Test Report No.: GETEC-E3-06-005

FCC Class B Certification

## APPENDIX H

: USER'S MANUAL

#### Installation and Operating Guide | Warranty

1

Model Numbers | Z56DC1D/Z62DC1D | DLP PROJECTION





## Warning/Caution







#### **WARNING/CAUTION:**

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 PREVENT FIRE OR SHOCK HAZARDS, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

#### POWER CORD POLARIZATION:

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

ATTENTION: POUR ÉVITER LES CHOCS ÉLECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU'AU FOND.

#### NOTE TO CABLE/TV INSTALLER:

This reminder is provided to call the CATV system installer's attention to Article 820-40 of the National Electric Code (U.S.A.). The code 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 the cable entry as practical.

#### **REGULATORY INFORMATION:**

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

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

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.

#### **COMPLIANCE:**

The responsible party for this product's compliance is:

Zenith Electronics Corporation

1-201-816-2000

Marked and Distributed in the United States by LG Electronics U.S.A., Inc.

1000 Sylvan Avenue, Englewood Cliffs, NJ 07632

http://www.zenith.com

## Safety Instructions

#### 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:

- 1. Read these instructions.
- 2. Keep these instructions.
- 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 are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and 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 required when the apparatus has been damaged in any way, such as power-supply 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.
- 15. 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.

#### 16. Outdoor Use Marking:

WARNING - To Reduce The Risk Of Fire Or Electric Shock, Do Not Expose This Appliance To Rain Or Moisture.

#### 17. Wet Location:

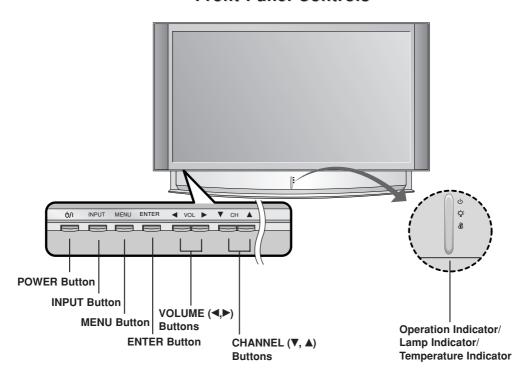
Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.

## Introduction

#### **Controls**

- This is a simplified representation of a front panel.
- Image shown may be somewhat different from your TV.

#### **Front Panel Controls**



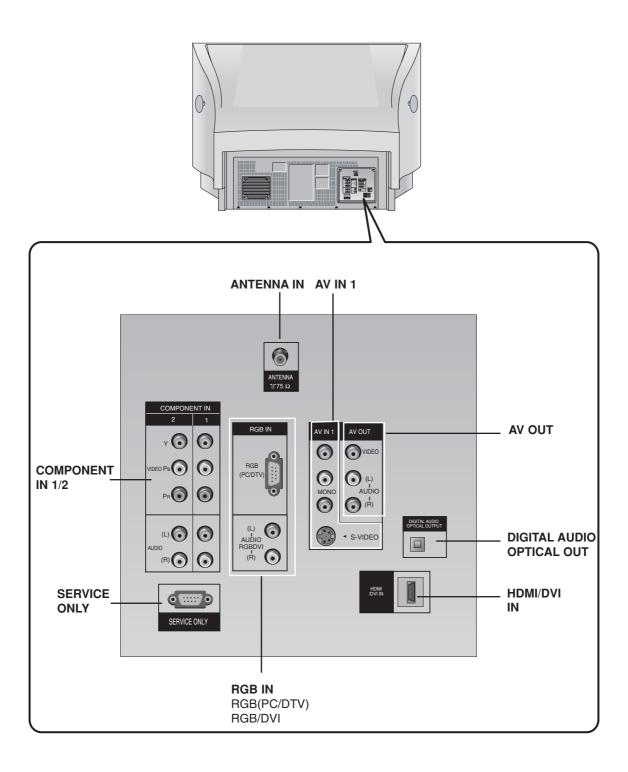
#### Function Status Indicators

 Lamp indicator, operation indicator, and temperature indicator located below the front panel controls, reveal the operating status of the DLP projection TV.

