

# **OPERATION MANUAL** · The illustrations and on-screen displays in this operation manual are for explanation purposes and may vary slightly from

# Contents

the actual operations.

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# 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.

# **Important Safety Precautions**

- Cleaning—Unplug the AC cord from the AC outlet before cleaning the product. Use a damp cloth to clean the product. Do not use liquid cleaners or aerosol cleaners.
- 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 dropped or impact applied. 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 cord under the TV set or other heavy items.
- Do not display a still picture for a long time, as this could cause an afterimage to remain.
- There is power consumption always if main plug is connected.
- Servicing—Do not attempt to service the product yourself. Removing covers can expose you to high voltage and other dangerous conditions. Request a qualified person to perform servicing.
- For ventilation, leave at least 4" to 6" free all around the TV. Do not place the TV on a carpet.
- The equipment shall not be exposed to dripping or splashing.
- The equipment shall not be exposed to rain or moisture and objects filled with liquids, such as vases, shall be placed on the apparatus.
- The appliance coupler is used as the disconnect device of this apparatus, the disconnect device shall remain readily operable.

The LCD panel is a very high technology product, 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 moving the TV, it should always be carried by two people, using both hands, be careful not to apply pressure to the display.

## Wall mounting

Installing the LCD Colour TV 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.

# WARNING

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







# Introduction

## **Remote control unit**

#### UI (POWER)

Press to turn the LCD TV on or enter standby mode.

# 

Select an input source.

## 0-9 DIGIT BUTTONS

To select a TV channel directly.

## EPG

Press this button to display electronic programme guide when watching digital channels.

## PRE PR

To display the previous selected TV channel.

## DTV/ATV

Press this button to switch between ATV and DTV channels.

## PR LIST

Press to display a list of channels. Then press **Red button** to select the digital or analogue channel list. (Only available when your input source is TV).

## ECO

Press this button to set the picture with less brightness for saving energy.

## i+

Display programme information, if available.

## ⊿ (+/-)

Press to adjust the volume.

## 刻

Press to toggle audio on and off. You can also press  $\checkmark$  (+/-) to restore the previous volume level.

## (Picture format)

Select picture format to Auto / Normal / Zoom 1 / Zoom 2 / Wide.

## P (∧/∨)

Press to select the channel.

## DUAL

Select **MONO / STEREO / DUAL 1 / DUAL 2** for ATV channel. Select Audio language for DTV channel.

## AUDIO (ADJ)

Press to set the LCD TV to a predefined sound setting. **Personal / Music / Speech** 



## VIDEO (ADJ)

Press to set the LCD TV to a predefined picture setting. Personal / Standard / Vivid / Movie / Eco

## SLEEP

Press to turn the LCD TV off within an amount of time. (10 ~ 120 minutes.)

## ^ < < >

Press  $\land \lor \lt >$  to navigate and confirm your selection.

## ок

Press to activate a setting.

## MENU

Press to activate the LCD TV OSD.

#### EXIT

Press to exit the LCD TV OSD or return to the previous layer.

## R/G/Y/B (COLOUR BUTTON)

Press buttons to select the pictures with various colours of text. Different channels display different functions.

## TELETEXT

Press this button to activate Teletext. Press again to activate Teletext with TV. Press again to turn off Teletext.

#### SUBTITLE

For DTV, press this button to toggle off / between available subtitle languages.

For ATV, press this button to toggle off / between available subtitle pages in Teletext.

## SIZE

Press this button to change the font size: Full screen, Top half and Bottom half.

## SUBPAGE

To select the subpage when the current page contains subpage(s).

## INDEX

Press this button to return to page 100 or the index page; and then press 0 to 9. The teletext page will be numbered and added to the page you select or the secondary item.

#### HOLD

Press this button to stop the scrolling of pages. The text decoder stops receiving data.

## REVEAL

Reveal hidden information such as answers to a quiz.

## FREEZE

Press to freeze a moving image on the screen. (Only available when your input source is TV). Scart output signal will also be frozen when you are watching digital channels.

### In USB mode:

## 

Press to skip back to the previous title or track.

Press to stop playback.

## ▶/||

Press to start/pause playback. Caution: Do not freeze the video image for long periods of time. You may damage the TV screen.

#### 

Press to skip forward to the next title or track.

## Introduction

## TV (Front view)



# TV (Rear view)



#### RS232C-connector

· The RS232 connector is only used for service purpose.

# Preparation

## Supplied accessories

Stand unit and screws



AC cord (x1) Product shape varies in some countries





Cable clamp (x1)

Attached in back of

Remote control (×1) AAA battery (×2)



**Operation Manual** 

Quick Setup Guide





# Mount the TV base





- 1. Put the TV face down on a safe surface that is covered by a soft and smooth cloth.
- 2. Adjust the TV stand to the bottom of the TV.
- **3.** Fasten the screws by using a cross-head screwdriver (Not supplied).

#### NOTE

To detach the TV base, perform the steps in reverse order.

# Wall mounting



#### NOTE

 At the time of purchasing wall bracket, please check if there is enough space between the wall bracket and TV terminals for the terminal connection.

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# Preparation

## Installation of batteries

- 1. Insert two AAA batteries into Remote control. Make sure (+) and (-) are facing the proper direction.
- 2. Replace the cover.



#### NOTE

 If the remote control will not to be used for a long time, remove the batteries to avoid remote control damage.

#### 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.

#### 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

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.



## **Display the Menu Screen**

Press MENU and the menu screen displays.

#### Select an item by the remote control

- **1.** Press  $\land \lor >$  to select the desired menu.
- Press <> to select / adjust the item to the desired level. The setting on screen is applied immediately.
- 3. Press EXIT to return to the previous layer .



#### Exit the Menu Screen

The operation will exit the menu screen if you press **EXIT** before it is complete.

# Quick guide

## Initial installation overview

Follow the below steps one by one when using the TV for the first time. Some steps may not be necessary depending on your TV installation and connection.





● Turn on the TV power with ().



2 Run the initial auto installation.



## 1. Language setting



## 2. Country setting



3. Mode select (TV location setting)



When selecting **HOME** mode, go to **step 4** to select the scan mode.

When selecting **SHOP** mode, a window pops out to ask your confirmation.

#### 4. Scan Mode setting



When selecting **Analogue**, go to **step 6** to start channel scan.



When selecting **Analogue and Digital**, the Tuner Mode screen will appear. Select the Tuner mode.

## 5. Tuner Mode setting



When selecting **Antenna**, go to **step 6** to start channel scan.



When selecting **Cable**, the Scan Mode configuration screen will appear.

Initial Setup			
Please configre the info.	cable		
Scan Mode		Full	⊲⊳
Frequency (KHz Modulation	)	47400 64QAM	
Symbol Rate (K- Network ID	aymis)	6875 999	
MENU Back	Select OF	Next	EXIT Exit

#### 6. Start searching channels



When selecting **Analogue and Digital**, the following screen will appear.

