

Owner's Manual

720p/1080p HDTV LCD

32"/46"



DP32242 / DP46142

Thank you for choosing SANYO. Please read all instructions to obtain maximum benefit of your product.

CAUTION

RISK OF ELECTRIC SHOCK DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

THIS SYMBOL INDICATES THAT DANGEROUS VOLTAGE CONSTITUTING A RISK OF ELECTRIC SHOCK IS PRESENT WITH THIS UNIT.



THIS SYMBOL INDICATES THAT THERE ARE IMPORTANT OPERATING AND MAINTENANCE INSTRUCTIONS IN THE OWNER'S MANUAL WITH THIS UNIT



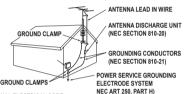
WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

IMPORTANT SAFETY INSTRUCTIONS

- 1. Read these instructions.
- 2. Keep these instructions.
- Heed all warnings.
- Follow all instructions.
- 5. Do not use this apparatus near water.
- 6. Clean only with a dry cloth.
- 7. Do not block any ventilation openings, Install in accordance with the manufacturer's instructions.
- 8. Do not install near any heat sources such as radiators, heat registers, stoves or other apparatus (including amplifiers) that produce heat.
- 9. Do not defeat the safety purpose of the polarized or grounding- type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10. Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and at the point where they exit from the apparatus.
- 11. Only use the attachments/accessories specified by the manufacturer.
- 12. Use only with the cart, stand, tripod, bracket or table specified by the manufacturer or sold with the apparatus. When a cart is used, use caution when moving the cart/ appliance combination to avoid injury from tip-over.
- 13. Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14. Refer all servicing to qualified service personnel. Servicing is required when the appliance has been damaged in any way, such as when a power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into apparatus, the apparatus has been exposed to rain or moisture, does not operate normally or has been dropped.
- 15. If an outside antenna is connected to the television equipment, be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges. In the U.S. Selection 810-21 of the National Electrical Code provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrodes.
- 16. An outside antenna system should not be located in the

vicinity of overhead power lines or other electrical light or power circuits or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.

EXAMPLE OF ANTENNA GROUNDING ACCORDING TO NATIONAL ELECTRICAL CODE, ANSI/NFPA 70

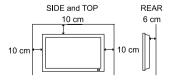


NEC- NATIONAL ELECTRICAL CODE

"Note to CATV system installer:

This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

- 17. Wall or Ceiling Mounting The product should be mounted to a wall or ceiling only as recommended by the manufacturer and listed by an independent laboratory (such as UL).
- 18. Apparatus shall not be exposed to dripping or splashing and no objects filled with liquides, such as vases, shall be placed on the apparatus.
- 19. When the MAINS plug is used as the disconnect device, the disconnect device shall remain readily operable.
- 20. Install the LCD TV in a proper position. If not, it may result in a fire hazard.
- 21. Provide appropriate space on the top, sides and rear of the LCD TV cabinet for allowing air circulation and cooling the LCD TV.
- 22. Minimum clearance must be maintained. If the LCD TV is to be built into a compartment or similarly enclosed. the minimum distances must be maintained. Do not cover the ventilation slot on the LCD TV. Heat build-up can reduce the service life of your LCD TV, and can also be dangerous.



FCC INFORMATION

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CAUTION: FCC Regulations state that improper modifications or unauthorized changes to this unit may void the user's authority to operate the unit.

ENERGY STAR® USER INFORMATION

ENERGY STAR User Information Statement: the factory default settings of this television meet ENERGY STAR requirements. Changing Picture Settings may increase energy consumption, possibly beyond the limits required for ENERGY STAR qualification.

To ensure your television is operating at an optimal energy efficiency, select default picture mode.

TRADEMARKS



Manufactured under license from Dolby Laboratories.

Dolby and the double-D symbol are trademarks of Dolby Laboratories.



HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.



"As an Energy Star® Partner, Sanyo Electric co., Ltd. has determined that this product meets the Energy Star® guidelines for energy efficiency."



This symbol on the nameplate means the product is Listed by Intertek Testing Services Taiwan Ltd. It is designed and manufactured to meet rigid U.L. safety standards against risk of fire, casualty and electrical hazards.



RECYCLING OF SANYO TELEVISIONS:

SANYO television customers should contact MRM Recycling at 888-769-0149 or visit their website at www.mrmrecycling.com regarding SANYO's waste management plan.

PROTECTING THE LCD SCREEN

The screen can be damaged if it is not maintained properly. Do not use hard objects such as hard cloth or paper. Do not use excessive pressure when cleaning the

screen; excessive pressure can cause permanent discoloration or dark spots.

NEVER spray liquids on the screen.

A

HANDLING PRECAUTIONS

- Handle by the cabinet only. Never touch the screen when handling.
- Excessive pressure on the screen can cause permanent discoloration or dark spots.
- Handling damage is not covered under warranty.

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INSTALLATION

POSITIONING THE LCD HDTV



Always use a firm-flat surface when positioning your HDTV. Do not position the unit in a confined area. Allow adequate space for proper ventilation.

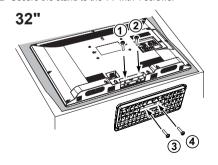
CAUTION INSTALLING STAND

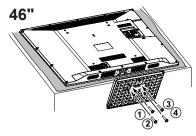
- Handling by two people is recommended when installing.
- When holding (moving or lifting) the LCD Display, hold the display's body. Do not handle the LCD TV by holding the attached accessory parts (speakers), otherwise it may result in damage
- Before installing, provide a desk (or a part of it)
 which is strong enough to support the weight of the
 LCD TV and its stand. The desk must be larger than
 the LCD Display's screen size. The desk's surface
 must be flat and covered with soft material (such as
 a blanket) for protecting the screen surface.
- Before putting the LCD Display on the desk, make sure there is no object on it. Leaving any object under the screen may cause damage on the screen.
- The LCD TV with this stand should be installed on a flat and level place. Do not place it on non flat, unlevel or unstable cart or stand. The display may fall, causing not only serious damage to the products but serious injury to a person.