	Off	Power cord is not connected.	
Operation Indicator	Red	Power Cord is connected, TV is in standby mode.	
	Green	TV turns on.	
	Orange (blinking)	Preparing operation in standby mode.	
	Orange	Projection lamp is reaching the end of its life and needs to	
		be replaced with a new lamp. Contact your service center.	
Lamp Indicator	Red (blinking)	There is a problem with the lamp or around it. Contact an	
		authorized service center.	
	Green (blinking)	The lamp cover is not closed.	
	Orange	The projection TV is overheating. Check for blocked vents on	
		the projection TV.	
Temperature Indicator	Red	The projection TV shut down due to overheating.	
	Red (blinking)	The projection TV shut down, check the cooling fan. Contact	
		your service center.	

## **Connection Options**

#### **Back Connection Panel**



#### **Front Connection Panel**

There are four jacks on the left side on your projection TV that make connecting Audio/Video devices like video games and camcorders very simple.

The jacks are like those found on the back jack connection panel. This means that most equipment that connects to those types of jacks on the rear jackpack, may be connected to the front connection panel.

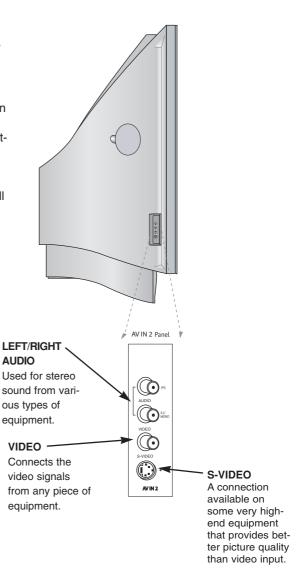
To use the side jacks as the signal source, select them using Main Input menu as described on page 23. They will be named "Front Video" in the Main Input menu.



If you input both Front Video and S-Video, only the S-Video will work.



If you're connecting a video game device, make sure to change the picture settings with the EZ Picture option in the Video menu (see page 24).



#### Mini glossary

A/V CABLES Audio/Video cables. Three cable connector—Right audio (red), Left audio (white), and Video (yellow). A/V cables are used for stereo playback of videocassettes and for higher quality picture and sound from other A/V devices.

A/V DEVICE Any device that produces video or sound (VCR, DVD, cable box, or television).

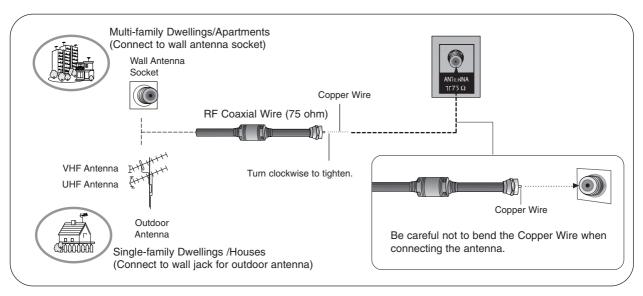
## Installation

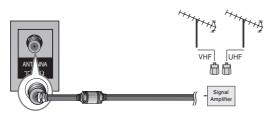
## **External Equipment Connections**

#### Antenna or Cable Connection

#### 1. Analog and Digital TV signals provided on one antenna

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

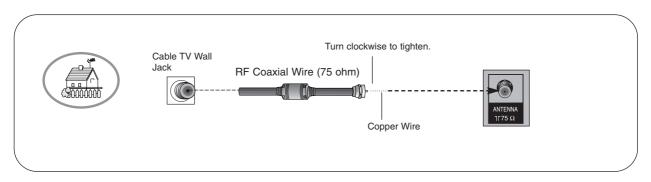




- · To improve the picture quality in a poor signal area, please purchase a signal amplifier and install properly.
- If the antenna needs to be split for two TV's, install a "2-Way Signal Splitter" in the connections.
- · If the antenna is not installed properly, contact your dealer for assistance.

