

HP LC3040N 30" HD Ready LCD TV
HP LC2640N 26" HD Ready LCD TV
User's Guide



invent

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Hewlett-Packard Company
P.O. Box 4010
Cupertino, CA 95015-4010
USA

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WARNING: Text set off in this manner indicates that failure to follow directions could result in bodily harm or loss of life.



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NOTE: Text set off in this manner indicates additional information.



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Safety

First:

- Read all instructions before installing and operating the TV.
- Keep this user guide in a safe place for future reference.
- To reduce the risk of bodily injury, electric shock, fire, and damage to the TV, observe all warnings and precautions in this user guide.
- Follow all instructions in this user guide.
- Do not use attachments that are not recommended by HP with this product. Use of inadequate attachments may result in damage to the product or personal injury.

Opening the package:

- Due to the size and weight of the TV, it is recommended that a minimum of two people move it.
- If speakers are attached to the TV, do not lift the TV by the speakers; instead, use the handles and the area under the screen.
- The protective glass and the glass substrate are installed on the front of the TV. Because both glasses can be broken and scraped easily, move the product gently. Never place the TV with the glass facing downward, unless it is protected with pads.
- The TV is packaged in a carton with other standard accessories. When opening the carton, check that the TV is in good condition and that all standard accessories and items are included. Any optional accessories come separately in another carton.

Installing the TV:

- A specified technician from the distributor or authorized agent should install the TV. Refer to “Wall Mounting or Stand Replacement” on page 4 for more information.
- Install the TV on a flat surface to avoid tipping. Leave some distance between the back of the TV and the wall for proper ventilation. Never install the unit where the ventilation on the top of the TV is covered. Otherwise, fire or damage to the unit may occur.
- Avoid installing the TV in the kitchen, the bathroom, or any other area with high humidity. Damp conditions may shorten the service life of the electronic components, or may cause fire or electrical shock.
- Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade, or the third prong, is provided for your safety. If the provided plug does not fit your outlet, consult an electrician for replacement of the obsolete outlet.
- Route power and signal cords appropriately to avoid stepping or tripping on them.
- Do not install this TV outdoors; rain or extended direct sunlight may damage the unit.
- Do not install the TV in a vehicle; vibrations may damage the unit, or the unit may fall and cause injury.
- Do not install the TV in a ship or a vessel; seawater damages the unit and may start a fire.
- Do not use this TV near water.

- Install the TV horizontally; any 90-degree clockwise or counterclockwise installation may induce poor ventilation and subsequent component damage. Do not hang the TV from the ceiling; the unit may fall and cause injury.
- Do not install near appliances, such as a microwave.
- Do not install near a heat source, such as a fireplace or radiator.
- Do not place the TV on an unstable cart or stand; the unit may fall over and cause injury.
- Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the TV. When a cart is used, use caution when moving the cart/TV combination to avoid injury from tip-over.
- Do not install the TV where it has a protruding edge. For example, do not place the TV where an edge overhangs a table. Do not install the product on a column, where it may accidentally fall.
- If moving the TV from a cold place to a warm place, condensation may occur inside the unit. Allow the condensation to dry before turning on the unit.
- Unplug the TV during lightning storms or when unused for long periods of time.
- Clean only with a soft dry cloth.



CAUTION: Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.

Precautions



DANGEROUS VOLTAGE: Do not attempt to repair your television yourself. Removing the back cover of the TV may cause fire or electric shock. An HP authorized service provider should do service needed on components inside the TV.

If the following conditions exist, unplug the TV from the electrical outlet and contact a qualified service professional:

- When the power cord or plug is damaged.
- When liquid was spilled on the product or when objects have fallen into the product.
- When the product does not operate as described in the instructions.
- When the product has been damaged or dropped.
- When the product displays an abnormal condition.
- When the product was exposed to rain or water.
- When the product shows signs of overheating.



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

Avoid hot areas: The TV should be placed away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers).

Avoid wet areas: Never use the TV in a wet location.

Avoid pushing objects into the product: Never push objects of any kind into cabinet slots or other openings in the TV. Slots and openings are provided for ventilation. These openings must not be blocked or covered.

Using mounting accessories: Any mounting of the TV should follow the manufacturer's instructions and should use the mounting accessory recommended by the manufacturer.

Adjust the volume: Turn down the volume before using headphones or other audio devices.

Use the correct external power source: The product should be operated only from the type of power source indicated on the electrical ratings label. If you are not sure of the type of power source required, consult your HP authorized service provider or local power company.

Position the power cord carefully: Route the power cord so that it will not be walked on, tripped over, or pinched by items placed upon or against it. Pay particular attention to the plug, electrical outlet and the point where the power cord exits the product.

Overloading: Do not overload an electrical outlet, power strip, or convenience receptacle. The overall system load must not exceed 80% of the power strip input rating.

Observe extension cord ratings: If an extension cord or power strip is used, make sure that the cord or strip is rated for the product and that the total ampere ratings of all products plugged into the extension cord or power strip do not exceed 80% of the extension cord or strip ampere ratings limit.

Using cables and power cords:

- Plug the product into a grounded (earthed) electrical outlet that is easily accessible at all times.
- Do not disable the power cord grounding plug. The ground plug is an important safety feature.
- Disconnect power from the TV by unplugging the power cord from the electrical outlet.
- Do not pull on cords and cables. When unplugging the cord from an electrical outlet, grasp and pull the cord by the plug.
- Do not attempt to power the TV with converter kits sold for appliances.
- Unplug the TV from the electrical outlet before cleaning. Do not use liquid cleaners or aerosol cleaners.



WARNING: Do not place any objects on top of the TV. Spilled water or metal objects may cause short circuit, fire, or electric shock if they penetrate into the housing of the TV.

Never use a damaged power cord. Do not place power cords in areas where they can be pinched, stepped on, or otherwise compromised. Heavy objects, heat, chemicals, or tensile force may damage the power cord and cause fire or electric shock.

Do not change or open the back cover. Removing the back cover of the TV may cause fire or electric shock. Contact the manufacturer when inspection or adjustment is required.

Do not use the TV if any abnormality occurs. If any smoke or odor becomes apparent, unplug the power cord and contact the manufacturer immediately.

Do not try to repair the TV on your own.

Cleaning the TV

Use a dry, soft cloth to remove dust from the TV screen and the chassis.

- Unplug the TV before cleaning the screen.
- A special anti-glare coating is applied to the screen of your TV. Using solvents such as alcohol or abrasive material such as a power towel may affect the screen coating or bezel paint.
- Do not expose the product to volatile gas or fluid such as a pesticide.
- Do not put the TV in contact with vinyl or rubber products for a long period of time. Extended contact may result in the removal of the coating or degradation of the surface.