For correct installing, mounting and uninstalling of the LCD TV Stand, it is strongly recommended to use a trained, authorized dealer. Failure to follow correct procedures could result in damage to the equipment or injury to the installer.

Installing Stand

- Place the LCD TV on a flat surface place where maintained with soft materials (such as a blanket) for protecting the display screen.
- 2 Secure the stand to the TV with 4 screws.



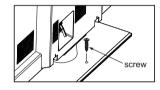


Warning

To prevent injury, this apparatus must be securely attached to the floor / wall in accordance with the installation instructions.

This TV could fall over if it is pushed , pulled or knocked down. Use the screw to secure TV to the furniture $\frac{1}{2}$

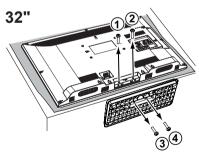
Screw type:

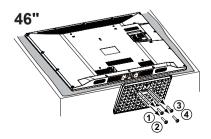




Uninstalling Stand

- 1 Place the LCD TV screen facing down on a flat surface with soft materials (such as a blanket) for protecting the display screen.
- 2 Remove screws in 4 holes with screw driver.





WALL MOUNTING (OPTIONAL)

Use the screws that are threaded into the standmounting inserts on the back of your HDTV to secure it to a wall mounting kit.

NOTE: 1. Wall Mounting kit is not supplied.

2. Wall mounting kit shall be able to sustain at least 3 times of set weight.

VESA standard interface:

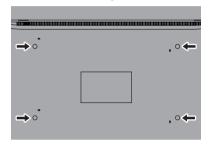
32" TV

TV 100 x 200mm

46" TV

TV 400 x 400mm

Wall Mounting Inserts



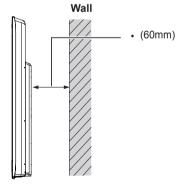
Mounting screws measurements:

32" TV

M8 Diameter, Length - 13mm (min.); 16mm (max.)

46" TV

M8 Diameter, Length - 13mm (min.); 16mm (max.)



GETTING STARTED

1 Install batteries in the Remote.



PRECAUTIONS

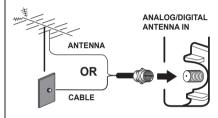
Do not use rechargeables together with dry cells, other types, mixed new and old or batteries with different charge levels.

Do not expose the Remote or batteries to moisture or heat such as sunshine. (the size of battery is AAA).

Match the "+" and "-" signs on the batteries with marks inside the Remote Control.

Please recycle used up batteries.

2 Antenna Connection for off-air signals.



THE TUNER IN THIS HDTV CAN RECEIVE:

- a. Digital and Analog off-air signals from an antenna. **OR**
- b. Analog or Clear QAM cable channels from a direct Cable TV connection.

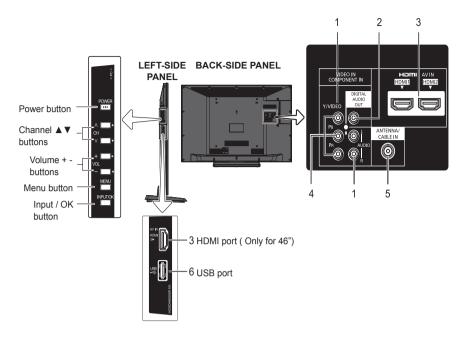
NOTES:

You must use the on-screen MENU to Search for Clear QAM Cable channels. (see p 11)

For the best picture, connect your Cable box or Satellite receiver to HDMI or component jacks.

This HDTV can receive ANT unscrambled RF signal being broadcast.

CONTROLS AND JACKS



- ① COMPOSITE VIDEO INPUT Standard (composite) video and audio inputs while using video devices with analog audio and composite video output. Connect digital video equipment to the Video jack, and matching Audio White (L) and Red (R) jacks.
- ② DIGITAL AUDIO OUT (Coaxial) Use a Phono-Type (Coaxial) Digital Audio Out Cable to connect Digital Audio Output to an advanced stereo home theater system equipped with Dolby® Digital.
- ③ HDMI INPUT (HDMI1,HDMI2,or HDMI3(only for 46")) - A digital AV interface that accepts uncompressed video signals for the best picture. This HDMI input supports HDCP copy protection and allows transmission of copy-protected digital contents.
- ④ COMPONENT YPbPr Connect digital video equipment to the Video Green (Y), Blue (Pb), Red (Pr) jacks, and matching Audio White (L) and Red (R) jacks.

- (5) ANALOG / DIGITAL ANTENNA INPUT Connect a RF antenna or Analog Cable system to this jack.
- © USB PORT Use for updating the television's firmware and accessing JPEG files.

REMOTE CONTROL OPERATION

- 1 MUTE Button- Press to mute or restore the sound.
- ② Numeric Buttons- Press numeric buttons to select a channel

Example: Press 6 then OK button to select analog channel A6. Press 6 then 1-- button to select digital channel D6

- ③ INPUT Button- Press to select the source to view: ANT/Cable in, HDMI 1, HDMI 2, HDMI 3(only for 46"), Component and Video.
- (4) FAVORITE Accesses the Favorites channel.
- (5) ECO Button Press to select Energy saving mode options On / Off in turn.
- **(6)** Volume Up / Down (VOL+ /)Buttons- Press to decrease or increase the audio volume.
- PIX SHAPE Button- Press to choose options: FULL /H-FILL / JUST / 4:3 / ZOOM / NATIVE. Available options depend on the signal and the aspect ratio of the hmadrast
- AUDIO Button- Press to select the desired audio mode, if available.
- (9) MENU- Press to display on-screen menu.

