

🗖 Google TV



LED BACKLIGHT TV / MONITOR

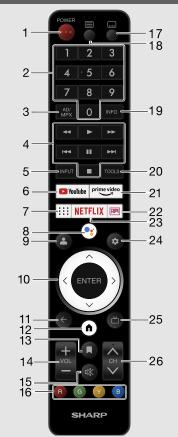
>>

OPERATION MANUAL

ENGLISH | 中文(台灣) | 中文(香港) | 中文 | FRANÇAIS | PORTUGUÊS | INDONESIA | ภาษาไทย | TIÊNG VIỆT | ᠽبي | РУССКИЙ | O'ZBEK TILIDA

<

Remote Control Unit



1 (POWER): Switch the TV power on or enter standby.

- 2 0-9: Set the channel.
- **3 AD/MPX:** Select the sound multiplex mode and audio description.
- 4 ◀◀ / ▶ / ▶▶ / ▮◀◀ / ▮ / ▶▶ / /■: Operate media contents on TV and VOD (Video On Demand) service playback.
- 5 INPUT: Select an input source.
- 6 SYOuTube (YouTube): Display the YouTube screen.
- 7 :::: (Apps): Open all Apps launcher.

8	(Google Assistant)
	ress the Google Assistant button on your remote to do more on your TV with your pice.
9	(Profile): Switch profile.
10	$\sqrt{1/1}$, ENTER: Select a desired item on the screen.
11 ((Back): Return to the previous screen.
12	(HOME): Display the HOME screen.
13	(Watchlist): To add a program to your watchlist.
14 ^v	VOL+/-: Set the volume.
	(Mute): Mute the sound. Mute can be cancelled by pressing VOL +/-
16	B , G , Y , B : The coloured buttons are correspondingly used to select the coloured items on the screen.
17 (
18 ((Teletext): Select the teletext mode.
19	NFO: Display the programme information (DTV only).
	TOOLS: Display the Tools screen. You can access menu screen by pressing TOOLS while watching TV in "Live TV" apps.
21	prime video (prime video): Display the prime video screen.
	(SHARP COCORO ALBUM): To view the picture where SHARP COCORO ALBUM using AI recognize faces and organize memories automatically.
23	NETFLIX (NETFLIX): Display the NETFLIX screen. f you press the NETFLIX button when the TV is turned off, the TV turns on and the NETFLIX screen is displayed.
24 ((Dashboard): Access the settings (direct or through the dashboard in GTV) from any place in the system.
25	Live Guide): Open Live TV EPG.
	CH \wedge / V : Select the channel.
•	The Remote Control Unit illustration in this operation manual is for explanation purpose and may vary slightly from the actual remote control unit depending on the selected

- The Remote Control Unit illustration in this operation manual is for explanation purpose and may vary slightly from the actual remote control unit depending on the selected region.
- Google Assistant is not available in certain languages and countries. Availability of services varies by country and language.

<

Remote Control Unit (Taiwan only)



1 (電源) (POWER): Switch the TV power on or enter standby.

- 2 0-9: Set the channel.
- 3 聲音 (AUDIO): Selects the audio mode during multichannel audio broadcasts.
- 4 ◀◀ / ▶ / ▶▶ / ▮◀◀ / ▮ / ▶▶ / ▲■: Operate media contents on TV and VOD (Video On Demand) service playback.
- 5 輸入 (INPUT): Select an input source.
- 6 **S** YouTube (YouTube): Display the YouTube screen.
- 7 :::: (Apps): Open all Apps launcher.

8 🗣 (Google 助理)
Press the Google Assistant button on your remote to do more on your TV with your voice.
9 (Profile): Switch profile.
10 $\Lambda/V/\langle i \rangle$, 確定 (ENTER): Select a desired item on the screen.
11 (Gack): Return to the previous screen.
12 (HOME): Display the HOME screen.
13 (Watchlist): To add a program to your watchlist.
14 音量+/- (VOL+/-): Set the volume.
15 🐼 (Mute): Mute the sound. Mute can be cancelled by pressing 音量+/- (VOL+/-) or 🛞 (Mute).
16 (II) (R), (II) (II) (II) (II) (II): The coloured buttons are correspondingly used to select the coloured items on the screen.
17 字幕 (Subtitle): Switch subtitle languages on / off.
18 定時關機 (SLEEP): Set the sleep timer.
19 資訊 (INFO): Display the programme information (DTV only).
20 工具 (TOOLS): Display the Tools screen. You can access menu screen by pressing 工具 (TOOLS) while watching TV in "Live TV"
apps.
21 prime video (prime video): Display the prime video screen.
22 💉 (COCORO VISION): Display the COCORO VISION screen.
23 NETFLIX (NETFLIX): Display the NETFLIX screen. If you press the NETFLIX button when the TV is turned off, the TV turns on and the NETFLIX screen is displayed.
24 (Cashboard): Access the settings (direct or through the dashboard in GTV) from
any place in the system.
25 (Live Guide): Open Live TV EPG.
26 頻道 \land / \lor (CH \land / \lor): Select the channel.
The Remote Control Unit illustration in this operation manual is for explanation purpose and may vary slightly from the actual remote control unit depending on the selected region.

Google Assistant is not available in certain languages and countries. Availability of services varies by country and language.

<

HOME screen

Connect to (HOME) for apps, games, movies and more.



NOTE

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

- ① Google TV[™] selections (Search / For you / Movies / Shows / Apps / Library).
- ⁽²⁾ The contents of the programmes that user is watching or watched are displayed here.
- ③ Among the applications installed on the TV, the icons for the favourite applications are shown inside here. (Favourite applications can be added / deleted / changes its order by users.)
- ④ User Google Account.

Initial setup <<

Auto installation

When the TV is powered 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 (¹) / **POWER** on the TV.

- The initial auto installation wizard appears.
- 2 You have to follow the procedure shown to pair the remote control unit with the TV.
- 3 Setting the OSD language.

Press Λ/V to select the desired language, and then press **ENTER**.

4 Setting the Region/Country.

Press Λ/V to select your region or area, and then press **ENTER**.

NOTE

- Digital broadcasting cannot be viewed in the area where digital broadcasting is not yet launched.
- DTV concerned menu may not displayed in some region.
- **5** Press Λ/V to select "Set up Google TV" or "Set up basic TV".
- If select "Set up Google TV", the screen will jump to step 6.
 If select "Set up basic TV", after select your Wi-Fi network, the screen will jump to step 11.
- **6** Set up with the Google Home app or press V to select "Set up on TV instead".
- After set up with the Google Home app, the screen will jump to step 9.
 If select "Set up on TV instead", the screen will jump to step 7.