	Initial Setup	Channel Scan
	The channel scan may take a while to complete.	
	Status: Scanning. Analogue Channels: 0 Digital Channels: 0	
	10 %	
_		(EXIT) Cancel

## **Tuner mode setting**

## Additional Information about Scan Mode

- Quick search method offers the fastest channel scan.
- Advanced search method works only in countries with broadcasting according to the LCN standard (e.g. UK and FRANCE).
- **Full** search method takes a long time (depending on network situation, about 1 hour).

## Radio channel sorting

 Auto sorting will store radio stations from program no. 1001 onwards in countries without broadcasting according to the LCN standard.

3	Watch	TV	
Congra	tulations! Now	you can v	vatch TV
	Initial Setup Congratulations !! Completed Initial setup Please press (OK) to exit the wized.	Completed	

If necessary, adjust the antenna to attain maximum signal reception.

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# Watching TV

## **Daily operation**

## Turning on/off the power

Press  $^{(1)}$  on the TV. Switch it off by pressing  $^{(1)}$  on the TV.



#### Changing channels

With **P**^V:



## Standby mode

## To standby mode

If the TV set is switched on, you can switch it to standby by pressing  $\bigcirc$  | on the remote control.

## Switching on from standby

From standby, press 🕛 | on the remote control.



## **TV** indicator status

()   indicator	Status
Off	Power off
Red	Standby
Green	Power on

#### NOTE

- If you are not going to use this TV for a long period of time, be sure to remove the AC cord from the power outlet.
- A small amount of electric power is still consumed even when 也 I is turned off.

#### Selecting external video source

Once the connection is made, press - to display the **INPUT SOURCE** screen, and then press  $\wedge \vee$  to switch over to the appropriate external source with **OK**.





32"/42"

INPUT SOURCE		
$\checkmark$	TV	
	YPbPr	
	AV	
	SCART 1	
	SCART 2	
	PC	
	HDMI 1	
	HDMI 2	
	HDMI 3	
	USB	

## Operation without a remote control



This function is useful when there is no remote control within your reach.

- 1. Press **MENU** briefly to display the direct control screen.
- **2.** Press  $P \land \lor$  instead of  $\land /\lor$  or  $\checkmark +/-$  instead of <> to select the item.
- 3. Press MENU to confirm the selection.

#### NOTE

• The direct control menu screen will disappear if left unattended for several seconds.

# Watching TV

## **EPG (Electronic Programme Guide)**

EPG is an on-screen guide that displays scheduled digital TV programmes. This guide is not available with analogue channels. You can navigate, select and view programmes.

There are two types of EPG, "Now and Next" and "7 or 8 day" EPG. "Now and Next" is always available but the "7 or 8 day" EPG is only available in certain countries.

With the EPG menu you can:

- · View a list of currently broadcast digital programmes.
- View upcoming programmes.

#### Switch on EPG

#### NOTE

- The first time you use EPG, you may be prompted to perform an update. If so, follow the on-screen instructions.
- Press EPG on the remote control, the "Now and Next" EPG will appear and the detailed information about the current programme is displayed.



**2.** Use the **colour buttons** on the remote control to activate available actions.

Television   TV guide Viewing date: Tue, 03 Jan			Current time: Tue, 03 Jan 18:50:10	
	1	BBC ONE	18:30	Ready Steady Cook
l '	2	BBC TWO	19:15	The Weakest Link
	3	AXN		
	4	HBO		
	5	MTV		
	6	BBC NEWS		
	7	Star Movies		
	8	BBC CHOICE		
_	Filte	er: All types		18:30 ~ 19:15 Shows
		Prev page	Next page	e Filter

- **Prev page** (Red): List the previous day's EPG.
- Next page (Green): List the next day's EPG.
- **Detail** (Yellow): Displays the information of your highlighted programme.
- Filter (Blue): Sets the type of the channel list.

	TV guide te: Tue, 03 J		t time: Tue, 03 Jan 18:50:10
Туре	⊲	All types	$\triangleright$
Subtype	⊲	All subtypes	$\triangleright$
	_		Return

3. Press EPG or EXIT to exit .

# Watching TV

## Teletext

#### What is Teletext?

Teletext broadcasts pages of information and entertainment to specially equipped television sets. Your TV receives Teletext signals broadcast by a TV network, and decodes them into graphical format for viewing. News, weather and sports information, stock exchange prices and programme previews are among the many services available.

#### Turning on and off Teletext

- 1. Select a TV channel or external source providing a Teletext programme.
- 2. Press TELETEXT to display Teletext.
  - Many stations use the TOP operating system, while some use FLOF (e.g. CNN). Your TV supports both these systems. The pages are divided into topic groups and topics. After switching on the teletext, up to 1000 pages are stored for fast access.
  - If you select a programme with no Teletext signal, "No Teletext " displays.
  - The same message displays during other modes if no Teletext signal is available.
- 3. Press **TELETEXT** again to activate Teletext with TV.

#### NOTE

Teletext will not work if the selected signal type is RGB.

Buttons for teletext operations

#### Buttons Description Increase or decrease the page $P(\wedge \vee)$ number. Colour Select a group or block of pages (R/G/Y/B) displayed in the coloured brackets at the bottom of the screen by pressing the corresponding Colour (R/G/Y/B) on the remote control unit. 0 - 9 Directly select any page from 100 to 899 by using 0 - 9. SIZE Switch the Teletext image to Top, Bottom or Full. INDEX Press this button to return to page 100 or index page. HOLD Stop updating Teletext pages automatically or release the hold ahom REVEAL Reveal or hide hidden information such as an answer to a quiz. SUBPAGE Select the subpage when the current page contains subpage(s). Press number buttons on the remote control to access the subpage directly, (two diaits)

#### Select a Teletext language

- 1. Press MENU on the remote control and press Features > Teletext Language.
- Press OK or > to enter Teletext Language menu and press ∧∨ to select one of the following.
  - Digital Teletext Lang.
  - Decode Page Lang.
- **3.** Highlight your selection and press <> to make a selection.
- 4. Follow the on-screen instructions to exit.

## Using the MHEG5 application (UK only)

Some services bring you programmes with the MHEG (Multimedia and Hypermedia Expert Group) application encoded, letting you experience DTV interactively. When provided, the MHEG5 application will start when you press the **Red** button.

## Sample MHEG5 screen



## Picture

## Adjust picture settings

- Press MENU on the remote control and select Picture.
- 2. Press OK or > to enter the list.

Menu			
Picture Sound TV Features Council	Smart Picture Brightness Contrast Colour Tint Sharpness	Standard 50 50 50 0 5	
Parental	Colour Temperature	Cool	

- Press ∧ ∨ to select one of the following settings:
  - Brightness: Changes the level of light in the picture.
  - **Contrast:** Changes the level of bright parts in the picture keeping the dark parts unchanged.
  - Colour: Changes the level of saturation.
  - Tint: Changes the colours to reddish or bluish.
  - Sharpness: Changes the level of sharpness of fine details.
  - Colour temperature: Sets the colour temperature to Cool (bluer), Normal (balanced), Warm (redder).
- **4.** Press <> to select / adjust the item to the desired level.
- 5. Follow the on-screen instructions to exit.

## Use smart picture

Apart from manually adjusting picture settings, you can use **Smart picture** to set your TV to a predefined picture setting.

