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# English

## ◇ Copyright

All rights reserved by the manufacturer. No part of this User's Manual may be reproduced, transmitted, transcribed, stored in a retrieval system or translated into any language or computer language, in any form or by any means, electronic, mechanical, magnetic, optical, chemical, manual or otherwise, without the prior written permission of the manufacturer.

## ◇ Disclaimer

The manufacturer makes no representations or warranties, either expressed or implied, with respect to the contents of this User's Manual. The manufacturer reserves the right to revise this publication and to make changes from time to time in the contents thereof without obligation to notify any person of such revision or changes.

## ◇ Introduction

Thank you for purchasing the LCD TV (Liquid Crystal Display Television). Your LCD TV will bring you years of high-quality viewing enjoyment. Your television is compatible with PAL and SECAM systems. Your new television is extremely easy to operate, and has exceptionally high image quality.

The LCD TV is also extremely versatile. You can install your television on the wall or set it on a table, and it can be used under any type of illumination.

This manual will explain the operation of the LCD TV Liquid Crystal Display Television, including the set's functions and features and other important information. Before installing or operating your liquid crystal display television, please take the time to thoroughly read this manual, particularly the sections on safety!

## ◇ Functions and Features

The LCD TV Liquid Crystal Display Television has many useful functions, including:

- 640 x 480 for 20" TV internal resolution
- Brightness and Contrast ratio: refer to the Function Specification
- Compatibility with 2D digital comb filter, 3D motion-adaptive de-interlacing, noise reduction, 3:2 auto pull down, De-Interlacing, Multiple image formats for diverse viewing conditions.

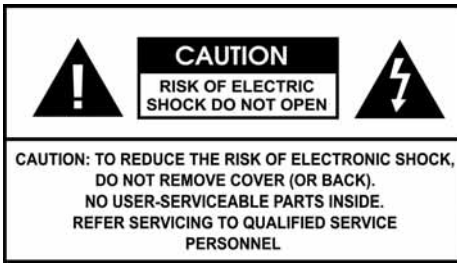
### **Shortcut buttons:**

- 1 Multi-Channel Television Sound (MTS) (Nicam)
- 2 Sleep timer
- 3 Back light adjustment
- 4 Auto Calibration
- 5 Graphic OSD

## ◇ Important Information

**WARNING:** TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DONOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

**CAUTION:** TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.



The exclamation point within a triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.



The lightning flash with arrowhead symbol within a triangle, alerts the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may constitute a risk of electric shock.

Note to CATV system installer: This reminder is provided to call the CATV system installer's attention to Article 820-40 of the National Electrical Code 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.

## ◇ Safety Tips

Please read and follow these safety tips to ensure the equipment is free from damage, and to ensure that no injury will occur as a result of improper use.

- Do not insert any object (especially metal) or liquids, into the TV.
- Do not place any objects containing water or any other liquid on top of the TV.
- Do not place the unit in direct sunlight, near heaters or in extremely dusty or humid locations.
- Do not install this system outdoors or otherwise expose it to the elements.
- Do not place heavy objects on top of the TV.
- If the power cord is damaged or frayed in any way, electrical shock and/or fire may result.
- Please do not place objects on the power cord, and keep the cord away from heat-emitting devices. Should the power cord become damaged in any way, please contact your dealer for a replacement cord.
- Do not remove the cover of the TV for any reason. If any problems arise with the unit, please contact your dealer for service. Removing the covers will void the warranty.

## ◇ Important Safety Instruction

- 1 Read these instructions before the product is operated.
- 2 Keep these instructions in a safe place for future reference.
- 3 Heed all warnings.
- 4 Follow all instructions.
- 5 Do not use this apparatus near water.
- 6 Clean only with 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 is 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 the point where they exit from the apparatus.
- 11 Only use 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/apparatus 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 not included if the apparatus has been damaged in the following ways, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 15 Apparatus shall not be exposed to dripping or splashing and no objects fill with liquids, such as vases, shall be placed on the apparatus.
- 16 To reduce the risk of electric shock, do not remove cover (or back). No user-serviceable parts inside. Refer servicing to qualified service personnel.
- 17 The apparatus must be connected to a mains socket outlet with a protected ground connection.
- 18 Keep 10cm minimum distance around the apparatus for sufficient ventilation.
- 19 Spent or discharged batteries must be recycled or disposed of properly in compliance with all applicable laws. For detailed information, contact your local county solid waste authority.
- 20 Please change to appropriate power cord complied with local regulation when the LCD Display purchased and utilized at different nations.