Wall Mounting or Stand Replacement

A specified technician from the distributor or authorized agent should install the TV, including stand replacement or wall mounting. Wall mounting brackets are sold separately and are not included with the TV.

Wall mounting the TV requires:

- Removal of the transport handles on the back of the TV.
- Removal of the stand from the TV panel.
- Assembly of the wall mounting bracket and installation of the bracket onto the TV panel.
- Placement and installation of the TV panel with wall bracket onto the wall.

Due to the size and weight of the TV, it is recommended that a minimum of two people move it.

Introduction



- **Faroudja's Emmy-Award winning DCDi video processing** technology analyzes video pixel-by-pixel to deliver a spectacular picture. The acclaimed DCDi algorithm detects low-angle lines and smoothes out staircases and jagged edges — bringing a new tier of realism to sporting events and movies.
- **SRS WOW™** creates a bigger, enhanced sound experience by providing three dimensional sound, enhancing musical vocals, and creating the perception of deep, rich bass.
- **BBE ViVA HD3D (High Definition 3D) Sound** provides musically accurate natural 3D image with Hi-Fi sound. The clarity of the sound is improved by BBE while the width, depth and height of sound image are expanded by BBE's proprietary 3D sound process.
- **FilmMode Processing with 3:2 & 2:2 pull down** accurately reproduces film-originated content from video sources.
- **Cross Color Suppressor** removes cross color artifacts from composite video sources, delivering consistent, true color every time.
- **Motion Adaptive Noise Reduction** greatly enhances quality of standard definition and off air media and standard definition video.
- **Fine Detail Enhancer** identifies areas of fine detail in a picture, such as skin and hair, and enhances them to a dramatically more life like appearance. Additionally, the TrueLife enhancer identifies large edges that identify separation of objects, and enhances them to create a greater perception of depth. The result is a stunningly realistic viewing experience.
- **Two-Tuner Picture-in-Picture and Split Screen** viewing.
- **Universal Remote Control** controls additional components, including HP Media Center PCs.

What's in the Box

The package contains:

- LCD color TV with stand
- Power cord
- Speakers
- Speaker cables
- 1.8 meter antenna cable
- Remote control with batteries
- User's guide
- Warranty card
- Setup poster

Power Cord

- Check first to make sure that the power cord is the correct type required for your area.
- This TV has a universal power supply that allows operation in either 100/120V \sim or 220/240V \sim voltage. No user adjustment is required.
- Connect the power cord into your TV's power input socket, and then plug the other end into a grounded outlet.

Use a UL-listed cord set consisting of a min No. 18 AWG, Type SVT or SJT three-conductor a maximum of 10 feet in length and a parallel blade, grounding type attachment plug rated 10A, 125V.

- For units to be used at 100/240V \sim (inside U.S.):

Use a UL-listed cord set consisting of a min No. 18 AWG, Type SVT or SJT three-conductor cord a maximum of 10 feet in length and a tandem blade, grounding type attachment plug rated 10A, 250V.

- For units to be used at 220/240V \sim (outside of U.S.):

Use a cord set consisting of a min 0.75mm², 3G, Type H05VV-F cord and grounding type attachment plug rated 10–16A, 250V. The cord set should have the appropriate safety approvals for the country/region in which the equipment will be installed and marked HAR.

Battery for the Remote Control

When the batteries are low, the red light on the remote control blinks twice when a button is pushed. Insert two AA non-rechargeable batteries into the remote control ensuring that you place them with the proper polarity.

- 1 Press and open the cover on the back of the remote control.
- 2 Insert the batteries into the remote control ensuring that you place them with the proper polarity.
- 3 Close the cover.



CAUTION: Battery cautions

Use only the size and type of batteries specified.

Be sure to follow the correct polarity when installing the batteries as indicated in the battery compartment. Reversed batteries may cause damage to the device.

Do not mix different types of batteries together (for example, alkaline and carbon-zinc) or old batteries with fresh ones.

When not using the remote for a long period of time, remove the batteries to prevent damage or injury from possible battery leakage.

Do not try to recharge batteries that are not intended to be recharged; they can overheat and rupture. (Follow the battery manufacturer's directions for the batteries you are using.)

Always remove batteries as soon as they become weak. Weak batteries can leak and severely damage the unit.

Replace batteries yearly or when remote control operation becomes erratic.

Do not take apart the batteries, heat them, or throw them into a fire.



CAUTION: Remote control cautions

Do not expose the remote control to shock, such as from dropping or an electric charge. In addition, do not expose the remote control to liquids, and do not place it in an area with high humidity.

Do not install or place the remote control under direct sunlight. The heat may cause deformation of the unit.

The remote control may not work properly if the remote sensor window of the main unit is under direct sunlight or strong lighting. In such a case, change the angle of the lighting or LCD TV set, or operate the remote control closer to the remote sensor window.

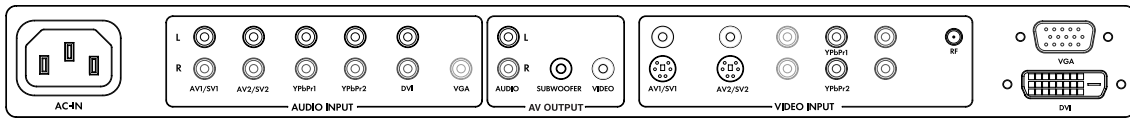
Setup

Rear Connectors

The rear connectors are located on the back of your display tucked under the back panel. Insert the cables from your component into these rear connectors. The rear connectors you use depend on the type of cables you are using with your component. Make sure you insert the audio cables into the connectors that correspond with the video input.

The rear connectors are divided into three sections

- Audio Inputs
- Audio/AV Outputs
- Video Inputs



Identifying Your Components Cables

Where you connect your component into the TV connectors depends on the type of cables you use to connect the component. Your TV is compatible with composite, component, S-video, DVI-D, or VGA cables. Some components, such as some DVD Players have multiple output types (component, S-video and composite). Use the following chart to determine your cable type:

Type of Component	Description of Cable(s)	Where to Connect
Composite	<p>One cable with three ends:</p> <ul style="list-style-type: none"> • One yellow for video • One red for audio • One white for audio <p>Some composite cables come with red and white audio cables separate.</p>	<ul style="list-style-type: none"> • Insert the yellow cable into the yellow AV1 or AV2 video input. • Insert the red and white cables into the red and white AV1 or AV2 audio inputs.
S-video	<p>One cable with three ends:</p> <ul style="list-style-type: none"> • One cable with 4 pins • One red for audio • One white for audio <p>Some S-video cables come with red and white audio cables separate.</p>	<ul style="list-style-type: none"> • Insert the cable into the SV1 or SV2 video input. • Insert the red and white cables into the red and white SV1 or SV2 audio inputs.