Note: The TV will let you know when the TV(analog antenna), DTV(digital antenna), CATV(analog cable) and CADTV(digital cable) channel scans are complete.

#### 2. Analog and DTV signals provided on two separate antennas

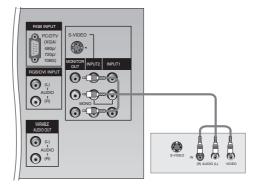


#### Monitor Out Setup

The TV has a special signal output capability which allows you to hook up a second TV or monitor.

Connect the second TV or monitor to the TV's MONITOR OUTPUT. See the Operating Manual of the second TV or monitor for further details regarding that device's input settings.

• Component, RGB-PC/RGB-DTV, HDMI1/DVI,HDMI2, DTV input sources cannot be used for Monitor out.



#### 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, change the screen scanning rate for the graphic card accordingly.

#### Monitor Display Specifications (RGB-PC or HDMI1/DVI Mode)

Resolution	Horizontal Frequency(KHz)	Vertical Frequency(Hz)	
640x350	31.468	70.09	RGB-PC Mode Only
	31.469	59.94	Widde Offig
640x480	37.861	72.80	
	37.500	75.00	
	35.156	56.25	
	37.879	60.31	
800x600	48.077	72.18	
	46.875	75.00	
	48.363	60.00	
1024x768	56.476	70.06	
	60.023	75.02	

#### Digital Audio Output

Send the TV's audio to external audio equipment (stereo system) via the Digital Audio Output (Optical) port.

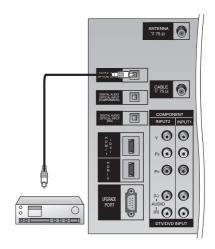
#### How to connect

- 1. Connect one end of an optical cable to the TV Digital Audio (Optical) Output port.
- 2. Connect the other end of the optical cable to the digital audio (optical) input on the audio equipment.
- 3. Set the " TV Speaker option Off" in the AUDIO menu. Refer to page 26.

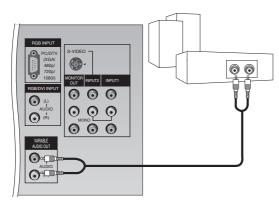
See the external audio equipment instruction manual for operation.



Caution: Do not look into the optical output port. Looking at the light may damage your vision.



#### External Stereo



Hook up Variable Audio Output, L-Audio-R to Amplifier system for Left/Right front speaker sound.

#### How to connect

- 1. Locate the Variable Audio Out jacks on the back of your TV and the Input jacks on the back of your stereo's amplifier.
- 2. Connect the two jacks, making sure that the right and left channels are connected correctly.
- 3. Set up your speakers through your analog stereo amplifier, according to the instructions provided with the amplifier.

## HDMI



- HDMI™, the HDMI logo and High-Definition Multimedia Interface is a trademark or registered trademark of HDMI Licensing.
- This TV can receive the High-Definition Multimedia Interface(HDMI) or the Digital Visual Interface(DVI).
- This TV supports HDCP(High-bandwidth Digital Contents Protection) Protocol for 720x480p, 1280x720p, and 1920x1080i resolutions
- When you connect this TV with a source device(DVD player, Set Top Box or PC) supporting Auto HDMI/DVI function, the output resolution of the source device will be automatically set to 1280x720p.
- If the source device does not support Auto HDMI/DVI, you need to set the output resolution appropriately. To get the best picture quality, adjust the DVD Player or Set Top Box's output resolution to 1280x720p, and the PC graphics card's output resolution to 1024x768, 60Hz.
- If the source device has an HDMI output, no other audio connection is necessary because HDMI-to-HDMI connection includes both video and audio.
- If the source device has a DVI output and no HDMI output, a separated audio connection is necessary.

#### <When the source device(DVD player or Set Top Box) supports HDMI>

#### **How To Connect**

- 1. Connect the source device to HDMI1/DVI or HDMI2 port of this TV with an HDMI cable(not supplied with this product).
- 2. No separated audio connection is necessary.