CURSOR ▲ (up) ▼ (down) Buttons - Press these buttons to move the cursor up and down.

CURSOR ◀ (left) ▶ (right) Buttons - Press these buttons to move the cursor left and right.

OK Button - Press to select an option from the menu, when required.

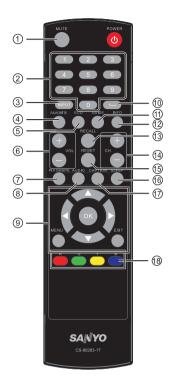
EXIT Button - Press to exit from the menu.

- ① 1-- Button Press numeric button then press this button followed by the desired digital sub-channel.
- (f) GUIDE Button- Press to show the information window about the current channel on your HDTV screen.(only for digital channels).
- (2) INFO Button- Press to display channel information hanner

Digital Banner may contain: Channel Number, CC State, Channel Title, Video Resolution, Video Ratio, Digital Sound information and Program Rating.

Analog Banner may contain: Channel Number, CC State, Channel Title, Video Resolution, Analog Sound information, and Program Rating.

- (3) RECALL Button- Press to switch to the last channel or input source.
- (4) Channel Up / Down (CH+ /) Buttons- Press to switch to the last or next channel.
- (§) RESET Button Press this button to display RESET menu. If you execute RESET function, the TV will clear all customized settings.



NOTE: The Channel Scan Memory database will be reset to default (all analog channel enabled). You will need to execute Channel Scan after RESET.

- (6) SLEEP Button- Press this button to set Off Timer function among Off, 15, 30, 60, 90, 120, 150, 180min.
 - NOTE: The Off Timer will be canceled when the TV is turned off or when a power failure occurs.
- CAPTION Button- Press this button to switch CC mode among Closed caption off, Closed caption on, and Closed caption On mute. Digital Captions can be changed through the the Digital setting from Closed caption menu.
- (8) COLOUR KEY Red/Green/Yellow/Blue keys for various function.

CONNECTIONS

Gomponent Signal Connections - COMPONENT(YPbPr)

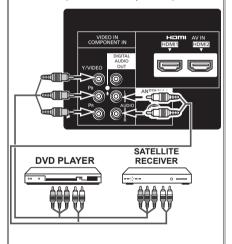
Connect Digital devices such as a HD Cable Box, HD Satellite Receiver, DVD Player, and Game System.

The Component jacks on this HDTV will accept HDTV, EDTV, and SDTV video signals and make a great choice for Component when connecting your compatible external devices.

- Connect a COMPONENT cable to the Green, Blue, and Red video jacks on the HDTV and to your digital device as shown. (Cable is not supplied)
- Connect an AUDIO cable to the matching White and Red audio jacks as shown. (Cable is not supplied)
- 3 Press the INPUT button to select the input signal as Component.

NOTES:

 The COMPONENT with Green video jack, White and Red audio jacks can be used as Composite connectors (Shared with Component-Y).

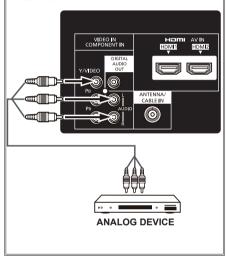


4 ANALOG SIGNAL CONNECTIONS - Video (Shared with Component-Y)

Connect an analog device such as an Analog Cable
Box. Satellite Receiver or VCR.

Composite connectors are included on your HDTV to provide continued compatibility with older analog devices such as a VCR. (Cables are not supplied).

- Connect an AV cable to the jack on the HDTV and to your analog AV equipment as shown.
- 2 Press the INPUT button to select the input signal as Video.



POWER CONNECTION

- 5 Plug in AC power cord (120V AC, 60Hz)
- 6 Press the **POWER** button, (Follow the on-screen instructions).



To 120V AC outlet.

POWER CONNECTION/CHANNEL SEARCH

INITIAL SETUP

 Use the CURSOR ▲ and ▼ buttons to highlight preferred Language (English / Español / Français).
 Press the OK button.



2 Use the CURSOR ▲ and ▼ buttons to highlight preferred viewing mode Store Demonstration or Home Use. Press the OK button.



3 Use the CURSOR ■ and ■ buttons to setup ANT/ Cable settings (Cable/Antenna/Not used). Press the OK button.



4 Use the CURSOR ▲ and ▼ buttons to set auto program Start or Skip. Press the OK button. Select "Start"



5 TV will begin the scanning "Progress".



If no channels found, TV will show below message.



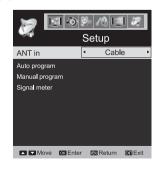
While doing scanning, pressing **MENU** or **EXIT** key will pop up below message.



6 If "Skip" is selected, TV will display as below message.



If you wish to perform a scan, select "Auto program" on ANT/Cable setup menu on Setup menu.



ADVANCED AV CONNECTIONS

ADVANCED DIGITAL SIGNAL CONNECTIONS HDMI TO HDMI

Connect compatible Digital devices such as a HD Cable Box, HD Satellite Receiver, DVD Player, and Game System.

HDMI-High-Definition Multimedia Interface.

This is a digital AV interface that accepts uncompressed video signals for the best picture quality possible. It supports HDCP copy protection and allows transmission of copy-protected digital content.

The signal can also include PCM audio, when available.

Connect the HDMI input and your external device with HDMI cable.

NOTE: Press the INPUT button to select the input signal as HDMI1.HDMI2 or HDMI3(only for 46").

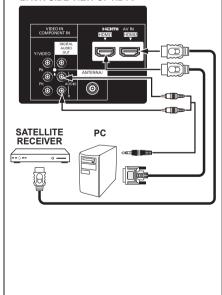
DVI TO HDMI

(ONLY HDMI1 IS COMPATIBLE WITH THIS FUNCTION)

1 Use an adapter (not supplied) to connect a DVI device to a HDMI1 input jack.

NOTE: HDMI Audio setting is necessary. Please see p14.