- 1. Press MENU on the remote control and select Picture.
- 2. Press OK or > to enter Picture and select Smart Picture.
- **3.** Press <> to select one of the following settings:
  - Personal
  - Standard
  - Vivid
  - Movie
  - Eco
- Follow the on-screen instructions to exit.

# Sound

## Adjust sound settings

This section describes how to adjust sound settings.

- 1. Press MENU on the remote control and select Sound.
- 2. Press OK or > to enter the list.

Menu			
Picture	Sound Mode	Personal	
Sound	Equalizer 120Hz	3	
TV 🕅	Equalizer 500Hz Equalizer 1.5KHz	2	
Features	Equalizer 5KHz Equalizer 10KHz	4	
A Parental	Balance	0	
Eco	Virtual Surround Digital Audio Out	Off PCM	
<b>P</b> 200	AVL	Off	$\bowtie$
OK Enter	<Ĵ> Select	EXIT) Exit	

- **3.** Press ∧ ∨ to select one of the following settings:
  - Equalizer 120Hz (Bass): Adjusts the amount of bass.
  - Equalizer 500Hz (Tenor): Adjusts the amount of tenor.
  - Equalizer 1.5KHz (Neutral): Adjusts the amount of neutral.
  - Equalizer 5KHz (Treble): Adjusts the amount of treble.
  - Equalizer 10KHz (Descant): Adjusts the amount of descant.
  - **Balance:** Sets the balance of the left and right speakers to best fit your listening position.
  - Virtual Surround: Automatically switches the TV to the best surround sound mode available from a broadcast. Select **On** or **Off**.
  - Digital Audio Out: Selects the type of digital audio out to PCM / Off / Dolby Digital.
  - AVL (Auto volume leveling): Reduces sudden volume changes, for example, during commercials or when switching from one channel to another. Select On or Off.
  - **Type:** (Only available for Digital channels.) Selects the type of audio broadcast.
    - \* Normal: Sets regular audio only.
    - \* **Hard of Hearing:** Sets the mix of hearing impaired audio with regular audio.
    - \* Audio Description: Sets the mix of visually impaired audio with regular audio.
  - Audio Description: (Only appears when you select MENU > Sound > Type > Audio Description): Adjusts the volume of visually impaired audio.
- **4.** Press <> to select / adjust the item to the desired level.
- 5. Follow the on-screen instructions to exit.

#### **Use Sound Mode**

Apart from manually adjusting sound settings, you can use **Sound Mode** to set your TV to a predefined sound setting.

- 1. Press MENU on the remote control and select Sound.
- 2. Press OK or > to enter Sound and select Sound Mode.
- **3.** Press <> to select one of the following settings:
  - Personal
  - Music
  - Speech
- Follow the on-screen instructions to exit.

# Т٧

The first time you set up your TV, you are prompted to select an appropriate menu language and to perform automatic installation of TV and digital radio channels (If available).

This chapter provides instructions on how to reinstall channels as well as other useful channel installation features.

#### NOTE

• Re-installing channels modifies the channel list.

## Select a digital audio language

- 1. Press MENU on the remote control and select TV.
- 2. Press OK or > to enter TV menu.
- 3. Press AV to select 1st Audio or 2nd Audio.
- **4.** Highlight your selection and press <> to select an audio language.
- 5. Follow the on-screen instructions to exit.

#### NOTE

 If your selected audio language is not broadcasted, the default audio language will be displayed.

#### Automatically install channels

This section describes how to search and store channels automatically. Instructions are for both digital and analogue channels.

## Step 1: Select your Tuner Mode

- Press MENU on your remote control and select TV > Tuner Mode.
- 2. Press <> to select Antenna or Cable.
- 3. Follow the on-screen instructions to exit.

#### Step 2: Select your country

Select the country where you are located. The TV installs and arranges channels according to your country.

- 1. Press MENU on the remote control and select TV > Country.
- Press <> to select your country.
- 3. Follow the on-screen instructions to exit.

#### Step 3: Automatic channel scan

Your TV searches and stores all available digital and analogue TV channels as well as all available digital radio channels.

 Press MENU on the remote control and select TV > Channels.

#### NOTE

- You are prompted to enter current password to enter Channels if Channel Block /Parental Guidance / Input Block in the Parental menu is not the default setting.
- Select Channel Scan and press OK or > and select ATV only or ATV and DTV to start channel installation. The installation may take a few minutes.
- **3.** When complete, follow the on-screen instructions to exit.

## Update Scan

**Update Scan** has similar function with **Channel Scan**. The difference is you could update channel list without erasing the original information.

## NOTE

- This function is for Antenna mode only.
- Press MENU on the remote control and select TV > Channels.

#### NOTE

- You are prompted to enter current password to enter Channels if Channel Block /Parental Guidance / Input Block in the Parental menu is not the default setting.
- Press ∧ ∨ to select Update Scan and press OK or > to start channel update.
- **3.** When complete, follow the on-screen instructions to exit.

## Single RF Scan

If using digital broadcasts, you can check the quality and signal strength of digital channels. This allows you to reposition and test your antenna or satellite dish.

 Press MENU on the remote control and select TV > Channels.

#### NOTE

- You are prompted to enter current password to enter Channels if Channel Block /Parental Guidance / Input Block in the Parental menu is not the default setting.
- Press ∧ ∨ to select Single RF Scan and press OK or > to enter.

## Antenna mode



#### Cable mode



## <Antenna Mode>

Highlight the **RF Channel** box, and press <> to select a channel number you prefer to scan.

#### <Cable Mode>

Configure the **Frequency**, **Modulation**, and **Symbol Rate** box to scan.

- 4. Press OK to start scanning.
- When the scan is completed, the result of signal strength and signal quality appear on the screen.
- 6. Follow the on-screen instructions to exit.

## NOTE

- If the signal quality and strength is poor, reposition the antenna or satellite dish and retest.
- If you have further problems with the reception of your digital broadcast, contact a specialised installer.

## Analogue Manual Scan

This section describes how to search and store analogue TV channels manually.

1. Press MENU on the remote control and select TV > Channels.

## NOTE

- You are prompted to enter current password to enter Channels if Channel Block /Parental Guidance / Input Block in the Parental menu is not the default setting.
- **2.** Press  $\land \lor$  to select **Analogue Manual Scan** and press **OK** or > to enter.

Menu	
Picture	
Sound Sound	Search for analogue channels
TV 💕	
Peatures	
🔒 Parental	Start Frequency (MHz) 45.00
🗭 Eco	Scan Down
EXIT Back	

- **3.** In the **Start Frequency (MHz)** box, enter the frequency by using the **digit buttons** on the remote control.
- **4.** Press ∧ ∨ to select **Scan Up** or **Scan Down** to scan the next available analogue channel from the frequency you have entered.
- 5. Press OK or > to start scanning.
- 6. When complete, follow the on-screen instructions to exit.

## Favourite Network Select

When watching the digital TV, select your favourite network in order to allocate channels of your favourite network on the top of channel list (PR LIST).

 Press MENU on the remote control and select TV > Channels.

#### NOTE

- You are prompted to enter current password to enter Channels if Channel Block /Parental Guidance / Input Block in the Parental menu is not the default setting.
- Press ∧ ∨ to select Favourite Network Select and press OK or > to enter the network list.
- 3. Select your favourite network and press OK.
- 4. Follow the on-screen instructions to exit.