	<b>CAUTION</b> RISK OF ELECTRIC SHOCK DO NOT OPEN			<b>WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE</b>
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The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

## ◇ Caution

These servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock does not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.



To protect your device from electrical damage, be sure to plug the cord into socket securely.



If you use the LCD Display with video games, computers, or similar products, keep brightness and contrast at a low level. Images with a high levels of brightness or contrast the may "burn on" the screen permanently.

### **[Maintenance]**

If any of following occurs, unplug the LCD Display and contact your distributor or qualified technician to repair the LCD Display:

- 1 The power cord or plug is damaged.
- 2 Liquid enters the LCD Display.
- 3 LCD Display is damp or wet.
- 4 LCD Display is damaged.
- 5 LCD Display malfunctions.

DO NOT attempt to repair the LCD Display by yourself. There are high voltages inside the cabinet, which poses a risk of electric shock.

Safety inspection After the LCD Display is repaired, be sure to ask the technician (in accordance with the manufacturer's requirements) to conduct a routine safety inspection to make sure the LCD Display is safe.

### **[User's record]**

You can find the serial number and model on the back of the LCD Display. Be sure to provide the model and serial number when you contact your distributor.

## ◇ Tips for cleaning the LCD Display

- 1 Wipe the LCD Display with soft or dry cloth.
- 2 DO NOT use solvent or methyl benzene. Harsh chemicals may damage your LCD Display.
- 3 Make sure the LCD Display is unplugged before you clean it.

## ◇ Installation and use of LCD Display

**[CATV]** Be sure to acquire due authorization from the broadcaster/CATV service provider/program owner before using the TV receiver to watch programs through UHF, VHF, or CATV.

- 1 Check the LCD Display power specification shown on the serial No./model tag. Be sure to use the power according to the specification. If you are unsure about the power requirement, please contact your distributor or local power company.
- 2 Make sure to plug the power cable into the socket securely. If you have problems plugging in, please contact your distributor.

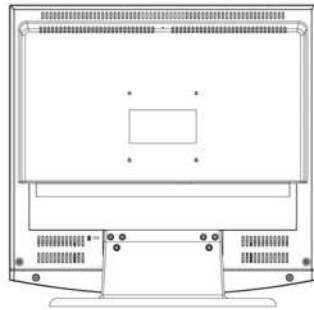
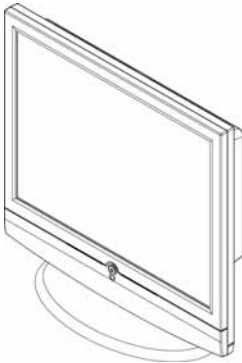
The plug is designed in such a manner that you can plug into a socket in a certain direction. If you have problems with the plug, contact with your distributor.

- 1 DO NOT overload powers sockets or extension cords. Overloading poses a risk of electric shock or fire.

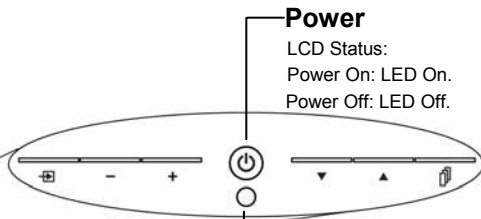
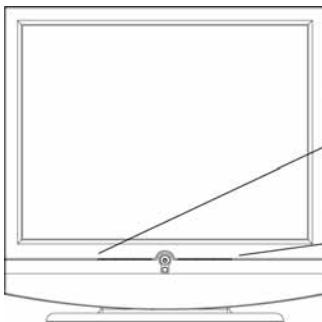
- 2 DO NOT place any objects on the power cord. Keep your LCD Display away from any place that might cause damage to the LCD Display. Use only the correct power cord.
- 3 Be sure to turn off your LCD Display when not in use. If the LCD Display will not be in use for a long time, unplug it to prevent risk of fire.
- 4 The vent on the rear of the LCD Display is designed for ventilation and heat dissipation. Keep the vent clear.
- 5 DO NOT place the LCD Display on beds, sofas, or carpet, as this may block the vent.
- 6 DO NOT use the LCD Display in enclosed spaces, such as a bookshelf or TV cabinet as this may block the vent.
- 7 Keep the LCD Display away from high-temperature objects or any heat-generating object.
- 8 Keep the LCD Display away from direct sunlight.
- 9 DO NOT place the LCD Display on an unstable shelf or desk. Failing to do so may result in injury.
- 10 DO NOT allow foreign objects inside the LCD Display, as this poses a risk of electric shock or damage to the internal components.
- 11 When transporting the TV, never carry it by holding onto the speakers. Be sure to always carry the TV by two people holding it with two hands.

