APPENDIX H

: USER'S MANUAL

DLP Projection TV

OWNER'S MANUAL

MODEL: DU-52SX40D/52SX4D-UB
DU-62SX40D/62SX4D-UB

Please read this manual carefully and completely before operating your TV.
Retain this manual for future reference.
Record model number and serial number of the TV in the spaces provided below.
See the label attached on the back cover and relate this information to your dealer if you require service.

Model Number :
Serial Number :

LG Electronics U.S.A., Inc.

Warning/Caution

WARNING/CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

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:
LG Electronics U.S.A., Inc
1000 Sylvan Avenue, Englewood Cliffs, NJ 07632
1-201-816-2000
http://www.lgusa.com

TV Guide On Screen Notices for U.S.A.

In the United States, the TV GUIDE and other related marks are registered marks of Gemstar-TV Guide International, Inc. and/or one of its affiliates. In Canada, TV GUIDE is a registered mark of Transcontinental Inc., and is used under license by Gemstar-TV Guide International, Inc.

The TV Guide On Screen system is manufactured under license from Gemstar-TV Guide International, Inc. and/or one of its affiliates.

The TV Guide On Screen system is protected by one or more of the following issued United States patents 6,498,895, 6,418,556, 6,331,877; 6,239,794; 6,154,203; 5,940,073; 4,908,713; 4,751,578; 4,706,121.

Digital Cable Compatibility

This digital television is capable of receiving basic analog, digital basic and digital premium cable television programming by direct connection to a cable system providing such programming. A security card provided by your cable operator is required to view encrypted digital programming. Certain advanced interactive digital cable services such as video-on-demand, cable operator enhanced program guide, and data enhanced television service may require the use of a set top box. For more information contact your local cable operator.

Use of the CableCARD™ TradeMark.

"CableCARD™ is a trademark of Cable Television Laboratories, Inc."

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.

PORTABLE CART WARNING

Safety Instructions continued

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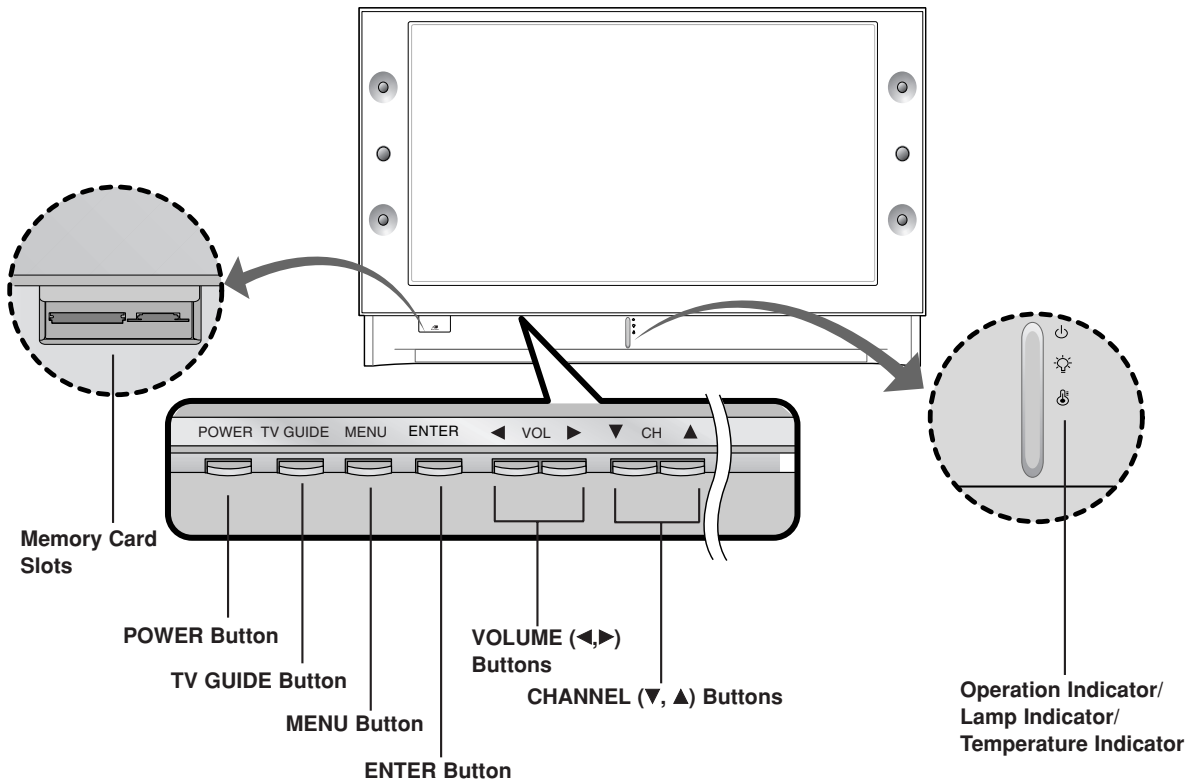
17. **Wet Location Marking :**
    Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.