## NOTE

 This menu is available only when 1) "Norway" is selected on country setting and 2) more than two networks are found after automatic channel scan.

## Channel Skip

Channel skip allows you to skip one or more channels when pressing  $P \land \lor$  on the remote control to switch between channels.

 Press MENU on the remote control and select TV > Channels.

#### NOTE

- You are prompted to enter current password to enter Channels if Channel Block /Parental Guidance / Input Block in the Parental menu is not the default setting.
- Press ∧ ∨ to select Channel Skip and press OK or > to enter the channel list.
- **3.** Press ∧ ∨ to select one or more channels you preferred to skip.
- 4. Press OK to mark or cancel.
- 5. Follow the on-screen instructions to exit.

## NOTE:

 To watch the skipped channels, enter the channel numbers by using the **digit buttons** on the remote control or select from **PR LIST**.

# Channel Sort

Channel sort allows you to reorder the channels in the **PR LIST**.

 Press MENU on the remote control and select TV > Channels.

#### NOTE

- You are prompted to enter current password to enter Channels if Channel Block /Parental Guidance / Input Block in the Parental menu is not the default setting.
- 2. Press  $\land \lor$  to select Channel Sort and press OK or > to enter the channel list.
- 3. Press ∧ ∨ to select one channel and press OK to mark.
- Press ∧ ∨ to select another channel and press OK to mark. The two channels your marked are exchanged.
- 5. Repeat step 3 to 4 to reorder more channels.
- 6. Follow the on-screen instructions to exit.

## Channel Edit

Channel edit allows you to change the channel number or the channel name.

 Press MENU on the remote control and select TV > Channels.

## NOTE

- You are prompted to enter current password to enter Channels if Channel Block /Parental Guidance / Input Block in the Parental menu is not the default setting.
- **2.** Press  $\land \lor$  to select **Channel Edit** and press **OK** or > to enter the channel list.
- Press ∧ ∨ to select one channel you prefer to edit.
- 4. Press OK to enter.
- **5.** Press  $\land \lor$  to highlight one of the following:
  - Channel Number: Enter a new channel number by using the digit buttons on the remote control
  - Channel Name: Press the digit buttons on the remote control to rename the channel. Please refer to the graphic below for available characters. (Press each button repeatedly to change between characters.)

#### 0-9 digit buttons with available characters



6. Follow the on-screen instructions to exit.

## NOTE

• The new channel number you have entered can not override the exist one.

## Assign a channel decoder (For ATV)

Decoders that decode channels can be connected to SCART. You have to assign the TV channel as a channel to be decoded. Before selecting channels, make sure your TV is connected to SCART.

 Press MENU on the remote control and select TV > Channels.

#### NOTE

- You are prompted to enter current password to enter Channels if Channel Block /Parental Guidance / Input Block in the Parental menu is not the default setting.
- Press ∧ ∨ to select Decoder and press OK or > to enter available analogue channel list.
- **3.** Press  $\land \lor$  to select the channel to decode.
- 4. Press OK to mark or cancel.
- 5. Follow the on-screen instructions to exit.

## Analogue Ch Fine Tune

You can manually fine tune analogue channels when reception is poor.

 Press MENU on the remote control and select TV > Channels.

#### NOTE

- You are prompted to enter current password to enter Channels if Channel Block / Parental Guidance / Input Block in the Parental menu is not the default setting.
- Press ∧ ∨ to select Analogue Ch Fine Tune and press OK or > to enter the analogue channel list.
- Press ∧ ∨ to select one channel and press OK to enter.
- 4. Press <> to adjust the frequency.
- When complete, press OK to set the frequency. The fine tuned channel is stored under the current channel number.
- 6. Follow the on-screen instructions to exit.

## Clean Channel List

Select to clean all the channels that stored in the channel list.

1. Press MENU on the remote control and select TV > Channels.

#### NOTE

- You are prompted to enter current password to enter Channels if Channel Block /Parental Guidance / Input Block in the Parental menu is not the default setting.
- **2.** Press  $\land \lor$  to select **Clean Channel List** and press **OK** or > to enter.
- **3.** Select **OK** and press **OK** on the remote control to clean channel list.

## Features

#### Select menu language

Select the menu display language.

- 1. Press MENU on your remote control and select Features > Menu language.
- 2. Press <> to select your language.
- 3. Follow the on-screen instructions to exit.

## 4:3 Mode

Select aspect ratio behavior for Auto mode. When 4:3 is selected, the picture size will follow WSS or Scart Pin8 Spec. If 16:9 is selected, the picture format will change to wide screen.

- 1. Press MENU on your remote control and select Features > 4:3 Mode.
- 2. Press <> to select the mode your preferred.
- 3. Follow the on-screen instructions to exit.

## Change picture format

Change the picture format to suit your content.



#### Auto



The Automatic format for DTV transports streams with AFD information, while for ATV and SCART should be with WSS information.

## Normal (Not for HD)



Displays the classic 4:3 format.

#### NOTE

• Constant use of the **Normal** picture format can cause screen distortion.

## Zoom 1 (Not for HD)



## Zoom 2 (Not for HD)



Scales the classic 4:3 format to 16:9.

Scales the classic 4:3 format to 14:9.

## Wide



Stretches the classic 4:3 format to 16:9.

## NOTE

- When source input is PC mode, only Full screen and 4:3 are available.
- For 4:3 PC input signal, picture format 4:3 and Wide screen are available.
- For other input signals, only Wide screen is available.

#### Time

Set the current time and the sleep timer.

## Change the time zone

- 1. Press MENU on your remote control and select Features > Time.
- 2. Press OK or > to enter Time.
- **3.** Select **Time zone** and press <> to select your time zone.
- 4. Follow the on-screen instructions to exit.

## Set the clock

- 1. Press MENU on the remote control and select Features > Time.
- 2. Press OK or > to enter Time menu.

Press ∧ ∨ to select Time and press OK or > to enter.

Menu		
Picture Sound TV	Auto Synchronization Date Time	Off  2009/01/01 16: 52: 38
Features Parental Eco	Timer Off Time	Off >
< _ > Select	EXIT Back	

- Select Auto Synchronization and press <> to select:
  - On: Sets the clock automatically the same with the digital signal time. (Only if digital signal is available).
  - Off: Press ∧ ∨ to set your system Date or Time manually by using the digit buttons on your remote control.
- **5.** When the clock setting is completed, follow the on-screen instructions to exit.

## Automatically switch the TV off (Off time)

Off time switches the TV to standby at a specified time.

#### NOTE

- Before using off time function, you have to set the time on your TV correctly. (See page 17 "Set the clock")
- 1. Press MENU on the remote control and select Features > Time.
- 2. Press OK or > to enter Time menu.
- Press ∧ ∨ to select Time and press OK or > to enter.
- **4.** Press v to select **Timer** and press <> to select:
  - Off: Disable Timer.
  - On: Press v to highlight the Off Time box and set and power off time by using the digit buttons on your remote control.
- 5. Follow the on-screen instructions to exit.

