

30" LCD TV User's Guide

- Please observe all safety precautions when using this product.
- Please read this manual carefully before using this product.

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- Versatility and Expandability
- That doesn't make you feel fatigue on your Eyes.
- Flat-Panel Digital Display easy on the Eyes.

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Power Supply

Warnings

Do not touch the power plug with wet hands.

Doing so may result in electric shock.



Do not use a damaged power cord or plug or a loose outlet.

Doing so may result in fire or electric shock.



Do not plug several devices into the same outlet.

Doing so may cause the outlet to overheat and start a fire.



Insert the power plug fully into the outlet.

A loose or improperly inserted power plug may result in fire.



Do not bend the power cord excessively or place heavy objects on it.

Doing so may result in fire or electric shock.



Be sure to ground the unit.

Failing to do so may lead to electric shock when a short circuit or overload occurs. If necessary, install a ground fault circuit breaker. Never ground to a telephone line, lightning rod, or metal gas pipe. (Doing so may result in fire, electric shock, or other hazards.)



Cautions

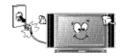
When disconnecting the power cord from an AC outlet, always grasp it by the plug.

Pulling on the cord can damage the internal wire and may result in fire.



Always unplug the unit before cleaning.

Not doing so may result in fire or electric shock.



The purpose of these precautions is to ensure user safety and prevent property damage.

Be sure to read and observe all safety precautions.



Installation

<u>Wa</u>rnings

Do not place containers with liquids such as flower vases, soft drink cans, or medicine bottles or small metallic objects on top of the unit.

If liquid enters the unit or any metal object falls into the unit, it may result in short-circuit fire, or electric shock.



Do not place the unit where it is exposed to rain, excessive moisture or grease.

Doing so may result in fire, electric shock, malfunction, or deformation.



Do not use or store flamm able or combustible materials near the unit

Doing so may result in fire or explosion.



Do not place the unit on an unstable surface, such as a wobbly stand or sloped table, or on any surface whose area is smaller than the bottom area of theunit.

off in a child climbs on the unit, it could topple and fall onto the child, resulting in serious injury to the child or damage to the unit. Place the unit on a flat stable surface.



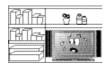
Do not place a burning candle, burning anti-mosquito incense, or lighted cigarette on top of the unit. Do not place the unit near any heat source such as a fireplace or space heater.

Doing so poses a serious risk of fire.



Do not place the unit in a poorly ventilated enclosure, such as a cabinet

Doing so poses a serious risk of fire.



Do not run power cords near heat-producing appliances such as radiators, stoves, or irons.

The excessive heat could melt the insulation and expose live wires, resulting in fire or electric shock.



Install the antenna away from high-voltage power lines and communication cables and make sure it is installed securely.

If the antenna touches a power line, contact with the antenna could result in fire, electric shock, serious injury, or death.



Cautions

Install the unit at an adequate distance from the wall to ensure sufficient ventilation.

If the temperature inside the unit rises, it may resultin fire.



Do not cover the unit with a tablecloth, curtain, or other material.

If the temperature inside the unit rises, it may result in fire.



Be sure to place the unit on a level surface.



∆ Warnings

Form a drip loop where the coaxial antenna cable enters your building to prevent rainwater from traveling along the cable and coming in contact with the antenna input terminal.

If rain water finds its way inside the unit, it may result in fire or electic shock.



The following precautions are divided into "Warnings" and "Cautions".

△ Warning: Ignoring this precaution may result in death or serious injury.
 △ Caution: Ignoring this precaution may result in injury or property damage.

Use and Maintenance

Warnings

Disconnect the power cord from the wall outlet during an electrical storm.

Not doing so may result in fire or electric shock.



Do not insert any metal objects, such as a screwdriver, paper dip, or bent wire into the ventilation openings or A/V terminals.

Doing so poses a serious risk of fire or electric shock.



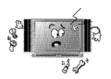
Do not allow children to climb or hang on the unit.

The unit could topple over onto a child and result in serious injury.



Never disassemble or modify the unit in any way. Do not attempt to service the unit yourself.

Doing so may result in fire or electric shock. If the unit requires repair, contact the service center.



Cautions

When not using the unit for long periods of time, disconnect the power cord from the wall outlet.

Dust could accumulate over time on the unit and cause it to generate heat and ignite, or deteriorate insulation, which in turn may result in an electrical fire.



When moving the unit, be sure to turn off the unit and unplug the power cord from the wall outlet.

Moving the unit with the power cord connected to the outlet may cause damage to the cord, resulting in fire or electric shock.



If you notice any unusual odors or smoke around the unit, immediately disconnect the unit from the outlet and contact the service center.

Failure to do so may result in fire or electric shock.



Warnings

When removing the batteries from the remote control, make sure children do not swallow them. Keep the batteries out of the reach of infants and children.

If a child has swallowed a battery, seek medical attention immediately.



Always use two or more people to lift or move the unit.

If the unit is dropped, it could be damaged or otherwise cause injury.



Wipe off any moisture, dirt, or dust on the power plug pins with a clean dry cloth.

Failure to do so may result in fire or electric shock.



It is advisable to clean the interior of the unit at least once a year. Contact the store of purchase or service center for information.

Continuing to use the unit without cleaning off the dust build-up inside it may result in fire or electric shock.



Always turn off the unit and unplug the power cord when cleaning the unit Use a soft dry cloth to cleanthe unit.

Never clean with industrial strength polish, wax benzene, paint thinner, airfreshener, lubricant, detergent, or other such chemicals. Also, do not clean with a damp cloth.



Safety Precautions

What is LCD TV?

What is LCD TV?

LCD (Liquid Crystal Display) is a next generation flat-panel display module. Liquid crystal material is contained between sheets of glass and electricity causes the liquid crystal material to reflect or block the light emitted from a light source inside the display chassis.

By incorporating this LCD display module, LCD TVs enable you to enjoy outstanding picture quality without the worries of space limitation and harmful radiation you may have experienced with conventional CRT TVs.



Features

- Picture-in-Picture : Enables you to simultaneously display two different image sources.
- PC Compatible Monitor : Enables you to connect PC (D-Sub) input for displaying high-resolution SXGA (1280x1024, 60Hz) PC images.
- HDTV-Ready Display: Enables you to view high-definition digital pictures using a DVD player or HDTV set-top receiver.
- Various Picture/Sound Controls: Enables you to set the picture and sound settings for a number of different types of programs and viewing and listening conditions.
- Auto Power On/Off Timer: Enables you to set the TV to automatically turn ON or OFF at a preset time.
- ATM : Enables you to set the TV to search for all available standard broadcast and cable TV channels and store them automatically.