BACK-SIDE VIEW OF HDTV



DIGITAL AUDIO

Connect the Digital Audio output to a multichannel receiver as shown.

NOTE: Dolby Digital audio signal is available from the Digital Audio output terminal only when receiving as part of a Digital input on the screen.

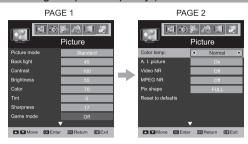
BACK-SIDE VIEW OF HDTV



ON-SCREEN MENU OPERATION

PICTURE / AUDIO / TIMER / LOCK / CLOSED CAPTION / SETUP

PICTURE (Adjust the image or picture quality)



Function	Items	Description				
Picture mode	Vivid	Provides enhanced picture contrast and sharpness for viewing in a well-lit room.				
	Standard	Recommended for normal viewing conditions with subdued room lighting.				
i lotare mode	Cinema	For watching movies in a darkened room. It provides a soft, film-like picture.				
	Custom	Customize each item according to your taste.				
Back light		Adjusts the luminance of the back light.				
Contrast, Brightness, Color, Tint, Sharpness		Adjusts the color, brightness, etc. for each picture mode to suit your taste • Display range Contrast/Brightness/ Color : 0-100 Tint : -50 - +50 Sharpness : 0 - 30				
Game Mode Off/On		Allows optimum picture settings for gaming. (Except TV)				
Color temp. Cool/Normal/Warm		Selects a choice of Cool (blue), Normal, or Warm (red) color.				
A.I. picture	Off/On	Controls dark area				
Video NR	Off/On	Reduces noise, commonly called snow. Leave it off when receiving a strong signal.				
MPGE NR	Off/On	Reduces noise of specific digital signals of DVD, Cable box, etc.				
Pix shape	FULL/H-FILL/ JUST/4.3/ZOOM/ NATIVE	Changes the format (aspect ratio). Lets you choose the aspect depending on the format of received signal.				
Reset to defaults		Resets all picture adjustments to factory default settings except for "Pix shape"				

AUDIO (Adjust Audio quality)



Function	Items	Description				
Bass		Increases or decreases the bass response.				
Treble		Increases or decreases the treble response.				
Balance		Emphasizes the left / right speaker volume.				
Surround	Off/On	Enhances audio L/R response when listening to stereo.				
Volume leveler	-7 ~ +7	Minimizes volume disparity after switching to external inputs.				
TV speakers Off/On		Switches to "Off" when using external speakers. Off: "Surround" and "Volume leveler" do not work if "Off" is selected.				
1		The default setting is "Digital" for the HDMI connection. (Digital input signal) Select audio input terminal when DVI cable is connected.				
		(Use White and Red audio jacks as Analog audio input signal)				
Reset to defaults		Resets Bass, Treble, and Balance adjustments to factory default settings.				

TIMER (The TV can automatically turn On/Off at the designated date and time.)



· If the Timer settings are grayed out, first set the clock completely.

Function	Items	Description				
Clock setting		year/month/day/hour/minute				
	Sleep(minutes)					
Sleep	Off / 15 / 30 / 60 /	Select how long for the TV to automatically turn off.				
	90 / 120 / 150 / 180					
Timer set		Enables or disables this timer. (Off/On)				
Inputs		Sets the input to select when the TV turns on.				
Channel		Sets the channel to select when the TV turns on.				

Day	Sets the day when the TV turns on.[SUN / MON / TUE / WED / THU / FRI/SAT(displays the nearest future date)MON-FRI/SAT-SUN / DAILY / Every SUN / Every MON / Every TUE / EveryWED / Every THU/ Every FRI / Every SAT]				
On time	Sets the time when the TV turns on. The TV will turn off after 90 minutes or as specified.				
Off time	Sets the time when the TV turns off within 24 hours.				

LOCK (Locks Specified Channels Or Shows To Prevent Children From Watching Objectionable Content.)



- You will be asked to enter your password each time you display the Lock menu.
- · For password setting/entering please see p18.
- Set "Custom" in "Mode" to specify "Channel", "Game" and "Program" settings.

Function	Items	Description				
	Off	Unlocks all the Lock settings of "Channel", "Game" and "Program".				
Mode	All	Locks all the inputs regardless of the Lock settings of "Channel", "Game" and Program".				
	Custom	Locks specified inputs of "Channel", "Game" and "Program".				
Channel (These channels will be blocked regardless	Mode	Set channel lock status. (Off/All/Custom) All: Locks all channelsOff: Unlocks all channels Custom: Locks specified channels. Set "Channel 1" - "Channel 7"				
of the program rating.)		Select a channel to lock. (Select up to 7 (1-7) channels to block.)				
Game	On/Off	Locks Channel 3, Channel 4, and external inputs.				
	Mode	Set program lock status. (Off/On) "V-chip" technology enables restricted shows to lock according to TV ratings. On: Set each rating level (MPAA, US.TV, C.E.L.R., C.F.L.R.)				
Program	MPAA	Select U.S. movie ratings to lock.				
(To set a rating level)	U.S.TV	U.S. TV program ratings.				
	C.E.L.R.	Canadian English ratings.				
	C.F.L.R.	Canadian French ratings.				
Change password		Change the password. Input the new 4-digit password twice.				
• •		-				

- This television is designed to support the "Downloadable U.S. Region Rating System" when available. (Available only in U.S.A.)
- The Off rating is independent of other ratings.
- When placing a lock on a specific-age-based-rating level, the Off rating and any other more restrictive ratings will also be blocked.
- It is downloaded and stored in memory and can be adjusted on the program lock menu page 2. (Page 2 only
 appears while detecting RRT5 data.)

