APPENDIX H : USER'S MANUAL



LCD TV OWNER'S MANUAL

LCD TV MODEL 37LB1DA

Please read this manual carefully before operating your set. Retain it for future reference. Record model number and serial number of the set. See the label attached on the back cover and quote this information to your dealer when you require service.

ENERGY STAR is a set of power-saving guidelines issued by the U.S. Environmental Protection Agency(EPA).



As an ENERGY STAR Partner LGE U. S. A.,Inc. has determined that this product meets the ENERGY

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www.lge.com / www.lg.ca

WARNING / CAUTION



WARNING / CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN

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

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.

WARNING/CAUTION

TO REDUCE THE RISK OF FIRE AND ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

WARNING / CAUTION

To prevent fire or shock hazards, do not expose this product to rain or moisture.

FCC NOTICE

Class B digital device

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 to 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.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

CAUTION

Do not attempt to modify this product in any way without written authorization from LG Electronics. Unauthorized modification could void the user's authority to operate this product

SAFETY INSTRUCTION

IMPORTANT SAFETY INSTRUCTIONS

Important safety instructions shall be provided with each apparatus. This information shall be given in a separate booklet or sheet, or be located before any operating instructions in an instruction for installation for use and supplied with the apparatus.

This information shall be given in a language acceptable to the country where the apparatus is intended to be used.

The important safety instructions shall be entitled "Important Safety Instructions". The following safety instructions shall be included where applicable, and, when used, shall be verbatim as follows. Additional safety information may be included by adding statements after the end of the following safety instruction list. At the manufacturer's option, a picture or drawing that illustrates the intent of a specific safety instruction may be placed immediately adjacent to that safety instruction :





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.





Unplug this apparatus during lightning storms or when unused for long periods of time.



Refer all servicing to qualified service person-П nel. Servicing is required when the apparatus has been damaged in any way, such as powersupply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has exposed to rain or moisture, does not operate normally, or has been dropped.



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CAUTION concerning the Power Cord : Most appliances recommend they be placed upon a dedicated circuit; that is, a single outlet circuit which powers only that appliance and has no additional outlets or branch circuits. Check the specification page of this owner's manual to be certain.

Do not overload wall outlets. Overloaded wall outlets, loose or damaged wall outlets, extension cords, frayed power cords, or damaged or cracked wire insulation are dangerous. Any of these conditions could result in electric shock or fire. Periodically examine the cord of your appliance, and if its appearance indicates damage or deterioration, unplug it, discontinue use of the appliance, and have the cord replaced with an exact replacement part by an authorized servicer. Protect the power cord from physical or mechanical abuse, such as being twisted, kinked, pinched, closed in a door, or walked upon. Pay particular attention to plugs, wall outlets, and the point where the cord exits the appliance.





Outdoor Use Marking : 12 WARNING - To Reduce The Risk Of Fire Or Electric Shock, Do Not Expose This Appliance To Rain Or Moisture



Wet Location Marking : Apparatus shall not 13 be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on or over apparatus.



ACCESSORIES

Ensure that the following accessories are included with your plasma display. If an accessory is missing, please contact the dealer where you purchased the product.





Batteries

Owner's Manual



D-sub 15 pin Cable



Twister Holder Arrange the wires with the twister holder.

75ohm Round Cable



Cable Management (Refer to p.15)

2-TV Bracket Bolts

POWER

Remote Control



Power Cord



2-TV Brackets, 2-Wall Brackets

INTRODUCTION

CONTROLS

This is a representation of the front panel of models 37LB1DA TVs. ■ Here shown may be somewhat different from your TV.

Front Panel Controls



CONNECTION OPTION

This is a back panel of 37LB1DA.

Back Connection Panel



AV OUT

Connect a second TV or monitor.

AV (Audio/Video) IN 1

Connect audio/video output from an external device to these jacks. S-VIDEO

Connect S-Video out from an S-VIDEO device.

G COMPONENT IN

Connect a component video/audio device to these jacks.

HDMI IN

Connect a HDMI signal to 1 (DVI) or 2. Or DVI(VIDEO) signal to the 1 (DVI) port with a DVI to HDMI cable.

5 DIGITAL AUDIO OUT

Connect digital audio from various types of equipment. Note: In standby mode, these ports do not work.

6 RS-232C IN (CONTROL & SERVICE) PORT Connect to the RS-232C port on a PC.

ANTENNA IN

Connect over-the air signals to this jack. CABLE IN Connect cable signals to this jack.

- 8 RGB/AUDIO IN Connect the monitor output from a PC to the appropriate input port.
- Remote Control Port Connect your wired remote control.
- Power Cord Socket
 For operation with AC power.
 Caution:
 Never attempt to operate the TV on DC power.