User Guidance Information

Names of each part

Front View



- **♦** VOLUME Button: VOLUME -, + Button
- PROG/CH: PROGRAM/Channel-, + Button
- MENU Button: OSD MENU Display Button

4 Source select Button : TV, SCART 1, SCART 2, Composite, S-Video,

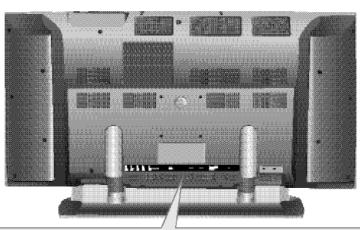
Component 1 (DVD), Component 2 (DTV),

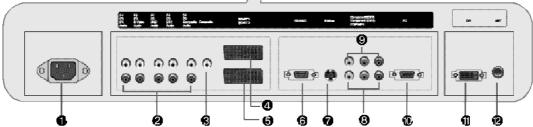
- Digital RGB, PC, Select Button
- Standby Button
- (8) Main Power Button: Please turn off the main power switch, if the LCD TV will not be used for a long period of time

User Guidance Information

Controls and Functions

Back View





- ♠ ACInput (AC 100-240V~, 50/60Hz, 2A)
- 2 Audio Input (PC, S-Video, DVD, DTV, Composite)
- AV Input (Composite)
- 4 SCART 1 (Full SCART)
- 6 SCART 2 (Half SCART)
- **6** RS-232C

- 7 S-Video Input
- 8 Component 1 (DVD) Input 480i~576i
- 9 Component 2 (DTV) Input 480p~1080i
- RGB PC Input [VGA~SXGA (60Hz)]
- 1 Digital RGB (DVI-D)
- Antenna (RF) Input

Accessories

■ The configuration of the components may look different from the following illustration.













Antenna Cable

SCART Cable

Power Cord

User's Guide

Remote

note Battery (2) (AAA, 1.5V)

Mounting on a Wall



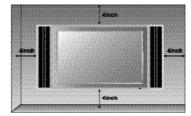
▶ Your LCD TV can be mounted on a wall as shown in the figure above.

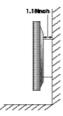
Installation Precautions

Wall Mounting

- Please secure enough space for safe use. (Please refer to A and B.)
- Installation of the LCD TV in an improperly ventilated location can cause a fire or damage to the LCD TV due to increased temperature.

A (Mounting on a wall)





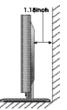
* Contact your dealer to purchase the "Adjustable-angle wall mount" required for wall-mounted installation.

Using the Stand

Do not install on an unstable location with support area smaller than the LCD TV.

B (Using the Stand)





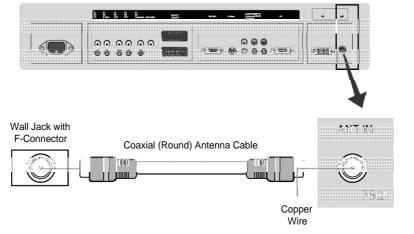
User Guidance Information

Installing an Antenna

For an Apartment or Condo Complex

Using an Indoor Antenna

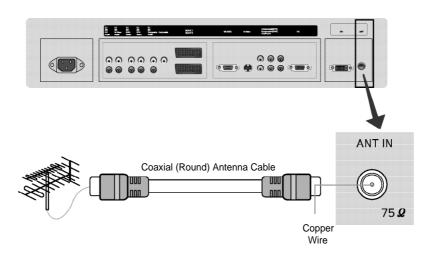
Locate a wall jack with an F-connector, and then connect the coaxial antenna cable to the wall jack.



For a House

Using an Outdoor Antenna

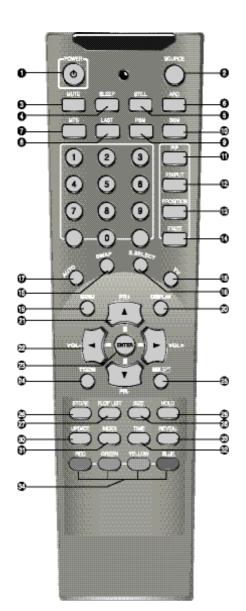
To install or use an outdoor antenna, if possible, consult a qualified technician for help.



Remote Controller

Functions of remote control buttons

The remote control is using Infra-Red (IR). Point it towards the front of the LCD TV. The remote control may not work correctly if it is operated out of range or out of angle.



- 1. POWER: TURNS THE TV ON AND OFF(page.20)
- 2. SOURCE: USE TO SELECT AN INPUT SOURCE (page.22)
- 3. MUTE: PRESS TO TEMPORARILY CUT OFF THE SOUND (page.21)
- 4. SLEEP: PRESS TO SELECT A TIME FOR THE TV TO TURN OFF AUTOMATICALLY (page.39)
- 5. STILL: PRESS TO STOP THE ACTION DURING A PARTICULAR SCENE (page.33)
- 6. ARC (Aspect Ratio Control): PRESS TO CHANGE THE SCREEN SIZE (page.29)
- 7. MTS (Multi-Television Sound): PRESS TO SELECT MONO OR STEREO MODE (page.36)
- 8. LAST: TUNES TO THE PREVIOUS PROGRAM (page.21)
- 9. PSM: PICTURE STATUS MEMORY KEY (page.25)
 - (CUSTOM, DYNAMIC, STANDARD, MOVIE, MILD)
- SSM: SOUND STATUS MEMORY KEY (page.26) (CUSTOM, STANDARD, MUSIC, MOVIE, SPEECH)

◆PIP CONTROL KEY (page 34, 35)

- 11. PIP: PIP ON/OFF
- 12. P.INPUT: PIP INPUT SELECT KEY
- 13. P.POSITION: PIP POSITION CONTROL KEY
- 14. P.SIZE: PIP AND PBP MODE CHANGE
- 15. SWAP: PIP SOURCE SWAP
- 16. S.SELECT: SOUND SWAP KEY

17. AUTO (AUTO N PROGRESS): PRESS TO CONTROL THE MONITOR SCREEN AUTOMATICALLY

- 18. TV: TV INPUT SOURCE SELECT KEY
- 19. MENU: DISPLAYS THE MAIN ON-SCREEN MENU
- 20. DISPLAY: PRESS TO DISPLAY THE CURRENT PROGRAM AND AUDIO/ VIDEO SETTINGS (page.21)
- 21. ▲, ▼ (PR+, PR-): PROGRAM, MENU CONTROL OR PAGE UP AND DOWN KEY, STAND BY ON
- 22. ◀,► (VOL-, VOL+): PRESS TO INCREASE OR DECREASE THE VOLUME OR MENU CONTROL KEY
- 23. ENTER: SAVE THE VALUE

◆TELETEXT CONTROL KEY (page 40)

- 24. TTXON: TEXT ON KEY
- 25. MIX : MIX WITH TV SCREEN
- 26. STORE : STORE THE USER DEFINED FAVORITE PAGE
- 27. FLOF LIST: EXCHANGE FLOF/LIST MODE
- 28. SIZE: TELE TEXT SCREEN SIZE KEY
- 29. HOLD: HOLD FUNCTION DURING TELETEXT DISPLAY
- 30. UPDATE: DISPLAY CANCEL OR TEXT UPDATE KEY
- 31. INDEX: TEXT INDEX KEY
- 32. TIME: SUBPAGE DISPLAY MODE KEY
- 33. REVEAL: SELECT HIDDEN CONTENT DURING TELETEXT DISPLAY
- 34. RED, GREEN, YELLOW, BLUE: DIRECT ACCESS TELETEXT

LINKED PAGE KEY

User Guidance Information

Precautions

Avoiding Remote Control Problems

- 1. Check the polarity (+,-) of the batteries in the remote controller.
- 2. Check that the batteries have power.
- 3. Check that the LCD TV is powered and that it is properly plugged in.
- 4. Check if any three-wavelength lamp, special fluorescent or neon sign is turned on near the LCD TV.

Instering Batteries in the Remote Controller

- 1. Open the cover out completely.
- 2. Insert the two supplied batteries (AAA, 1.5V). Ensure that the polarities (+ and -) of the batteries are aligned correctly.
- 3. Replay the cover.