7 Press Λ / V to select your Wi-Fi network.

8 Press "OK" or "Cancel" for Energy Saving Tips.

- If select "Cancel", the screen will jump to step 10.
- **9** Press Λ/V to select "Accept" or "Decline" for Network Privacy Policy.

10 Press Λ / V to sign into your Google Account.

11 Press Λ / V to select "Accept", "Terms of Service", "Play Terms of Service" and "Privacy Policy".

- 12 Press "Accept" to confirm your selection of these Google services settinas.
- For "Set up basic TV", after press "Accept", the screen will jump to step 16.
- 13 Press "Continue" for Google Assistant settings.
- 14 Press "Allow" or "No thanks" for search across all your TV apps.
- 15 Press "Confirm" to choose your subscriptions.
- 16 Select TV mode.

Press Λ/V to select where you will use this TV, and then press **ENTER**.

Home:

- "Home" mode is optimized for efficient energy usage for home use.
- If you plan to use this TV at home, please select "Yes".

Retail:

- "Retail" mode is optimized for store demo with fixed settings.
- "Retail" mode is for store demo only and setting are not saved. Please select "Yes" to proceed.

NOTE

Retail: A demonstration image will be displayed after initial auto installation is completed. If you have chosen "Retail" by mistake, go to "(Dashboard)" > "Settings" > "System" > "Retail Mode" > "Continue" > "Off".

17 Press Λ/V to select "Off" or "On" to enable Chromecast built-inTM.

- 18 Press "Antenna" or "Next Step" to select tuner mode.
- **19** Press Λ / V to select "Digital and analogue channels", "Only analogue channels", "Only digital channels" or "Skip Scan" to start channel scan.
- **20** Press Λ / V to view Sharp Terms of Use and Sharp Privacy Policy.
- 21 The description of Netflix screen will appear.
- Press "Next" to finish Netflix setup procedure.
- · Press "Setup network" if Wi-Fi network is not connected.
- 22 Press ENTER to start exploring your Google TV.

Software Updates

To search for new software updates via Over-The-Air

Refer to " (Dashboard)" > "Settings" > "System" > "About" > "System update".

NOTE

- Make sure your TV is connected to the internet when performing software updates via OTA.
- After finished downloading, please allow some time to apply the installed updates.
- During installation, please do not perform any operations, including power off or unplug your TV.
- Software updates performance is depending on internet connection.

OAD

Refer to "TOOLS" > "TV options" > "Advanced Options" > "OAD".

- This function is for automatically download the data for the version update software over digital broadcasts when the "Auto Download" 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.

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

Refer to "**TOOLS**" > "TV options" > "Advanced Options" > "Open Source Licenses".

You can read the software licenses in the on-screen display menu.

Software composition

The software included in this product is comprised of various software components whose individual copyrights are held by SHARP or by third parties.

Software Version

Refer to " (Dashboard)" > "Settings" > "System" > "About" > "Software Version".

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

How to tune the channel

Refer to "**TOOLS**" > "TV options" > "Settings" > "Channels & Inputs" > "Channels" > "Antenna".

You can tune channels manually.

Select from the following available settings.

- Channel Scan
- Update Scan
- Single RF Scan
- Manual Service Update
- LCN
- Channel Scan Type
- Channel Store Type
- Favorite Network Select

Channel Management

Refer to "TOOLS" > "Channels" > "Channel Management".

Use this menu to set up a channel individually.

- Channel Skip You can select the channels to skip.
- Channel Swap
 Channel position can be swapped freely.
- Channel Move
 Channels position can be moved freely.
- Channel Edit You can change channel names individually.
- Channel Delete Channels can be erased individually.
- Clear Channel List Erase all channels.

Auto Channel Update

Refer to "**TOOLS**" > "TV options" > "Settings" > "Channels & Inputs" > "Channels" > "Auto Channel Update".

Select from the following available settings.

• On / Off

Channel Update Message

Refer to "**TOOLS**" > "TV options" > "Settings" > "Channels & Inputs" > "Channels" > "Channel Update Message".

Select from the following available settings.

• On / Off

How to change Audio Language and Sound Tracks

1st Audio Language/2nd Audio Language

Refer to "**TOOLS**" > "TV options" > "Advanced Options" > "Audio" > "1st Audio Language/2nd Audio Language".

Switching the multi audio languages

Set up to two preferred multi audio languages to display if the audio languages are available. Each time you press **AD/MPX** on the remote control unit, the audio language switches.

Sound Tracks

Refer to "**TOOLS**" > "TV options" > "Advanced Options" > "Audio" > "Sound Tracks".

You can choose from the multilanguages options based on your preference.

Audio Type

Refer to "**TOOLS**" > "TV options" > "Advanced Options" > "Audio" > "Audio Type".

Select from the following available settings.

- Normal
- Audio Description
- Spoken Subtitle
- Hearing Impaired
- Audio Description and Spoken Subtitle

How to enable Subtitle

Subtitle

Refer to "TOOLS" > "TV options" > "Advanced Options" > "Subtitle".

You can display subtitles for the hearing impaired in the Teletext broadcast if the subtitle languages are available.

- Analog Subtitle
- Digital Subtitle
- Subtitle Tracks
- Digital Subtitle Language
- 2nd Digital Subtitle Language
- Subtitle Type

How to set your device name

Refer to "**TOOLS**" > "TV options" > "Settings" > "System" > "About" > "Device name".

Set the name of the TV displayed.

Use the software keyboard when you need to input text at device name setting.

How to launch EPG

EPG

What is an 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 (Live Guide) on the

remote control, provided that the TV is receiving the digital broadcasting signal. The EPG enables you to search for a programme, do timer view the programme schedule in detail.

Basic Operation

Display the EPG screen

1 Press (Live Guide).

 $^{\odot}$ Press Λ / V to select the desired programme.

Press < / > to display programme in the next time span.

Close the EPG screen

④ Press (Live Guide) again or ← (Back) to exit.

>>

How to change Audio channel

If multi sound modes are received, each time you press $\ensuremath{\text{AD/MPX}}$ the mode switches.

Switching the digital audio format (DTV only)

- The sound mode screen disappears in six seconds.
- Selectable items vary depending on the received broadcasts.
- The audio description sound is selected depending on the main audio.