Type of Component	Description of Cable(s)	Where to Connect
Component	One cable with three ends: <ul style="list-style-type: none"> • One red for Pr signal • One green for Y signal • One blue for Pb signal Some component cables come with red and white audio cables attached.	<ul style="list-style-type: none"> • Insert the red cable into the red YPbPr1 or YPbPr2 video input. • Insert the green cable into the green YPbPr1 or YPbPr2 video input. • Insert the blue cable into the blue YPbPr1 or YPbPr2 video input. • Insert the red and white audio cables into the red and white YPbPr1 or YPbPr2 audio inputs.
DVI-D	One cable with 3 rows of 8 pins.	Insert the cable into the DVI video input. DVI-D is analog only. Does not support digital signal.
VGA	One cable with 3 rows of 5 pins.	Insert the cable into the VGA video input.

Connecting a Composite Component

In the Audio Inputs section, insert the red and white audio cables into the **AV1/SV1** connectors. In the Video Inputs section, insert the yellow video cable into the top **AV1/SV1** connector.

To add an additional composite component, use the **AV2/SV2** connectors for audio and the top **AV2/SV2** connector for video.

Connecting a S-video Component

In the Audio Inputs section, insert the red and white audio cables into the **AV1/SV1** connectors. In the Video Inputs section, insert the S-video cable into the bottom **AV1/SV1** connector.

To add an additional S-video component, use the **AV2/SV2** connectors for audio and the bottom **AV2/SV2** connector for video.

Connecting a YPbPr Component

In the Audio Inputs section, insert the red and white audio cables into the **YPbPr1** connectors. In the Video Inputs section, insert the red, blue and green video cables into the top **YPbPr1/YPbPr2** connectors.

To add an additional YPbPr component, use the **YPbPr2** connector for audio and the bottom **YPbPr1/YPbPr2** connectors for video.

Connecting a PC with a DVI Cable

In the Audio Inputs section, insert the audio cables from your PC (color of cable tips vary) into the **DVI** connector. In the Video Inputs section, insert the DVI cable into the **DVI** connector.

Connecting a PC with a VGA Cable

In the Audio Inputs section, insert the audio cable from your PC (color of cable tip varies) into the **VGA** connector. In the Video Inputs section, insert the VGA cable into the **VGA** connector.

Connecting a Subwoofer

Insert speaker cable from your subwoofer into the **Subwoofer** connector.

Connecting Headphones

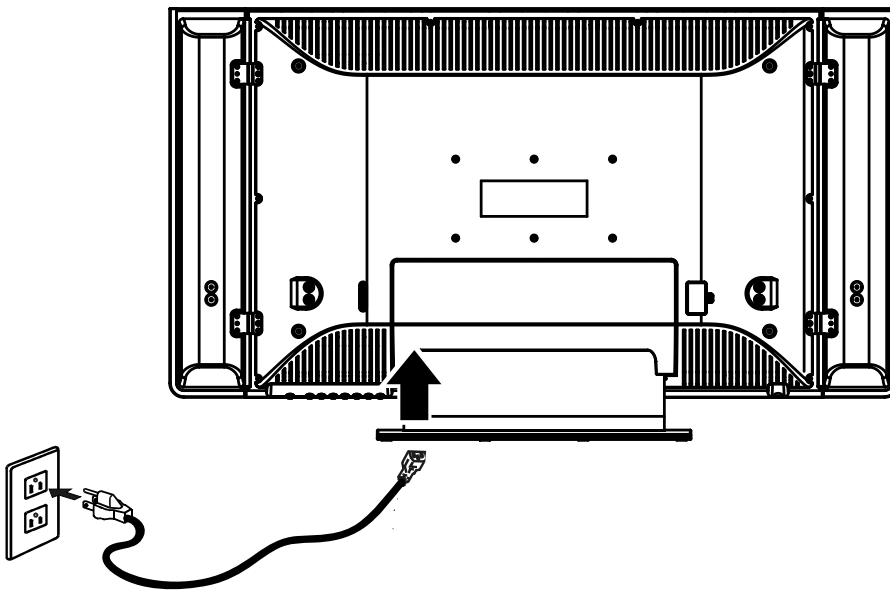
The headphone input is under the front of the display toward the left. Insert the headphone cable into the green input.

Connecting an Antenna/Cable box/Satellite Dish

Twist the cable from your antenna/cable box/satellite dish on to the **RF** connector.

Power Connection

- Use the provided AC power cord to connect to the wall outlet.
- Always unplug the AC cord from the product and power outlet when not using for a long period of time.



Antenna Connection

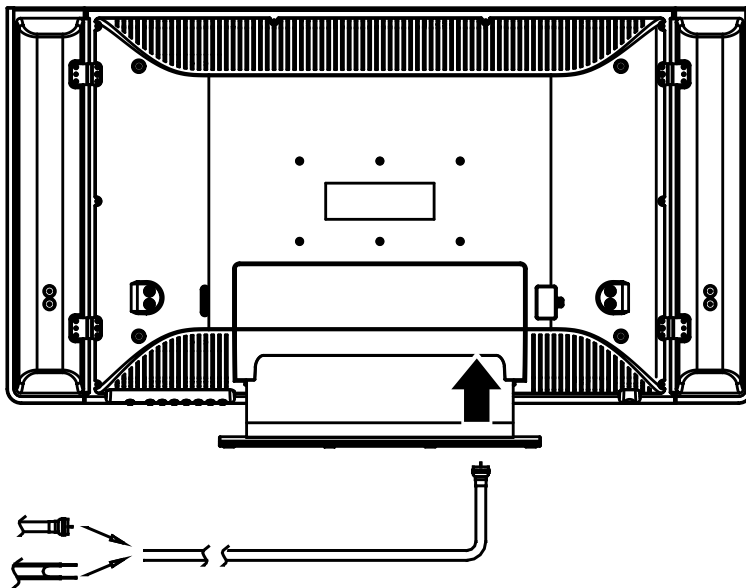
The antenna requirements for good color television reception are more important than those for black-and-white television reception. For this reason, a good-quality outdoor antenna is strongly recommended.