A CAUTION: Risk of explosion if battery is replaced by an incorrect type.

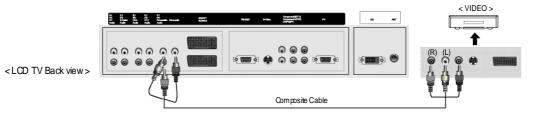
Dispose of used batteries according to the national code (Recycling program).

How to use remote controller

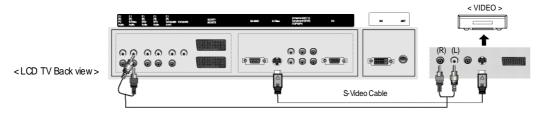
- \cdot The remote control should be operated within 23feet(7m) and 30 $^{\circ}$ to the left and the right of the IR receiver on the front of the LCD TV.
- · Used batteries should be disposed properly.

VCR Connections

- Connecting to the composite terminal
- * Connection terminals of other appliances differ by manufacturer and model.



- · Connect the LCD TV's Composite In terminal to the VCR's Composite Out terminal using the Composite cable. (Make sure the color of the terminals and the color of the cable are the same)
- Connecting to the S-Video terminal



- * Use the S-Video cable for higher picture quality.
- Connecting to the SCART terminal



· Connect the SCART terminal of the LCD TV and the VCR with the SCART cable.

Playing the VCR

- 1. Turn on the LCD TV and press
- Ö

on the remote controller.

- 2. Use

to move to "composite".

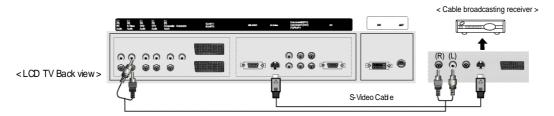
- · If S-Video has been connected, select S-Video.
- · If SCART terminal has been connected, select SCART1 or SCART2.
- 3. Turn on the VCR, insert the tape and press play button.

Cable TV Connections

- Connecting to the composite terminal
- * In order to watch Cable TV, Subscribe to your local Cable TV company and install a separate converter (Set-Top-Box)
- * Connection terminals of other appliances differ by manufacturer and model.



- · Connect the LCD TV's Composite In terminal to the cable broadcasting receiver Composite Out terminal using the Composite cable. (Make sure the color of the terminals and the color of cable are the same)
- Connecting to S-Video terminal



- W Use the S-Video cable for higher picture quality.
- Connecting to the SCART terminal



 $\cdot \ \text{Connect the SCART terminal of the LCDTV} \ \text{and the cable broadcasting receiver} \ \text{with the SCART cable}$

Viewing Cable TV





on the remote controller.

2. Use



to move to "composite".

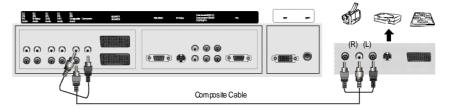
- · If S-Video has been connected, select S-Video.
- · If SCART terminal has been connected, select SCART1 or SCART2.
- 3. Turn on the cable broadcasting receive and select the channel you wish to view.

Camcorder/Game Console Connections

- Connecting to the composite terminal
- * Connection terminals of other appliances differ by manufacturer and model.

< Camcorder/ Game machine >

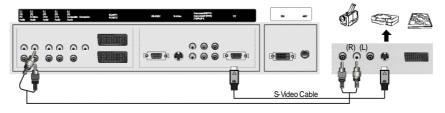




- · Connect the LCD TV's Composite In terminal to the camcorder/game console's Composite Out terminal with the Composite cable. (Make sure the color of the terminals and the color of cable are the same)
- Connecting to S-Video terminal

< Camcorder/ Game machine >





* S-Video cable can be used if there is an S-Video terminal.

Using Camcorder/Game Console

1. Turn on the LCD TV and press



on the remote controller.

2. Use



to move to "composite".

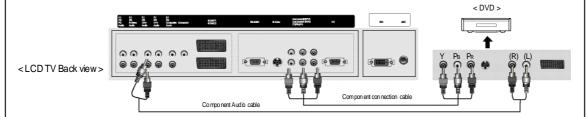
- · If S-Video has been connected, select S-Video.
- 3. Turn on the Camcorder or video game and Set to Video mode.

(Please refer to the User's manual of Camcorder/ Video game for more information)

4. Insert tape into Camcorder and press play button or insert disc into the Video game console.

DVD Connections

- Connecting to the component terminal
- * Connection terminals of other appliances differ by manufacturer and model.



- 1. Connect LCD TV's Y, PB, PR terminal in component 1 to DVD's Video Out terminal using the external cable.
- 2. Connect LCD TV's Audio terminals (left & right) in component 1 to DVD's Audio Out terminal using the Audio cable.
- Connecting to the S-Video terminal



- * S-Video cable can be used if there is an S-Video terminal.
- Connecting to the SCART



· Connect the SCART terminal of the LCD TV and the DVD with the SCART cable.

Playing the DVD

1. Turn on the LCD TV and press



on the remote controller.

2. Use



to move to "component1".

- · If S-Video has been connected, select S-Video
- · If SCART terminal has been connected, select SCART1 or SCART2.
- 3. Turn on the DVD, insert the DVD and press Play button.

DTV Connections

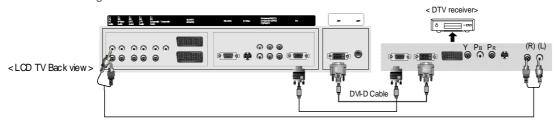
- Connecting to the component terminal
- * Connection terminals of other appliances differ by manufacturer and model.



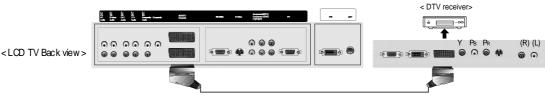
1. Connect LCD TV's Y, PB, PR terminal in component 2 to DTV receiver's Video Out terminal using the external cable

< DTV receiver>

- Connect LCD TV's Sound terminals (left & right) in component 2 to DTV receiver's Audio Out terminal using the Audio cable
- Connecting to the PC terminal



- · Some of DTV receiver(Set-Top-Box) have an PC Connector (D-Sub 15pin) instead of Component output .
- · Connect Audio Cable from the Audio output terminal of receiver to the PC Audio input terminal of the LCD TV.
- * Use the DVI-D with HDCP connection for higher picture quality if there is DVI-D terminal.
- Connecting to the SCART terminal



· Connect the SCART terminal of the LCD TV and the DTV receiver with the SCART cable.

Viewing DTV

1. Turn on the LCD TV and press



on the remote controller.

2. Use

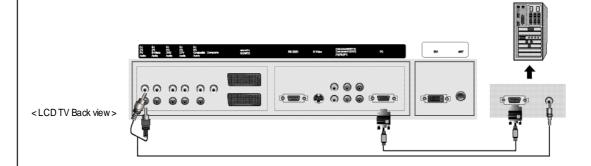


to move to "component2".

- · If D-Sub 15 Pin terminal has been connected, select PC.
- · If DVI-D has been connected, select DVI.
- · If SCART terminal has been connected, select SCART1 or SCART2.
- 3. Tum on the DTV receiver and select the channel that you want.

PC Connections

* Connection terminals of other appliances differ by manufacturer and model.