### Automatically switch the TV to standby (Sleep timer)

Sleep timer switches the TV to standby after a defined period of time.

- 1. Press MENU on the remote control and select Features > Time.
- 2. Press OK or > to enter Time.
- 3. Press AV to select Sleep Timer.
- **4.** Press <> to select the period of time before TV enters to standby.
- 5. Follow the on-screen instructions to exit.

#### NOTE

 When you press any button on the remote control with less than three minutes left in the countdown, Sleep timer will be automatically canceled.

## SCART

You can set the specific type of signal going into SCART terminal. Check the signal output type of the DVD or other equipment connected to the SCART terminal of the TV, referring to manufacturer's instruction of those devices. Select the correct input signal setting for SCART.

#### NOTE

 This option is available only when the input source is SCART.

#### Use subtitles

You can enable subtitles for each TV channel. Subtitles are broadcasted via teletext or DVB-T digital broadcasts. With digital broadcasts, you have the additional option of selecting a preferred subtitle language.

## Set analogue subtitles

- 1. Press MENU on the remote control and select Features > Subtitle.
- 2. Press OK or > to enter Subtitle.
- 3. Select Analogue Subtitle.
- Press <> to select On to display subtitle always or On During Mute to display subtitles only when audio is muted. Select Off to close subtitles.
- 5. Follow the on-screen instructions to exit.

### Select a subtitle language on digital TV channels

When you select a subtitle language on a digital TV channel as described below, the preferred subtitle language set in the **TV** menu is temporarily overruled.

- 1. Press MENU on the remote control and select Features > Subtitle.
- 2. Press OK or > to enter Subtitle.
- Press ∧∨ to select 1st Subtitle or 2nd Subtitle.
- **4.** Highlight your selection and press <> to select a subtitle language.
- 5. Follow the on-screen instructions to exit.

#### NOTE

- If your selected subtitle language is not broadcast, the default language subtitle will be displayed.
- If the 1st Subtitle language you selected is not available, the 2nd Subtitle language will be displayed.

## Select Hearing impaired subtitle

When watching channels with hearing impaired service, you can enable the subtitle commentary for the hearing handicapped. For digital channels only.

- 1. Press MENU on the remote control and select Features > Subtitle.
- 2. Press OK or > to enter Subtitle.
- 3. Press AV to select Subtitle Type.
- Press <> to select Hearing impaired as your subtitle type.
- 5. Follow the on-screen instructions to exit.

#### **Teletext language**

You can select Teletext Language when the TV receives Teletext signals broadcast by a TV network. (See page 11.)

#### **Common Interface**

This function enables you to watch encrypted services (pay services). (See page 25.)

#### NOTE

 This functions may not work depending upon the country broadcasting circumstances.

#### **HDMI** overscan

When you watch TV via HDMI input source, you could use this function to enlarge the picture. It may have few loss of video content.

- 1. Press MENU on the remote control and select Features > HDMI Scan info
- 2. Press <> to select one of the following:
  - · Select Auto to scan the picture automatically.
  - Select Underscan to disable.
  - Select Overscan to activate.
- 3. Follow the on-screen instructions to exit.

#### Manual OAD Download

When you get the software updating news from the retailer or internet, you can update the operation software using the OAD (Over Air Download) Download. The updated software data will be transferred through the TV signal.

- Press MENU on the remote control and select Features > OAD > Manual OAD Download.
- 2. Press OK or > to enter.
- **3.** Follow the on-screen instructions to download the updated software.

NOTE

Please do not switch off the TV during the downloading process.

## No Signal Off

When set to "On", the TV will automatically enter standby mode if there is no signal input for 15 minutes.

#### NOTE

 Even if a TV programme finishes, this function may not operate because of interference from other TV stations or other signals.

## No Operation Off

The TV will automatically enter standby mode if no operations are performed in three hours if "On" is selected.

## NOTE

 Five minutes before the TV enters standby mode, the remaining time displays every minute.

#### **Reset Default**

When you activate the **Reset Default**, the TV enters to first time installation.

- Press MENU on the remote control and select Features > Reset Default.
- 2. Press OK or > to enter.
- **3.** Select **OK** and press **OK** on your remote control to confirm.
- Follow the on-screen instructions to reset your TV settings.

#### **DivX® Setup**

This is the function to confirm your registration code. You need to register the code at www.divx.com.

## DivX® Registration (VOD)

You can find your registration code on this menu. You need to register the TV at www.divx.com before playing the DivX® content.

- 1. Press MENU on the remote control and select Features > DivX® Registration.
- 2. Press OK or > to enter.
- 3. Follow the on-screen instructions to exit.

## DivX® Deactivation (VOD)

You can find your deactivation code on this menu. You need to deactivate the TV at www.divx.com to release the registration.

- 1. Press MENU on the remote control and select Features > DivX® Deactivation.
- 2. Press OK or > to enter.
- 3. Follow the on-screen instructions to exit.

#### SW Ver.

Display the Software version.

- 1. Press MENU on the remote control and select Features > SW Ver.
- 2. Press OK or > to enter.
- **3.** Press ∧ ∨ to look for the software version information.

## Parental

Lock TV channels or connected devices with a four digit code to prevent children from watching unauthorized content.

## Access Parental menu

- 1. Press MENU on the remote control and select Parental.
- 2. Press OK or > to highlight the password box.

Menu	
Picture	Password: ****
Sound Sound	
🖉 TV	
Features	
角 Parental	
🇭 Eco	
EXIT Back	

**3.** Enter your password by using the **digit buttons** on the remote control. If your password is correct, the **Parental** menu appears.

#### NOTE

- You have to enter a 4-digit password every time to access Parental menu.
- Enter "0000" as the default password.
- If you forget your password, enter "5351" to override any existing passwords.

#### Lock one or more channels

Lock TV channels to prevent children from watching certain channels.

- 1. Enter your password to access the **Parental** menu.
- **2.** Select **Channel Block** and press **OK** or > to enter the channel list.
- Press ∧ ∨ to select one or more channels you preferred to lock.
- **4.** Press **OK** to lock or unlock the channel you selected.
- 5. Follow the on-screen instructions to exit.

## NOTE

- If you switch to the locked channel, you will be prompted to enter your password. (If your password is correct, the locked channel will be unlocked before the TV restarts from standby.)
- If your country selection is Italy (see page 7 "Step 2: Country setting"), you will be prompted to enter your password every time you access each blocked channel.

#### Set the time interval lock

Lock TV for the specific day and time to prevent children from watching.

- 1. Press MENU on the remote control and select Parental.
- 2. Enter your password to access the **Parental** menu.
- **3.** Select **Lock Type** and press <> to select the day.
- 4. Press AV to set the Start Time and End Time.
- 5. Follow the on-screen instructions to exit.

#### To set parental ratings

Some digital broadcasters rate their programmes according to age. You can set TV to display only programmes with age ratings higher than your child's.

- 1. Enter your password to access the **Parental** menu.
- 2. Press ∧ ∨ to select Parental Guidance and press OK or > to enter.
- Press <> to set the age rating.
- 4. Follow the on-screen instructions to exit.

## Lock one or more connected devices

Disable the specific external input signals.