Introduction

Controls

Front Panel Controls

Memory Card Slots

POWER Button

TV GUIDE Button

MENU Button

ENTER Button

VOLUME (◀,▶) Buttons

CHANNEL (▼, ▲) Buttons

Operation Indicator/ Lamp Indicator/ Temperature Indicator
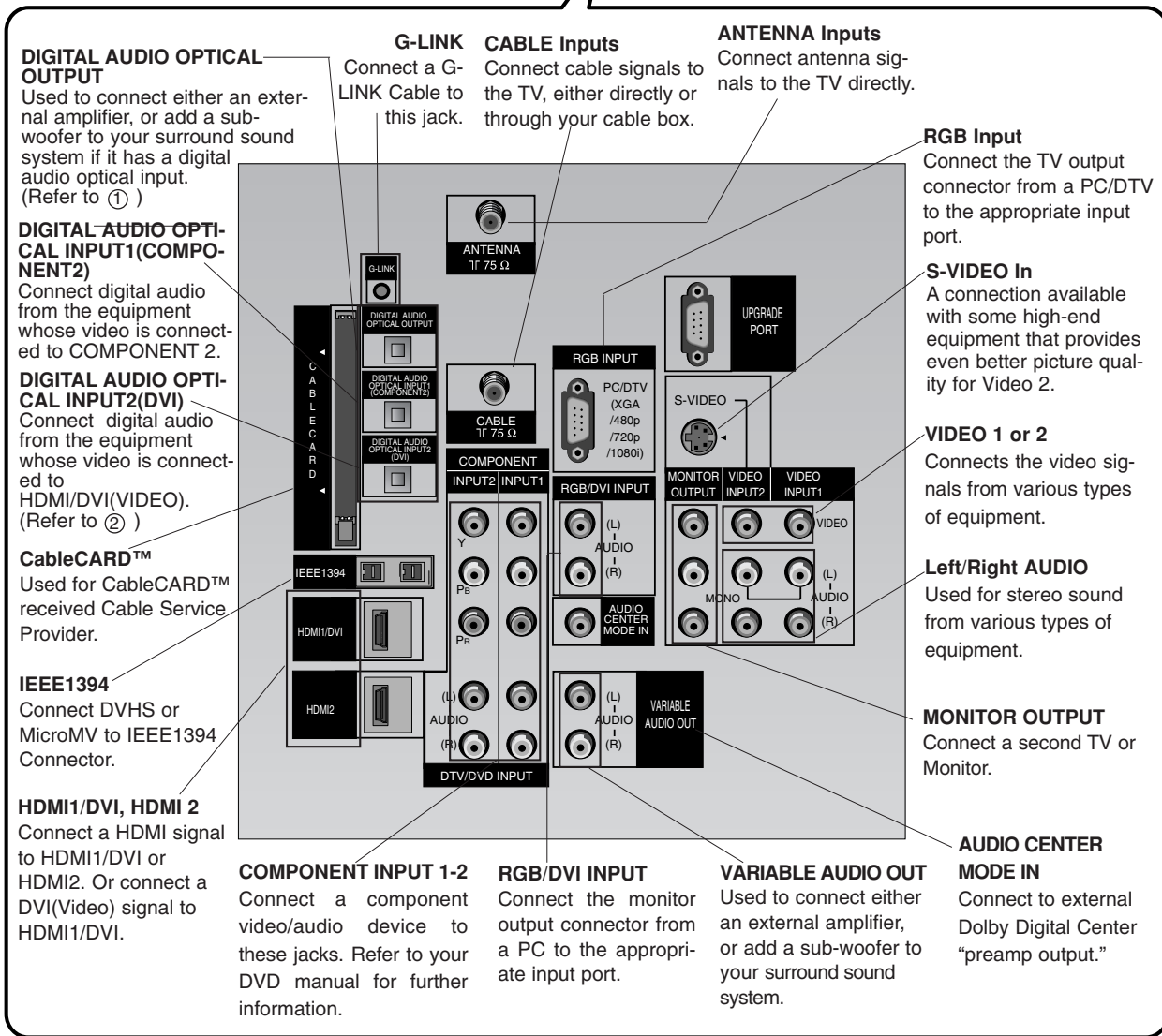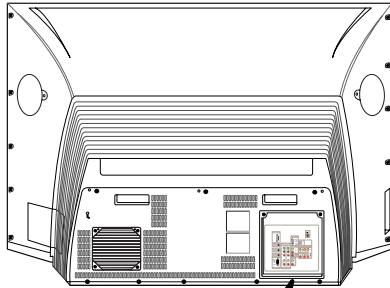
POWER TV GUIDE MENU ENTER ◀ VOL ▶ ▼ CH ▲

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.

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

Connection Options

Back Connection Panel

DIGITAL AUDIO OPTICAL OUTPUT
Used to connect either an external amplifier, or add a subwoofer to your surround sound system if it has a digital audio optical input.
(Refer to ①)

DIGITAL AUDIO OPTICAL INPUT1(COMPONENT2)
Connect digital audio from the equipment whose video is connected to COMPONENT 2.

DIGITAL AUDIO OPTICAL INPUT2(DVI)
Connect digital audio from the equipment whose video is connected to HDMI/DVI(VIDEO).
(Refer to ②)

CableCARD™
Used for CableCARD™ received Cable Service Provider.

IEEE1394
Connect DVHS or MicroMV to IEEE1394 Connector.

HDMI1/DVI, HDMI 2
Connect a HDMI signal to HDMI1/DVI or HDMI2. Or connect a DVI(Video) signal to HDMI1/DVI.

G-LINK
Connect a G-LINK Cable to this jack.

CABLE Inputs
Connect cable signals to the TV, either directly or through your cable box.

ANTENNA Inputs
Connect antenna signals to the TV directly.

RGB Input
Connect the TV output connector from a PC/DTV to the appropriate input port.

S-VIDEO In
A connection available with some high-end equipment that provides even better picture quality for Video 2.

VIDEO 1 or 2
Connects the video signals from various types of equipment.

Left/Right AUDIO
Used for stereo sound from various types of equipment.

MONITOR OUTPUT
Connect a second TV or Monitor.

COMPONENT INPUT 1-2
Connect a component video/audio device to these jacks. Refer to your DVD manual for further information.

RGB/DVI INPUT
Connect the monitor output connector from a PC to the appropriate input port.

VARIABLE AUDIO OUT
Used to connect either an external amplifier, or add a sub-woofer to your surround sound system.

AUDIO CENTER MODE IN
Connect to external Dolby Digital Center "preamp output."

Notes: ① *In standby mode, these port will not work.*

② *If the video is connected through HDMI-TO-HDMI cable, you don't need to connect digital audio. This port is used only when the video connected through DVI-TO-HDMI cable.*

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 58. They will be named "Front Video" in the Main Input menu.
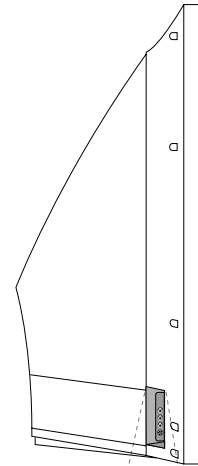
If you input both Front Video and S-Video, only the S-Video will work.

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 59).

Front A/V Panel

LEFT/RIGHT AUDIO
Used for stereo sound from various types of equipment.

VIDEO
Connects the video signals from any piece of equipment.

S-VIDEO
A connection available on some very high-end equipment that provides better picture quality than video input.
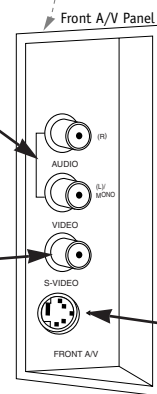
Mini glossary

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 antenna

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

Multi-family Dwellings/Apartments
(Connect to wall antenna socket)

Wall Antenna
Socket

ANTENNA
Ⅱ 75 Ω

Bronze Wire

RF Coaxial Wire (75 ohm)

VHF Antenna

UHF Antenna

Turn clockwise to tighten.

Bronze Wire

Outdoor
Antenna

Single-family Dwellings /Houses
(Connect to wall jack for outdoor antenna)

Be careful not to bend the bronze wire when connecting the antenna.

2. Analog and Digital TV signals provided on cable

Turn clockwise to tighten.

Cable TV Wall
Jack

RF Coaxial Wire (75 ohm)