- · Connect LCD TV's RGB terminal to PC's RGB terminal using the D-Sub cable.
- · Connect LCD TV's PC Audio terminal to PC's Audio terminal using the Audio cable. (Only possible for PC's with Audio terminal)
- \cdot If there is a DVI-D terminal in your PC, use the DVI-D cable connection.

How to Use as PC





on the remote controller.

2. Use



to move to "PC".

- · If DVI-D has been connected, select "DVI"
- 3. Set the PC video output mode to VGA (640×480) / SVGA (800×600) / XGA (1024×768) , SXGA $(1280 \times 1024, 60$ Hz). In the mode higher than SXGA $(1280 \times 1024, 75$ Hz) "Out of Range" message appears. Be sure to change your PC video format to less than SXGA mode.

Powering the LCD TV

- Power on/ off
 - · To turn the LCD TV on : Press the "Main Power" button of LCD TV and then press the "Standby" button.
 - To turn the LCD TV off:
 Press "Standby" button on the LCD TV and then press the "Main Power" button.
 Turning the main power switch off will save energy. It is the same as unplugging the power cord.
 If ON Time setting is set, the main power should be ON.
 - To turn on/off by remote controller: Press the Power button of remote controller (If the LCD TV is not turned on, check that the "Main Power" button on the LCD TV main body is turned on. The main power indicator will light up red if turned on).

ACAUTION - After turning off the main Power, please wait at least more than 3 seconds to turn the main power back on.

Initial Settings

- \cdot When the brand new television set it turned on for the first time, following settings can be set using the plug and play function of the TV.
- · Press the "Main Power" button of LCD TV and then press the "Standby" button. You will see the Country mode selection menu.

Use



to move to the desired "Country".

Press



to select.

Automatically "ATM" beginning.

After "ATM" ends, select the desired Language.



Use



to move to the desired "Language".

Press



to select.

Press



to go back to the previous menu.



Watching TV

Program Selection



increases the program.



decreases the program.

To go back to the previous program

Press



to go back to the program you were previously viewing.

Volume Control



in creases the volume.



decreases the volume.



To turn off only sound

Use the mute function to turn off the LCD TV sound for a while, when a phone or a bell rings.

Press



button again to hear the sound again.



INFO - To check the current state

Press



button on the remote control.

Display shows user's setting and selections.



Press



button or wait 10 seconds for the display to disappear.

Selecting Input Source

You can between the TV signal and the input signal of other appliances connected to the TV. Use this function to switch to the input source you wish to view.

Press



button on the remote control.

Use



to move to the desired item.

Press



to select.



- ** Aside from the watching TV, you can connect SCART1, SCART 2, Composite, S-Video, Component 1, Component 2, Digital RGB and PC to the TV set and enjoy these functions.
- ** All input sources will be automatically detected and displayed on screen, but you may select an activated source when the input cable is connected only.

Using the Menu

Press



. The menu screen will appear.

Use



(left, right arrows) to move the cursor to the desired function.



Press



to get into the sub menu.

Press



to select.

Press



to go back to the previous menu.





Basic Use

To Set Location



Use



to move to



Press



to move to "Country".

Press



to select.

Use



to select the desired country.

Press



to go back to the previous menu.



· TV System Standard

PAL(Phase Alternative Line)

SECAM(Séquential Couleur Amémoire)

L/SECAM: France

D.K/SECAM: Russia, Poland, Czechoslovakia, Hungary

I/PAL: United Kingdom, Hongkong

B.G/PAL: Germany, Netherland, Switzerland, Italy, Austria, Yugoslavia

B/PAL: Australia, New Zealand, Singapore, Norway, India, Thailand, Indonesia, Malaysia

B/SECAM: Egypt, Iran, Iraq D/PAL : China, north Korea

B.H/PAL : Belgium

Basic Use



Use the Auto Search function to preset all programs that are being broadcast

Press



Use



to move to



Press



to move to "ATM".

to select.



Press Use



to move to "Start".



Press



to select.

Press "Start" to start the automatic program search/set function All broad casting programs will be set.

Press



to go back to the previous menu.

To set or erase a Program

Press



Use



to move to



Press



to move to "Add/ Erase"



to select.



Use

Press



to move to "Add" or "Erase".

Press



to select.



Press



to go back to the previous menu.

Changing Picture Settings

Press



button on the remote control.

Press the mode buttons on the shown on the screen repeatedly to adjust the settings.

Custom — Dynamic — Standard — Movie — Mild

- · Custom : Select to set user's preferences.
- · Dynamic : Select when using the LCD TV in a brightly lit environment.
- · Standard : It is the best screen setting (factory setting).
- · Movie : Select when watching a movie.
- · Mild : Select when using the LCD TV in a dimly lit environment.
- Custom Picture Adjustment

Press



.





to move to



Press



to move to "Custom Adjust".

Press



to select.

Use



to move to the desired category.

Use



to adjust the setting.

Use



select between Brightness/ Contrast/ Colour/Tint/ Sharpness.

Press



to go back to the previous menu.





Custom Mode

- · Brightness: It adjusts the brightness of the image.
- \cdot Contrast : It adjusts the contrast of image.
- · Colour : It adjusts the intensity of the colour.
- · Tint : It adjusts the natural tint of the image.
- · Sharpness: It adjusts the clarity of the image.

Press button on the remote control. Press the mode buttons on the shown on the screen repeatedly to adjust the settings. Custom Standard Music Movie Custom: Select when listening to the sound to user's preference. Standard: It is the flat sound setting with no equalizer effect at all. Music: It is preset for music listening. Movie: It is preset sound for watching a movie. Speech: It is preset for hearing vocal audio clearly. Custom Sound Adjustment



Press to move to "Custom Adjust".



Speech

Use to move to the desired category.

Use to adjust the setting.

Press to go back to the previous menu.

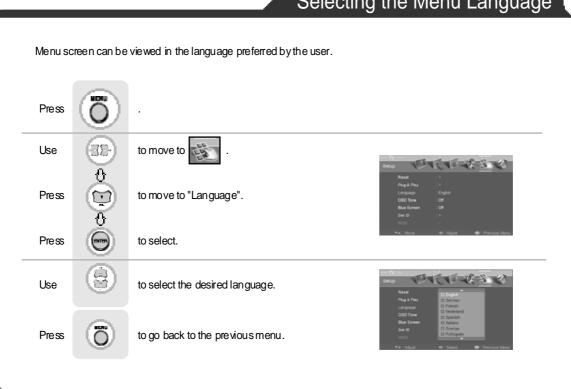


Custom Mode

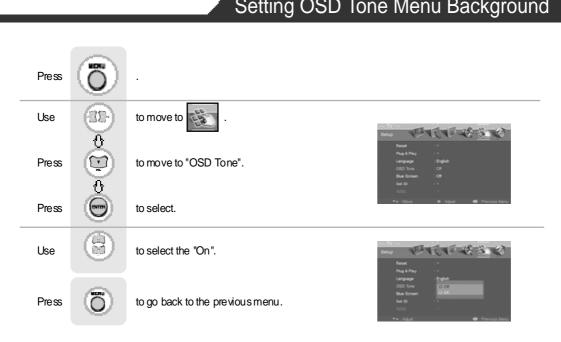
- · Volume : It adjusts the sound volume.
- · Balance : It adjusts the volume of speakers on the left and the right.
- · Equalizer: It adjusts the volume by frequency bands and the user can select the desired sound quality.