- 1. Enter your password to access the **Parental** menu.
- 2. Press ∧ ∨ to select Input Block and press OK or > to enter the input source list
- **3.** Press  $\land \lor$  to select one or more input source.
- 4. Press OK to lock or unlock your selected input source.
- 5. Follow the on-screen instructions to exit.

## NOTE

- If you switch to the locked input source, you will be prompted to enter your password. (If your password is correct, the locked input source will be unlocked before the TV restarts from standby.)
- If your country selection is Italy (see page 7 "Step 2: Country setting"), you will be prompted to enter your password every time you access each blocked input source.

#### Set / Change password

- Enter your password to access the Parental menu.
- Press ∧ ∨ to select Set Password and press OK or > to enter.
- 3. Enter your new password in the New box by using the digit buttons on the remote control.
- **4.** Enter your new password again in the **Confirm** box.
- 5. When complete, the TV reruns to the Parental menu.
- 6. Repeat step 1 to 4 to change password.

#### **Clear all parental settings**

Reset all the settings in the Parental menu.

- 1. Enter your password to access the **Parental** menu.
- **2.** Press  $\land \lor$  to select **Clear All** and press **OK** or > to enter.
- **3.** Select **OK** and press **OK** on the remote control to clear all parental settings.

#### NOTE

 If parental settings are cleared, you do not have to enter password to access Channels in the TV menu.

## Eco

This function enables you to automatically reduce the backlight brightness in order to decrease the power consumption and increase the backlight life span.

- 1. Press MENU on the remote control and select Eco and press OK or > to enter.
- **2.** Press  $\land \lor$  to select **On** or **Off** and press > to activate the selection.
- **3.** Follow the on-screen instructions to exit.

# Connecting a USB device

## **USB** function

This TV is equipped with a USB connector that enables you to view photos, listen to music, and play videos stored on a USB storage device.



## NOTE

- Depending on the USB device, the TV may not be able to recognise the contained data.
- Use only alphanumeric characters for naming files.
- File names over 80 characters (may vary depending on character set) may not be displayed.
- Do not disconnect a USB device or memory card from the TV while transferring files, using the slide show function, when a screen is switching to another or before you exit "USB" from the "SOURCE" menu.
- Do not connect and disconnect a USB device from the TV repeatedly.

## Basic Operation

- 1. Turn on the TV.
- **2.** Connect the USB storage device to the USB port on the side of your TV.
- Press → on the remote control and press ∧∨ to select USB input source and press OK. The USB thumbnail browser appears.



 Press MENU to display the sub-menu. Select Media Type (Photo/Music/Video) of the file you wish to play.

Sort	Photo
Media Type	Music
Thumbnail Size	Video

Your **Media Type** selection will be displayed at the upper-right corner of the thumbnail browser.

 Press AV<> and OK to browse the files or folders. Press EXIT to return to the previous operation / folder.

#### NOTE

- Sort: enables you to sort out the files in the selected Media Type category.
- **Thumbnail Size:** enables you to change the size of thumbnails.

## View Photos

 In the Photo thumbnail browser, press AV<> to select a photo or a photo album.



- **2.** Press **OK** to view a full screen image. The slide show begins.
- **3.** Use the buttons on the remote control and follow the on-screen instructions to view photos.

## Buttons for enlarged photo display operation

Buttons	Descriptions	
▶/	Play or pause the slide show.	
	Go to the previous/next photo in the same directory.	
MENU	Open the Photo sub-menu.	

Buttons	Descriptions	
G button	Select the slide show duration.	
Y button	Select the slide show transition effect.	
EXIT	Return to the previous operation.	

## Listen to Music

- 1. In the **Music** thumbnail browser, press AV<>> to select a music file or a music album.
- 2. Press OK to play the MP3 file.
- Use the buttons on the remote control and follow the on-screen instructions to play the MP3 files.

## Buttons for music mode

Buttons	Descriptions	
> (Cursor)	Fast forward the music.	
< (Cursor)	Rewind the music.	
▶/	Play or pause the music.	
	Stop the music.	
	Go to the previous/next music.	
MENU	Open the music sub-menu.	
R button	Repeat the music.	
G button	Play the music randomly.	
Y button	Audio Only.	
B button	Show information of the music file.	
EXIT	Return to the previous operation.	

## Play Videos

- 1. In the Video thumbnail browser, press AV<> to select a video file.
- 2. Press OK to play the video.
- **3.** Use the buttons on the remote control and follow the on-screen instructions to play the video.

## Buttons for playing video mode

Buttons	Descriptions		
> (Cursor)	Fast forward the video.		
< (Cursor)	Reverse the video.		
▶/	Play or pause the video.		
	Stop the video.		
	Go to the previous/next video.		
MENU	Open the video sub-menu		
EXIT	Return to the previous operation.		

## **USB** device compatibility

USB 2.0 device	USB Memory, USB card reader, HDD (Mass Storage class)		
File system	FAT / FAT32 / NTFS		
File system	FAL/FAI32/INTES		
Photo file format	JPEG (*.JPG), PNG		
Music file format			
Video file format	MPEG1/2 (*.AVI, *.MPG, *.MPEG, *.TS) MPEG4 (*.AVI, *.MP4, *.MOV, *.MKV) H.264 (*.AVI, *.MP4, *.MOV, *.MKV, *.TS) DivX (*.AVI) XviD (*.AVI)		

## NOTE

- Progressive format jpeg files are not supported.
- All files in USB devices with capacity may not be played properly.
- Operation using USB hubs is not guaranteed.
- The external hard disc with capacity cannot be detected correctly.
- Cables used to prolong the USB device must be certified as USB 2.0.
- In USB devices, video files may not be played properly if speed is not enough.

# **Connecting external devices**

## Before connecting ...

- Be sure to turn off the TV and any devices before making any connections.
- · Firmly connect a cable to a terminal or terminals.
- Carefully read the operation manual of each external device for possible connection types. This also helps you get the best possible audiovisual quality to maximise the potential of the TV and the connected device.

## **HDMI** connection

#### Example of connectable devices

DVD Blu-ray player/recorder

The HDMI connections (High Definition Multimedia Interface) permit digital video and audio transmission via a connection cable from a player/recorder. The digital picture and sound data are transmitted without data compression and therefore lose none of their quality. Analogue/digital conversion is no longer necessary in the connected devices, which also would result in quality losses.



#### **DVI/HDMI** conversion

- Using an DVI/HDMI adapter cable, the digital video signals of a DVD can also be played via the compatible HDMI connection. The sound must be fed in additionally.
- Both HDMI and DVI use the same HDCP copy protection method.

#### Supported video signal:

576p, 480p, 1080i, 720p, 1080p See page 26 for PC signal compatibility.

# YPbPr (Component connection)

## Example of connectable devices

VCR DVD Blue-ray player/recorder

You will enjoy accurate colour reproduction and high quality images through the (YPbPr) when connecting a DVD recorder or other recording equipment.



# SCART connection

#### Example of connectable devices

Decoder

## When using the SCART 1

Full SCART, which transmits RGB, S-Video and CVBS in, and CVBS tuner out.