CABLE
Ⅱ 75 Ω

Bronze Wire

3. Analog and Digital TV signals provided on cable and antenna
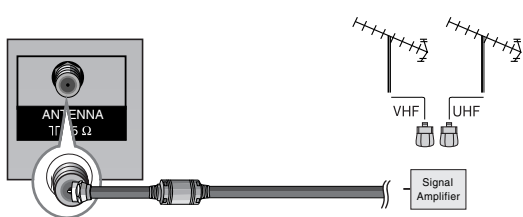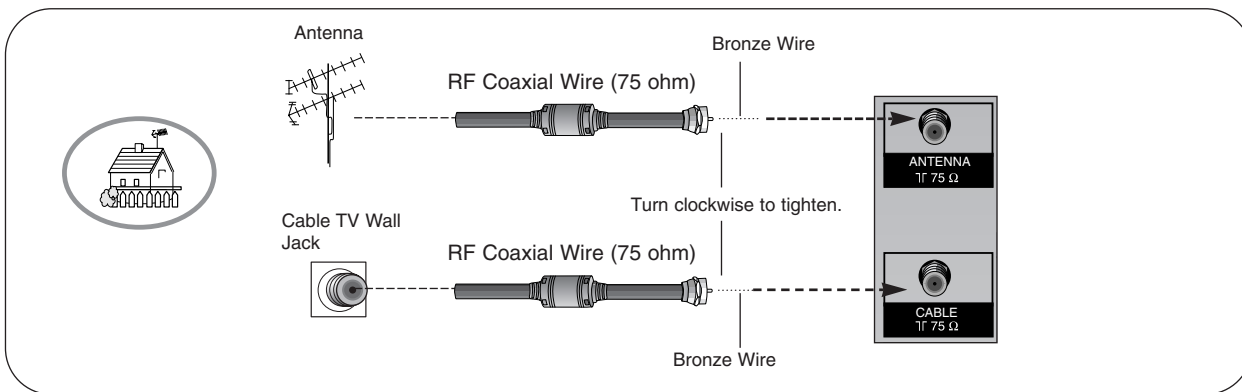
- In a poor signal area to improve picture quality, purchase and install a signal amplifier.

- If the antenna or cable needs to be split for two TV's, install a "2-Way Signal Splitter" in the connections.

- If the antenna or cable 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.*

VCR Setup

Connection Option 1

Set VCR output switch to channel 3 or 4 and then tune the TV to the same channel number.

Connection Option 2

1. Connect the audio and video cables from the VCR's output jacks to the TV input jacks, as shown in the figure.
   When connecting the TV to VCR, match the jack colors (Video = yellow, Audio Left = white, and Audio Right = red).
   If you connect an S-VIDEO output from VCR to the S-VIDEO input, the picture quality is improved; compared to connecting a regular VCR to the Video input.
2. Insert a video tape into the VCR and press PLAY on the VCR. (Refer to the VCR owner's manual.)
3. Select the input source with using the **TV/VIDEO** button on the remote control. Note that this TV finds the connected input sources automatically for Video, Front Video and Component 1-2. It is presumed that RGB, HDMI1/DVI and HDMI2 sources are connected.

Do not connect to both Video and S-Video at the same time. In the event that you connect both Video and the S-Video cables, only the S-Video will work.)

VCR Rear
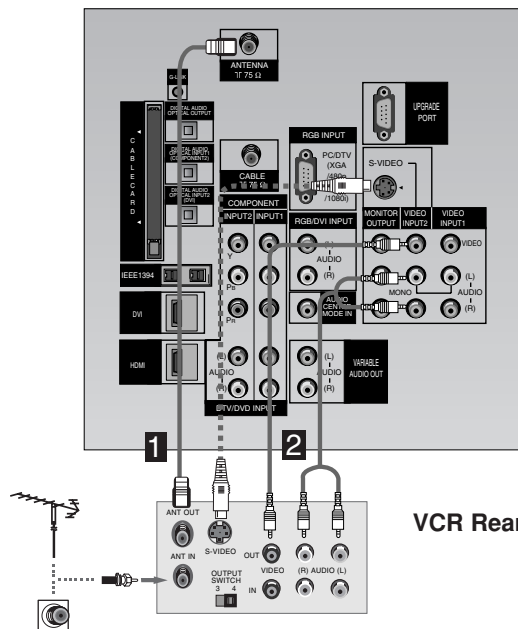
External A/V Source Setup

How to connect

Connect the audio and video cables from the external equipment's output jacks to the TV input jacks, as shown in the figure.

When connecting the TV to external equipment, match the jack colors (Video = yellow, Audio Left = white, and Audio Right = red).

How to use

1. Select the input source with using the **TV**/**VIDEO** button on the remote control. Note that this TV finds the connected input sources automatically for Video 1-2 and Component 1-2. It is presumed that RGB, HDMI1/DVI and HDMI2 sources are connected.
2. Operate the corresponding external equipment. For connection instructions for operating the TV Guide On Screen system, see page 21.
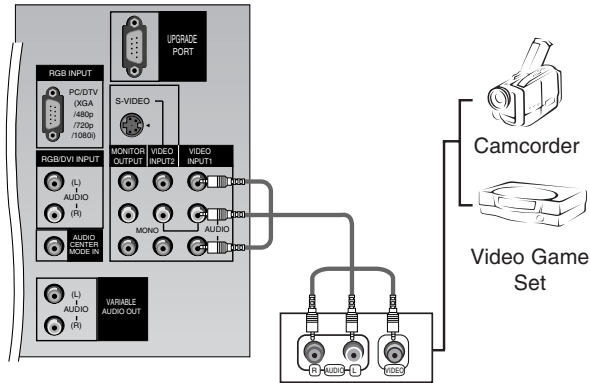
DVD Setup

How to connect

1. Connect the DVD video outputs (Y, P$_B$, P$_R$) to the COMPONENT (Y, P$_B$, P$_R$) INPUT jacks on the TV and connect the DVD audio outputs to the AUDIO INPUT jacks on the TV, as shown in the figure.
2. If your DVD only has an S-Video output jack, connect this to the S-VIDEO input on the TV and connect the DVD audio outputs to the AUDIO INPUT jacks on the TV, as shown in the figure.

Note: If your DVD player does not have component video output, use S-Video.

How to use

1. Turn on the DVD player, insert a DVD.
2. Use the **TV**/**VIDEO** button on the remote control to select **Component 1** or **Component 2**. (If connected to S-VIDEO, select the **Video** or **Front Video** external input source.)
3. Refer to the DVD player's manual for operating instructions.

• **Component Input ports**
  To get better picture quality, connect a DVD player to the component input ports as shown below.

Component ports on the TV	Y	P$_B$	P$_R$

Video output ports on DVD player	Y	Pb	Pr
	Y	B-Y	R-Y
	Y	Cb	Cr
	Y	P$_B$	P$_R$
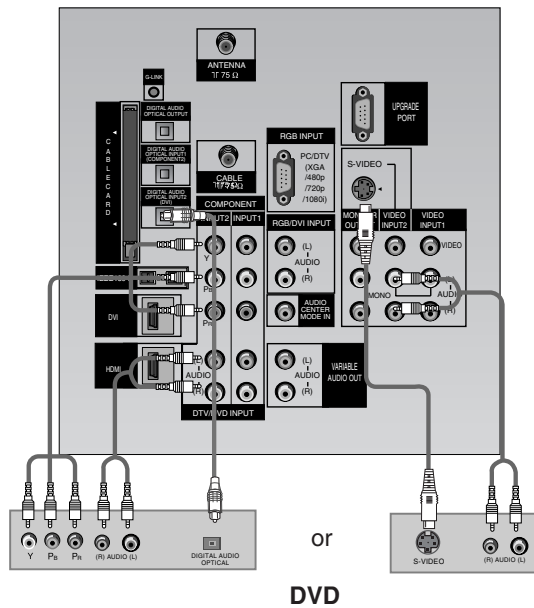
Notes:
• Digital Audio will not work for Component 1 input source.
• Digital Audio operation has priority if Digital Audio and AUDIO L/R are connected at the same time.