Basic Use

Selecting the Menu Language



Setting OSD Tone Menu Background





Setting Blue Background

The LCD TV can be set to display blue screen when no TV signal or signal from other connected appliances are being received. If there is an incoming signal, the blue screen will be replaced by the normal picture screen.

Press



...

Use



to move to



Press



to move to "Blue Screen".

Press



to select.



Use



to select the "On".

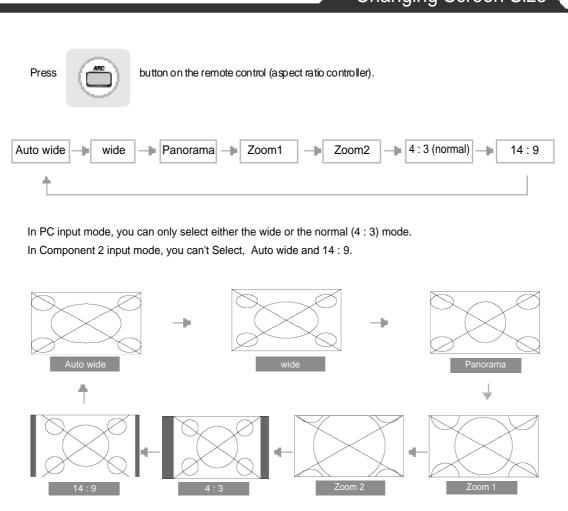
Press



to go back to the previous menu.



Changing Screen Size



Screen Size

- · Auto wide It automatically displays for the screen format of input signal.
- · wide It makes 15: 9 format for input signal.
- \cdot Panorama It makes 4 : 3 format fit into 15 : 9 format with minimal loss in content.
- · Zoom 1 It enlarges the natural screen factor by approx. 5 %
- \cdot Zoom 2 It enlarges the natural screen factor by approx. 10 %
- · 4:3 It is the standard format of broadcasting.
- · 14:9 It makes 14:9 format for input signal.

Changing the Screen Size for WSS Signal Input

When WSS signal is incoming from a connected external appliance, screen size can be changed to panorama or 4:3.

Press



Use



to move to



Press



to move to "WSS".

Press



to select.

Use



to select the Panorama or 4:3.

巴尼亚化造物

Press



to go back to the previous menu.

Changing the Program

Color system and sound system can be setup for each program.

Press



Use



to move to



Press



to move to "Manual Store".

Press

Use



to select.



to move to the desired category.





to select.

Use



to adjust the setting.

Press



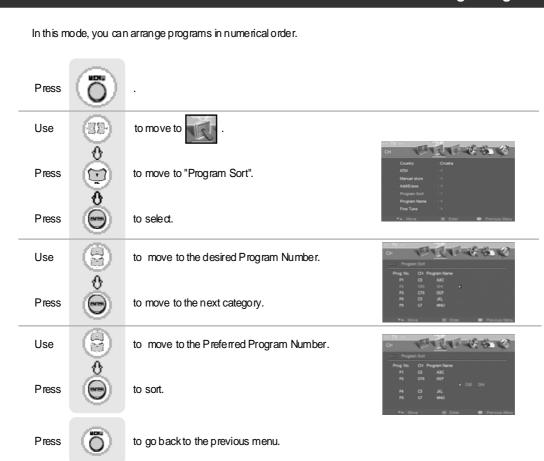
to go back to the previous menu.

四国军政党的

四国军场被约

Select "Yes" in Manual Store to save the Program settings.

Sorting Program





Editing Program Name

Favorite programs can be stored to make it easier to find.

Press



.

Use



to move to



Press



to move to "Program Name".

to select.

Press Use



to move to the desired Program Number.

Program Name

四项证明在公

Press



to move to program name.

Use



to register program name.

Press



to go back to the previous menu.



Adjusting Unclear Screen

Use screen fine-tune controls to adjust the screen when picture quality is unclear or lines appear.

Press



Use



to move to



Press



to move to "Fine Tune".



to select.



Press Use



to tune.



Press



to go back to the previous menu.

To return to initial setting, use



to select "Reset" and press



To view the still picture





button on the remote control.

Picture will freeze, but sound will continue to be heard.

Press



again to cancel.

Viewing Picture in Picture

Press



١.

Use



to move to



Press



to move to "Mode".

Press



to select.



to select the "On".

Press

Use



to go back to the previous menu.

Or press



button on the remote control.

Sound from only one of the screens may be heard.





TV/External Input

Press



to move to "Source"

Press



to select.



to select the desired input source.

Press

Use



to go back to the previous menu.

Or press



button on the remote control.

The sub-screen can be changed to display picture from the desired input source.

Changing the Screen Size

Press



to move to "Size".

Press



to select.

Use



to select the desired size.

Press



to go back to the previous menu.

Or press



button on the remote control.









Viewing Picture in Picture

Selecting Position

Press



to move to "Position".

Press



to select.

Use



to select the desired position.

Press



to go back to the previous menu.

Orpress



button on the remote control.

Sub-screen position can be selected only from the







Main Screen/Sub Screen Swap

Press



to move to "PIP Swap".

Press



to select.

Use



to select the "YES".

Press



.....

Or press



button on the remote control.

to go back to the previous menu.

The main screen and the sub screen will swap.







Selecting Sub Screen Sound

Press



to move to "Sound Select".

Press



to select.

Use



to select the "Main" or "Sub".

Press



to go back to the previous menu.

Or press



button on the remote control.





This feature maintains an equal Volume level even if you change programs.

Press



Use





Press



to move to "Auto Volume Level".

to select.

Press

Use



to select the "On".

Press



to go back to the previous menu.



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Stereo Settings

Press



Use



to move to



Press



to move to "MTS".

Press



to select.

Use



to select the desired category.

Press



to go back to the previous menu.

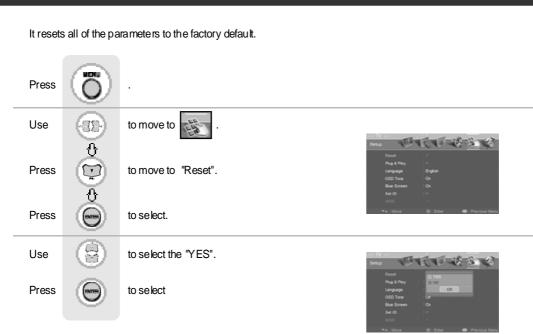
Or press



button on the remote control (Multi Television Sound).

Application

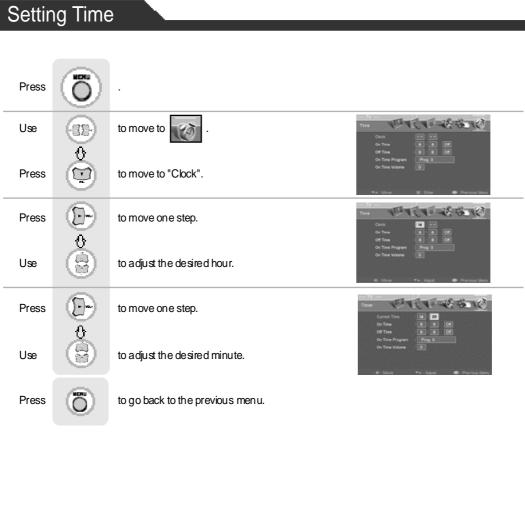
Resetting LCD TV Setting



 $\ensuremath{\,\%\,}$ The LCD TV will turn off. The parameters will be set to factory default.