CLOSED CAPTION (Display closed caption.)



- The television includes a built-in decoder that is capable of providing a text display of the audio.
- The program being viewed must be transmitting the Closed caption (CC) information.

Function	Items	Description				
Mode	On/Off/CC on mute	On: To display Closed captions.CC on mute: To display Closed captions when the audio is muted.(When not using, select "Off").				
Analog	CC1-4/T1-4	Choose the Closed caption service of Analog broadcasting.CC1-4: Information related to pictures (Appears at the bottom of the screen) T1-4: Textual information (Appears over the entire screen)				
Digital	Primary/Second./ Service 3/4/5/6	The Digital Closed caption menu lets you configure the way you choose to view the digital captioning.				
	Size	Text size				
	Font	Text font				
	Style	Text style (Raised, Depressed, etc.)				
Digital setting	Foreground	Color of text				
(Set display setting digital program	Fore. opacity	Opacity of text				
	Background	Color of text box				
	Back. opacity	Opacity of text box				
	Outline	Outline color of text (Identify the setting options on the screen.)				
Reset to defaults	eset to defaults Yes / No Resets all Closed caption settings to factory default settings					
The settings in "Analog" or "Digital" depend on the broadcaster.						

SETUP (Other function settings.)



Function	Items	Description			
Language	English/Español/ Français	Selects the screen menu language.			
ANT/Cable setup	See p.22 for more detail	The current channel settings can be changed according to your needs and reception conditions.			
USB photo viewer	See p.19 for more detail	You can enjoy photo contents stored in a USB storage device.			
Power saving	No signal for 15 minutes(Stay on/ Power TV off)	To conserve energy, the TV automatically turns off when NO SIGNAL and NO OPERATION continue for more than 15 minutes. • "No signal for 15 minutes was activated" will be displayed for about 10 seconds when the TV is turned on for the first time after the power was turned off by "No signal for 15 minutes". • The on-screen display will flash 3, 2 and 1 to indicate the last three (3) remaining minutes prior to the shut-off.			
	No activity for 4 hours(Stay on/ Power TV off)	To conserve energy, the TV automatically turns off when no operation of remote and side panel key continues for more than 4 hours. No activity for 4 hours was activated" will be displayed for about 10 seconds when the TV is turned on for the first time after the power was turned off by "No activity for 4 hours". The on-screen display will flash 3, 2 and 1 to indicate the last three (3) remaining minutes prior to the shut-off.			
First time setup		Restarts the first time setup from "Language" setting.			
About		Displays TV version.			
Reset to defaults	Performing Reset will clear all settings made with Setup, channel settings. Performing Reset will clear all settings made with Setup, channel settings. Password setting/entering, please see p18.				

USEFUL FUNCTIONS OPERATION

LISTEN WITH SECONDARY AUDIO PROGRAMMING

Select the Audio mode for watching TV

Digital mode

Press the **AUDIO** button to select all available audio service (if available).

- Audio information is displayed in banner for the first time.
- When pushing AUDIO key twice, audio information and actual output audio from speaker will change.

Analog mode

Press the AUDIO button to select Audio mode.

Each press of AUDIO key will change the Audio mode. (Stereo / SAP / Mono)

- AUDIO is not available when watching TV with a Cable or Satellite box connected via HDMI.
- Contact your Cable or Satellite operator for instructions on enabling SAP with their box.

CLOSED CAPTION

■ Switches the Closed Caption mode On or Off.

Press the CAPTION button to select Closed Caption menu.(Closed caption Off / Closed caption on / Closed caption on mute)

- Closed Caption is not available when watching TV with a Cable or Satellite box connected via HDMI.
- Contact your Cable or Satellite operator for instructions on enabling CC with their box.

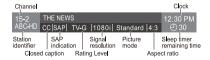
GUIDE FEATURE

When viewing the TV, press GUIDE button to display the information window about the current channel on your HDTV screen.

· This feature is only for digital channels.

DISPLAYING INFORMATION

Displays and removes information. When watching programming via the Antenna/Cable input, shows the channel banner.



CHANGE ASPECT RATIO AND ZOOM THE PICTURE

Press the **PIX SHAPE** button to cycle through the aspect modes.

- ATV \ Video \ DTV \ HDMI \ Component (480i) : FULL / JUST/ 4:3/ ZOOM
- DTV \ Component (except 480i): FULL/ H-FILL/ JUST / 4:3/ ZOOM
- HDMI (except 480i): FULL/ H-FILL/ JUST / 4:3/ ZOOM / NATIVE
- HDMI (DVI): FULL / 4:3

Use when the picture does not fill the whole screen (bars appear on either side of the image) or portions of the picture is trimmed.

Note:

- Some content, such as film-based movies, are available in extra-wide format. Top and bottom bars are unavailable.
- Connected devices, such as Cable/Satellite box, DVD/ Blu-ray players and game consoles have their own aspect (format) settings. Adjust the device's aspect settings.

OTHER USEFUL OPERATIONS

ENTERING CHARACTERS

You can use the remote control keys to enter the alphanumeric characters.

Switches input mode

Press each number key to cycle through the alphanumeric character.



PASSWORD SETTING/ENTERING

You need to enter the password when you access locked channel or inputs.

Press (0 - 9) Number button to input your 4-digit password.



USEFUL FUNCTIONS OPERATION (CONTINUED)

- If it is your first time entering the password, enter the password twice in order to register it.
- Make a note of your password. Do not forget it. (If you have forgotten your password, consult your local dealer.)
- When you select a locked channel, a message will be displayed that allows you to view the channel after you input your password.

CALL UP A FAVORITE CHANNEL

Favorite



Channel numbers registered in Favorite are displayed on the favorite tune screen. Select the desired broadcast station with the cursor or use the number buttons.