The following is a brief explanation of the type of connections that are provided with the various antenna systems.

- A 75-ohm system is generally a round cable with F-type connector that can easily be attached to a terminal without tools.
- A 300-ohm system is a flat "twin-lead" cable that can be attached to a 75-ohm terminal through a 300-to-75-ohm adapter (not supplied).

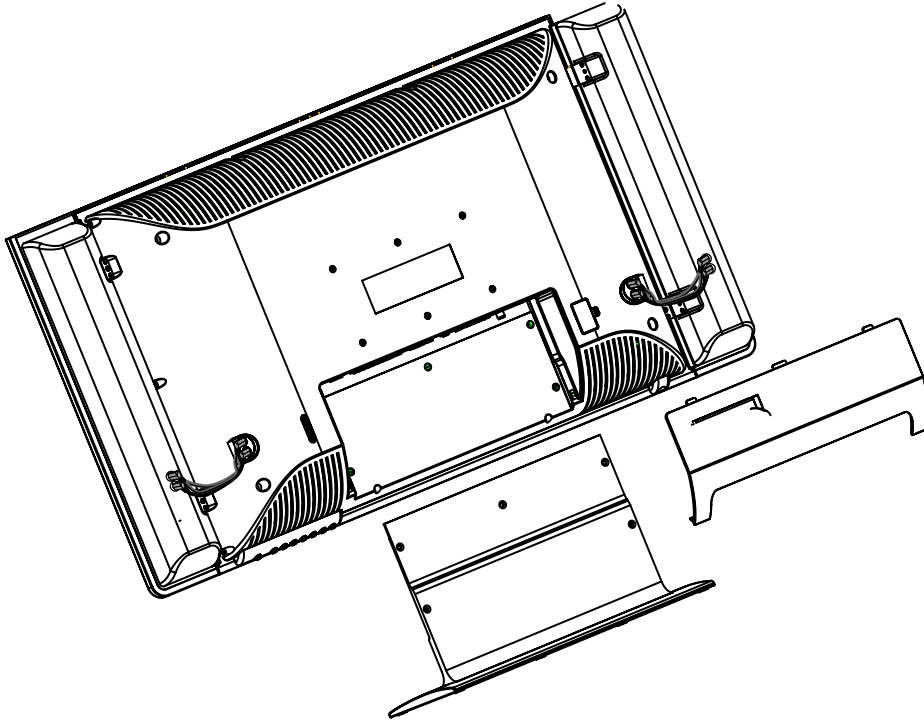
Outdoor Antenna Connection

Connect the outdoor antenna cable lead-in to the RF connector on the rear of the TV set.



VESA Wall Mounting

Your LCD TV comes with a TV stand already attached. You must remove the stand attached to the LCD TV before attaching any wall mounting equipment (not included). It is recommended that a specified technician from the distributor or authorized agent mount the TV on a wall.



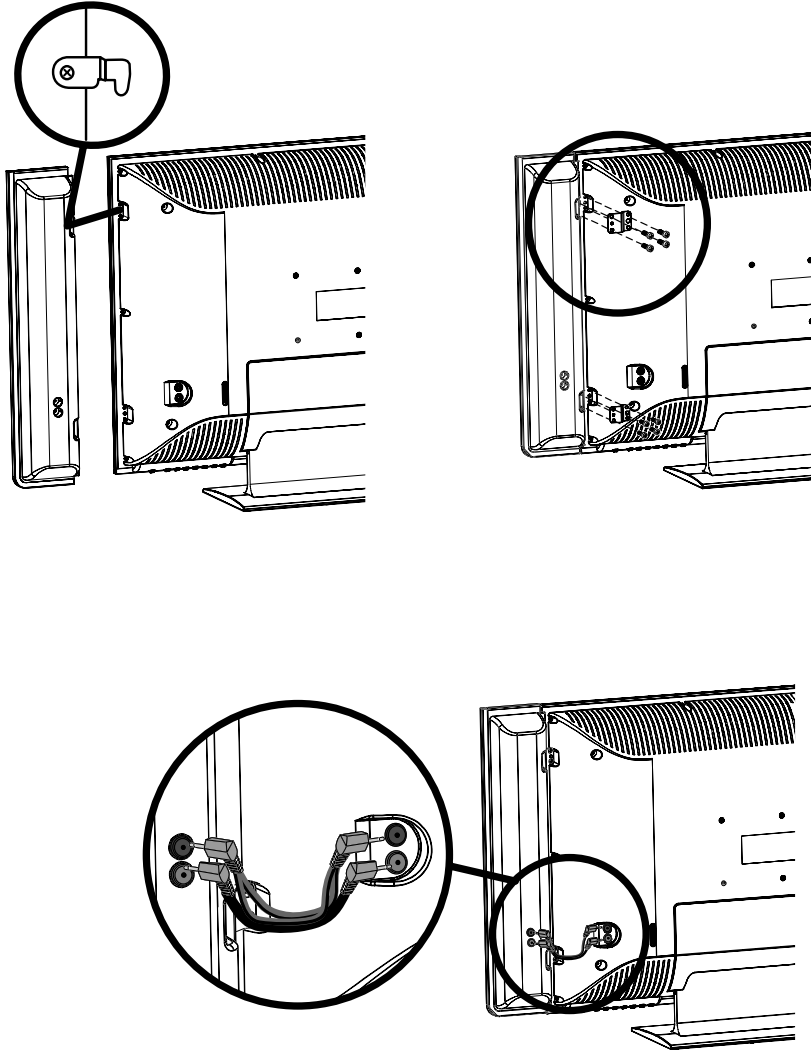
Removing the Stand

- 1 Place a soft cloth on a stable table.
- 2 Carefully place the TV face down on the cloth with the stand hanging over the edge of the table.
- 3 Remove the five screws attaching the stand to the main display. Be careful to not drop the stand.

Attaching the Speakers

Your LCD TV comes with speakers and speaker wire for you to connect to each side of the TV. Follow these steps to attach the speakers:

- 1 Hook the speaker onto the LCD TV.
- 2 Insert and tighten the four screws to each clip.
- 3 Insert the speaker wires into the connectors on the speakers and back panel of the LCD TV.



Control Options



- Input Select, Exit, Vol (+)/(-), CH (+)/(-), and Menu on the main unit have the same functions as the same buttons on the remote control. This manual describes the features through the remote control keys.

Power Management System (For PC Mode Only)

The LCD TV has a power management function that automatically reduces power consumption in three power-saving modes when not in use.