Application





Application

Automatic Power On/Off

Clock time must be set



Use

to move to

Press

to move to desired category.

Press



to select.



		Setting Time for Power On	Setting Time for Power Off
Setting Hour			
Use (13)	to select,	On Time 10 0 OF	Off Time 22 0 GP
	to set		
Setting Minute			
Use (13)	to se lect,	On Time 19 19 04	Of Time III III Of
	to set		
Set/Cancel			
Use (13)	to se lect,	On Time 10 30 On	Off Time 20 20 Co
	to select the "On" or "Off"		
Channel Select			
Use	to set program.	On Time Program Prog 7	
Volume Control			
Use	to set volume.	On Time Volume : 11	

To have the TV turn off after you fall a sleep

press



button on the remote control.

It automatically turns off the TV after a designated period of time

Depending on the number of times the "Sleep" button is pressed, the TV will be turned off after 30, 60, 90, 120, 150 or 180 minutes.

Teletext

Basic Function

■ TEXT On/Off

- 1. Press "TTXON" once , then displays the Teletext pages.
- 2. If you press "TTXON" once more, Text mode is off.

■TOP TEXT

The user guide displays four fields-red, green, yellow and blue at the bottom of the screen. The yellow field denotes the next group and the blue field indicates the next block.

- Group/Block/Page selection
- 1. With the blue button you can progress block to block.
- 2. Use the Yellow button to proceed to the next group with automatic overflow to the next block.
- 3. With the Green button you can proceed to the next existing page with automatic overflow to the next group.
- 4. The RED button permits to return to previous selection.

■FLOF TEXT

The teletext pages are colour coded along the bottom of the screen and are selected by pressing the corresponding coloured button.

- Page selection
- 1. Press the Index button to select the index page.
- 2. You can select the pages, which are colour coded along the bottom line with the same coloured buttons.

Special Teletext Function key

- MIX : In the mix mode display, the underlying video and the teletext page display are both simultaneously visible on the screen. This command turns the display to mix mode and is enabled only in the text mode
- STORE : This command stores the user defined favorite pages. This command is enabled only if the list mode is active.
- FLOF LIST: This command toggles between list mode and current. Text mode(FLOF, TOP or normal)
- SIZE : Toggle the display page size between double-size top, double-size bottom and normal.
- HOLD : The update of the current display page is halted so that the content will not be changed.
- ■UPDATE : Press this button to view the updated teletext page or display cancel.
- ■INDEX : Return to the index page.
- TIME: In TV mode this command makes clock display at right-top corner.

 In TEXT mode if this command is given the sub page mode is activated.
- REVEAL: Press this button to display the concealed information. Such as solutions of riddles or puzzles.
 RED, GREEN, YELLOW, BLUE-In the TOP/FLOF automatic navigation mode, these keys select and display the linked page.

Using TV as a Monitor

Press



button on the remote control.

Use



to move to "PC".

Press



to select.



PC Mode must be on in order for you to use the TV as a monitor. If these is a DVI-D terminal in your PC, use the DVI-D cable connection.

Adjusting PC Screen



Press





Press

Use



to move to "PC".

Press



to select.



Use



to move to desired category.

Use



to adjust the setting.

Press



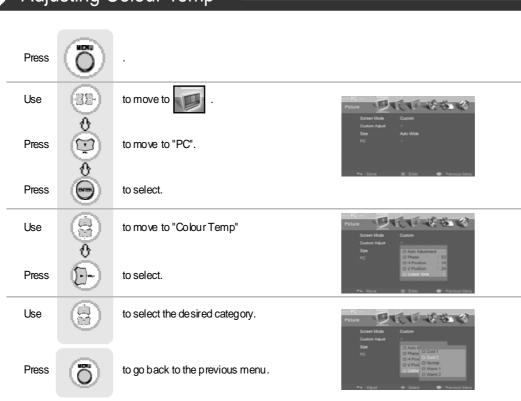
to go back to the previous menu.



In DVI Input mode, you can only select the "Color Tone".

- · Auto Adjustment
- \cdot Phase : It adjusts the phase shift of the image. Use when image appears blurry or out of focus.
- · H-Position : It moves the image on the screen horizontally.
- \cdot V-Position : It moves the image on the screen vertically.

Adjusting Colour Temp



- · Cool 1: This results in a blueish tone.
- · Cool 2: This results in a more blueish tone.
- · Normal : This is standard colour setting.
- · Warm1 : This results in a reddish tone.
- · Warm2 : This results in a more reddish tone.

External adjustment

External adjustment

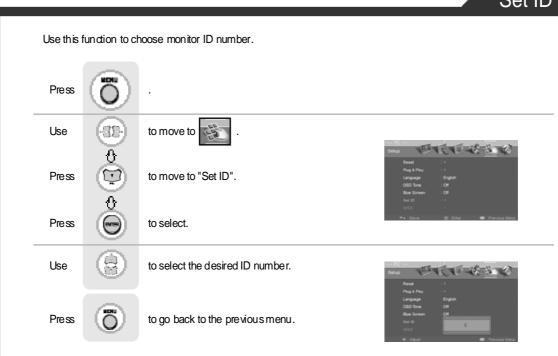
- · Use the RS-232C jack to control monitor's functions externally by external equipment.
- How connect a external equipment

The adjustment range of Set ID is $0 \sim 254$.



 \triangle Caution : Regular customer does not allow using the external adjustment that is used for service purpose only.

Set ID

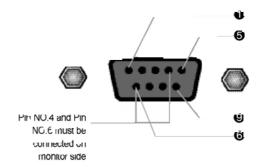


External adjustment

Special features

Type of connector: D-Sub 9-pin male

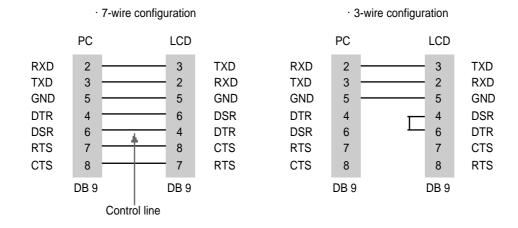
No.	Pin name
1	No connection
2	RXD (Receive data)
3	TXD (Transmit data)
4	DTR (DTE side ready)
5	GND
6	DSR (Dce side ready)
7	RTS (Ready to send)
8	CTS (Clear to send)
9	No Connection



· Use a crossed (reverse) cable.

Wire the cable so that each pair of data lines cross between the two devices. These data line pairs are RXD (Receive to send) and TXD (Transmit data), DTR (DTE side ready) and DSR (DCE side ready), and RTS (Ready to send) and CTS (Clear to send).