# **Connecting external devices**

#### Example of connectable devices

VCR DVD recorder

## When using the SCART 2

Half SCART, which transmits S-Video or CVBS in, and CVBS monitor out.



#### NOTE

- In cases when the decoder needs to receive a signal from the TV, make sure to select the appropriate input source.
- Do not connect the decoder to the SCART 2.
- You cannot connect the VCR with Decoder using a fully wired SCART cable under the SCART 2 source.

## Speaker / Amplifier connection

#### Connecting an amplifier with digital audio input / analogue audio input



## Inserting the Smartcard into the CA module

In order to receive coded digital stations, a conditional access module (CA module) and a Smartcard must be inserted in the CI (Common Interface) slot of the TV. The CA Module and the Smartcard are not supplied accessories. They are usually available from your dealer.

## Inserting the Smartcard into the CA Module

- **1.** Carefully insert the CA module in the CI slot with the contact side forward.
- **2.** The logo on the CA module must be facing outward from the rear of the TV.



## NOTE

- It takes about 30 seconds to certify the license key when you insert a Smartcard into the CI+ compatible CA module for the first time. This process may fail when there is no antenna input or you have never run "Auto installation".
- The CI+ compatible CA module sometimes upgrades its firmware. You may not receive any TV images before upgrading. You can only use the power button during upgrading.
- The CI+ compatible CA module does not allow you to output any copy protected programmes using monitor out.
- If the TV displays an update confirmation message for the Smartcard while receiving CI+ compatible broadcasts, follow the screen prompts.
- · Make sure that the CA module is properly inserted.

#### **Checking CA module information**

After inserting and activating the CA Module, make sure the input source is **TV**.

- 1. Press MENU on the remote control.
- 2. Go to Features > Common Interface.

#### NOTE

- · This menu is only available for digital stations.
- The content of this menu depends on the provider of the CA module.

#### Module

General information on CA module displays.

## Menu

Adjustment parameters of each Smartcard displays. **Enquiry** 

You can input numerical values such as passwords here.

# **Connecting external devices**

# **Connecting a PC**

## **Digital connection**



## Supported display resolutions

## Computer formats (PC)

Resolution	Refresh rate
640 x 480	60Hz
800 x 600	56Hz
800 x 600	60Hz
1024 x 768	60Hz
1280 x 720	60Hz
1280 x 768	60Hz
1360 x 768	60Hz
1280 x 1024	60Hz (Only for 42")
1920 x 1080	60Hz (Only for 42")

## Video formats

Resolution	Refresh rate
480i	60Hz
480p	60Hz
576i	50Hz
576p	50Hz
720p	50Hz, 60Hz
1080i	50Hz, 60Hz
1080p	(HDMI, Component only) 50Hz, 60Hz, 24Hz



# (GB) - 26

# Appendix

# Troubleshooting

Problem	Possible Solution	
No picture	<ol> <li>Connect power cord correctly.</li> <li>Turn on power.</li> <li>Connect signal cable correctly.</li> <li>Press any button on the LCD TV.</li> </ol>	
Abnormal colours	Connect signal cable correctly.	
Twisted picture	<ol> <li>Connect signal cable correctly.</li> <li>Please use compatible signal.</li> </ol>	
Picture too dark	Adjust brightness and contrast.	
Audio only, no images	<ol> <li>Please check if input signal is connected correctly.</li> <li>TV-RF signal must not be lower than 50dB.</li> </ol>	
Picture only, no audio	<ol> <li>Connect signal cable correctly.</li> <li>Adjust volume to proper level.</li> <li>Connect audio signal cable correctly.</li> <li>TV-RF signal must not be lower than 50dB.</li> </ol>	
Cannot use remote control	<ol> <li>Please change battery.</li> <li>Turn off power for 10 seconds; and then restart power.</li> </ol>	
Cannot receive sufficient channels through antenna	Please use the Channel Scan function to increase the number of channels not included in memory.	
No colour	Please adjust the colour setup.	
Blinking picture accompanied by ghost image	<ol> <li>Check the connection of antenna/signal cable.</li> <li>Check if channel is in play mode.</li> <li>Press signal source and change input mode.</li> </ol>	
Broken lines or segments	Adjust antenna. Keep the TV away from noise sources, such as automobiles, neon lights, and hair dryers.	
Certain TV channels are blocked (Hope to acquire some channels)	Please use the Update Scan method to add the channels not included in memory.	
Overlapping images or ghost images	Please use multi-directional outdoor antenna. (If your TV is subject to the influence of nearby mountains or buildings).	
Cannot use a function	If the item you choose turns gray, that item cannot be selected.	
Cannot receive programmes	Please use the Update Scan method to add the channels not included in memory.	

# Appendix

		0	26" LCD COLOUR TV.	32" LCD COLOUR TV.	42" LCD COLOUR TV.
Item		Model: LC-26SH330E	Model: LC-32SH330E	Model: LC-42SH330E	
LCD scree	reen size		26" diagonal	32" diagonal	42" diagonal
Number of	umber of dots		3,147,264 dots (1366 $\times$ 768 $\times$ 3 dots)	3,147,264 dots (1366 $\times$ 768 $\times$ 3 dots)	6,220,800 dots (1920 $\times$ 1080 $\times$ 3 dots)
Video Colo	our System		PAL/SECAM/NTSC 3.58/NTSC 4.43/PAL 60		
	TV-Standard	Analogue	CCIR (B/G, I, D/K, L/L')		
		Digital	DVB-T (2K/8K OFDM), DVB-C		
TV	Receiving	VHF/UHF	ATV: IRA-E69, DVB-T: E5-E69		
Function	Channel	CATV	S-band, S1–S41ch		
	TV-Tuning Syst	em	Auto Preset 1599 ch, Auto Labe	el, Auto Sort	
	STEREO/BILIN	GUAL	NICAM/A2		
Audio amp	lifier		5 W  imes 2	10  W  imes 2	
Speaker	ker		58±1 (H) x 41±1 (W) x 135±1 (D) mm	58±0.5 (H) x 41±0.5 (W) x 135±0.5 (D) mm	55±0.5 (H) x 37±0.5 (W) x 126±0.5 (D) mm
Antenna		UHF/VHF 75 Ω			
	SCART 1		SCART (AV input, Y/C input, RC	B input, TV output )	
	SCART 2		-	SCART (AV input, Y/C input, monitor output [analogue source ATV, SCART 1, SIDE AV; digital source - DTV] )	
	PC IN		D-sub 15 pin (AV input), Ø 3.5 mm jack (Audio input)		
	Component		Y/Pb(Cb)/Pr(Cr), RCA pin (L/R)		
Rear	SPDIF OUT		Digital audio output		
	AV OUT		RCA pin (AV output)	-	
	AUDIO OUT		-	RCA pin (L/R)	
	HDMI 1		Digital video and audio input		
	HDMI 2		-	Digital video and audio input	
	RS-232C		D-sub 9 pin male connector	-	
	RS-232C		-	D-sub 9 pin male connector	
	C. I. (Common	Interface)	EN50221, R206001, CI Plus spe	ecification	
	AV IN		RCA pin (AV input)		
Side	USB		Software update, multi-media play		
	Headhones		Ø 3.5 mm jack (Audio output)		
	HDMI 2		Digital video and audio input	Digital video and audio input -	
	HDMI 3		-	Digital video and audio input	
OSD langu	lage		Polish, Turkish, Hungarian, Cze	n, Dutch, Spanish, Greek, Portug ch, Slovak, Danish, Norwegian, Romanian, Serbian, Ukrainian, I	guese, Swedish, Finnish, Russiar Estonian, Latvian, Lithuanian, Belarussian.
Power Rec	quirement		AC 220–240V, 50 Hz		
Power Cor	nsumption		70 W (Standby < 0.3 W) (Method IEC62087)	90 W (Standby < 0.3 W) (Method IEC62087)	160 W (Standby < 0.3 W) (Method IEC62087)
Weight		6.9 kg (Without stand), 8.3 kg (With stand)	9.25 kg (Without stand), 10.65 kg (With stand)	15.73 kg (Without stand), 18.11 kg (With stand)	
Operating	temperature		0°C to +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.