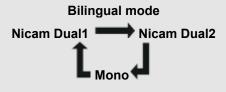
Switching the analogue audio format

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

In the NICAM TV broadcasts When receiving a stereo signal

Stereo mode Nicam Stereo Mono

When receiving a bilingual signal



When receiving a monaural signal

Monaural mode Nicam Mono In the TV mode of A2 TV broadcasts When receiving a stereo signal

> Stereo mode Stereo Mono

When receiving a bilingual signal

Bilingual mode
Dual1

When receiving a monaural signal

Monaural mode Mono

In the BTSC broadcasts (Philippines only) When receiving a SAP STEREO signal

SAP STEREO mode

ST(SAP) SAP(ST) Mono

When receiving a stereo signal

When receiving a SAP signal

SAP mode Mono SAP

How to operate Parental Controls

Refer to "TOOLS" > "TV options" > "Parental Controls".

This function allows TV channels to be restricted. It prevents children from watching violent or sexual scenes that may be considered inappropriate. If you have already set the password, enter it here.

Channels Blocked

You can block the viewing of any selected channel.

- Inputs Blocked You can block the viewing of any selected input.
- Change PIN
 You can set and change the Password by using 0-9.

NOTE

- As a precautionary measure, make a note of your Password and keep it in a familiar place.
- PIN input is required when executing "Parental Controls" screen. The default PIN is "1234".

• Program Restrictions

Used to enable or disable the parental control function. This function will not be selectable from the menu if you do not first configure your password.

Ratings (Guaranteed by SHARP)

Singapore

None: Cancel the blocking.

G: Suitable for all ages.

PG: Suitable for all but parents should guide their young.

PG13: Suitable for persons aged 13 and above but parental guidance is advised for children below 13.

NC16: Suitable for persons aged 16 and above.

M18: Suitable for persons aged 18 and above.

R21: Suitable for adults aged 21 and above.

Thailand

None: Cancel the blocking.

P: Suitable for children kid 3-6 years.

C: Suitable for children kid 6-12 years.

G: Suitable for general audience.

PG13: Suitable for people aged 13 and above.

PG18: Suitable for people aged 18 and above. And parental guidance for children under 18.

R: Suitable for adult.

Ratings (Not Guaranteed by SHARP)

This is used in regions other than Singapore and Thailand.

Teletext settings (DTV only) (Except Taiwan)

Refer to "TOOLS" > "TV options" > "Advanced Options" > "Teletext".

If you set the language of the initial page (this page is displayed for the first time after pressing) for teletext in DTV mode, it will start from the selected language page.

Select from the following available settings.

- Digital Teletext Language
- Decoding Page Language

NOTE

- This function is available for teletext in DTV mode. This is not available for teletext in ATV or external input mode.
- If the initial teletext page of the selected language in this function is not included in a received broadcast, the default initial page will be displayed.

Postal Code (Indonesia only)

Refer to "TOOLS" > "TV options" > "Advanced Options" > "Postal Code".

This function enable you to select your local postal code.

NOTE

• "Postal Code" will be appear only when region "Indonesia" is selected.

System Information

Refer to "**TOOLS**" > "TV options" > "Advanced Options" > "System Information".

Check for system updates and view various information of signal.

Screen

Refer to "TOOLS" > "TV options" > "Screen".

This function changes the screen size. The Screen menu varies depending on the input source.

For 4:3 programmes

Automatic: Keeps the original aspect ratio based on source information and enlarge the picture as much as possible.

Full: For 16:9 squeeze pictures.

Super zoom: Removes the black bars on the side of 4:3 broadcasts. There is minimal distortion.

Unscaled: Detects the resolution of the signal and displays an image with the same number of pixels on the screen.

4:3: Keeps the original aspect ratio in a full screen display.

Movie expand 14:9: For 14:9 letterbox pictures. Bars may appear on the top and bottom with some programmes.

Movie expand 16:9: For 16:9 letterbox pictures. Bars may appear on the top and bottom with some programmes.

NOTE

· Some items do not appear depending on the type of received signal.

Network and Internet

Connecting to the Internet

To configure the network settings in order to enjoy streaming content and internet applications. These settings can be configured from

" (Dashboard)" > "Settings" > "Network & Internet" > "Wake configs".

NOTE

• When an Internet connection is made, LAN and wireless connection cannot be used at the same time. Use only one of the connection types.

Using Wi-Fi

This TV is equipped with a wireless LAN function. For a wireless LAN connection, you must use wireless setup to connect the access point and TV.

WoW (Wake on wireless network)

Enable the TV to be started by a signal over a Wi-Fi.

NOTE

• Standby power consumption will be increase when WoW is turned ON.

Using LAN

Using a LAN cable (commercially available) to connect the LAN terminal on the TV to your broadband router (commercially available).

WoL (Wake on LAN)

Enable the TV to be started by a signal over a LAN.

NOTE

• Standby power consumption will be increase when WoL is turned ON.

Network and Internet (Continue)

NOTE

- This TV has a built-in wireless LAN function. Using a separate wireless USB LAN adapter may result in radio communications that do not comply with regulations on radio communications. Therefore, do not use a separate wireless LAN adapter.
- A wireless LAN connection and performance cannot be guaranteed for all residential environments. In the following cases, the wireless LAN signal may be poor or drop, or the connection speed may become slower.
 - When used in buildings made with concrete, reinforced steel, or metal
 - When placed near objects that obstruct the signal
 - When used with other wireless devices that emit the same frequency
- When used in the vicinity of microwave ovens and other devices that emit a magnetic field, electrostatic charge, or electromagnetic interference
- When there is significant interference in the 2.4-GHz frequency (such as from other wireless LAN devices, Bluetooth[®] devices, 2.4-GHz cordless telephones, and microwave ovens), it is recommended that you use a wireless LAN router/access point that supports IEEE802.11ac (5 GHz) and set the access point to transmit at 5 GHz. For setup details, see the operation manual of your access point.
- Operations cannot be guaranteed when used with access points that do not have Wi-Fi® certification.
- A wireless LAN router/access point is required to connect the TV to the Internet using a wireless LAN. See the operation manual of your access point for setup.
- If your access point is set to a stealth mode (that prevents detection by other devices), you may not be able to establish a connection. In this case, disable the stealth mode on the access point.
- A stable connection speed is required to play back streaming content. Use LAN connection if the wireless LAN speed is unstable.
- Before transferring to a third party or disposal, be sure to initialise the wireless LAN settings.
- Please follow the legislation in your region when using the wireless LAN outdoors.
- If you have failed to connect to the Internet in the above operation, then an error message will appear. In this case, press (Dashboard) to exit from the connected TV feature to make changes to the network settings.
- If you still cannot connect to the Internet, please consult your Internet service provider or telephone company.
- You cannot configure the settings from " (Dashboard)" > "Settings" > "Network & Internet" while using an application. If you must configure your "Network" settings, press the (a) (Dashboard) key to exit the function.