RS-232C configurations



External adjustment

RS-232C Communication Protocol

COMMUICATION PARAMETERS

BAUD RATE : 9600 bps
Data Length : 8bits
Parity : None
Stop bit : 1bit

Command List

Item	ASCII Code	Data(hex)	
1. Power	р	00h~01h	
2. Input Source	i	00h~07h	
3. Aspect Ratio	r	00h~08h	
4. Volume Mute	W	00h~01h	
5. Volume Control	V	00h~64h	
6. Screen Mode	S	00h~04h	
7. Brightness	b	00h~64h	
8. Contrast	k	00h~64h	
9. Colour	С	00h~64h	
10. Tint	t	00h~64h	

Item	ASCII Code	Data(hex)
11. Sharpness	h	00h~64h
12. Information	f	00h~01h
13. Pip On	0	00h~01h
14. Pip Source	u	00h~07h
15. Pip Location	n	00h~03h
16. Pip Sound set	е	00h~01h
17. Pip Mode	d	00h~02h
18. Remote Control O	n j	00h~01h
19. Prog -,+	а	00h~01h
20. Abnormal State	q	00h~01h
21. So und Mode	у	00h~04h

Tramsmission / Receiving Protocol List

* Transmission

{Command}{ }{SET ID}{ }{Data}{Cr}

 $\begin{tabular}{ll} & \begin{tabular}{ll} & \begin{tabular}{ll}$

Menu of LCD TV

{Data} Data Command

Transmit 'FF' data to data

read mode

{Cr} Carriage Return

ASCII Code 0x0d

* Ok Acknowledge

{SET ID}{:}{OK}{x}{Data}{x}

The LCD TV set transmits ASCII based on this format When receiving normal data. At this time, If the data is data read mode, it indicates present status data if the data is data write mode, it returns the data of PC.

* In case set ID is 0, Ack data doesn't feed back, and you can adjust all LCD set.

F

RS-232C Communication Protocol

Commands

1. Power : p

- ▶ To Control Power On/Off of the LCD TV
- * Transmission

{p}{ }{SET ID}{ }{Data}{Cr}

Data 0 : Off

Data 1: On

* Ack

{SET ID}{:}{OK}{x}{Data}{x}

Data 0 : Off

Data 1: On

- ▶ Read Power On Source Status
- * Transmission

{p}{ }{SET ID}{ }{FF}{Cr}

* Ack

{SET ID}{:}{OK}{x}{Data}{x}

Data 0: Power Off

Data 1: Power On TV

Data 2: Power On Scart1

Data 3: Power On Scart2

Data 4: Power On Composite

Data 5: Power On S-Video

Data 6 : Power On Component1

Data 7 : Power On Component2

Data 8: Power On PC(RGB)

If Other Functions Transmit 0xFF data based on this format, Ack data feeds back present status about each function.

2. Input Source : i

- ▶ To Input Source Select
- * Transmission

{i}{ }{SET ID}{ }{Data}{Cr}

Data 0 : TV

Data 1 : Scart1

Data 2 : Scart2

Data 3 : Composite

Data 4 : S-Video

Data 5 : Component1

Data 6: Component2

Data 7 : PC(RGB)

* Ack

{SET ID}{:}{OK}{x}{Data}{x}

Data 0: TV

Data 1 : Scart1

Data 2 : Scart2

Data 3: Composite

Data 4 : S-Video

Data 5 : Component1

Data 6 : Component2

Data 7: PC(RGB)

3. Aspect Ratio: r

► To adjust screen format

* Transmission

{r}{ }{SET ID}{ }{Data}{Cr}

Data 0 : Auto Wide

Data 1 : Wide

Data 2 : Panorama

Data 3: Zoom1

Data 4 : Zoom2

Data 5 : 4:3

Data 6 : 14:9

Data 7: 4:3(In PC Mode)

Data 8: Wide(In PC Mode)

* Ack

{SET ID}{:}{OK}{x}{Data}{x}

Data 0 : Auto Wide

Data 1 : Wide

Data 2 : Panorama

Data 3 : Zoom1

Data 4 : Zoom2

Data 5 : 4:3

Data 6 : 14:9

Data 7: 4:3(In PC Mode)
Data 8: Wide(In PC Mode)

RS-232C Communication Protocol

4. Volume Mute : w

- ▶ To Select volume mute on/off
- * Transmission

{w}{ }{SET ID}{ }{Data}{Cr}

Data 0 : On

Data 1: Off

* Ack

{SET ID}{:}{OK}{x}{Data}{x}

Data 0: On

Data 1: Off

5. Volume Control: v

- ▶ To adjust volume
- * Transmission

{v}{ }{SET ID}{ }{Data}{Cr}

Data: Min: 00h~Max: 64h

* Ack

{SET ID}{:}{OK}{x}{Data}{x}

Data: Min: 00h~Max: 64h

6. Screen Mode : s

- ► To Select Screen Mode
- * Transmission

{s}{ }{SET ID}{ }{Data}{Cr}

Data 0 : Custom

Data 1 : Dynamic (In PC Mode : High)

Data 2: Standard (In PC Mode: Middle)

Data 3 : Movie (In PC Mode : Low)

Data 4: Mild

* Ack

{SET ID}{:}{OK}{x}{Data}{x}

Data 0 : Custom

Data 1 : Dynamic (In PC Mode : High)

Data 2 : Standard (In PC Mode : Middle)

Data 3 : Movie (In PC Mode : Low)

Data 4 : Mild

7. Brightness: b

- ► To adjust Brightness
- * Transmission

{b}{ }{SET ID}{ }{Data}{Cr}

Data: Min: 00h~Max: 64h

* Ack

{SET ID}{:}{OK}{x}{Data}{x}

Data: Min: 00h~Max: 64h

8. Contrast : k

- ▶ To adjust Contrast
- * Transmission

{k}{ }{SET ID}{ }{Data}{Cr}

Data: Min: 00h~Max: 64h

* Ack

{SET ID}{:}{OK}{x}{Data}{x}

Data: Min: 00h~Max: 64h

9. Colour : c

► To adjust Colour (Not available in PC Mode)

* Transmission

{c}{ }{SET ID}{ }{Data}{Cr}

Data: Min: 00h~Max: 64h

* Ack

{SET ID}{:}{OK}{x}{Data}{x}

Data: Min: 00h~Max: 64h

10. Tint : t

► To adjust Tint (Not available in PC Mode)

* Transmission

{t}{ }{SET ID}{ }{Data}{Cr}

Data: Min: 00h~Max: 64h

* Ack

{SET ID}{:}{OK}{x}{Data}{x}

Data: Min: 00h~Max: 64h

RS-232C Communication Protocol

Commands

11. Sharpness : h

- ▶ To adjust Sharpness
- * Transmission

{h}{ }{SET ID}{ }{Data}{Cr}

Data: Min: 00h~Max: 64h

* Ack

{SET ID}{:}{OK}{x}{Data}{x}

Data: Min: 00h~Max: 64h

12. Information: f

- ▶ Information on/off
- * Transmission

{f}{ }{SET ID}{ }{Data}{Cr}

Data 0 : On

Data 1: Off

* Ack

{SET ID}{:}{OK}{x}{Data}{x}

Data 0 : On

Data 1: Off

13. Pip On : o

- ▶ Pip on/off
- * Transmission

{o}{ }{SET ID}{ }{Data}{Cr}

Data 0 : On

Data 1 : Off

* Ack

{SET ID}{:}{OK}{x}{Data}{x}

Data 0 : On

Data 1: Off

14. Pip Source: u

► To Select Pip Source [Not available] (only adjustable when pip mode is activated.)

* Transmission

{u}{ }{SET ID}{ }{Data}{Cr}

Data 0: TV

Data 1 : Scart1

Data 2 : Scart2

Data 3 : Composite

Data 4 : S-Video

Data 5 : Component1

Data 6 : Component2

Data 7: PC(RGB)

* Ack

{SET ID}{:}{OK}{x}{Data}{x}

Data 0: TV

Data 1 : Scart1

Data 2 : Scart2

Data 3 : Composite

Data 4 : S-Video

Data 5 : Component1

Data 6 : Component2

Data 7 : PC(RGB)

15. Pip Location : n

► To Select Pip Position

(only adjustable when pip mode is activated.)