#### **How To Use**

- If the source device supports Auto HDMI function, the output resolution of the source device will be automatically set to 1280x720p.
- If the source device does not support Auto HDMI, you need to set the output resolution appropriately. To get the best picture quality, adjust the output resolution of the source device to 1280x720p.
- Select HDMI1/DVI or HDMI2 input source in main input option on the SETUP menu.(Refer to P.23) **TV/VIDEO** button is also available for this purpose.

#### <When the source device(DVD player or Set Top Box) supports DVI>

#### **How To Connect**

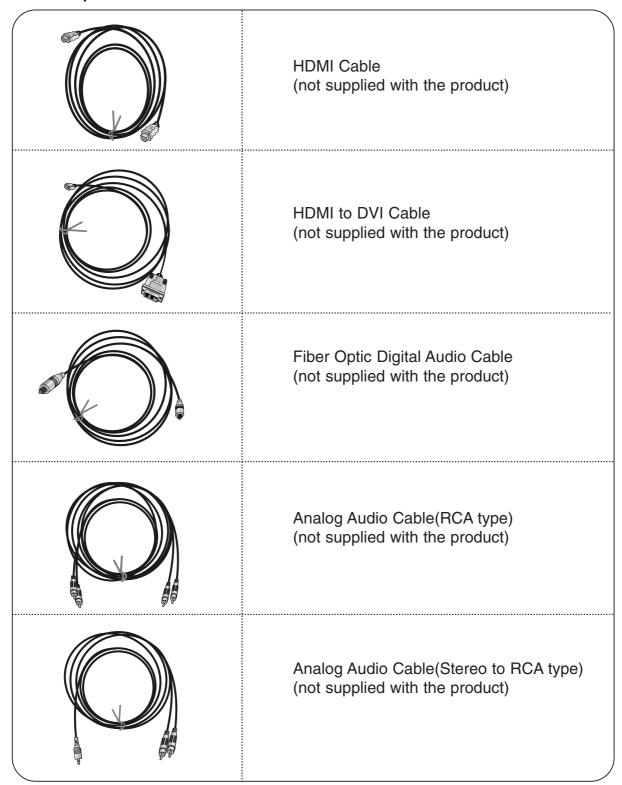
- 1. Connect the source device to HDMI1/DVI port of this TV with a HDMI-to-DVI cable(not supplied with this product). Do not use HDMI2 port for DVI connection if you want to connect audio.
- 2. A separated audio connection is necessary.
- 3. If the source device has a fiber optic digital audio output, connect the audio output to DIGITAL AUDIO(OPTICAL) port for DVI INPUT
- 4. Connect the PC's audio output to AUDIO INPUT port located on the right side of RGB INPUT port.

#### **How To Use**

- If the source device supports Auto DVI function, the output resolution of the source device will be automatically set to 1280x720p.
- If the source device does not support Auto DVI, you need to set the output resolution appropriately. To get the best picture quality, adjust the output resolution of the source device to 1280x720p.
- Select HDMI1/DVI input source in main input option on the SETUP menu.(Refer to P.23)
   TV/VIDEO button is also available for this purpose.

#### Reference

#### Cable sample



#### How to use

- 1. Connect the HDMI1/DVI Source Devices(DVD Player or Set Top Box or PC) and the TV SET.
- 2. Turn on the display by pressing the POWER button on the TV SET and HDMI1/DVI Source Devices remote control.
- 3. Select HDMI1/DVI Input source in Main Input option on the SETUP menu.(Refer to P.23)
- 4. Check the image on your TV SET. There may be noise associated with the resolution, vertical pattern, contrast or brightness in HDMI1/DVI Source Devices. If noise is present, change the HDMI1/DVI Source Devices to another resolution, change the refresh rate or adjust the brightness and contrast on the menu until the picture is clear. If the refresh rate of the PC graphics card can not changed, change the PC graphics card or consult the manufacturer of the PC graphics card.