INSTALLATION

TO ATTACH THE TV TO A WALL

We recommend that you set up the TV close to a wall so it cannot fall over if pushed backwards. Additionally, we recommend that the TV be attached to a wall so it cannot be pulled in a forward direction, potentially causing injury or damaging the product.

Caution: Please make sure that children don't climb on or hang from the TV.



Insert the eye-bolts (or TV brackets and bolts) to tighten the product to the wall as shown in the picture.
*If your TV have bolts in the upper holes, loosen the bolts.

Insert the eye-bolts and tighten them securely in the upper holes.

Secure the wall brackets with the bolts (not provided as parts of the product, must purchase separately) on the wall. Match the height of the bracket that is mounted on the wall to the holes in the product. Ensure the eye-bolts or brackets are tightened securely.



Use a sturdy rope (not provided as parts of the product, must purchase separately) to tie the product. It is safer to tie the rope so it becomes horizontal between the wall and the product.

WIRE ARRANGEMENT

This function explains the features available on the 37LB1DA.



2

Connect the cables as necessary.

After connecting the cables neatly, arrange the cables to the Cable Holder. To connect an additional equipment, see the **External equipment Connections** section.



Install the CABLE MANAGEMENT as shown.





Bundle the cables using the supplied twister holder.



How to remove the CABLE MANAGEMENT

► Hold the **CABLE MANAGEMENT** with both hands and pull it backward.



NOTE

- Do not hold the CABLE MANAGEMENT when moving the product.
 - If the product is dropped, you may be injured or the product may be broken.

INSTALLATION

DESKTOP PEDESTAL INSTALLATION

For proper ventilation, allow a clearance of 4inches on each side from the wall.



A CAUTION

▶ Ensure adequate ventilation by following the clearance recommendations.

INSTALLATION

AUTO LINK

Press the **ENTER** button to change the main input to the active Antenna Cable external equipment. Use the \blacktriangle or \triangledown button to select the main AV 1 input source. 1 When every external equipment is connected: Antenna Cable AV1 AV2 Component1 Î I RGB-DTV (or RGB-PC) HDMI2 HDMI1/DVI Component2 2 When any external equipment is not connected: Antenna Cable 3 When some External Equipment is connected: (ex: When connected to AV 2) AV2 Antenna Cable

AV 2

Auto Link

You can also select Main Input in the Setup menu.

Press the INPUT button and then displays the connected

external equipment list on the screen.



- Antenna: Select it when watching the TV/DTV.
- **Cable**: Select it when watching the CATV/CADTV.
- **AV 1-2**: Select it when watching the VCR or external equipment.
- **Component 1-2**: Select it when using the DVD or the Digital set-top box depend on connector.
- **RGB-PC/RGB-DTV**: Select it when using PC or Digital set-top box depend on connector.
- **HDMI1/DVI, HDMI2**: Select it when using DVD, PC or Digital set-top box depend on connector.

CONNECTIONS & SETUP

ANTENNA OR CABLE CONNECTION

1. Antenna (analog or digital)

Wall Antenna Socket or Outdoor Antenna without a Cable Box Connections. For optimum picture quality, adjust antenna direction if needed.



2. Cable box



3. Using both cable and antenna



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INSTALLATION



To improve the picture quality in a poor signal area, please purchase a signal amplifier and install properly.

- If the antenna needs to be split for two TV's, install a 2-Way Signal Splitter.
- If the antenna is not installed properly, contact your dealer for assistance.

NOTE

▶ The TV will let you know when the analog, cable, and digital channel scans are complete.

CONNECTIONS & SETUP

CABLECARD[™] SETUP

1. How to use

Insert the CableCARDTM from your cable service provider into the CableCARDTM slot on the back of your TV. If pairing information about this TV and the CableCARD is displayed on the screen, contact your cable service provider.

NOTE

► This TV supports CableCARD[™] technology from Motorola, Scientific Atlanta, and SCM.

ACAUTION

▶ When removing, do not drop it as this may cause damage to the CableCARD[™].



HDSTB SETUP

This TV can receive Digital Over-the-air/Cable signals without an external digital set-top box. However, if you do receive digital signals from a digital set-top box or other digital external device, refer to the figure as shown below.

This TV supports HDCP (High-bandwidth Digital Contents Protection) protocol for Digital Contents (480p,720p,1080i).

When connecting Component cable

1. How to connect

1

Connect the video outputs (Y, PB, PR) of the digital set top box to the **COMPONENT IN VIDEO 1** jacks onthe set. Match the jack colors

(Y = green, PB = blue, and PR = red).

Connect the audio output of the digital set-top box to the **COMPONENT IN VIDEO 1** jacks on the set.

2. How to use

- Turn on the digital set-top box.
 (Refer to the owner's manual for the digital set-top box.)
- Select COMPONENT 1 input source with using the INPUT button on the remote control.
- If connected to COMPONENT 2 input, select COMPO-NENT 2 input source.