## ◇ Package Contents

### Top View & Rear View



### Front view



#### **Power**

LCD Status:  
Power On: LED On.  
Power Off: LED Off.

#### **IR Receiver**

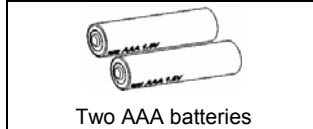
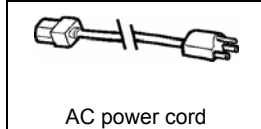
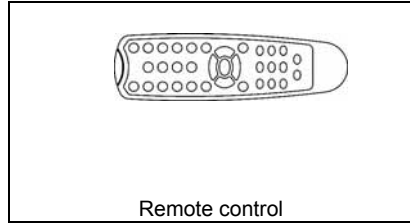
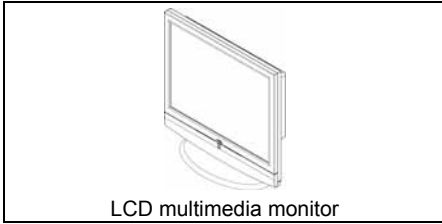
Picks up the signals from the remote control.

#### **Note:**

The buttons on the LCD multimedia monitor have the same functions as the corresponding buttons on the remote control. This user's manual describes the functions based on the remote control.

## Accessories

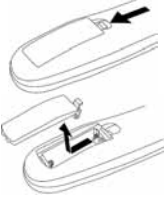
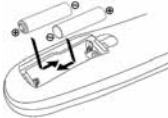

After you unpack your LCD Television, make sure the following items are included in the box and are in good condition:



If you find that any of these items are missing or appear damaged, contact your dealer immediately. Do not throw away the packing material or shipping carton in case you need to ship or store the LCD Television in the future.

## Installation of batteries

Before using the remote control, you must insert two AAA batteries. Refer to the following:

<p>1. Push the battery cover latch in the direction of the arrow to release the cover.</p>		<p>2. Insert the two AAA batteries. The battery terminals should match</p>	
<p>3. Close the battery cover.</p>			

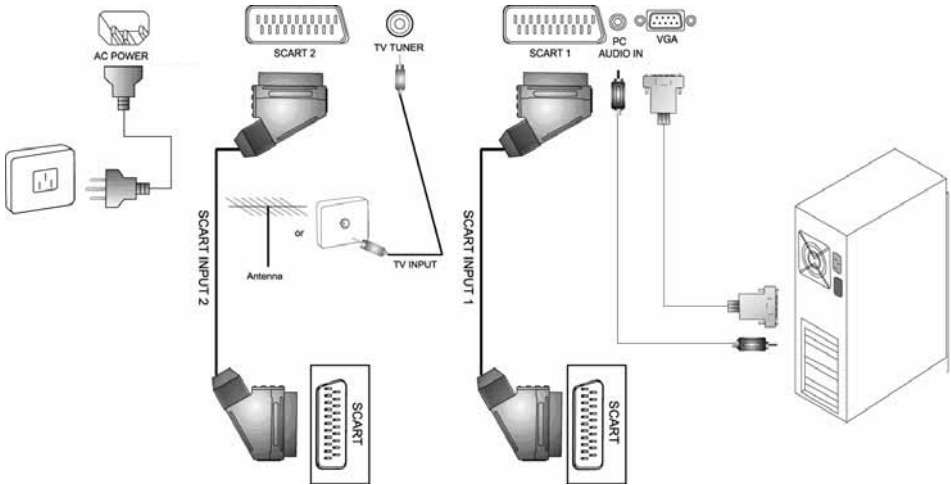
### Note:

1. If the remote control is not to be used for a long time, remove the batteries.
2. Use the remote control carefully. DO NOT drop the remote control on the ground.
3. Keep the remote control away from moisture, sunlight, and high temperatures.