- 1 Press **FAVORITE** button to display menu.
- 2 Use the CURSOR ▲ and ▼ buttons or (0-9) Number key to select your favorite channel. Press the OK button.

To change the page

Press CURSOR ◀ and ▶ button to change pages (1/3, 2/3, 3/3).

Note:

 Favorite channels cannot be set when using Cable or Satellite box.

ENERGY SAVING MODE

Press **ECO** button to select Energy saving mode options Off and On in turn.

SLEEP TIMER

Press **SLEEP** button to set Off Timer function among Off, 30 min, 60 min, 90 min, 120 min,150 min and 180 min.

Note:

• The Off Timer will be canceled when the TV is turned off or when a power failure occurs.

RESET TO DEFAULT

Press **RESET** button to enter password and display RESET menu. If you execute RESET function, the TV will clear all customized settings.

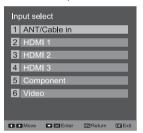


Note:

• The Channel Scan Memory database will be reset to default (all analog channel enabled). You will need to execute Auto program after RESET.

WATCHING CONTENT FROM EXTERNAL DEVICES

- 1 Press the **INPUT** button to display input menu.
- Press the corresponding (0-9)NUMBER buttons on the remote control to select the input of your choice. Or, press the INPUT button repeatedly to cycle through the available inputs.



3 Select the input of your choice, Press the OK button.

Note:

 During the selection, if no action is taken for several seconds, the "Input select" menu disappears.

USB PHOTO VIEWER

There are two methods for starting the Photo Viewer.

Automatically:

Gently insert a supported USB storage device to the USB port on the rear side of the TV. A prompt will appear.

1 USE CURSOR ■ and ▶ buttons to select Yes. Press the OK button then Photo Viewer menu will appear. When you select No, nothing happens.



USEFUL FUNCTIONS OPERATION (CONTINUED)

Note:

- The prompt will disappear after about 10 sec.
- If you repeatedly insert and remove the USB device, the prompt may not appear.

Manually:

- 1 Firstly, insert the USB flash memory into USB Port.
- 2 Press MENU button on the remote control and use the CURSOR ◀ and ▶ buttons to select SETUP menu. Press the OK button.
- 3 Use the CURSOR ▲ and ▼ buttons to highlight
 USB photo viewer function. Press the OK button.
- 4 The USB photo viewer will appear. Press OK button. When you do nothing, it will disappear after few seconds.



Note:

- The viewer will also open even if there are no photo files.
- While the USB Photo Viewer is active, the main menu cannot be displayed.

VIEWING PHOTOS

There are three types of view modes.

Multi View:

This view allows you to search for photos in a grid format. These pictures are displayed using thumbnail data in each image file.

Press CURSOR ▲ ▼ ■ to move the highlight in one window. If all of the photos will not fit in one screen, when pressing CURSOR ■ button at the top left thumbnail, the screen will move to the previous page. Conversely, when pressing CURSOR ► button at the bottom right thumbnail, the screen will move to the next page. CH+ and CHbuttons can be used to page up/down the photo list when there are more photos than will fit onto one screen.



- When you select a folder, press **OK** to move to the next layer.
- When you select a photo. Press **OK** to view the selected photo in Single view mode.

Single View:

In this view mode, only files located in the selected directory shall be displayed. This view allows you to change the photo content manually. When moving from Multi View to the Single View, the currently selected photo shall be displayed.

- 1 Use CURSOR ▶ button to view the next photo. Use CURSOR ◀ button to view the previous photo.
- 2 Use CURSOR ▲ button to rotate the image 90° counterclockwise. Use CURSOR ▼ button to rotate the image 90° clockwise.

Slideshow:

This view allows you to watch a slideshow of the photos. In this mode, only files located in the selected directory will be played.

To start slideshow, press OK button in the Single View mode. You can see the state of Sildeshow is On or Off at the right bottom.



2 Use CURSOR ■ and ► buttons to view the previous or next photo.

To set Display interval and Repeat settings:

Gently insert a supported USB storage device to the USB port on the rear side of the TV. A prompt will appear.

- 1 Press MENU button to open the Photos Menu.
- 2 Use CURSOR ▲ and ▼ buttons to select either Display interval or Repeat.
- 3 Use CURSOR ◀ and ▶ buttons to adjust the setting and press MENU button.

To close the Photo Viewer:

Press EXIT button then television will return to the last viewed channel or external input.

USEFUL FUNCTIONS OPERATION (CONTINUED)

To adjust Back light:

- 1 Press MENU button on the remote control and use the CURSOR ■ and ▶ buttons to select PICTURE menu. Press the OK button.
- 2 Use CURSOR ▲ and ▼ buttons to highlight Back light function. Press the OK button.

Contents	Descript	ion	mark
	Photo li	See p. 20	
Photo	1 Press	the folders and files MENU button to open the Thumbnail menu from Multi View mode. CURSOR ◀ and ▶ buttons to select Title, New or Old to set the grule. File sorting rules:1 Unicode priority2 Numerical (0-9); Upper Case (A-Z); lowercase (a-z), Chinese3 Increasing order From new to old according to the date and time when the picture was taken. From old to new according to the date and time when the picture was taken.	See p. 20
	SlideSkipSlide	e View mode Show mode to previous/next photo Show Repeat play Show Display interval selection	See p. 21

EDITING AND SETTING CHANNELS

The current channel settings can be changed according to your needs and reception conditions.

ANT/CABLE SETUP AND OPERATION

- 1 Press MENU button on the remote control and use the CURSOR ■ and ▶ buttons to select SETUP menu. Press the OK button.
- 2 Use CURSOR ▲ and ▼ buttons to highlight ANT/ Cable setup function. Press the OK button.



Auto program (Set automatically)

Automatically searches and adds available channels to the memory.