Signal	Component 1/2	RGB-DTV, HDMI /DVI, HDMI2
480i	Yes	No
480p	Yes	Yes
720p	Yes	Yes
1080i	Yes	Yes



CONNECTIONS & SETUP

When connecting D-sub 15pin cable

1. How to connect



Connect the RGB output of the digital set-top box to the RGB (PC/DTV) jack on the set.



Connect the audio outputs of the set-top box to the AUDIO (RGB/DVI) jack on the set.

2. How to use

- Turn on the digital set-top box. (Refer to the owner's manual for the digital set-top box.)
- Select **RGB-DTV** input source with using the **INPUT** button on the remote control.

When connecting HDMI cable

1. How to connect



Connect the digital set-top box to HDMI IN 1 (DVI) or **2** jack on the set.



No separated audio connection is necessary.

2. How to use

- Turn on the digital set-top box. (Refer to the owner's manual for the digital set-top box.)
- Select HDMI1/DVI or HDMI2 input source with using the **INPUT** button on the remote control.
- If the digital set-top box supports Auto HDMI function, the output resolution of the source device will be automatically set to 1280x720p.
- If the digital set-top box player does not support Auto HDMI, you need to set the output resolution appropriate ly.
 - To get the best picture quality, adjust the output resolution of the source device to 1280x720p.





When connecting HDMI to DVI cable



1. How to connect

Connect the DVI output of the digital set-top box to the HDMI IN 1 (DVI) jack on the set.
 Connect the audio output of the digital set-top box to the AUDIO(RGB/DVI) jack on the set.

2. How to use

- Turn on the digital set-top box. (Refer to the owner's manual for the digital set-top box.)
- Select HDMI1/DVI input source with using the INPUT button on the remote control.

CONNECTIONS & SETUP

PC SETUP

This TV provides Plug and Play capability, meaning that the PC adjusts automatically to the TV's settings. The TV perceives 640x480, 60Hz as DTV 480p based on the PC graphic card. If necessary, change the screen scanning rate for the graphic card accordingly.

When connecting D-sub 15pin cable

1. How to connect



Connect the RGB output of the PC to the **RGB** (**PC/DTV**) jack on the set.



Connect the PC audio output to the AUDIO (RGB/DVI) jack on the set.

2. How to use

- Turn on the PC and the set.
- Select RGB-PC input source in main input option of SETUP menu. (> p.67)
- Once you select RGB-PC in main input option of SETUP menu, INPUT button is also available for this purpose.

NOTE

Check the image on your TV. There may be noise associated with the resolution, vertical pattern, contrast or brightness in PC mode. If noise is present, change the PC output to another resolution, change the refresh rate to another rate or adjust the brightness and contrast on the VIDEO menu until the picture is clear. If the refresh rate of the PC graphic card can not be changed, change the PC graphic card or consult the manufacturer of the PC graphic card.



CONNECTIONS & SETUP

When connecting HDMI to DVI cable



1. How to connect

Connect the DVI output of the PC to the HDMI IN 1 (DVI) jack on the set.

2 Connect the PC audio output to the AUDIO(RGB/DVI) jack on the set.

2. How to use

- Turn on the PC and the set
- Select HDMI1/DVI input source with using the INPUT button on the remote control.

NOTE

- ► HDMI2 source does not support DVI source.
- ▶ If the PC has a DVI output and no HDMI output, a separated audio connection is necessary.
- If the PC does not support Auto DVI, you need to set the output resolution appropriately. To get the best picture quality, adjust the output resolution of PC graphics card's output resolution to 1024x768, 60Hz.

- ► To get the the best picture quality, adjust the PC graphics card to 1024x768, 60Hz.
- Depending on the graphics card, DOS mode may not work if a HDMI to DVI Cable is in use.
- When Source Devices are connected with HDMI/DVI Input, the output PC Resolution(VGA, SVGA, XGA), Position and Size may not fit on the Screen. As shown in the picture, press the ADJUST button to adjust the screen Position of the TV SET and contact a PC graphics card service center.
- When Source Devices connected with HDMI/DVI Input, output TV SET Resolution (480p, 720p, 1080i) and TV SET Display fit EIA/CEA-861-B Specification to Screen. If not, refer to the Manual

of HDMI/DVI Source Devices or contact your service center.

- If the HDMI/DVI Source Device is not connected to the Cable or if there is a poor cable connection, "No signal" is displayed in the HDMI/DVI Input. In this case, that Video Resolution is not supported. If "Invalid Format" is displayed, refer to the Source Device manual or contact your service center.
- Avoid keeping a fixed image on the screen for a long period of time. The fixed image may become permanently imprinted on the screen.
- The synchronization input form for Horizontal and Vertical frequencies is separate.