# ◇ Setting up your Television

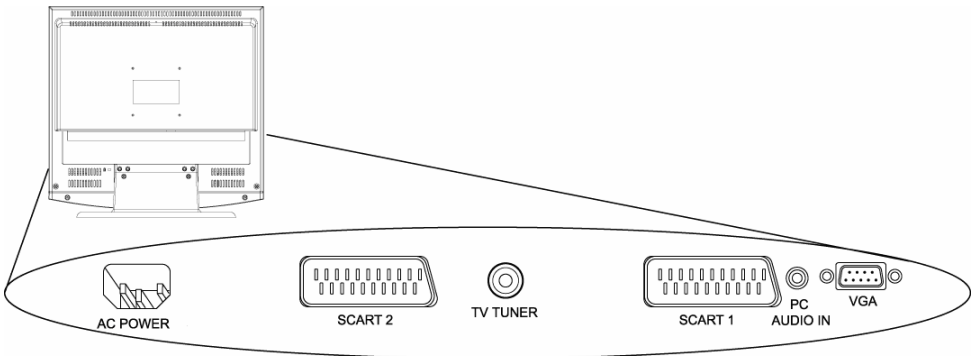
## Input Connection



Port	Functions
Tuner Input	Connects to TV RF signals (antenna/CATV).
SCART Input	Connects to SCART output Video/Audio device. (SCART 1 with TV out)
VGA Input (analog) and Audio input	Connector with VGA analog signals sources.

## Power Connection

Connect the AC power cord to the LCD-Display and plug into an appropriate wall outlet.



### **Note:**

**AC power Input: Connect power cord to this port**

Your LCD Television can connect to a PC through the VGA connector. Check your PC's user's manual to see which connectors are available on your PC.

1. Connect one end of the VGA cable to this monitor.
2. Connect the other end to your PC and tighten the securing screws on the connectors.
3. Connect one end of the PC-audio-in cable to Audio-in.

## ◇ Turning your LCD Display on

When press the **POWER** button, the LED on the front lower of the TV to switch off and LCD display on.

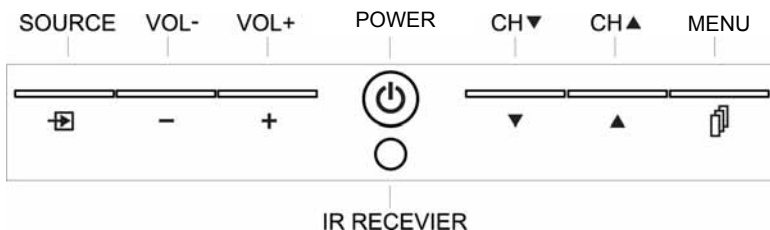
Power indicator on -- Power on. Power indicator off -- Power off.





## ◇ Programming TV channels

- 1 Press the **TV** button on the remote control to select TV mode.
- 2 Press the **MENU** button on your remote control to display the OSD menu.
- 3 Press the **▲ / ▼** button on your remote control to highlight **TV SETTINGS** and press VOL+ button to select it.
- 4 Press the **▲ / ▼** button on your remote to highlight **CHANNEL-SCAN** and press VOL+ button to start the tuning process. (This process will take a few minutes. The tuning process will find all available channels.)
5. You can now watch TV. Change channels by pressing the CH▲ and CH ▼ buttons.

## ◇ Operation using the controls on the LCD TV

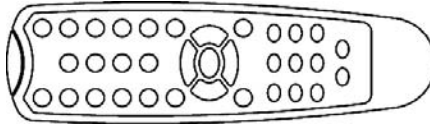
The buttons on the LCD Television have the same functions as the corresponding buttons on the remote control. This user's manual describes the functions based on the remote control. A brief description is provided here of operation using the controls on the television.