#### Notes:

- Depending on the graphics card, DOS mode may not work if a HDMI to DVI Cable is in use.
- When Source Devices connected with HDMI1/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 HDMI1/DVI Source Devices or contact your service center.
- In case HDMI1/DVI Source Devices is not connected Cable or poor cable connection, "NO SIGNAL" OSD display in HDMI1/DVI Input. In case that Video Resolution is not supported TV SET output in HDMI1/DVI Source Devices, "INVALID FORMAT" OSD display. Refer to the Manual of HDMI1/DVI Source Devices or contact your service center.

#### In DTV Mode, the Supported TV Set Resolution Specification

- 1920 x 1080 I @ 59.94Hz / 60Hz, 16:9
- 1280 x 720 P @ 59.94Hz / 60Hz, 16:9(preferred format)
- 720 x 480 P @ 59.94Hz / 60Hz, 16:9
- 720 x 480 P @ 59.94Hz / 60Hz, 4:3

#### In PC Mode, the Supported PC Resolution Specification

- 640 x 480 @ 60Hz
- 640 x 480 @ 72Hz
- 640 x 480 @ 75Hz
- 800 x 600 @ 56Hz
- 800 x 600 @ 60Hz
- 800 x 600 @ 72Hz
- 800 x 600 @ 75Hz
- 1024 x 768 @ 60Hz(preferred format)
- 1024 x 768 @ 70Hz
- 1024 x 768 @ 75Hz

## **Option Menu Options**

#### Aspect Ratio Control

- Lets you choose the way an analog picture with a 4:3 aspect ratio is displayed on your TV with a 16:9 ratio picture format.
   When you receive an analog picture with a 4:3 aspect ratio on your 16:9 TV, you need to specify how the picture is to be displayed.
- Horizon aspect ratio is not available for Component 1-2 (720p/1080i)/RGB-DTV (720p/1080i)/HDMI1/DVI-DTV(720p/1080i), HDMI2-DTV(720p/1080i)/ CADTV, DTV(720p/1080i) input source.
- RGB-PC/DVI-PC input source use 4:3 or 16:9 aspect ratio.
- 1. Press the **RATIO** button repeatedly to select the desired picture format.

You can also adjust the Aspect Ratio in the OPTION menu.

#### Set By Program

Selects the proper picture proportion to match the source's image.  $(4:3 \rightarrow 4:3, 16:9 \rightarrow 16:9)$ 

#### • 4:3

Choose **4:3** when you want to view a picture with an original 4:3 aspect ratio, with black bars appearing at both the left and right sides.

#### • 16:9

Choose 16:9 when you want to adjust the picture horizontally, in a linear proportion to fill the entire screen.

#### • Horizon

Choose **Horizon** when you want to adjust the picture in a non-linear proportion, that is, more enlarged at both sides, to create a spectacular view.

#### • Zoom l

Choose **Zoom 1** when you want to view the picture without any alteration. However, the top and bottom portions of the picture will be cropped.

#### • Zoom 2

Choose **Zoom 2** when you want the picture to be altered, both horizontally extended and vertically cropped. The picture taking a halfway trade off between alteration and screen coverage.

#### • Cinema Zoom

Choose **Cinema Zoom** when you want to enlarge the picture in correct proportion. Note: When enlarging or reducing the picture, the image may become distorted.

You can adjust the enlarge proportion of Cinema Zoom using ▲ / ▼ button. The adjustment range is 1~16.

#### Cinema 3:2 Mode Setup

- Most movies are 24 frames/sec, but TV signal is 30 frames/sec.
   This option lets the TV do 3:2 pull-down operation for you to watch movies with the best motion appearance.
- 1. Press the **MENU** button and then use ▲ /▼ button to select the **OPTION** menu.
- 2. Press the ▶ button and then use ▲ / ▼ button to select **Cinema 3:2 Mode**.
- 3. Press the ▶ button and then use ▲ / ▼ button to select **On** or **Off**.
- Press EXIT button to return to TV viewing or press MENU button to return to the previous menu.