Network and Internet (Continue)

NOTE

DISCLAIMERS

- This SHARP device facilitates the access to content and services provided by third parties. The content and services accessible via this device belong to and may be proprietary to third parties. Therefore, any use of such third party content and services must be in accordance with any authorization or terms of use provided by such content or service provider. SHARP shall not be liable to you or any third party for your failure to abide by such authorization or terms of use. Unless otherwise specifically authorized by the applicable content or service provider, all third party content and services provided are for personal and non-commercial use; you may not modify, copy, distribute, transmit, display, perform, reproduce, upload, publish, license, create derivative works from, transfer or sell in any manner or medium any content or services available via this device.
- SHARP is not responsible, nor liable, for customer service-related issues related to the third party content or services. Any questions, comments or service-related inquiries relating to the third party content or service should be made directly to the applicable content or service provider. You may not be able to access content or services from the device for a variety of reasons which may be unrelated to the device itself, including, but not limited to, power failure, other Internet connection, or failure to configure your device properly. SHARP, its directors, officers, employees, agents, contractors and affiliates shall not be liable to you or any third party with respect to such failures or maintenance outages, regardless of cause or whether or not it could have been avoided.
- ALL THIRD PARTY CONTENT OR SERVICES ACCESSIBLE VIA THIS DEVICE IS PROVIDED TO YOU ON AN "AS-IS" AND "AS AVAILABLE" BASIS AND SHARP AND ITS AFFILIATES MAKE NO WARRANTY OR REPRESENTATION OF ANY KIND TO YOU, EITHER EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY WARRANTIES OF MERCHANTABILITY, NON-INFRINGEMENT, FITNESS FOR A PARTICULAR PURPOSE OR ANY WARRANTIES OF SUITABILITY, AVAILABILITY, ACCURACY, COMPLETENESS, SECURITY, TITLE, USEFULNESS, LACK OF NEGLIGENCE OR ERROR-FREE OR UNINTERRUPTED OPERATION OR USE OF THE CONTENT OR SERVICES PROVIDED TO YOU OR THAT THE CONTENT OR SERVICES WILL MEET YOUR REQUIREMENTS OR EXPECTATIONS.
- SHARP IS NOT AN AGENT OF AND ASSUMES NO RESPONSIBILITY FOR THE ACTS OR OMISSIONS OF THIRD PARTY CONTENT OR SERVICE PROVIDERS, NOR ANY ASPECT OF THE CONTENT OR SERVICE RELATED TO SUCH THIRD PARTY PROVIDERS.
- IN NO EVENT WILL SHARP AND/OR ITS AFFILIATES BE LIABLE TO YOU OR ANY THIRD PARTY FOR ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL, PUNITIVE, CONSEQUENTIAL OR OTHER DAMAGES, WHETHER THE THEORY OF LIABILITY IS BASED ON CONTRACT, TORT, NEGLIGENCE, BREACH OF WARRANTY, STRICT LIABILITY OR OTHERWISE AND WHETHER OR NOT SHARP AND/OR ITS AFFILIATES HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Chromecast-enabled devices

With Chromecast built-in, your phone becomes your remote. Simply tap the Cast button from apps you already know and love to stream entertainment from your phone, tablet or laptop to the TV.

NOTE

- When the TV is turned off or the connection is ended on the device, you must connect the device again.
- For details about the operation of Chromecast-enabled devices, check the manual for that device.

Audio Devices

HDMI Input

Inputs

Refer to "**TOOLS**" > "TV options" > "Settings" > "Channels & Inputs" > "Inputs".

Change the label for an input terminal, and switch between HDMI CEC Control Settings.

Audio Output

Digital Audio Output

Refer to " (Dashboard)" > "Settings" > "Display & Sound" > "Audio Output" > "Digital Audio Output".

This function allows you to select the digital audio signal type.

- Auto
- BypassPCM
- Dolby Digital Plus
- Dolby Digital

Digital Output Delay

Refer to " (Dashboard)" > "Settings" > "Display & Sound" > "Audio Output" > "Digital Output Delay".

You can delay the output of audio to minimize the time gap between audio output and a visual display.

Selected item	< button	> button
Digital Output Delay	For later delay	For advance delay

>>

Bluetooth setup

This feature enable a TV to connect with other Bluetooth devices via Bluetooth connection.

NOTE

- When you use the Bluetooth device with your TV for the first time, you
 must make pairing between the device and the TV. Once the pairing is
 correctly carried out, the Bluetooth device will be registered on the TV.
- Connectivity and reception range may depend on condition, environment, and distance of Bluetooth devices.
- Sound quality and compatibility are depending on Bluetooth devices.
- The Bluetooth format only supports HID, A2DP and AVRCP.

Bluetooth devices

You can add, delete or select Bluetooth devices.

Connection/Selection Procedure

- Turn the Bluetooth device on and put it in pairing mode. To put your Bluetooth device in pairing mode, refer to the operation manual of the device.
- 2 Refer to " (Dashboard)" > "Settings" > "Remotes & accessories" >

"Add accessory" to put the TV in pairing mode. A list of available Bluetooth device will be displayed.

3 Select the desired device from the list, then follow the on screen display instruction.

If you are prompted to enter a password, refer to the operation manual of the device.

After pairing is completed, the device connects to the TV.

NOTE

To pair the remote control unit with the TV, please hold (Back) and
 (HOME) for 10 seconds. Wait for about 1 minute before pairing.

USB

Preparation

You can connect the TV to a USB memory device and USB hard drive to enjoy viewing pictures, listening to music, and watching videos.

NOTE

- Depending on the USB memory device/USB hard drive, the TV may not be able to recognise the recorded data.
- It may take time to read the recorded data if the USB memory device/USB hard drive contains many files or folders.
- Use only alphanumeric characters for naming files.
- File names (may vary depending on character set) may not be displayed.

Connecting a USB Memory Device/USB Hard Drive

Insert the USB memory device with recorded photos, music or videos into the USB 1 or USB 2 terminal on the TV.

- When connecting a USB hard drive, be sure to use a hard drive with an AC adapter.
- Do not remove a USB memory device from the TV while transferring files, using the slide show function, or switching screens, or before you exit "MultiMediaPlayer".
- Do not insert and remove a USB memory device/USB hard drive to and from the TV repeatedly.
- When using a card reader, be sure to insert a USB memory device first.

CAUTION

- Do not use a USB extension cable when connecting a USB memory device to the USB terminal on the TV.
- Using a USB extension cable with the USB memory device may prevent the TV from performing correctly.

Selecting the Folders to Play Back

• To play back data on a USB memory device insert the USB memory device on the TV.

