.



Cautions regarding the remote control unit

- Do not expose the remote control unit to shock. In addition, do not expose the remote control unit to liquids, and do not place 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 control sensor of the TV is under direct sunlight or strong lighting. In such cases, change the angle of the lighting or the TV, or operate the remote control unit closer to the remote control sensor.



Troubleshooting

Problem	Possible Solution
No power.	- Check if you pressed $\odot$ on the remote control unit. If the indicator on the TV lights up red, press $\odot$. - Is the AC cord disconnected? - Check if you pressed $\odot$ on the TV.
The TV cannot be operated.	External influences such as lightning, static electricity, etc., may cause improper operation. In this case, operate the TV after first turning off the power, or unplugging the AC cord and re-plugging it in after one or two minutes.
Remote control unit does not operate.	- Are batteries inserted with polarity (+, -) aligned? - Are batteries worn out? (Replace with new batteries.) - Are you using it under strong or fluorescent lighting? - Is a fluorescent light illuminating to the remote control sensor?
Picture is cut off.	- Is the image position correct? - Are screen mode adjustments (WIDE MODE) such as picture size made correctly?
Strange colour, light colour, or dark colour, or colour misalignment.	- Adjust the picture tone. - Is the room too bright? The picture may look dark in a room that is too bright. - Check the "Colour System" setting.
Power is suddenly turned off.	- The TV's internal temperature has increased. Remove any objects blocking the vent or clean. - Is the "Sleep Timer" set? Select "Off" from the "Sleep Timer" menu. - Is "No Signal Off" or "No Operation Off" activated?
No picture.	- Are connections to external equipment correct? - Is the input signal type selected correctly after connection? - Is the correct input source selected? - Is a non-compatible signal being input? - Is the picture adjustment correct? - Is the antenna connected properly? - Is "On" selected in "Audio Only"?
No sound.	- Is the volume too low? - Make sure that headphones are not connected. - Check if you pressed $\otimes$ on the remote control unit. - Is the proper item selected in the "PC Audio Select" menu when connecting devices to the HDMI2 terminal or the EXT4 terminal?
The TV sometimes makes a cracking sound.	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 TV 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 TV will recover when the temperature returns to normal.
- Do not leave the TV in a hot or cold location. Also, do not leave the TV 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: +5 °C to +35 °C.

Information on the software license for this product

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<http://www.sharp-eu.com/gpl/>

We are unable to answer any questions about the source code for the open source software. The source code for the software components whose copyrights are held by SHARP is not distributed.

Acknowledgements

The following open source software components are included in this product:

• linux kernel • busy box • uClibc • zlib • libpng • libjpeg

[3] DIMENSIONS

Unit: mm