Note: This feature operates only in 480i mode.



## **Option Menu Options**

#### Caption

- 1. Press the **MENU** button and then use ▲ /▼ button to select the **OPTION** menu.
- 2. Press the ▶ button and then use ▲ / ▼ button to select Caption.
- 3. Press the ▶ button and then use ▲ / ▼ button to select **On** or **Off**.
- Press EXIT button to return to TV viewing or press MENU button to return to the previous menu.



#### Caption/Text

#### **Analog Broadcasting System Captions**

- Select a caption mode for displaying captioning information if provided on a program.
- Analog caption displays information at any position on the screen usually the program's dialog.
- Text displays information, usually at the bottom position and is used for a data service, generally not program related.
- Caption/Text, if provided by the broadcaster, would be available for both digital and analog channels on the Antenna/Cable.
- This TV is programmed to remember the caption/text mode it was last set to, when you turn the power off.
- 1. Use the CC button repeatedly to select Caption CC1, CC2, CC3, CC4, Text1, Text2, Text3, or Text4.
- 2. Press **EXIT** button to save and return to TV viewing.
  - You can also use the **OPTION** menu to select **Caption/Text**.
- 1. Press the **MENU** button and then use ▲ / ▼ button to select the **OPTION** menu.
- 2. Press the ▶ button and then use ▲ / ▼ button to select **Caption/Text**.
- 3. Press the ▶ button and then use ▲ / ▼ button to select caption: CC1, CC2, CC3, CC4, Text1, Text2, Text3, or Text4.

#### • CAPTION

The term for the words that scroll across the bottom of the TV screen; usually the audio portion of the program provided for the hearing impaired.

#### • TEXT

The term for the words that appear in a large black frame and almost cover the entire screen; usually messages provided by the broadcaster.

Press EXIT button to return to TV viewing or press MENU button to return to the previous menu.

# Aspect Ratio Cinema 3:2 Mode Caption Caption Caption/Text Caption Option Caption Option Caption Option Caption Option Caption Caption Option Opt

#### **Digital Broadcasting System Captions**

- Choose the language you want the DTV/CADTV Captions to appear in.
- Languages can be chosen for digital sources only if they are included on the program.
- 1. Press the **MENU** button and then use ▲ /▼ button to select the **OPTION** menu.
- 2. Press the ▶ button and then use ▲ / ▼ button to select Caption/Text.
- Press the ▶ button and then use ▲ / ▼ button to select available caption languages: English, Spanish, or French.
- Press EXIT button to return to TV viewing or press MENU button to return to the previous menu.



#### Caption Option

- Customize the DTV/CADTV captions that appear on your screen.
- Press the MENU button and then use ▲ /▼ button to select the OPTION
  menu.
- 2. Press the ▶ button and then use ▲ / ▼ button to select **Caption Option**.
- 3. Press the ▶ button and then use ◄ / ▶ button to select **Custom**.
- Use ▲ / ▼ button to customize the Style, Font, etc., to your preference. A preview icon is provided at the bottom of the screen, use it to see the caption language.
  - Size: Set the size the words will appear in.
  - Font: Select a typeface for the words.
  - Text Color: Choose a color for the text.
  - Text Opacity: Specify the opacity for the text color.
  - Bg (Background) Color: Select a background color.
  - Bg (Background) Opacity: Select the opacity for the background color.
  - Edge Type: Select an edge type.
  - Edge Color: Select a color for the edges.
- Press EXIT button to return to TV viewing or press MENU button to return to the previous menu.

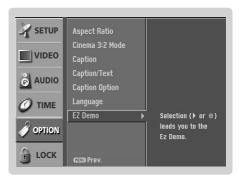


#### EZ Demo

Shows you how to navigate the TV's on-screen menus.

**EZ Demo** Use to scan the features and menu options available on your TV.

- Press the MENU button and then use ▲ / ▼ button to select the OPTION menu.
- Press the ▶ button and then use ▲ / ▼ button to select EZ Demo, then use the ▶ button to start EZ Demo.
- 3. Press **EXIT** button to stop EZ Demo.