CableCARD™ Setup

How to use

Insert the CableCARD™ received from the cable service provider to the CableCARD™ slot of TV back panel.
If the pairing information about this TV and the CableCARD is automatically displayed on the screen, contact with the cable service provider by phone.

Note *:*
• CableCARD™ have the types of Motorola, Scientific Atlanta, SCM etc.. These 3 types of CableCARD™ can be used for this PLASMA TV.

⚠ **Caution**: When removing the CableCARD™, do not drop it as this may cause impact to the CableCARD™.
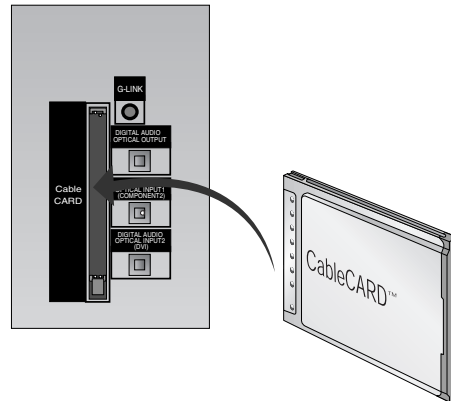
HDSTB Setup

- 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).

How to connect

Use the TV's COMPONENT (Y, P$_B$, P$_R$) INPUT, RGB, HDMI1/DVI or HDMI2 jack for video connections, depending on your set-top box connector. Then, make the corresponding audio connections.

Note: *HDMI(High Definition Multimedia Interface): Input that accepts uncompressed digital signal and multi channel digital audio signal.*

How to use

1. Turn on the digital set-top box. (Refer to the owner's manual for the digital set-top box.)
2. Use **TV**/**VIDEO** on the remote control to select **Component 1**, **Component 2**, **RGB-DTV**, or **HDMI**/**DVI** source.

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

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.

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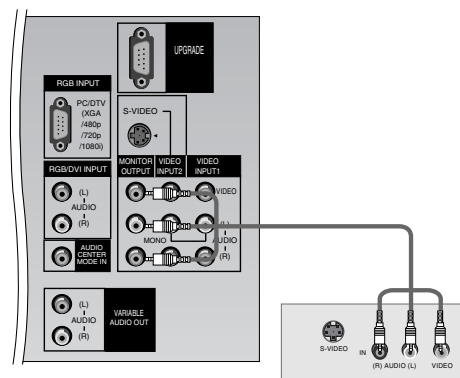
Digital Audio Output

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 65.
   See the external audio equipment instruction manual for operation.

⚠ **Caution**: Do not look into the optical output port. Looking at the laser beam may damage your vision.
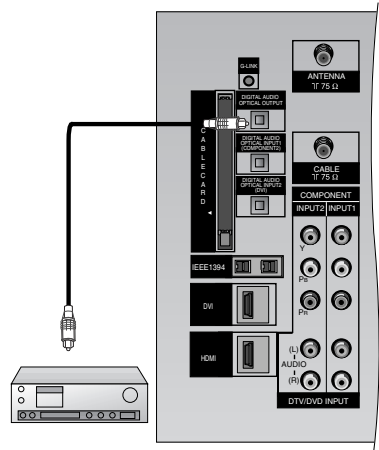
Dolby Digital Audio Connection

How to connect
1. Connect the Dolby Digital Output jacks from the TV to the input jacks on the Dolby Digital Receiver.
2. Set up your Dolby Digital Receiver according to the directions provided with that device.
3. If you wish to use your TV as the "Center channel" for your home theater, re-direct the center channel to **Center speaker mode input** jack on the TV.

Set the **TV Speaker** option to - "**Center**" on the AUDIO menu. Refer to page 60.
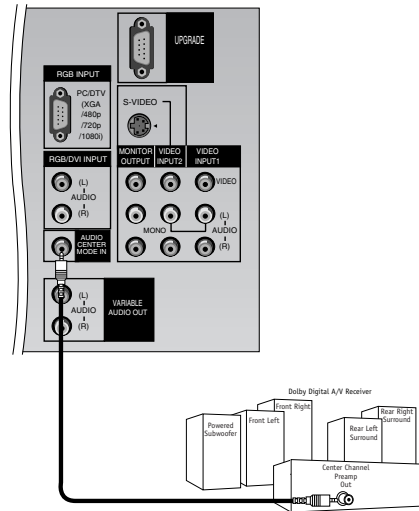
External Stereo
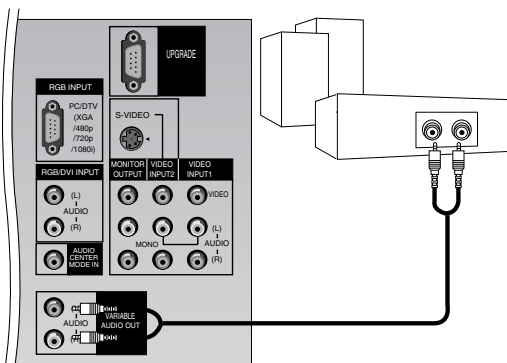
Hook up Variable Audio Output, L-Audio-R to Amplifier system for Left/Right front speaker sound.

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.

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.

<When the PC supports DVI>

How to connect
1. Connect the PC to HDMI1/DVI port of this TV with an HDMI-to-DVI cable(not supplied with this product).
   If you do not need to connect audio, HDMI2 port is also available for the DVI video connection.
2. If the PC(or the sound card of the PC) has a fiber optic digital audio output connector, connect the PC's audio output to DIGITAL AUDIO(OPTICAL) port for DVI INPUT.
3. If the PC(or the sound card of the PC) has an analog audio output connector, connect the PC's audio output to AUDIO INPUT port located on the right side of RGB INPUT port.

How To Use
1. To get the best picture quality, adjust the PC graphics card to 1024x768, 60Hz.
2. Select HDMI1/DVI input source in main input option of SETUP menu.(Refer to P.58)
   **TV**/**VIDEO** button is also available for this purpose.
3. 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.

<When the PC supports RGB>

How to connect
1. Connect the PC to RGB INPUT port of this TV with a RGB cable(not supplied with this product).
2. If the PC(or the sound card of the PC) has an analog audio output connector, connect the PC's audio output to AUDIO INPUT port located on the right side of RGB INPUT port.
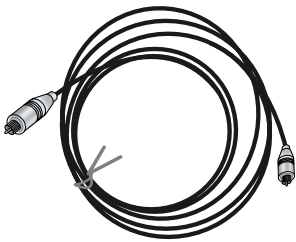
How To Use
1. To get the best picture quality, adjust the PC graphics card to 1024x768, 60 Hz.
2. Select **RGB-PC** input source in main input option of SETUP menu.(Refer to P.58)
   Once you select **RGB-PC** in main input option of SETUP menu, **TV**/**VIDEO** button is also available for this purpose.
3. 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.