State	LED	Video	Power
On	Blue	TV on, video input active	185W (typical)
Standby	Red	TV on, but video not present	< 5W
Off	Off	TV is off	< 5W

Timing Mode

Mode	Resolution	Horizontal Frequency (KHz)	Vertical (Hz)
1	VGA 720 x 400	31.47 kHz	70 Hz
2	VGA 640 x 480	31.47 kHz	70 Hz
3	VESA 640 x 480	31.47 kHz	60 Hz
4	VESA 640 x 480	37.50 kHz	75 Hz
5	VESA 800 x 600	37.88 kHz	60 Hz
6	VESA 800 x 600	46.88 kHz	75 Hz
7	VESA 1024 x 768	48.36 kHz	60 Hz
8	VESA 1024 x 768	60.02 kHz	75 Hz
9	VESA 1280 x 768	47.78 kHz	60 Hz
10	VESA 1280 x 768	68.28 kHz	75Hz

Using the TV

Basic Operation

Adjusting the Volume

Press the (+) or (-) VOL buttons on the remote control to increase or decrease the volume. The indicator bar on the display shows the increase or decrease.

Muting the Sound

- 1 Press the MUTE button to temporarily turn off the sound.
- 2 Press the MUTE button again to restore the sound back to the previous level.

Turning On and Off the LCD TV

To turn on the display, press the PWR button on the remote control. The Power LED on the display turns blue.

To turn off the display, press the PWR button on the remote control. The Power LED on the display turns red.

First Time Setup for Channels

First select the TV receiving mode to Air or Cable. Use the Channel Search feature to set up your channels. The Channel Search scans channels 1 to 125 and adds the channels that return a signal. Use the following steps to run the Channel Search:

- 1 Press the ENTER button on the remote control to display the Menu screen.
- 2 Use the arrows to select the System Page and press the ENTER button.
- 3 Arrow down and press the ENTER button to enter the Channel Search feature.
- 4 Use the right arrow to select Yes and then press ENTER.

Changing Channels

Press the (+) or (-) CH buttons on the remote control to change the channel up or down.

- This LCD TV set allows you to select up to 125 channels (1 to 125). To select a channel, enter a one- or two- or three-digit number, or use the channel up or channel down buttons.

To select a one or two-digit channel number (for example, channel 5):

Press 0 on the remote control, and then press 5 immediately.

Or

Press the 5 button.

To select a three-digit channel number (for example, channel 115):

Complete the following procedure within 4 seconds.

- 1** Press the 10+ button on the remote control.
- 2** Press the 1 button.
- 3** Press the 5 button.

The three-digit channel number can be selected only when the receiving mode is set to Cable in the TV Country setting on the System Page.

Exit Button

Press the EXIT button to return one level back from each menu in the onscreen display. You can escape fully out of the On Screen Display (OSD) with the Exit key.

Adjusting the Language Settings

- 1** Press the ENTER button on the remote control to display the Menu screen.
- 2** Arrow down and press ENTER button to select the OSD Page.
- 3** Press the ENTER button to enter the Language selection menu.
- 4** Press the Right Arrow to select a language.
- 5** Press the EXIT button to save your selection.

Adjusting the Picture Mode Settings

Press the Picture Mode key on the remote control to display the Standard, Vivid, Favorite, and Movie brightness settings.

- **Standard:** Fixed brightness for normal viewing conditions.
- **Vivid:** For viewing conditions with higher ambient light.
- **Favorite:** Manual adjustment to user preference.
- **Movie:** For viewing conditions with a darker contrast.

Channel Editing

Follow these steps to add or remove channels from your selection list.

- 1** Press the ENTER button on the remote control to display the Menu screen.
- 2** Arrow down and press the ENTER button to select the System Page.
- 3** Arrow down and press the ENTER button to enter the Channel Edit section.
- 4** Use the following arrows to add or erase channels:
 - Right arrow erases the current channel.
 - Left arrow adds the current channel.
 - Up and Down arrows scroll through the channels.

Setting the TV Receiving Mode

To receive locally broadcast programming, you need to set the receiving mode to Air or Cable.

- 1 Press the ENTER button on the remote control to display the Menu screen.
- 2 Arrow down and press the ENTER button to select the System Page.
- 3 Arrow down and press the ENTER button to enter the TV Country section.
- 4 Press the Right Arrow to select a Air or Cable mode.
- 5 Press the EXIT button to save your selection.

Selecting an Input Source

To view different sources on your display such as a DVD Player, VCR, PC, or game console, and so on, you need to set the input source.

- 1 Press the Input Select button on your remote control to bring up the Select Source menu.
- 2 Use the Left and Right arrow buttons until you see the desired input source on your display.
- 3 Press the EXIT button to return to your display.

Or

Wait a few seconds, and your selected input mode will take effect without pressing more keys.

Selecting a PIP Source

The PIP (Picture-In-Picture)Source button on the remote control displays your sub source in a smaller window. Continuously pressing the PIP Source button scrolls through all available sub source options.

Selecting the PIP Size

The PIP Size button on the remote control changes the PIP size from small, middle, and large.

POP Button

The POP (Picture-Outside-of-Picture) button on the remote control displays the last 8 channels you selected around your current channel. Use the Left and Right arrow buttons on the remote control to activate a channel. You can only activate one channel at a time. Use the Up and Down arrow buttons on the remote control to scroll through the previous channels you selected.

Setting Up V-chip

The V-chip feature requires a PIN number to be entered to view movies and TV programs with unsuitable ratings for some viewers who share the TV. Follow these steps to lock movies and TV programs:

- 1 Press the ENTER button on the remote control to bring up the OSD menu.
- 2 Press the Down arrow button five times to highlight the Factory Page icon, and then press ENTER.
- 3 Press the Down arrow button to highlight V-chip.
- 4 If this is your first time using this feature, enter the default password, 9999, to gain access.
- 5 Use the following table to set up your V-chip.

V-chip Page	Function	Options
V-chip	Requires a PIN number to be entered to view movies and TV programs with unsuitable ratings for people in your household.	On or Off
TV Rating	Blocks selected TV-rating and all ratings above it.	TV-Y, TV-Y7, TV-G, TV-PG, TV-14, TV-MA
MPAA Rating	Blocks selected MPAA-rating and all ratings above it.	G, PG, PG-13, R, NC-17
New Password	Enter a new password.	