Button		Description
	SOURCE	Use this button to change between video input signals. Press the INPUT button repeatedly to scroll through the following list of inputs: TV / AV-1 / AV-2 (Optional) / PC.
	MENU	Use this button to display and adjust the features in the On-Screen Display. Use the four arrow keys (channel and volume adjustments) to navigate the menu options.
	CH (Function)	Use these buttons to switch between preprogrammed channels. Use these buttons to move between functions in the OSD.
	VOL +/- (ADJUST)	Use these two buttons to adjust the volume. Use these buttons to adjust the values of a function.

## ◇ Remote Control

### Remote Control Key



- 1.1 Power**   
To turn on the LCD Display or enter standby mode.  
Power On/Off.
- 1.2 MUTE**  
Press to toggle audio on and off. Press again or press volume +/- to restore the previous volume level. Sound On or Off.
- 1.3 Digital key from 0 to 9 and Digital key 100**  
Select TV channel by numbers.
- 1.4 RTN**  
Return to the previous TV channel.
- 1.5 MENU**  
Get into OSD menu.
- 1.6 CH ▲ PG**  
Press to select the next channel or selects next items in OSD menu.
- 1.7 CH ▼ PG**  
Press to select the previous channel or selects previous items in OSD menu.
- 1.8 VOL +**  
Press to increase the volume or increase the setting in OSD menu.
- 1.9 VOL –**  
Press to decrease the volume or decrease the setting in OSD menu.
- 1.10 TV**  
Select video input source: TV → AV-1 → AV-2 (Optional).
- 1.11 PC**  
Select PC input source: TV → PC
- 1.12 MTS**  
Select TV audio system (TV mode): (1) Stereo ⇄ Mono; (2) Dual1 ⇄ Dual2
- 1.13 WIDE**  
Select 4:3 or 16:9 screen  
Note: This key has no function if panel type is 4:3.
- 1.14 DISP**  
Show a channel number in the screen.
- 1.15 zZZ**  
Press repeatedly to cycle through the available sleep time options at [OFF], [00:10], [00:20], [00:30], [00:40], [00:50], [01:00], [01:10], [01:20], [01:30], [01:40], [01:50], [02:00].
- 1.16 CC/TT**  
TT : Turn Teletext function on and Off. (European version only)  
CC: To turn the Closed Caption function on and off. (USA version only)
- 1.17 VC/INDEX**  
INDEX: Get back to Teletext index page. (European version only)  
VC: To display the V-Chip setting status. (USA version only)
- 1.18 SET/ZOOM**  
ZOOM: Teletext zoom function. (European version only)  
SET: To enter parental controls OSD menu. (USA version only)
- 1.19 HOLD**  
For Teletext operation. (European version only).

### **1.20 SUB. P**

For Teletext operation. (European version only).

### **1.21 Red key**

For Teletext operation. (European version only).

### **1.22 Green key**

For Teletext operation. (European version only).

### **1.23 Blue key**

For Teletext operation. (European version only).

### **1.24 Yellow key**

For Teletext operation. (European version only).

## ◇ **Using the advanced OSD menu**

Read this chapter to learn how to adjust your LCD TV setting from the on-screen display (OSD). Your LCD TV features an OSD that lets you adjust and save contrast, brightness, and other settings. Your LCD TV saves change you make to the settings, even if you turn your TV off.

To adjust settings from the OSD:

1. Press the MENU button on the remote control or on the front of your LCD TV. The OSD opens.
2. Press the CH ▲ or CH ▼ on the remote control or on the front panel of your LCD TV to select the menu you want.
3. Press the VOL – or VOL + on the remote control or on the front panel of your LCD TV to adjust the option setting.
4. Press the MENU button on the remote control or on the front of your LCD TV. The OSD closes.

If you are using TV for your video source, go to “OSD menu and options (TV mode)”

If you are using SCART video for your video source, go to “OSD menu and options (Video mode).”

If you are using RGB (PC) for your video source, go to “OSD menu and options (PC video mode)”

## ◇ OSD menus and options (TV and video mode)

You can use these OSD menus and options to adjust various settings for your LCD TV.