Monitor Display Specifications (RGB-PC)

Resolution	Horizontal Frequency(KHz)	Vertical Frequency(Hz)	Resolution	Horizontal Frequency(KHz)	Vertical Frequency(Hz)
720x400	31.469	70.08	800x600	35.156	56.25
	37.927	85.03		37.879	60.31
640x480	31.469	59.94		48.077	72.18
	37.861	72.80		46.875	75.00
	37.500	75.00		53.674	85.06
	43.269	85.00	1024x768	48.363	60.00
				56.476	70.06
				60.023	75.02

Monitor Display Specifications (HDMI/DVI Mode)

Resolution	Horizontal Frequency(KHz)	Vertical Frequency(Hz)	Resolution	Horizontal Frequency(KHz)	Vertical Frequency(Hz)
640x480	31.469	59.94	1024x768	48.363	60.00
	37.861	72.80		56.476	70.06
	37.500	75.00		60.023	75.02
800x600	35.156	56.25			
	37.879	60.31			
	48.077	72.18			
	46.875	75.00			

HDMI

HDMI™
HIGH DEFINITION MULTIMEDIA INTERFACE

- HDMI™, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC."
- 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 resolution.
- 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 of SETUP menu.(Refer to P.58)
  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. If the source device has an analog audio output connector, 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 of SETUP menu.(Refer to P.58)
  TV/**VIDEO** button is also available for this purpose.

Cable sample
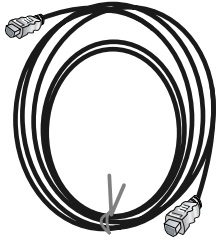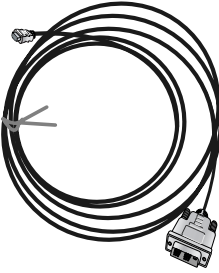
|	
	HDMI Cable (not supplied with the product)
	HDMI to DVI Cable (not supplied with the product)
	Fiber Optic Digital Audio Cable (not supplied with the product)
	Analog Audio Cable(RCA type) (not supplied with the product)
	Analog Audio Cable(Stereo to RCA type) (not supplied with the product)

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 HDM1/DVI Input source in Main Input option of SETUP menu.(Refer to P.58)
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 you use a HDMI1 to DVI Cable.
- Avoid keeping a fixed image on the TV SET screen for a long period of time. The fixed image may become permanently imprint-ed on the screen. Use the Orbiter screen saver when possible.
*- When Source Devices connected HDMI/DVI Input, output PC Resolution(VGA, SVGA, XGA), Position, Size may not fit to Screen. As shown the lower picture, press the **ADJUST** button to adjust the screen Position of TV SET and contact an PC graphics card service center.*
- When Source Devices connected HDMI1/DVI Input output TV SET Resolution(480p, 720p, 1080i), 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. And In case of, Video Resolution 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.
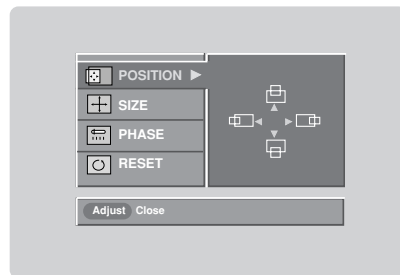
In This Mode, the Supported TV Set Resolution Specification

- 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 This Mode, the Supported PC Resolution Specification

- 640 x 350 @ 70Hz
- 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

TV Guide On Screen Setup

- The TV Guide On Screen system uses Setup information to provide you with show listings and lineups in your area—which are updated several times a day.
- Once you set up the TV according to manufacturer's instructions, you are ready to set up the TV Guide On Screen system.

Note:*The TV Guide On Screen system interactive program guide provides listings for cable-ready, cable box, and digital cable services as well as over-the-air broadcast. It does not provide listings for satellite services.*

How to connect VCR and Cable Box

1.Antenna Service

VCR Front   **VCR Rear**

2. Cable Service without a Cable Box

VCR Front   **VCR Rear**

3.Cable Service without a Cable Box

VCR Front

VCR Rear

Cable Box Front

Cable Box Rear

or
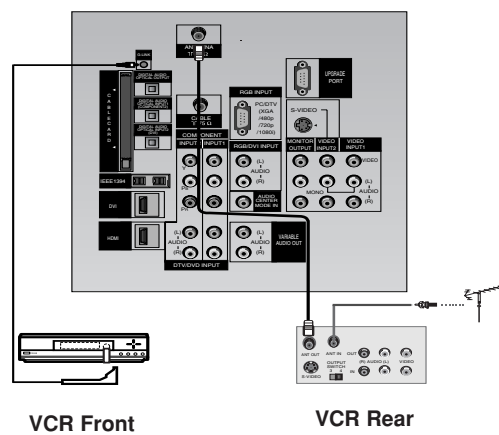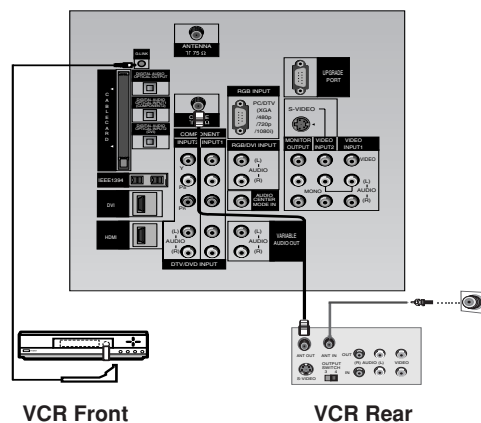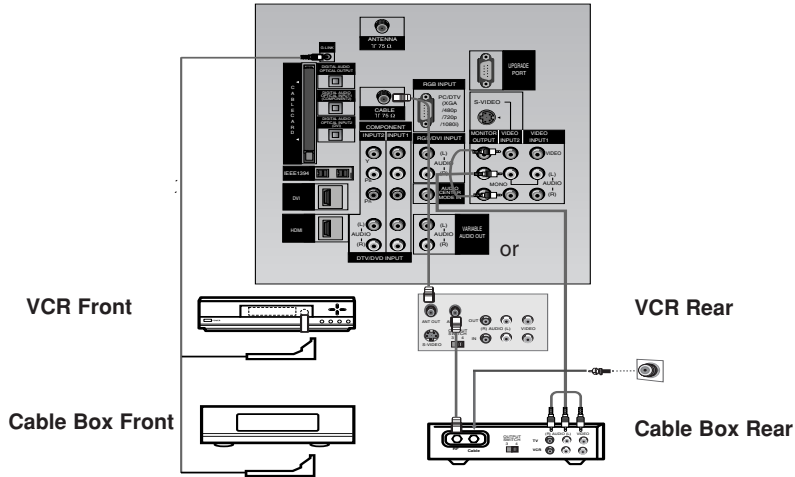
4. Antenna and Cable Service without a Cable Box

VCR Front

VCR Rear
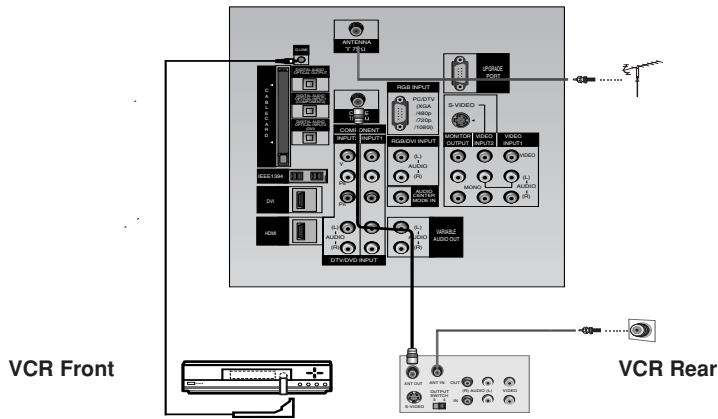
5. Antenna and Cable Service with a Cable Box