1 Press " (h) (HOME)" > "Your apps" > "MultiMediaPlayer" to open the Playback screen.

2 Press < / > to select "VIDEO", "PHOTO", "MUSIC" or "TEXT", and then press ENTER.

- **3** Press Λ / V (or $\langle \rangle$) to select the drive/server where you want to find your file, and then press **ENTER**. (Only can select if more than one USB input.)
- 4 Press </>> to select the desired folder, and then press ENTER.

NOTE

• USB only support device up to DC5V 1.5A.

Video file format

USB	Device	Compatibi	lity
-----	--------	-----------	------

	USB Memory, USB card reader (Mass Storage class), USB hard drive
File system	FAT/FAT32

Photo file format

USB (Continue)

Format JPEG, PNG, BMP

Music file format

Format	Sampling rate [KHz]	Bitrate [Kbps]
MP3	8/11.025/12/16/ 22.050/24/32/44.1/48	8~320
AAC	32/44.1/48	8~320
WMA	8/11.025/16/22.05/ 32/44.1/48/64/88.2/96	8~384
WAV	8/11.025/12/16/ 22.050/24/32/44.1/48	8~1024

NOTE

• If the TV is turned off and then on again, the number assigned to the USB may change.

Container	Video	Music
AVI	MPEG-1 MPEG-2 MPEG-4 H.264	PCM MP2: MPEG-1 Layer2 MP3: MPEG-1 Layer3 AAC AC3 WMA
MKV	MPEG-1 MPEG-2 MPEG-4 H.264 VP8 H.265(HEVC)	PCM MP2: MPEG-1 Layer2 MP3: MPEG-1 Layer3 AAC AC3 WMA VORBIS
ASF	MPEG-4 VC1(WMV3)	MP3: MPEG-1 Layer3 WMA
PS	MPEG-1 MPEG-2	MP2: MPEG-1 Layer2 MP3: MPEG-1 Layer3 AC3
TS	MPEG-2 VC1(WMV3) H.264 H.265(HEVC)	MP2: MPEG-1 Layer2 AAC AC3
MP4	MPEG-4 H.264 H.265(HEVC) VP8 VC1(WMV3)	MP2: MPEG-1 Layer2 MP3: MPEG-1 Layer3 AAC

NOTE

- Progressive format jpeg files are not supported.
- USB 1.1 devices may not be played properly.
- Operation using USB hubs is not guaranteed.
- Some video file formats may not be played depending on the file.
- Some images may not be displayed in the appropriate aspect ratio depending on the file format.
- File extensions are not used to determine the file format.

USB (Continue)

Playing Back Files on a USB Memory Device

Photo Mode/Music Mode/Video Mode

Buttons for thumbnail/list operations

Buttons	Description
\land	Select a desired item.
ENTER	When selecting a folder icon: Enter this directory. When selecting a photo file: Enlarge the photo. When selecting an audio file: Play audio. When selecting a video file: Play the video file.
(Back)	Return to the previous process.
B _(Blue)	Change Thumbnail/List mode.
TOOLS	Display the Menu screen.

NOTE

• When you are viewing the MultiMediaPlayer app in Music Mode, you cannot configure Picture/Audio settings.

Menu for thumbnail operations

Press Λ/V to select an item and make settings to your preferences.

Example		
Sort		
Media Type		
Thumbnail Size		
Recursive Parser		

Sort

- You can change the way in which files are ordered. Press Λ/V to select "Type", "Date" or "Name" and then press **ENTER**.

Media Type

- Switch the media type when the Recursive parser display is displayed.

Thumbnail Size

- Change the thumbnail size.
- Small/Medium/Large

Recursive Parser

- Display all files according to the Media type settings.

Photo Frame

- You can add frame to your photo.

NOTE

· You can see the file name, file size and pixel size of the selected photo in the upper-left corner of the screen.

<< Connection/External Devices</p>

USB (Continue)

Playing Back Files on a USB Memory Device (Continue)

Photo Mode

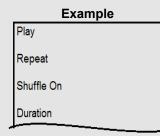
Slide Show

The photos displayed on the thumbnail selection screen are displayed as a slide show.

Buttons for slide show operation

Buttons	Description
►	Play the Slide Show.
11	Pause the Slide Show.
$\Lambda/V/,$ ENTER	Select the desired item.
(Back)	Return to the thumbnail selection screen.
TOOLS	Display the USB Menu screen.

Menu for slide show



Play/Pause

Start or pause slideshow.

Repeat

Set whether to show the slide show repeatedly. None/Repeat One/Repeat All

Shuffle On/Shuffle Off

Shuffle the image files within the folder and display as a slide show.

Duration

Specify the length of time before the next image appears.

Press Λ / V to select the desired length of the time, and then press **ENTER**. Short/Medium/Long

Effect

Specify the effect for transitioning to the next image.

None/Dissolve/Wipe Right/Wipe Left/Wipe Up/Wipe Down/Box In/ Box Out/Random

Rotate*

Rotate the photo by 90 degrees to the right. * Only displayed when playback is paused.

Zoom*

Zoom in on the image.

1 X/2 X/4 X

* Only displayed when playback is paused.

Show Info

Display the photo information.

Photo Frame Image Display the photo in frame.

Picture Settings

See pages 5-1 to 5-3.

NOTE

- For setting the slide show speed, select "Duration" on the Menu screen.
- Depending on the contents, the TV system cannot display the picture at its original resolution in some cases. TV system may adjust the picture resolution accordingly.

<< Connection/External Devices</p>

USB (Continue)

Playing Back Files on a USB Memory Device (Continue)

Music Mode

Playing Mode

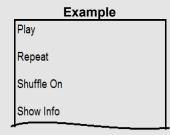
Buttons for playing mode

Buttons	Description
	The fast reverse speed changes every time you press ◀◀.
••	The fast forward speed changes every time you press ►►.
	Pause the music.
	Go to the previous file.
	Go to the next file.
$\Lambda/V/,$ ENTER	Select a desired item.
(Back)	Return to the previous process.
TOOLS	Display the Menu screen.

NOTE

• The displayed play time may differ slightly from the actual play time depending on the files.

Menu for playing mode



Play/Pause

Start or pause music.

Repeat

Configure the repeat playback settings. None/Repeat One/Repeat All

Shuffle On/Shuffle Off

Shuffle the music within the folder.

Show Info Display audio information.

Hide Spectrum/Show Spectrum Show or hide the spectrum.

Lyric Options

You can change the lyric display type. This is only available when a lyrics file (".lrc") is presented. Only UTF-8 character code lyric files (without BOM) are supported.

Sound Settings

See pages 6-1 to 6-2.