OSD menu	Item	Description
VIDEO ADJUST	CONTRAST	To adjust the difference between the lightest and darkest areas of the LCD display screen. Contrast should be adjusted in conjunction with the brightness item.
	BRIGHTNESS	To adjust the light level of the LCD display's screen. It should be adjusted in conjunction with the contrast setting.
	COLOR	Adjusts the color saturation making color more intense.
	TINT	Adjusts the color of flesh tones.
	SHARPNESS	To adjust the sharpness of the image.
	RESET	To reset the initial default for video setting.
AUDIO ADJUST	VOLUME	Adjust the volume of speaker.
	BASS	Adjust the bass.
	TREBLE	Adjust the treble.
	BALANCE	Adjusts the balance level between the speakers.
	AUDIO MODE	To select audio mode (PRESET, SOFT, USER).
	MTS (TV mode only)	To select audio system (MONO/STEREO , DUAL1/DUAL2).
SYSTEM SETTINGS	LANGUAGE	To select the language mode (English, French, Deutschland, España, Italia, Nederland, Portugal, Chinese-simplified, Chinese-traditional)
	SCART AUTO	To select the SCART AUTO detect on or off.
	Sleep Timer	To set the sleep timer ([OFF], [00:10], [00:20], [00:30], [00:40], [00:50], [01:00], [01:10], [01:20], [01:30], [01:40], [01:50], [02:00])
TV SETTINGS (This menu is available for TV mode only)	PROGRAM SELECT	To select program channel.
	PROGRAM FREQ	Adjust program channel frequency.
	PROGRAM SYSTEM	Select TV system
	PROGRAM SKIP	Select skip this program. + : Display / - : Skip
	CHANNEL SCAN	To invoke the TV auto scan when turn on your LCD TV first time. (This process will take a few minutes. The tuning process will find all available channels.) To automatically scans for available channels. To press "MENU" button of remote controller to stop channel scan.

	PROGRAM EDIT	Edit program name / Swap program / Copy program / Delete program
--	--------------	--

## ◇ OSD menus and options (PC Video mode)

You can use these OSD menus and options to adjust various settings for your LCD TV.

OSD menu	Item	Description
VIDEO ADJUST	CONTRAST	Adjusts the contrast of the picture.
	BRIGHTNESS	Adjusts the brightness of the picture.
	PHASE	Adjust PC video phase
	H SIZE	Adjusts pixel alignment to help stabilize the VGA display.
	H POSITION	To adjust video horizontal position.
	V POSITION	To adjust video vertical position
	AUTO ADJUST	Allows the monitor to determine and select the horizontal and vertical adjustment, and clock and phase settings that are most appropriate for your system requirements.
	RESET	To reset the initial default for video setting.
AUDIO ADJUST	VOLUME	Adjust the volume of speaker
	BASS	Adjust the bass.
	TREBLE	Adjust the treble.
	BALANCE	Adjusts the balance level between the speakers.
	AUDIO MODE	To select audio mode (Preset, Soft, User).
SYSTEM SETTINGS	LANGUAGE	To select the language mode (English, French, Deutschland, España, Italia, Nederland, Portugal, Chinese-simplified, Chinese-traditional)
	SCART AUTO	To select the SCART AUTO detect on or off.
	Sleep Timer	To set the sleep timer ([OFF], [00:10], [00:20], [00:30], [00:40], [00:50], [01:00], [01:10], [01:20], [01:30], [01:40], [01:50], [02:00])
COLOR ADJUST	RED	Adjust color – red
	GREEN	Adjust color – green
	BLUE	Adjust color – blue
	COLOR MODE	A way to characterize the spectral properties of a light source. Low color temperature implies warmer (more yellow/red) light, while high color temperature implies a colder (more blue) light. color mode : NORMAL / WARM / COOL / USER.

## ◇ Troubleshooting

You are encouraged to diagnose the problem base on the following list before calling a service center.