30 DLP Projection TV

### Screen Setup for PC mode

#### Operation

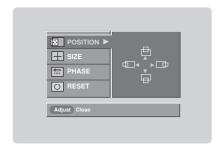
- When RGB connect to PC input and select the RGB-PC in Main Input, this function is used.
- In RGB-DTV mode, SIZE is not available.

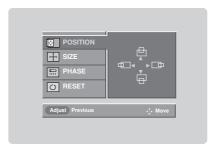
#### Adjustment for screen Position, Size, Phase, Reset

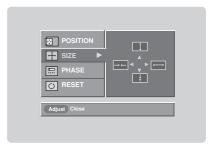
- •After connecting RGB-PC to PC input and checking the screen quality.
- Display PC Adjust Menu using ADJUST button.
- Position: Adjust the screen position. After displaying the Adjust, select the screen position.
- : Adjust the screen size. - Size

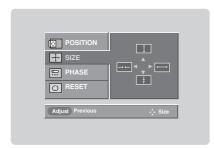
(Only available in RGB-PC mode)

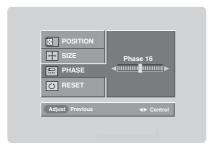
- : Adjust the phase of Pixel clock. - Phase
- : Initializating Size, Position, Phase adjustment . - Reset













# **Troubleshooting Checklist**

## · Check whether the TV is turned on. • Is the power cord inserted into wall power outlet? No picture & No sound • Test the wall power outlet, plug another product's power cord into the outlet where the TV's power cord was plugged in. • Press the **VOLUME** (▶) button. Picture OK & No sound · Sound muted? Press MUTE button. • Check to see if there is any object between the TV and the Remote Control causing obstruction. • Are batteries installed with correct polarity (+ to +, - to -)? **The Remote Control** (Refer to p.10) doesn't work • Correct remote operating mode set: TV, VCR etc.? • Install new batteries. (Refer to p.10) • This is normal, the image is muted during the TV startup process. Please Picture appears slowly contact your service center, if the picture has not appeared after five minutes. after switching on •Select Color in the Picture menu and press the ▶ button. (Refer to p.24) No or poor color • Keep a sufficient distance between the TV and the VCR. or poor picture • Activate any function to restore the brightness of the picture. (If still picture is on the screen for more than 5 minutes, the screen gets dark.) Horizontal/vertical bars • Check for local interference such as an electrical appliance or power tool. or picture shaking

# **Troubleshooting Checklist**

No output from one of the speakers	Adjust <b>Balance</b> in the <b>AUDIO</b> menu. (Refer to p.25)	
Unusual sound from inside the TV	A change in ambient humidity or temperature may result in the unit turning off and does not indicate a fault with the TV.	
Poor TV input signal	Check ANTENNA and CABLE connection.	
Poor Video signal	Check ANTENNA and CABLE connection.	
No channel or a few channel	Start EZ Scan.	
Unsuitable Aspect Ratio	You can adjust the RATIO button or Aspect Ratio in the OPTION menu.	$\Big)$

## **Maintenance**

- Early malfunctions can be prevented. Careful and regular cleaning can extend the amount of time you will have your new TV. Be sure to turn the power off and unplug the power cord before you begin any cleaning.

#### Cleaning the Screen

- Here's a great way to keep the dust off your screen for a while. Wet a soft cloth in a mixture of lukewarm water and a little fabric softener or dish washing detergent. Wring the cloth until it's almost dry, and then use it to wipe the screen.
- 2. Make sure the excess water is off the screen, and then let it air-dry before you turn on your TV.

#### Cleaning the Cabinet

To remove dirt or dust, wipe the cabinet with a soft, dry, lint-free cloth. Please be sure not to use a wet cloth.

#### **Extended Absence**



If you expect to leave your TV dormant for a long time (such as a vacation), it's a good idea to unplug the power cord to protect against possible damage from lightning or power surges.