<< Connection/External Devices</p>

USB (Continue)

Playing Back Files on a USB Memory Device (Continue)

Video Mode

Playing Mode

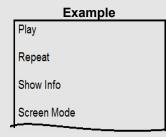
Buttons for playing mode

Buttons	Description
	The fast reverse speed changes every time you press ◀◀.
•	Play the video.
••	The fast forward speed changes every time you press ►►.
	Pause the video.
	Go to the previous file.
	Stop the video.
	Go to the next file.
$\Lambda/V/,$ ENTER	Select a desired item.
(Back)	Return to the previous process.
TOOLS	Display the Menu screen.

NOTE

• The displayed play time may differ slightly from the actual play time depending on the files.

Menu for playing mode



Play/Pause

Start or pause the video.

Repeat

Configure the repeat playback settings. None/Repeat One/Repeat All

Show Info Display the video information.

Screen Mode

This function changes the screen size. Full Screen/4:3/16:9/Auto

Picture Settings

See pages 5-1 to 5-3.

Sound Settings See pages 6-1 to 6-2.

See pages 6-1 to 6-2.

Sound Tracks Display soundtracks info.

Last Memory Press Λ/V to select "Off" or "Time", and then press ENTER.

Seek

Jump to the specific scenes.

<< Apps

Google Assistant

Talk to Google to control your TV using your voice.

 Press the Google Assistant button on your remote to do more on your TV with your voice.

NOTE

• Google Assistant is not available in certain languages and countries. Availability of services varies by country and language.

Google Account setting

Accounts & sign-in

Refer to "(Cashboard)" > "Settings" > "Accounts & sign-in".

To sign in, enter your email address and password. You can also sign in another account and kids account.

Location

Refer to "(Dashboard)" > "Settings" > "Privacy" > "Location".

Configure the location settings.

Usage & diagnostics

Refer to " (Dashboard)" > "Settings" > "Privacy" > "Usage & diagnostics".

Automatically send diagnostic information to Google, like crash reports and usage data from your device, apps, and Chromecast built-in. You can adjust these permissions at any time from device settings. Learn more at g.co/tv/diagnostics.

Security & Restrictions

Refer to " (Dashboard)" > "Settings" > "Privacy" > "Security & Restrictions".

Unknown sources.

Allow installation of apps from sources other than the Play Store.

Unique feature from SHARP

Azan - Prayer time

Refer to " (Dashboard)" > "Settings" > "Apps" > "See all apps" > "Azan" app.

This feature could help a Muslim user to stay on top of Prayers with Azan by getting the accurate prayer times via notification. By configuring location and time zone, all five times prayer will be calculated according to the pointed calculation method.

• Auto Setup:

This function allows you to select the address configuration through preset data. (Country, Province, City)

Manual Setup:

You can insert manually all informations in the screen.

Prayer Time Selection:

You can select or deselect between 5 prayers for Azan notification.

• Notification:

You can select or deselect prayer time to notify and enable or disable prayer alert.

• Info:

A quick reference for you to get info on five times prayer after setup completed.

• Demo:

A demonstration video will be displayed when Azan is implemented.

NOTE

- The notification will be displayed on the screen for 5 minutes. After 5 minutes, the notification screen will be off automatically.
- The notification is based on the setting in Prayer time selection.
- Press (Back) to off the notification screen immediately.
- The TV and Azan time information prior to internet connection.
- The TV time information from digital TV signal will be used if internet connection is not available.
- Deviation of the TV and Azan display time may occur due to improper digital broadcast standard.

SHARP SELECT

Refer to " (Dashboard)" > "Settings" > "Apps" > "See all apps" > "SHARP SELECT" app.

This app shows recommended apps that can be enjoyed with AQUOS.

SHARP COCORO ALBUM

Refer to "(Dashboard)" > "Settings" > "Apps" > "See all apps" > "SHARP COCORO ALBUM" app or by pressing (SHARP COCORO ALBUM) on the remote control unit.

You can import your photos/videos downloaded from user personal Google Drive using "Contents Downloader" app to view on SHARP COCORO ALBUM.

Tools screen setting

Tools menu screen

Channels					
TV options					
Source	Picture			Sound	Power Control
	Ð	Ð	Q	•	۴

1 Press TOOLS to display the TOOLS screen.

2 Press < /> > to select the desired menu.

- Channels Program Guide, Channel, Channel Management
 TV options Source, Picture, Screen, Sound, Power Control, Parental Controls, Manual OAD Download, Advanced Options, Settings

3 Press TOOLS to exit.

Picture settings

Picture Mode (Changing Pic. Quality)

Refer to "**TOOLS**" > "TV options" > "Picture" > "Picture Mode".

Picture Mode gives you several viewing option to choose from to best match the surrounding environment of the TV, which can vary due to factors like room brightness, type of programme watched or the type of device connected.

- User: Customise the picture setting.
- Standard: Default picture settings for common users.
- Dynamic: For a clear-cut image emphasising high contrast, useful for sports viewing.
- Comfort mode: Reduce the blue light of the TV.*
- Movie: Dim down the colour for long hour viewing.
- Game: Lower latency for fast gaming illustration.
- Super Eco: Reduce the backlight brightness to save power consumption.

NOTE

* Low Blue Light contents

Blue-violet light is capable of damaging the human eye. It can be particularly harmful to the lens and retina, and exposure may result in myopia and macular degeneration.

Low blue light contents means that the blue light ratio to the luminance level and ratio to other wavelength is controlled within the allowable level to protect the human eye.

* Low Blue Light mode

To access to the Low blue light mode in this device, please select the Comfort mode. Refer to the above Picture Mode (Changing Pic. Quality) on how to go to Comfort mode.

* Viewing recommendation for eye protection

- Take regular breaks from the screen, example 5 minutes for every hour.
- Look at distance objects (look far away) when taking break.
- Recommended viewing distance at least 2 ~ 3 times from the screen size.

- Do eye exercise such as Focus change, near and far focus or implement 20-20-20 rule to prevent eye strain.

- To access VOD (Video On Demand) picture mode, go to "MultiMediaPlayer" app for setting. With playing SDR/HDR10/HLG contents, press "TOOLS" > "Picture Settings".
- You can set the Picture Mode on each input individually. These settings will be automatically saved on each input for convenience.

Configuring Picture settings

Refer to "TOOLS" > "TV options" > "Picture".

Adjusts the picture to your preference with the following picture settings.

Selected item	< button	> button
Backlight	The screen dims	The screen brightens
Brightness	For less brightness	For more brightness
Contrast	For less contrast	For more contrast
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

NOTE

For resetting all Picture settings items to the factory preset values, press Λ/V to select "Reset to Default", press **ENTER**, press Λ/V to select "OK", and then press **ENTER**.