Resolution	Horizontal Frequency(KHz)	Vertical Frequency(Hz)	
640x350	31.468	70.09	
720x400	31.469	70.08	
640x480	31.469 37.861 37.500	59.94 72.80 75.00	
800x600	35.156 37.879 48.077 46.875	56.25 60.31 72.18 75.00	
1024x768	48.363 56.476 60.023	60.00 70.06 75.02	
1280x768	47.776	59.870	
1360x768	47.720	59.799	

Surpported Display Specifications (RGB/HDMI-PC)

* RGB-PC mode only: 640x350, 720X400

* HDMI-PC mode only: 1280x768

Surpported Display Specifications (RGB/HDMI-DTV)

Resolution	Horizontal Frequency(KHz)	Vertical Frequency(Hz)	
720x480	31.47 31.47	60 59.94	
1280x720	45.00 44.96	60.00 59.94	
1920x1080	33.75 33.72	60.00 59.94	

Screen Setup for PC mode

Overview

When RGB connect to PC output and select the RGB-PC in Main Input, this function is used. When HDMI/DVI connect to PC output and select HDMI/DVI input, this function is used. In RGB-DTV mode, SIZE and PHASE is not available.

Adjustment for screen Position, Size, Phase, Reset



2

select Position, Size, or Phase.

Press the **ADJUST** button and then use **A** or **V** button to

- Press the ENTER button and then use $\blacktriangle \lor \blacklozenge \lor$ button to make appropriate adjustments.
- The Phase adjustment range is -16 ~ +16.
- The Size adjustment range is -30 ~ +30.

Press the **ENTER** button.



3

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FLASHBK

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- Size This function is to minimize any vertical bars or stripes visible on the screen background. And the horizontal screen size will also change.
- Phase This function allows you to remove any horizontal noise and clear or sharpen the image of characters. In HDMI/DVI-PC mode, PHASE is not available.



Initializing (Reset to original factory values)

To initialize the adjusted values

Press the **ENTER** button.



Press the **ADJUST** button and then use **A** or **V** button to select Reset.

Press the ENTER button and then use ◀ or ▶ button to select Yes.



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APPENDIX

EXTERNAL CONTROL DEVICE SETUP

Connect the RS-232C (serial port) input jack to an external control device (such as a computer or an A/V control system) to control the product's functions externally.

Connect the serial port of the control device to the RS-232C jack on the product back panel.

Note: RS-232C connection cables are not supplied with the product.

RS-232C Setup



Type of Connector; D-Sub 9-Pin Male

Pin Name

APPENDIX

No.

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
	• • • • •

PROGRAMMING THE REMOTE CONTROL

The provided universal remote control can be programmed to operate most remote-controllable devices. Note that the remote may not control all models of other brands.

Programming a code into a remote mode

- To find out whether your remote control can operate each device without programming, turn on the device (such as a VCR) and press the corresponding mode button on the remote.
 After that, press the POWER button. If the device is turned off and it responds properly the remote control need not be programmed. If not, the remote should be programmed to operate the device. The programming procedures are explained below.
- Press the MENU and MUTE button continuously at the same time for two seconds; the currently selected device button is illuminated.

If you don't press any button for 20 seconds, the light on the mode button will be turned off. In that case, you have to repeat from step 2.

- 3 Enter the appropriate code from the code table on the following pages. When pressing the button, the light blinks at a time. If the device turned off, the programming is successful.
- **4** Press the **MENU** button to store the code. After blinking twice, this code is stored.
- Test the remote control functions to see if the device responds properly. If not, steps 2-5.

PRODUCT SPECIFICATIONS

MODELS		37LB1DA (37LB1DA-UB)	
Dimensions (Width x Height x Depth)	including stand	41.2 x 27.3 x 10.3 inches	
		1045.8 x 693.8 x 260.4 mm	
	excluding stand	41.2 x 23.4 x 5.2 inches	
		1045.8 x 594.4 x 133.0 mm	
Weight	including stand	69.7 pounds / 31.6 kg	
	excluding stand	55.8 pounds / 25.3 kg	
Power requirement		AC100-240V ~ 50/60Hz	
Television System		NTSC-M, ATSC, 64 & 256 QAM	
Program Coverage		VHF 2-13, UHF 14-69, CATV 1-135, DTV 2-69, CADTV 1-135	
External Antenna Impedance		75 ohm	
Environment condition	Operating Temperature	32 ~ 104°F (0 ~ 40°C)	
	Operating Humidity	Less than 80%	
	Storage Temperature	-4 ~ 140°F (-20 ~ 60°C)	
	Storage Humidity	0 ~ 85%	

The specifications shown above may be changed without prior notice for quality improvement.

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