### TV

Symptoms	Possible Causes
Power does not turn ON	Ensure whether the power plug is securely inserted into the receptacle.
There is no picture or sound	<ul style="list-style-type: none"> <li>• Ensure the television power is ON (Indicated by the green LED on the front of the unit)</li> <li>• Reception other than those of broadcasting stations can be considered.</li> <li>• Check for connection to wrong terminal or for wrong input mode.</li> <li>• Ensure the communication cable is properly connected between the Video Source and the television.</li> </ul>
There are spots on the screen	Check whether your AV equipments is affected by interference from automobiles, trains, high-voltage transmission lines, neon signs or other potential sources of interference.
Degraded colors or tints	Check whether all image adjustments have been properly adjusted.
Improper screen position or size	Check whether screen position and size have been properly adjusted.
The image appears distorted	Ensure the television's aspect ratio is properly set.
The image is purple	Check the "Component" or "RGB" setting in the television and set it for the appropriate signal type.
The image appears too bright, and there is a loss of definition in the brightest areas of the image.	<ul style="list-style-type: none"> <li>• Check whether the contrast setting is too high.</li> <li>• The DVD player is set for a high-level output.</li> <li>• The video signal has not been terminated properly somewhere in the system.</li> </ul>
The image appears too 'washed out', or the darkest areas of the image appear too bright.	<ul style="list-style-type: none"> <li>• Check whether Brightness is set too high.</li> <li>• The DVD player may be set at too high a brightness level.</li> </ul>
If "xxx searching" appears, the image or signal cannot be produced by display.	<ul style="list-style-type: none"> <li>• Check the cable for disconnection.</li> <li>• Check for connection to proper terminal or for proper input mode.</li> </ul>
Power indicator lamp appears flashes blue	<ul style="list-style-type: none"> <li>• Check the cable for disconnection.</li> <li>• Check whether the screen is on power saving status (DPMS)</li> </ul>
"Over range" appears	Check whether the input signal is acceptable to the display.

Remote control does not function properly	<ul style="list-style-type: none"> <li>• Check for incorrect battery orientation.</li> <li>• Check for dead batteries</li> <li>• Check for distance and angle from the television.</li> <li>• Check whether remote control is properly being pointed at the television's remote control sensor window.</li> <li>• Check for any obstacle between the remote control and the remote control sensor window.</li> <li>• Check that the remote sensor window is not under strong fluorescent lighting.</li> </ul>
There is no picture or sound, just noise	<ul style="list-style-type: none"> <li>• Make sure the antenna cable is properly connected.</li> <li>• Consider whether TV signals are being properly received.</li> </ul>
Picture is not clear	<ul style="list-style-type: none"> <li>• Make sure the antenna cable is properly connected.</li> <li>• Consider whether TV signals are being properly received.</li> </ul>
No sound	<ul style="list-style-type: none"> <li>• Check whether you have selected Mute for Audio setting.</li> <li>• Make sure the volume is not set to minimum.</li> <li>• Make sure that headphones are not connected.</li> <li>• Check cables for disconnection.</li> </ul>

## Antenna

Symptoms	Possible Causes
The picture is not sharp or the picture moves	<ul style="list-style-type: none"> <li>• The reception may be weak.</li> <li>• The state of the broadcast may also be bad.</li> <li>• Make sure the outside antenna is not disconnected.</li> <li>• Make sure the antenna is facing the right direction.</li> </ul>
The picture is doubled or tripled	<ul style="list-style-type: none"> <li>• Make sure the antenna is facing the right direction.</li> <li>• There may be reflected electric waves from mountains or buildings.</li> </ul>
The picture is spotted	<ul style="list-style-type: none"> <li>• There may be interference from automobiles, trains, high voltage lines, neon lights, etc.</li> <li>• There may be interference between the antenna cable and power cable. Try positioning them further apart.</li> </ul>
There are stripes on the screen or colors fade	<ul style="list-style-type: none"> <li>• Is the television receiving interference from other devices? Transmission antennas of radio broadcasting stations and transmission antennas of amateur radios and cellular phones may also cause interference.</li> <li>• Use the television as far apart as possible from devices that may cause possible interference.</li> </ul>