Picture settings

Configure advanced Picture settings

Refer to "TOOLS" > "TV options" > "Picture" > "Advanced Settings".

Gamma

Adjusts the differences of picture tones between bright parts and dark parts.

• Dark / Middle / Bright

Color Temperature

For a better white balance, use colour temperature correction.

- User: White with bluish tone
- Cool:
- Warm:
- Comfort: White with reddish tone
- Red/Green/Blue Adjusts the white balance by changing the value of each item.

CMS (Colour Management System)

Colour tone is managed using the six-colour adjustment setting.

• Enable / Tint / Colour / Brightness

NOTE

• A lower value makes the image darker.

HDR related settings

Refer to "TOOLS" > "Picture".

HDR (High Dynamic Range)

The HDR (High Dynamic Range) technology implements video image that is very similar to the image shown through human eyes by finely adjusting the contrast of the source.

- On: Enable HDR effect for HDR source.
- Off: Disable HDR effect for HDR source.

NOTE

• This feature only available when input signal is playing HDR content. (For example, HDMI 1)

Unique Picture setting from SHARP

Refer to "**TOOLS**" > "TV options" > "Picture" > "Advanced Settings".

Digital Noise Reduction

Reduces noise on screen and produces a clearer video image.

• Off / Low / Medium / High / Auto

MPEG NR

This feature improves the quality of pictures by reducing the block noise and mosquito noise without compromising the picture resolution.

• Off / Low / Medium / High

Max Vivid

Sharpens the image by increasing the contrast, brightness and sharpness.

• Off / On

Active contrast

Automatically adjusts the image contrast according to the scene.

• Off / Low / Medium / High

Local Contrast Control

Automatically adjusts the brightness of image contrast according to the scene.

• Off / Low / Medium / High

Filmmaker Mode

This feature disables most video processing so that user can view content in the way that filmmakers intended.

• Off / On

Flesh Tone

Adjust the flesh tone in the image without affecting the other colours on the screen.

• Off / Low / Medium / High

DI Film Mode

This function provides high-quality playback of images originally encoded at 24 frames/second, such as films.

Off / Auto

Game Mode

Lowers image brightness for easier viewing.

• Off / On

Color Space

Color Space refers to the range of colour of image or video content that the SHARP TV can support.

• Auto / Off / On

Picture settings

Input settings

PC Mode

Refer to "**TOOLS**" > "TV options" > "Picture" > "Advanced Settings" > "PC Mode".

Adjusts the picture when a PC is connected to the TV via HDMI.

ALLM (Auto Low Latency Mode)

Refer to "**TOOLS**" > "TV options" > "Picture" > "Advanced Settings" > "ALLM".

This feature triggers the lowest latency setting on a device for a smoother and lag-free experience.

• Off / On

HDMI RGB Range

Refer to "**TOOLS**" > "TV options" > "Picture" > "Advanced Settings" > "HDMI RGB Range".

Sets the HDMI type for HDMI IN 1, 2 and 3 terminals. This feature provides picture colour quality of HDMI input signal.

• Auto / Full / Limit

Sound settings

Audio Mode

Refer to "**TOOLS**" > "TV options" > "Sound" > "Audio mode".

This function allows you to convert the audio quality. Select from the following available settings.

- User: Customise the sound setting.
- Standard: Optimise sound quality for general content.
- Dynamic: Enhances the treble and bass for a clearer sound.
- Sports: Simulates the larger space of a stadium or other venue.
- Movie: Optimise surround sound suitable for movie.
- Music: Optimise sound for listening to music.
- Clear: Makes voice clearer by lowering background sound.

Configuring Sound settings

Refer to "TOOLS" > "TV options" > "Sound".

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

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

NOTE

 For resetting all Sound settings items to the factory preset values, press ∧/∨ to select "Reset to Default", press ENTER, press ∧/∨ to select "OK", and then press ENTER.

Configure advanced Sound settings

Refer to "TOOLS" > "TV options" > "Sound".

Surround Sound

The surround function produces Surround effect from the speakers.

• Off / On

NOTE

 For some discs, setup may be required on your BD/DVD player. In this case, please refer to the operation manual of your BD/DVD player.

Equalizer Detail

This function allows you to change the sound quality.

• 120Hz / 500Hz / 1.5KHz / 5.0KHz / 10.0KHz

Speaker Delay

If you are hearing an audio delay across all sources or channels and you have a home theatre system or other speakers connected to your TV, you can access the Speaker Delay settings to increase the Speaker Delay.

Selected item	< button	> button
Speaker Delay	For later delay	For advance delay

Dolby Audio Processing

This function allows you to reduces the amount of data needed to produce high quality sound.

Off / On

Clear Voice

This function emphasises speech against background noise for greater clarity.

• Off / Low / Medium / High

<< Sound settings</pre>

Unique Sound setting from SHARP

Refer to "TOOLS" > "TV options" > "Sound".

Auto Volume

Different sound sources sometimes do not have the same loudness level, such as a programme and its commercial breaks. The Auto Volume reduces this problem by equalising it.

Off / On

Downmix Mode

You can select the multi-channel downmix method that is compatible with your stereo system.

• Stereo / Surround

<< Other

Sleep Timer

Refer to "TOOLS" > "TV options" > "Power Control" > "Sleep Timer".

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

- Off \rightarrow 10 Minutes \rightarrow 20 Minutes \rightarrow 30 Minutes \rightarrow 40 Minutes \neg
- 120 Minutes ← 90 Minutes ← 60 Minutes ← 50 Minutes ←

Switch Off Timer

Refer to "TOOLS" > "TV options" > "Power Control" > "Switch Off Timer".

You can use this function to automatically shut off the TV after pre-configured period of time.

No Signal Off

Refer to "TOOLS" > "TV options" > "Advanced Options" > "No Signal Off".

When this function is enabled, the TV automatically shuts down if no signal is received for more than 5 to 60 minutes.

Off / 5 Minutes / 10 Minutes / 15 Minutes / 30 Minutes / 60 Minutes

NOTE

- When it is 5 minutes before the power shuts down, the remaining time will start to keep appearing every minute.
- When a TV programme finishes, this function may not operate.

Language

Refer to "(Dashboard)" > "Settings" > "System" > "Language".

You can select a language.

Storage

Refer to "(Dashboard)" > "Settings" > "System" > "Storage".

View the memory usage status.

Accessibility

Refer to "(Dashboard)" > "Settings" > "System" > "Accessibility".

Configure Captions, High contrast text, Text to speech and Accessibility shortcut. Some of the Caption settings may not be applied.