1 Use CURSOR ■ and ► buttons to select (Cable / Antenna / Not used). Press the OK button.



2 Use CURSOR ▲ and ▼ buttons to select Auto Program mode. Press the OK button.



3 Use CURSOR ▲ and ▼ buttons to select scanning mode function. Press the OK button.



Note:

- · After the scanning is completed, select Apply.
- · All previously saved channels are erased.

Manual program

Add or remove channels from memory, edit channel caption and set favorite channels.

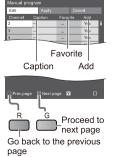
1 Use CURSOR ▲ and ▼ buttons to select Manual Program mode. Press the OK button.



2 Press Edit item. Use CURSOR ■ and ► buttons to select the setting you want to adjust and press the OK button.



3 Use CURSOR ■ and ► buttons to select the item to edit (Caption / Favorite / Add). Press the OK button.



- · Caption: Changes the station identifier.
- · Favorite: Registers channels to the Favorite List
- · Add: Adds or skips channels

CAPTION FUNCTION:

Use CURSOR ◀ and ▶ or (0-9) number buttons to change caption. Press the **OK** button.

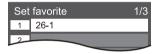
Select or edit the station identifier. (maximum 8 characters available)



FAVORITE FUNCTION:

Use CURSOR ▲ and ▼ to set favorite. Press the **OK** button

· Select the number



ADD FUNCTION:

Press **OK** button to select **Yes**(add) or **No**(skip) to set favorite

· Select the number



Move the cursor to a channel number

Use CURSOR \blacktriangle and \blacktriangledown to select channel. Press the **OK** button to tune to the channel.



Select Apply

Use CURSOR ▲ and ▼ to select. Press the **OK** button.

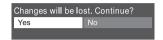


To cancel the Edit

1 Use CURSOR ▲ and ▼ to select. Press the OK button.



2 Use CURSOR ◀ and ▶ to choose yes or no. Press the **OK** button to return to ANT/Cable setup mode.



Signal meter (Check signal strength)

Check the signal strength if interference is found or freezing occurs on a digital image.

- 1 Press MENU button on the remote control and use the CURSOR ■ and ▶ buttons to select Setup menu. Press the OK button.
- 2 Use CURSOR ▲ and ▼ buttons to select ANT/ Cable setup menu. Press OK button.
- 3 Use CURSOR ▲ and ▼ buttons to highlight Signal meter item. Press **OK** button.

If the signal is weak, check the antenna. If no problem is found, consult your local dealer.



Note:

- Not available if "Cable" is selected in "ANT in".
- Available only for digital antenna channels.

DATA FORMAT FOR USB PHOTO VIEWER

Photo	JPEG
Data format	JPEG Exif ver2.1C
Max. number of files	500 / folder
Image resolution	4096 x 4096 pixels ; 920 x 1080 pixels
Max. number of files	500 / folder

^{*}Supported file system: FAT32

Caution:

- · USB photo viewer only supports USB Mass storage class devices.
- · A JPEG image modified with a PC may not be displayed.
- Partly degraded files might be displayed at a reduced resolution.
- · Support is not guaranteed for all devices.
- · Do not use a USB Hub.
- · Do not support multi-partition USB.

NOTES:

- Folder structure viewed in PC
- The folder and file names may be different depending on the digital camera used.
- Support USB 2.0 Type A connector (DV5V MAX500mA)

HELPFUL HINTS - Problems / Solutions

If you are having problems with your HDTV, check this trouble shooting chart to find one or more possible solutions.

Before returning your HDTV, please visit our website at http://www.sanyoctv.com or call us toll free at 1-800-877-5032 We can Help!

Problem:	Check these Conditions:	Try these Solutions:	Page No.
No picture, sound (Digital Picture)	Check the antenna / external connections. There may be a station trouble, no signal broadcast. MUTE function may be turned ON.	Adjust antenna. Try a different channel. Execute Auto program in the ANT/ Cable setup menu. Adjust Volume.	7-9, 11
No Caption	 Check if station is broadcasting a Closed - Caption signal. Select another channel. 	Press the CAPTION button to select captioning mode.	9, 16, 18
Cannot display picture on a full screen		Press the PIX SHAPE button on the remote control to change settings.	9, 13, 18
Poor Picture/ Sound (watching Analog)	Check if the program is in color. Check the antenna / external connections. Color or Tint may be misadjusted. There may be a station trouble. MUTE function may be turned ON.	Try a different channel. Execute Reset to defaults in the Picture or Audio menu. Execute Reset to defaults in the PICTURE menu. Adjust the Volume or Image.	7 - 9 13 - 14
"No Signal" message appears on screen	Check the Audio / Video connections. Check the external equipment connections. Check the external equipment settings. Check the antenna connection.	Press the INPUT button on the remote control.	7 - 12, 19 22 - 23
Pixilation of Digital image	Execute Signal meter in the ANT/ Cable setup menu to check the signal strength.	Turn antenna, install signal booster. Install outdoor Digital antenna.	7, 22 - 23
Cannot select or scan some channels	Channel may be removed from memory. Check antenna connections. No digital signal being broadcasted. Weak Signal.	Select Manual program to add channels or start Auto program in ANT/Cable setup menu. Turn antenna, install signal booster.	7, 22 - 23
No Cable channels above number 13	Check ANT/Cable setup menu, ANT in item should set to Cable.	Set ANT in item to Cable, Select All channels and press OK button to search for Cable channels in ANT/Cable setup menu.	22 - 23
Remote Control will not operate TV	Check batteries. Check if the TV is Plugged in.	Replace batteries. Aim remote control at front of TV.	7, 9
Cabinet makes popping sound	This is a normal condition during warm - up and cool down of the plastic cabinet parts.		