# ◇ TV Signal System

## Color and Broadcasting System by Country

Country	TV	Color	Stereo	Subtitles
Albania	B/G	PAL		
Argentina	N	PAL-N		
Australia	B/G	PAL	FM-FM	Teletext
Austria	B/G	PAL	FM-FM	Teletext
Azores (Portugal)	B	PAL		
Bahamas	M	NTSC		
Bahrain	B	PAL		
Barbados	M	NTSC		
Belgium	B/G	PAL	NICAM	Teletext
Bermuda	M	NTSC		
Brazil	M	PAL-M	MTS	
Bulgaria	D	SECAM		
Canada	M	NTSC	MTS	CC
Canary Is	B	PAL		
China	D	PAL		
Colombia	M	NTSC		
Cyprus	B	PAL		
Czechoslovakia	D/K	SECAM/PAL		
Kia Denmark	B	PAL	NICAM	Teletext
Egypt	B	SECAM		
Faroe Islands (DK)	B	PAL		
Finland	B/G	PAL	NICAM	Teletext
France	E/L	SECAM		Teletext
Gambia	I	PAL		
Germany	B/G	PAL	FM-FM	Teletext
Germany (prev East)	B/G	SECAM/PAL		
Gibraltar	B	PAL		
Greece	B/G	PAL (was SECAM)		
Hong Kong	I	PAL	NICAM	
Hungary	B/G & D/K	PAL (was SECAM)	NICAM NICAM (Budapest only)	
Iceland	B	PAL		
India	B	PAL		
Indonesia	B	PAL		
Iran	H	SECAM		
Ireland	I	PAL	Nicam	Teletext
Israel	B/G	PAL	Nicam	Teletext
Italy	B/G	PAL	FM-FM	Teletext
Jamaica	N	SECAM		
Japan	M	NTSC	Matrix	
Jordan	B	PAL		
Kenya	B	PAL		
Korea	M	NTSC		
Luxembourg	B/G	PAL	Nicam	Teletext
Madeira	B	PAL		
Madagascar	B	SECAM		
Malaysia	B	PAL		
Malta	B/G	PAL		
Mauritius	B	SECAM		
Mexico	M	NTSC	MTS	CC
Monaco	L/G	SECAM/PAL		
Morocco	B	SECAM		
Netherlands	B/G	PAL	FM-FM	Teletext
New Zealand	B/G	PAL	Nicam	Teletext
North Korea	D/K	SECAM		

Country	TV	Color	Stereo	Subtitles
Norway	B/G	PAL	Nicam	
Pakistan	B	PAL		
Paraguay	N	PAL		
Peru	M	NTSC		
Philippines	M	NTSC		
Poland	D/K	PA		Teletext
Portugal	B/G	PAL	Nicam	Teletext
Romania	G	PAL		
Russia	D/K	SECAM		
Saudi Arabia	B	SECAM		
Seychelles	I	PAL		
Singapore	B	PAL		
South Africa	I	PAL		
South Korea	M	NTSC		
Spain	B/G	PAL	Nicam	Teletext
Sri Lanka	B/G	PAL		
Sweden	B/G	PAL	Nicam	Teletext
Switzerland	B/G	PAL	FM-FM	Teletext
Tahiti	KI	SECAM		
Taiwan	M	NTSC		
Thailand	B	PAL		
Trinidad	M	NTSC		
Tunisia	B	SECAM		
Turkey	B	PAL	-	Teletext
United Arab Emirates	B/G	PAL		
United Kingdom	I	PAL	Nicam	Teletext
Uruguay	N	PAL	MTS	
USA	M	NTSC	MTS	CC
Venezuela	M	NTSC		
Yugoslavia	B/H	PAL		
Zimbabwe	B	PAL		

## ◇ Supported Operating Modes

Item	Resolution	H Freq. (kHz)	V Freq. (Hz)	VGA	AV	Note
1.	640x480 @60	31.469	59.940	V		VESA
2.	640x480 @72	37.861	72.809	V		VESA
3.	800x600 @56	31.156	56.250	V		VESA
4.	800x600 @60	37.879	60.317	V		VESA
5.	800x600 @72	48.077	72.188	V		VESA
6.	480i				V	SCART 1 / 2
7.	576i				V	SCART 1 / 2

Note: The VGA support timing will depend upon the panel resolution.

# ◇ Dimensional Drawings