Auto Sleep

Refer to "**TOOLS**" > "TV options" > "Power Control" > "Auto Sleep" > "Never" to continue watching TV.

Select from the following available settings.

• Never / 4 hours / 6 hours / 8 hours

NOTE

• The default setting for "Auto Sleep" is "Never".

Energy saver

Refer to " (Dashboard)" > "Settings" > "System" > "Power & Energy" > "Energy saver".

Set to turn off display screen to reduce the power consumption.

• 15 minutes / 30 minutes / 1 hour / 4 hours / 8 hours / 12 hours / 24 hours / Never

Restart

Refer to "(Dashboard)" > "Settings" > "System" > "Restart".

When your TV is not properly working, restart of the TV is required.

Factory reset

Refer to " (Dashboard)" > "Settings" > "System" > "About" > "Reset" > "Factory reset".

When you perform a reset, the TV will be returned to the factory preset values, and the Google Accounts will also be removed.

NOTE

• Your purchased apps will remain.

Other <<

Refer to "(Dashboard)" > "Settings" > "System" > "Power & Energy" > "Power on behavior".

The default setting for "Power on behavior" is the Google TV home screen. You can change the TV startup behavior to "Last used input" if you prefer your TV to power on with the last watched TV channel.

Google TV home screen / Last used input

Timer

```
Refer to
        "(Dashboard)" > "Settings" > "System" > "Power & Energy" > "Timer".
```

You can use this function to turn the TV on and off.

 Power On Time Type / Auto Power On Time / Power Off Time Type / Auto Power Off Time

NOTE

 "Auto Power On Time" / "Auto Power Off Time" is not available when you set "Power On Time Type" / "Power Off Time Type" to "Off".

Automatic date & time

Refer to "(C) (Dashboard)" > "Settings" > "System" > "Date & Time" > "Automatic date & time".

This function allows you to set Date & Time automatically.

Use network-provided time / Off

Set date

Refer to "(Dashboard)" > "Settings" > "System" > "Date & Time" > "Set date".

This function allows you to set date manually.

NOTE

 "Set date" is not available when you set "Automatic date & time" to "Use network-provided time".

Set time



Refer to "(Dashboard)" > "Settings" > "System" > "Date & Time" > "Set time".

This function allows you to set time manually.

NOTE

 "Set time" is not available when you set "Automatic date & time" to "Use network-provided time".

Set time zone

Refer to "(Dashboard)" > "Settings" > "System" > "Date & Time" > "Set time zone".

This function enable you to select your local time zone.

Use 24-hour format

Refer to "(Dashboard)" > "Settings" > "System" > "Date & Time" > "Use 24-hour format".

You can select the time format (either "24HR" or "AM/PM") for the clock time.

Ambient mode



Refer to "(Dashboard)" > "Settings" > "System" > "Ambient mode".

This function allows you to display your Google Photos or curated images from other sources when the TV is idle.

Help & Feedback

Refer to "(Dashboard)" > "Settings" > "Help & Feedback".

You can help improve Google TV when you share your feedback and tell us about any problems you have. Visit Google TV Help at g.co/tv/help.

<< Appendix

Troubleshooting		
Problem	Possible Solution	
No power.	 Check if you pressed (POWER) on the remote control unit. Is the AC cord disconnected? Has the power been turned on? 	
Unit cannot be operated.	 External influences such as lightning, static electricity, may cause improper operation. In this case, operate the unit after first turning off the power of the TV or unplugging the AC cord and replugging it in after 1 or 2 minutes. 	
Remote control unit does not operate.	 Is the equipment to be operated by the remote control unit set correctly? 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 illuminated near the remote control sensor? 	
Picture is cut off/with sidebar screen.	Are Screen adjustments such as picture size made correctly? Page 2-5	
Strange colour, light colour, or colour misalignment.	 Adjust the picture tone. Pages 5-1 to 5-3 Is the room too bright? The picture may look dark in a room that is too bright. 	
Power is suddenly turned off.	 Is the sleep timer set? Page 7-1 Check the power control settings. Page 7-1 The unit's internal temperature has increased. Remove any objects blocking vent or clean. 	

Problem	Possible Solution
No picture.	 Is the connection to the device correct? If the PC image is not displayed, check the following: When connecting a laptop PC to the TV, check that display output mode of the PC is set to external monitor.
Picture quality of HD programmes is poor.	 To enjoy HD images from external equipment, you are required to set up HDMI connection. If the programme content is not of HD quality, HD images cannot be displayed. Check that the programme you are viewing provides HD images. The HD cable/satellite set-top box may need to be configured to output HD images via cable/satellite. The cable/satellite broadcast may not support a signal resolution of 1080p.
The TV sometimes makes a cracking sound.	 This is not a malfunction. This happens when the cabinet slightly expands and contracts according to change in temperature. This does not affect the TV's performance. 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.

NOTE

If require any assistance with troubleshooting, please contact SHARP Customer Care.

<< Appendix

Troubleshooting (Continue)

Problem	Possible Solution		
No sound.	 Is the connection to the device correct? Is the volume too low? Have you pressed (Mute) on the remote control unit? 		
	 Check the audio output of the connected external equipment. Is the volume too low or muted? 		
	 When external equipment is connected via an HDMI cable, you may need to configure the audio to be output through the HDMI cable. 		
	 When connecting a PC via an HDMI-certified cable, check the following: 		
	 Is the audio output of the PC configured correctly? Check the audio output settings and output audio format in Sound Properties on the PC. The audio formats compatible with this TV are PCM, Dolby Digital. With other formats, audio cannot be output. 		
 Chromecast built-in image/ audio cannot be output to the TV. 	 Check if the smartphone/tablet is connected in the same Wi-Fi network. 		
 Software updates via Over-The-Air (OTA) is not successful. 	 Make sure your internet connection is working. If the TV is connected to Internet, but no connection available, please disconnect the internet from your TV and then reconnect again. 		

Troubleshooting - Error Message		
The example of an error message displayed on a screen	Possible Solution	
No broadcast now.	Check the antenna cable. Check that the antenna is correctly setup.Check the broadcast time in the programme guide.	
An incompatible audio signal has been received. Check the output device settings.	 This message is displayed when an audio format other than PCM, Dolby Digital is input. Set the audio output format of connected external HDMI equipment to PCM, Dolby Digital. Refer to the operation manual of the external equipment for setting details. 	

NOTE

• If require any assistance with troubleshooting, please contact SHARP Customer Care.

Trademarks

 Google TV is the name of this device's software experience and a trademark of Google LLC. Google, YouTube, Google Photos and Chromecast built-in are trademarks of Google LLC.

• Google Assistant is not available in certain languages and countries. Availability of services varies by country and language.