# **Product Specifications**

MODEL	Z56DC1D	Z62DC1D	
Horizontal Size (inches)	39.9	47.5	
Height (inches)	29.2	33.8	
Depth (inches)	14.4	16.1	
Weight (lbs.)	57.3	83.6	
Power requirement	AC120V ~ 60Hz		
Television System	NTSC-M, ATSC, 64 & 256 QAM		
Program Coverage	VHF 2 ~ 13, UHF 14 ~ 69, CATV 1 ~ 135, CADTV 1 ~ 135. DTV 2 ~ 69		
Power Consumption (W)	210W		
Antenna	75 ohm External Terminal for VHF/UHF		
Audio Output (W)	20Wx2		
Supplied Accessories	Remote Control, 2 size AA batteries, D-sub 15 pin Cable		

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

## **Notes**

# ZENITH ELECTRONICS CORPORATION DLP Projection TV Limited Warranty - USA



Zenith will repair or replace your product, at Zenith's option, if it proves to be defective in material or workmanship under normal use, during the warranty period ("Warranty Period") listed below, effective from the date ("Date of Purchase") of original consumer purchase of the product. This warranty is good only to the original purchaser of the product and effective only when used in the United States, excluding U.S. Territories.

#### **WARRANTY PERIOD:**

LABOR: One Year from the Date of Purchase.

Parts: One Year from the Date of Purchase.

Halogen Bulb: One Year from the Date of Purchase.

\* Parts replaced are warranted for the remaining portion of the original warranty period.

#### **HOW SERVICE IS HANDLED:**

**In-Home Service:** Please retain dealer's dated bill of sale or delivery ticket as evidence of the Date of Purchase for proof of warranty, and submit a copy of the bill of sale to the service person at the time warranty service is provided.

Please call 1-877-9Zenith (1-877-993-6484) to locate your nearest Zenith Authorized Service Center.

Replacement parts may be new or factory remanufactured.

THIS WARRANTY IS IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. TO THE EXTENT ANY IMPLIED WARRANTY IS REQUIRED BY LAW, IT IS LIMITED IN DURATION TO THE EXPRESSED WARRANTY PERIOD ABOVE. ZENITH WILL NOT BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL, INDIRECT, SPECIAL OR PUNITIVE DAMAGES OF ANY NATURE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, INCLUDING WITHOUT LIMITATION, LOST REVENUES OR PROFITS, LOST OR CORRUPTED PROGRAMMING OR DATA, OR ANY OTHER DAMAGE WHETHER BASED IN CONTRACT, TORT, OR OTHERWISE. Some states do not allow the exclusion or limitation of incidental or consequential damages or limitation on how long an implied warranty lasts, so the above exclusion or limitation may not apply to you. This warranty gives you specific legal rights and you may also have other rights that may vary from state to state.

#### THIS LIMITED WARRANTY DOES NOT APPLY TO:

- 1. Damages or operating problems that result from shipping, installation, adjustment of user controls, calibration, maintenance or failure to maintain, or separate system components; and
- 2. Damages or operating problems that result from normal wear and tear, misuse, abuse, operation outside environmental specifications or contrary to the requirements or precautions in the Operating Guide, accident, lightning strikes or other natural causes, unauthorized modification or alteration, incorrect electrical current or voltage, reception problem caused by inadequate home antenna or faulty antenna connections, computer software, institutional or commercial use, or other causes not arising out of defect in material or workmanship.
- 3. Therefore, the cost of repair or replacement of such a defective product shall be borne by the consumer.

#### **CUSTOMER INTER-ACTIVE CENTER NUMBERS:**

For nearest Authorized Service Center, Where to buy, Product Assistance, or Customer Assistance Call 1-877-9Zenith (1-877-993-6484) (24 hours a day, 365 days per year) and select an appropriate option from the menu.

Or visit our website at http://www.zenithservice.com

LG Customer Interactive Center 201 James Record Road Huntsville, Alabama 35824 http://www.zenithservice.com