VCR Front

VCR Rear

Cable Box Front

Cable Box Rear

or
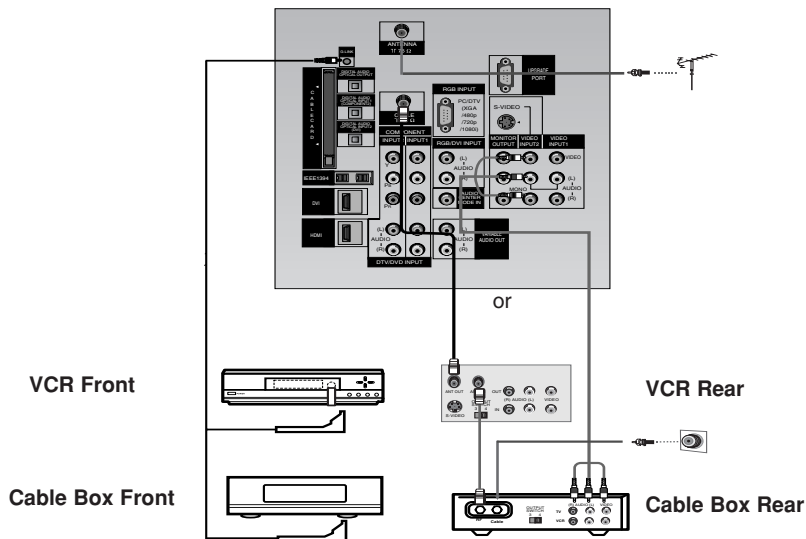
Note: The G-LINK cable is necessary for the TV Guide On Screen system to work with your Cable Box and VCR. See Page 20~21 for G-LINK connection instructions.

TV Guide On Screen Setup

1.Welcome Screen

The TV Guide On Screen system's Welcome Screen appears:

    -- by pressing the TV Guide key
    -- when you power On your TV if you previously skipped "Set up TV Guide On Screen now" on the Reminder Screen.

The Welcome Screen highlights features of the TV Guide On Screen system.

Press **ENTER** to begin Setup.

2.Reminder Screen

The TV Guide On Screen system's Reminder Screen appears:

    -- after initial TV set up
    -- if you power Off the TV and then power it back On

To make a selection, use the ▲ / ▼ button to highlight to an option, and press **ENTER**.

• "Set up TV Guide On Screen now," displays the Welcome Screen. Press **ENTER** to begin Setup.

• "Remind me to set up later" returns you to watching TV.

• "Don't remind me again" returns you to watching TV and stops the reminder screen from appearing upon power On.
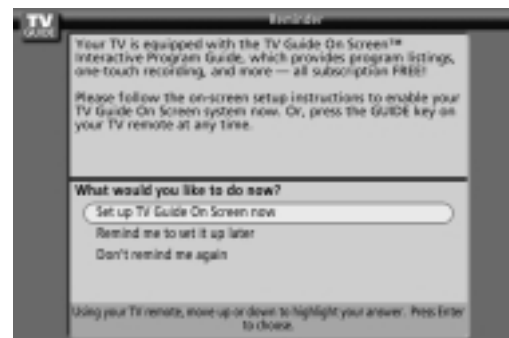
How to use

1. Screen 1: Country

   • This screen asks you the location of your TV.
   • Use the ▲ / ▼ button to highlight a country.
   • Press **ENTER** to display Screen 2.
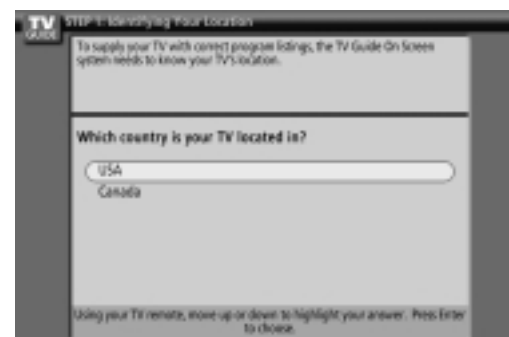
4. Screen 2: Enter Zip or Postal Code

Option 1

•If you selected USA in Screen 1, you see the ZIP Code screen.

•You input numbers by either pressing the number keys on the remote or using the ▲ / ▼ buttons to display a number, and then the ◄ / ► buttons to move to another field.

•Press **ENTER** to display Screen 3.
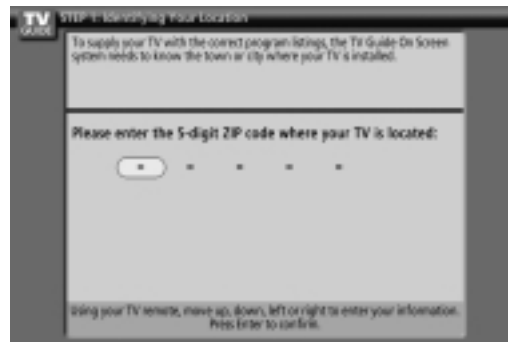
Option 2

•If you selected Canada in Screen 1, you see the Postal Code screen.

•You input characters by using the ▲ / ▼ buttons, and then the ◄ / ► buttons to move to another field.

•Press **ENTER** to display Screen 3.
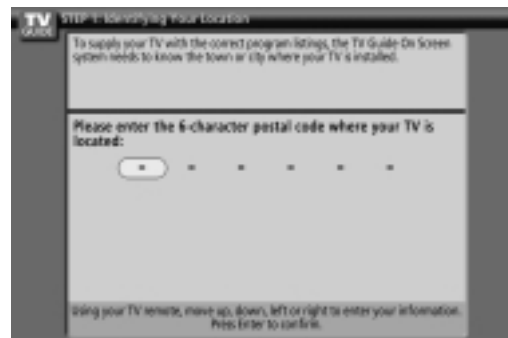
5. Screen 3: Do you have Cable?

•If you select Yes, you see Screen 4.

•If you select No, you see Screen 12.
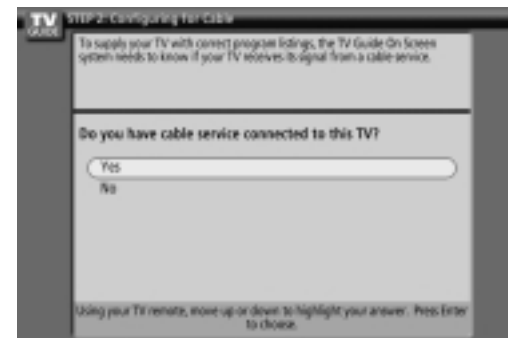
6. Screen 4: Do you have a Cable Box?

•If you select Yes, you see Screen 5.