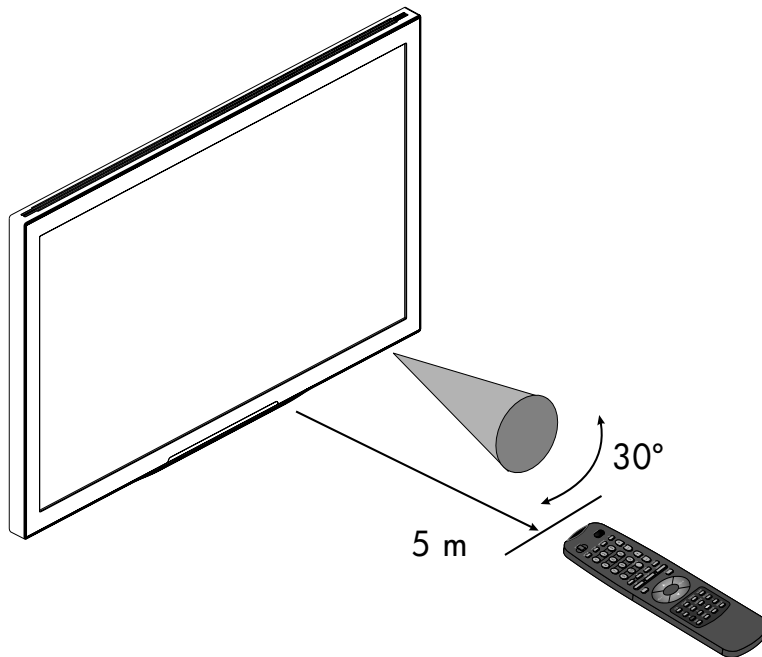
Using the Remote Control

The remote control operates the TV, your cable or satellite set-top-box, your DVD/VCR, and your HP Media Center PC (HP PC).

NOTE: Use the remote control within a distance of 16.4 feet (5 meters) from the front of the TV remote control sensor window and at the maximum 30° horizontal and vertical angles.

To use the remote control:

- 1 Press the TV, CBL/SAT, DVD/VCR, or HP.PC button to select the home entertainment component (Set-top-box, DVD/VCR or HP MCPC) to control.
- 2 Aim the remote control at the remote control sensor of the selected home entertainment component, and then press the button you want to use.





Remote control item	Description
Indicator light	The red light blinks once each time a button is pushed. If the red light blinks two times when a button is pushed, the remote control batteries are low and need replacement.
Setup	Use the SETUP button when programming the remote control for component control.
PWR	Press PWR once to turn on or off the selected home entertainment component.
TV, CBL/SAT, DVD/VCR, or HP.PC	Press one of these buttons once to select a home entertainment component to control. HP.PC selects the HP Media Center PC (connected to the VGA or DVI connector) and enables the HP MCPC special buttons on the remote. To program the remote control to operate a cable or satellite set-top-box, or a DVD, or a VCR, see "Programming the remote control for component control" on page 22.
Keypad	Use the keypad (0-9, +10) to directly select channels.
Mute	Press MUTE once to turn sound off or on.
VOL	Use VOL+ (or VOL-) to raise (or lower) the sound volume.
CH. RTN	Press CH. RTN (channel return) once to recall the last channel or to page back one screen in the main menu.
HP.MC	Press HP.MC to Start Media Center when using the HP Media Center PC.
CH	Use CH+ (or CH-) to select the next higher (or lower) channel.
Guide	Use GUIDE to display the program guide for a TV set-top-box or for HP MCPC.
Exit/Back	Use EXIT to exit out of the selected component's menu or guide. Use Back for the HP MCPC.
Up/down/left/right buttons	Use these cursor buttons to move the cursor in a program guide or in menus.
Enter	Press ENTER once after entering channel numbers on some TV models. Use Enter as the OK button for the HP MCPC. Use Enter to bring up the OSD.



Remote control item	Description
Info/Display	Use INFO to display current channel and program information, if available. Use Display to show you which channel you are on.
Menu	Press MENU to access the HP MCPC menu.
PIP Size/Fast reverse	Press PIP SIZE to change the size of the PIP from small, middle and large. Press Fast reverse when using a VCR or other device.
POP/Play	Press POP to display the last 8 channels you selected around your current channel. Press Play when using a VCR or other device.
Swap/Fast forward	Press Swap when using the PIP to exchange the pictures in the main display and the PIP/POP display. Press Fast forward when using a VCR or other device.
PIP Source/Record	Press PIP SOURCE to select the source for PIP. Press the Record button for HP MCPC. Press Record when using a VCR or other device.
Stop play	Press the Stop play button to stop when using a VCR or other device.
Pause	Press the Freeze play button to pause play when using a VCR or other device.
Sound Mode	Press the Sound Mode button to select a preset sound effect.
Picture Mode	Press the Picture Mode button to select a preset picture setting.
Replay/Reverse	Use the Replay button for rewinding your selected component.
Skip/Forward	Use the Skip button for fast forwarding your selected component.
Input Select	Press INPUT SELECT to select the input source for the main picture.
Caption	Use the Caption button to display closed caption content.
Aspect	Use the Aspect button to select one of four screen sizes when viewing videos or digital discs.
MTS	Use MTS to select STEREO, MAIN, or SAP (second audio program) for TV sound.

Programming the remote control for component control

Programming the component code

- 1 Turn on the TV. Turn on the cable or satellite set-top-box, VCR, or DVD and, if applicable, insert media (a cassette or a disc).

NOTE: Please read steps 2 through 4 completely before proceeding. We recommend highlighting or writing down the codes and device you wish to program before performing step 2.

- 2 On the remote control, press CBL/SAT button or DVD/VCR button once. Press and hold SETUP until the red light blinks twice, then release SETUP.
- 3 Use the Manufacturer's Codes (see listing that follows) to locate the type of component by brand name and then enter the first four-digit code for your component. If performed correctly, the red light blinks twice.

NOTE: If the red light did not blink twice, then repeat steps 2 and 3, entering the code again.

- 4 Aim the remote control at the component and press PWR once. The component should turn off. If it does not respond, repeat steps 2 and 3, trying each code for your brand until you find one that works. If it still does not work, try searching for the code in the component code table.
- 5 Repeat steps 1 through 4 for each component you want to control with the remote control.

Searching for the component code

If your device does not respond to the remote control after trying all codes listed for your brand, or if your brand is not listed at all, try searching for your code:

- 1 On the remote control, press CBL/SAT button or DVD/VCR button once.
- 2 Press and hold SETUP until the red light blinks twice, then release SETUP.
- 3 Press the number buttons 9, 9, and 1. The red light blinks twice.
- 4 Aim the remote control at the set-top-box or the VCR or DVD and slowly alternate between pressing PWR and the component (CBL/SAT or DVD/VCR) button. Stop when the component turns off.