SPECIFICATIONS

Maximum Visible Range

32": 697.6845(H) x 392.256(V) **46"**: 1018.08(H)× 572.67(V)

Refresh Rate

60 Hz

Picture Resolution

32": WXGA (1360X768) **46"**: Full HD (1920X1080)

Viewing Angle

Horizontal 178° & Vertical: 178° (Panel tentative)

Brightness

32": 320(Typical) cd/m2 (Panel tentative) **46"**: 350(Typical) cd/m2 (Panel tentative)

Contrast Ratio

32": 4000:1 (Typical) (Panel tentative) **46"**: 3000:1 (Typical) (Panel tentative)

Voltage

120V AC 60Hz

AC Power Consumption (average)

32": 56 Watts 46": 110 Watts

Color System

NTSC3.58

Sound System

Μ

Channel Coverage

Low band: 55.25 to 144.00MHz Mid band: 145.00 to 424.00MHz High band: 425.00 to 861.00MHz

Sound Output

32": 5W + 5W 46": 8W + 8W

Dimensions (Including Stand)

32" : 768 mm × 512 mm × 178 mm **46"** : 1081mm × 694 mm × 280 mm

Net Weight (Including Stand)

32": 8.5 kg **46"**: 17.8 kg

Operating Environment

32" Operating Temperature: 0°C to 50°C

Operating Humidity: 20 % to 90 % Storage Temperature: 0°C to 60°C

Storage Humidity: 5% to 90% (non-condensing)

46" Operating Temperature: 0°C to 50°C

Operating Humidity: 20 % to 90 % Storage Temperature: 0° C to 60° C

Storage Humidity: 10% to 90% (non-condensing)

• Specifications are subject to change without notice.

• The On-Screen Menu and figures in this manual may differ slightly from the product.

Input terminals

ANT/Cable in	HDMI/DVI		Component / Video					USB
AITT/Gubic III	32"	46"	Y/Video	Pb	Pr	Audio-L	Audio-R	OOB
1	2	3	1	1	1	1	1	1

Output terminals

Digital Audio Output
1

Input signal that can be displayed

* Mark: Applicable input signal for Component (Y, PB, PR), HDMI.

FORMAT	HORIZONTAL FREQUENCY (KHZ)	VERTICAL FREQUENCY (HZ)	COMPONENT	HDMI
525 (480i) / 60i	15.734	59.940	*	*
525 (480p) /60p	31.469	59.940	*	*
750 (720p) /60p	45.000	60.000	*	*
1,125 (1,080i) /60i	33.750	60.000	*	*
1,125 (1,080p)/60p	67.500	60.000	*	*
1,125(1,080p)/24p	27.000	24.000		*
640 × 480 @60	31.469	59.940		*
800 × 600 @60	37.879	60.317		*
1,024 × 768 @60	48.363	60.000		*
1,280 × 768 @60	47.776	59.870		*
1,280 × 1,024 @60 (only for 46")	63.981	60.020		*
1,360 × 768 @60	47.712	60.015		*

NOTE:

- Signals other than above may not be displayed properly or no support.
- The above signals are reformatted for optimal viewing on your display.

ONF-YEAR LIMITED PARTS AND LABOR WARRANTY

THIS LIMITED PARTS AND LABOR WARRANTY IS VALID ONLY ON SANYO TELEVISIONS PURCHASED AND USED IN THE UNITED STATES OF AMERICA, CANADA, AND PUERTO RICO, EXCLUDING ALL OTHER U.S. TERRITORIES AND PROTECTORATES. THIS LIMITED WARRANTY APPLIES ONLY TO THE ORIGINAL RETAIL PURCHASER, AND DOES NOT APPLY TO PRODUCTS USED FOR INDUSTRIAL OR COMMERCIAL PURPOSES.

WARRANTY APPLICATION

FOR ONE YEAR from the date of original retail purchase Sanyo Manufacturing Corporation (SMC) warrants this TV to be free from manufacturing defects in materials and workmanship under normal use and conditions for parts and labor.

For the FIRST 90 DAYS from the date of original retail purchase, Sanyo Manufacturing Corporation will replace any defective TV via exchange at the retailer. To ensure proper warranty application, keep the original-dated-sales receipt for evidence of purchase. Return the defective TV to the retailer along with the receipt and the included accessories, such as the remote control. The defective TV will be exchanged for the same model, or a replacement model of equal value, if necessary. Replacement model will be contingent on availability and at the sole discretion of Sanyo Manufacturing Corporation.

THE FOREGOING WARRANTY IS EXCLUSIVE AND IN LIFTLOF ALL OTHER WARRANTIES OF MERCHANTARILITY OR FITNESS FOR A PARTICULAR PURPOSE.

OBLIGATIONS

For one year from the date of purchase, Sanyo Manufacturing Corporation warrants this product to be free from defects in material and workmanship under normal use and conditions. During the first 90 days under this warranty for any manufacturing defect or malfunction Sanyo Manufacturing Corporation will provide a new TV via exchange at the retailer.

HOW TO MAKE A CLAIM UNDER THIS WARRANTY

Please call 1-800-877-5032. Please be prepared to give us the television's model number and serial number when you call. The model number and serial number are printed on a label attached to the back of the unit.

For customer assistance, call toll free 1-800-877-5032.

This warranty expresses specific contractual rights; retail purchasers may have additional statutory rights which vary from state to state.

(EFFECTIVE: March 1, 2007)

Your Sanyo HDTV is registered at the time of purchase, please keep sales receipt for future reference.

For your protection in the event of theft or loss of this product, please fill in the information requested below and KEEP IN A SAFE PLACE FOR YOUR OWN PERSONAL RECORDS. Model No._____ Date of Purchase _____ Serial No._____ Purchase Price (Located on back of unit) Where Purchased



Sanyo Manufacturing Corp. 3333 Sanyo Road, Forrest City, AR 72335