* Transmission

{n}{ }{SET ID}{ }{Data}{Cr}

Data 0 : Right Bottom

Data 1 : Right Top

Data 2 : Left Top

Data 3 : Left Bottom

* Ack

{SET ID}{:}{OK}{x}{Data}{x}

Data 0: Right Bottom

Data 1 : Right Top

Data 2: Left Top

Data 3: Left Bottom

RS-232C Communication Protocol

16. Pip Sound Set : e

▶ To Select Pip Sound

(only adjustable when pip mode is activated.)

* Transmission

{e}{ }{SET ID}{ }{Data}{Cr}

Data 0 : Main Data 1 : Sub

* Ack

{SET ID}{:}{OK}{x}{Data}{x}

Data 0 : Main Data 1 : Sub

17. Pip Mode : d

▶ To Select Pip Mode

(only adjustable when pip mode is activated.)

* Transmission

{d}{ }{SET ID}{ }{Data}{Cr}

Data 0 : PIP Data 1 : PBP1 Data 2 : PBP2

* Ack

{SET ID}{:}{OK}{x}{Data}{x}

Data 0 : PIP Data 1 : PBP1 Data 2 : PBP2

18. Remote Control On : j

► To Select Remote Control on/off

* Transmission

{j}{ }{SET ID}{ }{Data}{Cr}

Data 0 : Pc Control

Data 1: Remote Conroller On

* Ack

{SET ID}{:}{OK}{x}{Data}{x}

Data 0 : Pc Control

Data 1 : Remote Conroller On

19. Prog -, + : a

► To Adjust Program Number

* Transmission

{a}{ }{SET ID}{ }{Data}{Cr}

Data 0 : Decrement Program Number Data 1 : Increment Program Number

* Ack

{SET ID}{:}{OK}{x}{Data}{x}

Data 0 : Decrement Program Number Data 1 : Increment Program Number

20. Abnormal Status : q

▶ You Can Read LCD TV Status

* Read Only Mode

* Transmission

{q}{ }{SET ID}{ }{FF}{Cr}

* Ack

{SET ID}{:}{OK}{x}{Data}{x}

Data 0 : OK Data 1 : Stanby Data 2 : AC Downr

21. Sound Mode : y

▶ To Select Sound Mode

* Transmission

{s}{ }{SET ID}{ }{Data}{Cr}

Data 0 : Custom
Data 1 : Standard
Data 2 : Music
Data 3 : Movie
Data 4 : Speech

* Ack

{SET ID}{:}{OK}{x}{Data}{x}

Data 0 : Custom
Data 1 : Standard
Data 2 : Music
Data 3 : Movie
Data 4 : Speech

Trouble shooting Tips

Do not use other functions that are mentioned on this user's manual. It will be main reason of a faulty and motion error.

In case a problem occurs with your LCD TV, please take the following steps first.

If you still have the problem, turn the power off and contact your dealer or an authorized service center.

Screen related Matters

Problem	Action
The screen does not appear.	Is the power plug pulled out? Insert the power plug. Tum the main power button on and press the power button of the remote controller.
The screen appears too slowly after the power is turned on.	This problem occurs for a brief time in the process of image elimination processing in order to hide temporary screen noise that occurs when the power is turned on. But if the screen does not come after 1 minute has passed, contact your dealer or an authorized service center.
Screen is too bright or too dark.	Perform brightness adjustment or Contrast adjustment. (Please refer to page 25)
Screen is too large or too small.	Adjust the screen size. (Please refer to page 29)
Stripes appear on the screen and it shakes.	Stop using wireless telephones, hair driers and electric drills.
Simultaneous Sα een does not appear.	Check that LCD TV and external equipment are connected. Check the inputs of simultaneous sα een by pressing sub-sα een selection.
The screen does not move.	Press the "STILL" button. (Please refer to page 33) Check if the Pause button is pressed on external equipment
Computer In put Screen is abnormal.	Perform manual fine adjustment (Please refer to page 41).
Automatic Turn On does not work.	Automatic Turn On function works only when turning the LCD TV off with the remote controller or Standby button.

Sound related Matters

Problem	Action
Screen appears, Voice is not heard	1. Press the "Mute"button. (page 21) 2. Increase the sound by pressing volume adjustment button. 3. Check if voice terminal of external input is connected properly. 4. Check if audio cables are connected properly. 5. If it is on PIP mode, convert audio of main screen and subscreen by pressing S.SELECT. 6. Select and check the other input. If the sound still does not work and the other channels are the same after you have done as the above, contact your dealer or an authorized service center.
Lots of noise (static) occurs.	When connecting a Set-Top-Box, check that it is on stereo broadcasting. If it is, the TV program may not be available or the reception may be bad. Check the audio source with another player. If that source is good, contact your dealer or an Authorized service center.

Trouble shooting Tips

Others

Problem	Action	
Remote controller does not work.	Check if main power is On. Check that the batteries of the remote controller were loaded properly.	
	Check to see if any obstacle exists between the LCD TV and the remote controller and remove it, if any.	
	If the batteries have no power, replace them with two new batteries.	
LCD TV makes strange noise.	It is the noise when the mechanism expands or contracts from to changes to the environment due to factors such as humidity, temperature, etc. It is not a failure.	
LCD TV indication lamp is On.	The red means the Stand-by power is ON. It will take a few seconds to turn off as the main power is off.	

This LCD TV is for household use and registered as suitable on electromagnetic waves. Therefore, you can use it in every location as well as residential areas.

Supporting display mode

Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)
	31.47	60
640 × 480	37.86	72
	37.50	75
720×400	31.47	70
	35.15	56
800×600	37.88	60
000 ^ 000	48.88	72
	46.88	75
	48.36	60
1024×768	56.48	70
	60.02	75
1280×1024	64.0	60

Considerations in Installation
 If any signal of unsupported resolution is input, the "Out of Range" message appears.

Supported Display Modes

Component Mode [Y, C_B(P_B), C_R(P_R)]

Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)	
720×480	15.73	60.00	SDTV, DVD 480i
720×576	15.63	50.00	SDTV, DVD 576i
720×480	31.47	59.94	SDTV,480p
1280×720	45.00	60.00	HDTV, 720p
1280×720	44.96	59.94	HDTV, 720p
1920×1080	33.75	60.00	HDTV, 1080i
1920×1080	33.72	59.94	HDTV, 1080i

Specifications

Aspect Ratio	15:9
Screen Size (H×V)	643.2mm×385.92mm
Resolution	1280×768(Wide XGA)
Pixel pitch	0.1675mm×RGB×0.5025mm
Displayable Colors	16.7M
Brightness	550cd/m² (Typical)
Contrast	600:1
Color Temperature	9500 _° K
Viewing Angle	85 _° / 85 _° / 85 _° / 85 _°
Input signal	PAL, SECAM, SD, HD VGA~SXGA
Tuner	PAL, SECAM
RGB Input	D-Sub (15pin)
AC Input	AC100-240V~, 50/60Hz, 2A
Power Consumption	150W
Dimensions/ Weight (H×V×W) (Kg)	TV Only - 933 ×479 × 104/ 15.3Kg with stand - 933 ×526 × 215/ 18.4Kg

The outside design and specification can be modified without any previous notice for improving the performance.

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