NOTE: In the search mode, the remote control sends codes from its library to the selected device, starting with the most popular code first.

- 5 Press SETUP once to lock in the code.

Checking the component code

If you have set up the remote control to use a component, you may need to find out which four-digit code is operating your component equipment:

- 1 On the remote control, press CBL/SAT or DVD/VCR once.
- 2 Press and hold SETUP until the red light blinks twice, then release SETUP.
- 3 Press the number buttons 9, 9, and 1. The red light blinks twice.
- 4 For the first digit of the code, press the number button 1 once. Wait 3 seconds, and then count the number of times the red light blinks and write down the number.

NOTE: When you count three blinks, it means the code digit is 3. When a code digit is 0, the red light will not blink.

- 5 Repeat step 4 for the three remaining digits of the code, pressing 2 for the second digit, 3 for the third digit, and 4 for the fourth digit.

Reassigning component buttons

The remote control can be set up to control a second TV or VCR, or any combination of eight home entertainment components.

For example, to control a TV, a Cable Converter, and two VCRs, you need to re-assign a component button to operate the second VCR as follows:

- 1 On the remote control, press and hold SETUP until the red light blinks twice, then release SETUP.
- 2 Press the number buttons 9, 9, 1. The red light blinks twice.
- 3 Press DVD/VCR once, then press CBL/SAT once.
- 4 The CBL/SAT button is now ready to be programmed for your second VCR.

To re-assign other device keys, repeat steps 1 through 4 by substituting the key sequence from the following table for the most popular components:

To assign	Use this sequence
TV as 2nd DVD/VCR button	SETUP - 9 - 9 - 2 - DVD/VCR - TV
TV as 2nd CBL/SAT button	SETUP - 9 - 9 - 2 - CBL/SAT - TV
TV back to TV	SETUP - 9 - 9 - 2 - TV - TV
VCR as 2nd CBL/SAT button	SETUP - 9 - 9 - 2 - CBL/SAT - VCR
VCR back to VCR	SETUP - 9 - 9 - 2 - VCR - VCR
CBL/SAT as 2nd VCR button	SETUP - 9 - 9 - 2 - VCR - CBL/SAT
CBL/SAT back to CBL/SAT	SETUP - 9 - 9 - 2 - CBL/SAT - CBL/SAT

When a re-assignment is done, the red light blinks twice to confirm your choice. Then, you need to program the remote control to control the new component.

Changing volume lock

The remote control is set to control volume of a component through your TV while in the TV, DVD/VCR, or CBL/SAT mode. However, in the HP.PC mode you have separate control of the volume.

If you want the volume to be controlled by a different component than the TV, you can change the Volume Lock setting to control volume through a non-associated mode (for example, through the cable in the TV mode).

To change volume lock to another mode:

- 1** On the remote control, press and hold SETUP until the red light blinks twice, then release SETUP.
- 2** Press the number buttons 9, 9, 3, and then press any mode key once (except TV). The red light will blink twice.
- 3** Now, whenever you press VOL+, VOL-, or MUTE, volume is controlled by your component mode choice.

To change volume lock back to the TV mode:

- 1** On the remote control, press and hold SETUP until the red light blinks twice, then release SETUP.
- 2** Press the number buttons 9, 9, 3, and then press TV. The red light blinks twice.
- 3** Now, whenever you press VOL+, VOL-, or MUTE on the remote control, volume is controlled by your TV.

Manufacturer's codes

Manufacturer	Codes for VCR
Admiral	0048
Adventura	0000
Aiko	0278
Aiwa	0037, 0000
Akai	0041
American High	0035
Asha	0240
Audiovox	0037
Beaumarck	0240
Bell & Howell	0104
Broksonic	0184, 0121, 0209, 0002
CCE	0072, 0278
Calix	0037
Canon	0035
Carver	0081
Cineral	0278
Citizen	0037, 0278
Colt	0072
Craig	0037, 0047, 0240, 0072, 0271
Curtis Mathes	0060, 0035, 0041, 0162
Cybernex	0240
Daewoo	0045, 0278
Denon	0042
Dynatech	0000
Electrohome	0037
Electroponic	0037
Emerex	0032
Emerson	0037, 0184, 0000, 0121, 0043, 0209, 0002, 0278
Fisher	0047, 0104
Fuji	0035, 0033
Funai	0000
GE	0060, 0035, 0048, 0240
Garrard	0000
Go Video	0526
GoldStar	0037, 0038
Gradiente	0000

Manufacturer	Codes for VCR
HI-Q	0047
Harley Davidson	0000
Harman/Kardon	0081, 0038
Harwood	0072
Headquarter	0046
Hitachi	0000, 0042, 0041
JVC	0067, 0041
Jensen	0041
KEC	0037, 0278
KLH	0072
Kenwood	0067, 0041, 0038, 0046
Kodak	0035, 0037
LXI	0037
Lloyd's	0000
Logik	0072
MEI	0035
MGA	0240, 0043
MGN Technology	0240
MTC	0240, 0000
Magnasonic	0278
Magnavox	0035, 0039, 0081, 0000, 0149
Magnin	0240
Marantz	0035, 0081, 0038
Marta	0037
Matsushita	0035, 0162, 0454
Memorex	0035, 0037, 0048, 0039, 0047, 0240, 0000, 0104, 0046, 1162, 1262
Minolta	0042
Mitsubishi	0048, 0067, 0043
Motorola	0035, 0048
Multitech	0000, 0072
NAP	0035, 0037, 0039, 0042, 0033
NEC	0104, 0067, 0041, 0038
Nikko	0037
Noblex	0240
Olympus	0035
Optimus	0037, 0048, 0104, 0162, 0454, 1062, 1162, 1262
Orion	0184, 0002

Manufacturer	Codes for VCR
Panasonic	0035, 0162, 0225, 0454, 1162
Penney	0035, 0037, 0240, 0042, 0038
Pentax	0042
Philco	0035, 0209
Philips	0035, 0081
Pilot	0037
Pioneer	0067
Profitronic	0240
Proscan	0060
Protec	0072
Pulsar	0039
Quarter	0046
Quartz	0046
Quasar	0035, 0162, 0454, 1162
RCA	0060, 0035, 0048, 0240, 0042, 0149
Radio Shack	0000
Radix	0037
Randex	0037
Realistic	0035, 0037, 0048, 0047, 0000, 0104, 0046
Runco	0039
STS	0042
Samsung	0240, 0045
Sanky	0048, 0039
Sansui	0000, 0067, 0041, 0271
Sanyo	0047, 0240, 0104, 0046
Scott	0184, 0045, 0121, 0043
Sears	0035, 0037, 0047, 0000, 0042, 0104, 0046
Semp	0045
Sharp	0048
Shintom	0072
Shogun	0240
Signature	0035
Singer	0072
Sony	0035, 0032, 0000, 0033
Sylvania	0035, 0081, 0000, 0043
Symphonic	0000
TMK	0240