•If you select No, you see Screen 12.
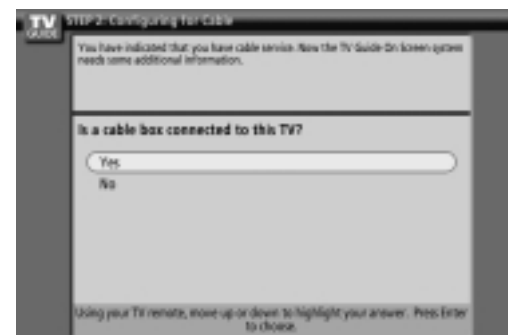
7. Screen 5: Which TV input is the cable box plugged into?

•If you select Cable, you see Screen 6.

•If you make any other choice, you see Screen 7 .
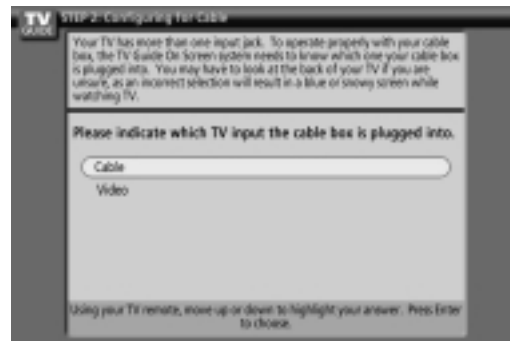
8. Screen 6: Cable Box Tuning Channel

•Select the channel used for the cable box.

•Press **ENTER** to display Screen 7.
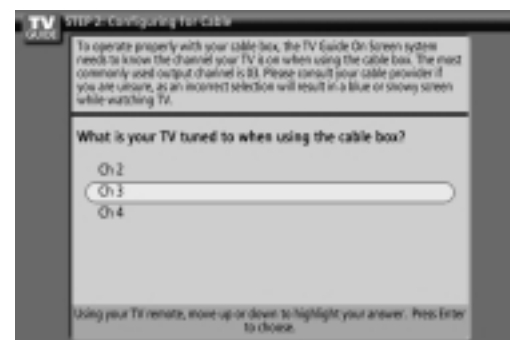
9. Screen 7: Cable Box Configuration Diagram

•The diagram shows the correct way to install the G-LINK Cable from the back of the device to the cable box.
Make sure the G-LINK Cable is properly installed.

•Press **ENTER** to display Screen 8.
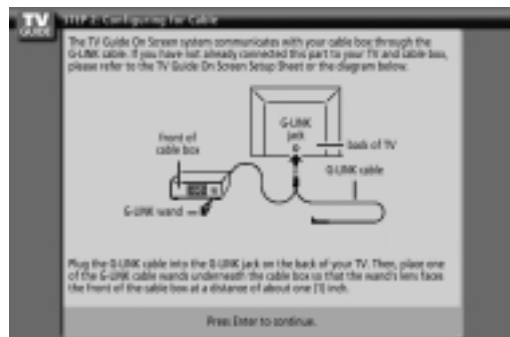
10. Screen 8: Cable Box Brand Name

•Use the ▲ / ▼ buttons to select a cable box brand.

•Press **ENTER** to display Screen 9.
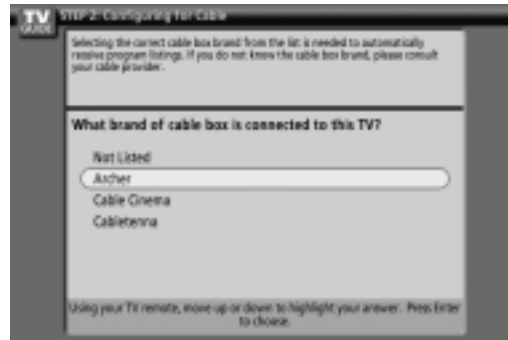
11. Screen 9: Cable Box Preparation

Follow the on-screen instructions, and press **ENTER** to display
Screen 10.
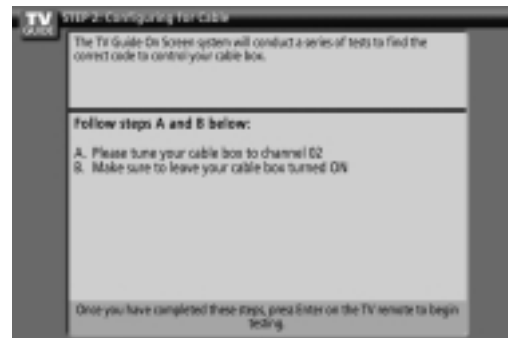
12. Screen 10: Cable Box Code Testing

When testing is done, Screen 11 displays automatically.
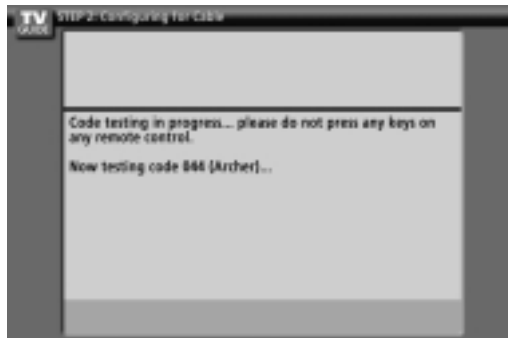
13. Screen 11: Cable Box Tuned to Channel 9?

If you select Yes, you see Screen 12.

If you select No, a different code is tested in Screen 10.

Notes: *Many Cable Boxes require testing more than one code.*

If you select Test this code again, the same code is tested again
in Screen 10.
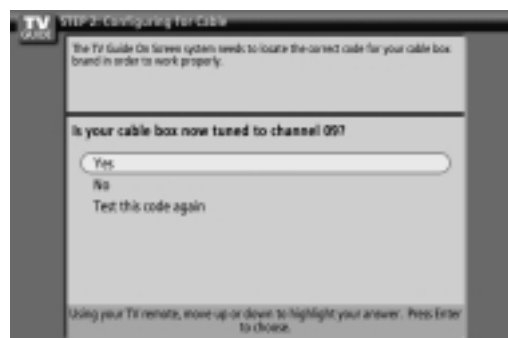
14. Screen 12: Do you have an antenna connected?

•If you select Yes, you see Screen 13.

Note: If you selected No in Screen 3 then you must select Yes in this screen to receive a channel lineup and listings.
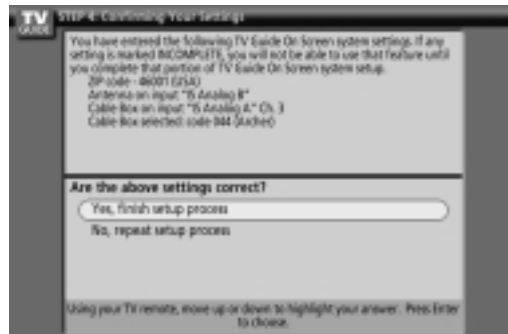
•If you select No, you see Screen 13.
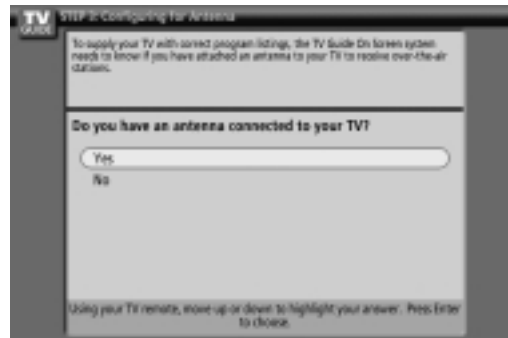
15. Screen 13: Are your basic settings correct?