#### NOTE

- · Refer to the inside back cover for dimensional drawings.
- Audio cannot be output through the HDMI terminal.

# Appendix

## **Environmental specifications**

Item		26"	32"	42"
*1 On-Mode (W)	Standard	75 W	90 W	160 W
*2 Energy-Save-Mode (W)	Eco > On	45 W	50 W	90 W
*3 Standby-Mode (W)		0.3 W	0.3 W	0.3 W
*4 Off Mode (W)	Power button	0.29 W	0.29 W	0.29 W
*5 Annual Energy Consumption (kWh)		109.5 kWh	131.4 kWh	233.6 kWh
*6 Annual Energy Consumption (kWh) (Energy-Save-Mode)	Eco > On	65.7 kWh	73 kWh	131.4 kWh

- \*1 Measured according to IEC 62087 Ed. 2
- \*2 For further information about the Energy Save function, please see related pages in this operation manual
- \*3 Measured according to IEC 62301 Ed. 1
- \*4 Measured according to IEC 62301 Ed. 1
- \*5 Annual energy consumption is calculated on the basis of the On-Mode (Standard) power consumption, watching TV 4 hours a day, 365 days a year
- \*6 Annual energy consumption is calculated on the basis of the Energy-Save-Mode power consumption, watching TV 4 hours a day, 365 days a year.

#### NOTE

The power consumption of On-Mode varies depending on the images the TV displays.

## Other information

#### 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: + 5°C to + 35°C.

Devices connected to the protective earthing of the building installation through the MAINS connection or through other devices with a connection to protective earthing and to a television distribution system using coaxial cable, may in some circumstances create a fire hazard. Connection to a television distribution system therefore has to be provided through a device providing electrical isolation within a certain frequency range (galvanic isolator, see EN 60728-11).

#### NOTE

• For requirements in Norway and Sweden, the requirements for isolation are also relevant for devices that can be connected to television distribution systems.

#### Information on the software license for this product

#### 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 developed by SHARP and open source software

The copyrights for the software components and various relevant documents included with this product that were developed or written by SHARP are owned by SHARP and are protected by the Copyright Act, international treaties, and other relevant laws. This product also makes use of freely distributed software and software components whose copyrights are held by third parties. These include software components covered by a GNU General Public License (hereafter GPL), a GNU Lesser General Public License (hereafter LGPL) or other license agreement.

#### Acknowledgements

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

Inux kernel • modutils • glibc • zlib • libpng

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## A. Information on Disposal for Users (private households)



Attention: Your product is marked with this symbol. It means that used electrical and electronic products should not be mixed with general household waste. There is a separate collection system for these products.

## 1. In the European Union

Attention: If you want to dispose of this equipment, please do not use the ordinary dust bin!

Used electrical and electronic equipment must be treated separately and in accordance with legislation that requires proper treatment, recovery and recycling of used electrical and electronic equipment.

Following the implementation by member states, private households within the EU states may return their used electrical and electronic equipment to designated collection facilities free of charge\*. In some countries\* your local retailer may also take back your old product free of charge if you purchase a similar new one. \*) Please contact your local authority for further details.

If your used electrical or electronic equipment has batteries or accumulators, please dispose of these separately beforehand according to local requirements.

By disposing of this product correctly you will help ensure that the waste undergoes the necessary treatment, recovery and recycling and thus prevent potential negative effects on the environment and human health which could otherwise arise due to inappropriate waste handling.

#### 2. In other Countries outside the EU

If you wish to discard this product, please contact your local authorities and ask for the correct method of disposal.

For Switzerland: Used electrical or electronic equipment can be returned free of charge to the dealer, even if you don't purchase a new product. Further collection facilities are listed on the homepage of www.swico.ch or www.sens.ch.

#### B. Information on Disposal for Business Users

#### 1. In the European Union

If the product is used for business purposes and you want to discard it:

Please contact your SHARP dealer who will inform you about the take-back of the product. You might be charged for the costs arising from take-back and recycling. Small products (and small amounts) might be taken back by your local collection facilities.

For Spain: Please contact the established collection system or your local authority for take-back of your used products.

#### 2. In other Countries outside the EU

If you wish to discard of this product, please contact your local authorities and ask for the correct method of disposal.



For EU: The crossed-out wheeled bin Implies that used batteries should not be put to the general household waste ! There is a separate collection system for used batteries, to allow proper treatment and recycling in accordance with legislation.

Please contact your local authority for details on the collection and recycling schemes.

For Switzerland: The used battery is to be returned to the selling point.

For other non-EU countries: Please contact your local authority for correct method of disposal of the used battery.





# SPECIAL NOTE FOR USERS IN THE U.K.

The mains lead of this product is fitted with a non-rewireable (moulded) plug incorporating a 5A fuse. Should the fuse need to be replaced, a BSI or ASTA approved BS 1362 fuse marked  $\textcircled$  or  $\textcircled$  and of the same rating as above, which is also indicated on the pin face of the plug, must be used. Always refit the fuse cover after replacing the fuse. Never use the plug without the fuse cover fitted. In the unlikely event of the socket outlet in your home not being compatible with the plug supplied, cut off the mains plug and fit an appropriate type.

# DANGER:

The fuse from the cut-off plug should be removed and the cut-off plug destroyed immediately and disposed of in a safe manner.

Under no circumstances should the cut-off plug be inserted elsewhere into a 5A socket outlet, as a serious electric shock may occur.

To fit an appropriate plug to the mains lead, follow the instructions below:

# IMPORTANT:

The wires in the mains lead are coloured in accordance with the following code:

# Blue: Neutral

Brown: Live

As the colours of the wires in the mains lead of this product may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

- The wire which is coloured blue must be connected to the plug terminal which is marked N or coloured black.
- The wire which is coloured brown must be connected to the plug terminal which is marked L or coloured red.

Ensure that neither the brown nor the blue wire is connected to the earth terminal in your three-pin plug.

Before replacing the plug cover make sure that:

- If the new fitted plug contains a fuse, its value is the same as that removed from the cut-off plug.
- The cord grip is clamped over the sheath of the mains lead, and not simply over the lead wires. IF YOU HAVE ANY DOUBT, CONSULT A QUALIFIED ELECTRICIAN.