•If you select Yes, you see Screen 14.
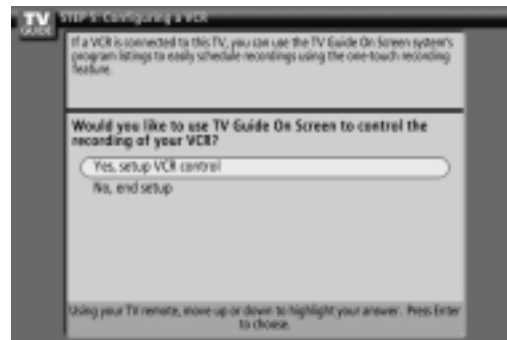
•If you select No, you see Screen 1.

**16. Screen 14: Congratulations**

•Press **ENTER** to display Screen 15.

17. Screen 15: Is a VCR Connected?

•If you select Yes, you see Screen 16.
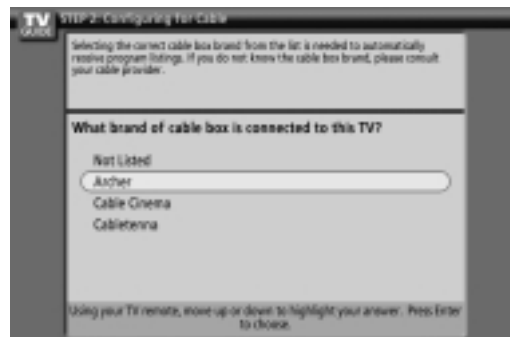
•If you select No, you see Screen 21.

18. Screen 16: VCR Configuration Diagram

•This screen shows the correct way to install the G-LINK Cable from the back of the TV to the Recording device.
Make sure the G-LINK Cable is properly installed.
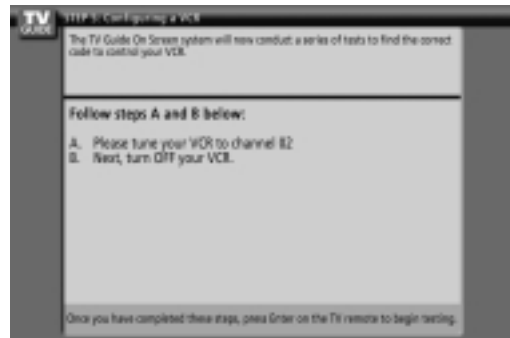
•Press **ENTER**, and you see Screen 17.
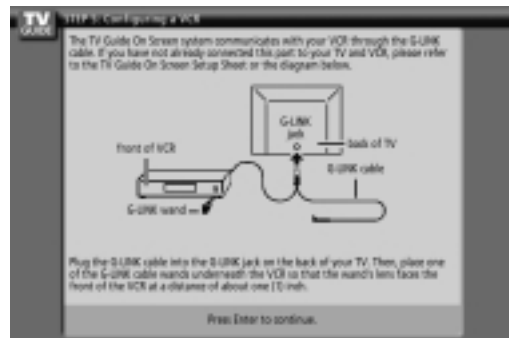
19. Screen 17: VCR Brand Name

•Use the ▲ / ▼ buttons to select the brand of the recording device.
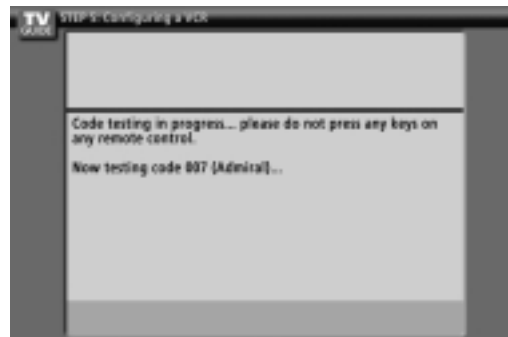
•Press **ENTER**, and you see Screen 18.

20. Screen 18: VCR Preparation

Follow the on-screen instructions, and press **ENTER** to display Screen 19.

21. Screen 19: VCR Code Testing

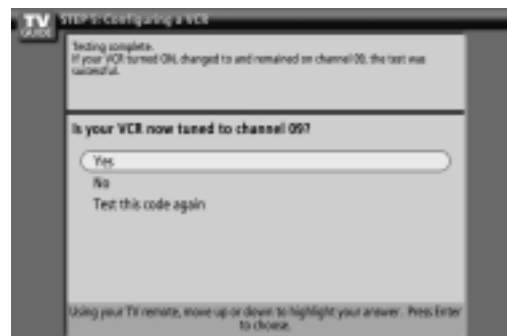When testing is done, Screen 20 displays automatically.

22. Screen 20: VCR Tuned to Channel 9?

•If you select Yes, you see Screen 21.

•If you select No, a different code is tested in Screen 19.

Note : *Many VCRs require testing more than one code.*

•If you select Test this code again, the same code is tested again in Screen 19.

23 Screen 21: Confirming Your Settings

Verify the Setup information is correct.

If it is, select Yes, end setup, and you see Screen 22.

If it is not, select No, repeat setup process, and you see Screen 1.
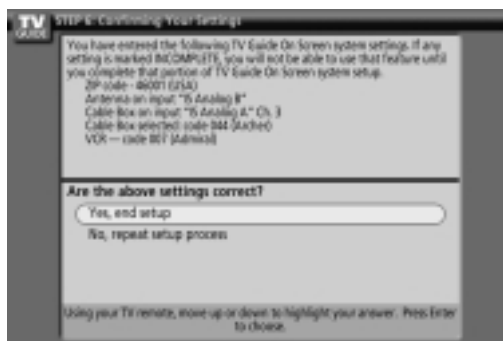
24. Screen 22: Congratulations

•You have successfully completed Setup!

•Press **ENTER** and you see Screen 23.

25. Screen 23: Helpful Information

•This screen tells you valuable information on using your Guide.

•Press **ENTER** to watch TV.

Notes:

The TV Guide On Screen system receives program listings data through your cable or over-the-air video signal. In order to receive regular program listings, please remember to do the following:

1. Turn OFF your TV when it is not in use. (Do not unplug the power cord.)

2. If you have a Cable box connected, leave it ON.

3. If you have a VCR connected, turn it OFF when not in use. (Do not unplug the power cord.)

4. If you have more than one Cable system in your area, you may be prompted to select which Cable system's program data to download. If so prompted, please follow the on-screen instructions.

Product Specifications

MODEL	DU-52SX40D/52SX4D-UB	DU-62SX40D/62SX4D-UB
Horizontal Size (inches)	55.7	63.4
Height (inches)	35.5	40.4
Depth (inches)	15.7	19.5
Weight (lbs.)	82.7	132.3
Power requirement	AC120V, 60Hz	
Television System	NTSC-M, ATSC	
Program Coverage	VHF 2 ~ 13, UHF 14 ~ 69, CATV 1 ~ 135, CADTV 1 ~ 135. DTV 2 ~ 69	
Power Consumption (W)	250W	
Antenna	75 ohm External Terminal for VHF/UHF	
Audio Output (W)	20Wx2	
Supplied Accessories	Remote control, 2 size AA batteries.	

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