Manufacturer	Codes for VCR
Tatung	0041
Teac	0000, 0041
Technics	0060, 0035, 0039, 0162
Teknika	0035, 0037, 0000
Thomas	0000
Toshiba	0045, 0043
Totevision	0037, 0240
Unitech	0240
Vector	0045
Vector Research	0038
Video Concepts	0045
Videosonic	0240
Wards	0060, 0035, 0048, 0047, 0081, 0240, 0045, 0000, 0042, 0072, 0149
White Westinghouse	0278
XR-1000	0035, 0000, 0072
Yamaha	0041, 0038
Zenith	0039, 0000, 0033

Manufacturer	Codes for cable converter box
ABC	0003, 0008, 0014, 0017, 0007, 0011, 0013
Allegro	0153, 0315
Archer	0153, 0797
Bell & Howell	0014
Century	0153
Citizen	0153, 0315
Comtronics	0040
Contec	0019
Eastern	0002
Emerson	0797
Everquest	0015, 0040
Focus	0400
Garrard	0153
Gemini	0015
General Instrument	0476, 0276, 0011, 0810
GoldStar	0144, 0040
Goodmind	0797
Hamlin	0020, 0259, 0009, 0034

Manufacturer	Codes for cable converter box
Hitachi	0011
Hytex	0007
Jasco	0015, 0153, 0315
Jerrold	0003, 0012, 0476, 0276, 0014, 0015, 0011, 0810
Magnavox	0014
Memorex	0000
Movie Time	0063
NAP	0007
NSC	0063
Oak	0019, 0007
Optimus	0021
Panasonic	0000, 0107, 0021
Paragon	0000
Philips	0153
Pioneer	0144, 0533
Popular Mechanics	0400
Proscan	0021
Pulsar	0000
Quasar	0000
RCA	0021
Radio Shack	0015, 0315, 0797, 0883
Recoton	0400
Regal	0020, 0259
Regency	0002
Rembrandt	0011
Runco	0000
SL Marx	0040
Samsung	0144, 0040
Scientific Atlanta	0008, 0477, 0017, 0877
Signal	0015, 0040
Signature	0011
Sprucer	0021
Starcom	0003, 0015
Stargate	0015, 0040, 0797
Starquest	0015
TV86	0063

Manufacturer	Codes for cable converter box
Televue	0040
Tocom	0012, 0013
Toshiba	0000
Tusa	0015
Unika	0153
United Artists	0007
Universal	0153, 0191
Viewstar	0063
Zenith	0008, 0000, 0015, 0525
Zentek	0400

Manufacturer	Codes for satellite or DBS receivers
AlphaStar	0772
Echostar	0775
Expressvu	0775
General Instrument	0627, 0361, 0869
HTS	0775
Hitachi	0819
Hughes Net. Sys.	0749
JVC	0775
Jerrold	0627, 0361
Magnavox	0724, 0722
Memorex	0724
Next Level	0869
Panasonic	0701
Philips	0724, 0722
Primestar	0627, 0361
Proscan	0566
RCA	0566, 0143, 0855
Radio Shack	0566, 0869
Sony	0639
Star Choice	0869
Toshiba	0790
Uniden	0724, 0722
Zenith	0856

Manufacturer	Codes for DVD players
Harman/Kardon	0582
JVC	0558
Kenwood	0534
Magnavox	0503
Mitsubishi	0521
Onkyo	0503
Optimus	0525
Panasonic	0490
Philips	0503, 0539
Pioneer	0525, 0571
Proscan	0522
RCA	0522
Samsung	0573
Sony	0533
Technics	0490
Theta Digital	0571
Toshiba	0503
Yamaha	0490, 0545
Zenith	0503, 0591

On Screen Display (OSD) Menu

Your LCD TV comes with a On Screen Display (OSD) menu. Use the remote control to move through the OSD menu. Press the ENTER button to bring up the OSD menu. The three different modes for the OSD are the following:

- **PC Mode:** Displays when the VGA or DVI input is selected.
- **TV Mode:** Displays when TV1 or TV2 input is selected.
- **AV/SV/YPbPr Mode:** Displays when a AV1, AV2, SV1, SV2, YPbPr1 or YPbPr2 input is selected.

Depending on which mode you are displaying the following pages appear on your OSD menu:

- **System Page:** (TV Mode only) Sets the video standard, cable input, channel search, channel edits and fine tuning of your display.
- **Image Page:** Adjust the brightness, contrast, picture mode, sharpness, hue and color of your display.
- **Color Page:** (PC Mode only) Adjusts the color temperature of your display.
- **OSD Page:** Adjusts the language, length of time OSD menu is displayed and position of OSD menu.
- **Audio Page:** Sets the sound effects, volume, balance, subwoofer, treble and bass of your sound.
- **PIP/PAP Page:** Sets the PIP mode, PIP source, PIP size and position on the display of the PIP.
- **Factory Page:** Sets the closed captioning, sleep timer, aspect ratio and noise reduction of your display.

NOTE: Not all functions are included in each mode.

PC Mode

Adjusting the Volume

Press the (+) or (-) VOL buttons on the remote control to increase or decrease the volume.

PC Mode Operation

- 1** Press the ENTER button on the remote control to display the following On Screen Display (OSD) menu items: Image Page, Color Page, OSD Page, Audio Page, PIP/POP Page, and Factory Page. (Press the Exit key to return one level back in the OSD menu.)
- 2** Press the Up and Down arrow buttons to move up and down the Page icons. Press the ENTER button when you arrive at your selection.
- 3** Use the Up and Down arrow buttons to highlight a function.
- 4** Press the Left or Right arrow buttons to either scroll through the options of a specific function or view the submenu.
- 5** Press the Exit button to save your change and return to the OSD menu.

Image Page

- 1 Press the ENTER button on the remote control to bring up the OSD menu.
- 2 Press the ENTER button again to highlight the first setting of the Image Page icon.
- 3 Use the Up and Down arrow buttons to highlight a setting and press ENTER.
- 4 Press the Left and Right arrow buttons to scroll through your options.
- 5 Press the Up and Down arrow buttons to select other settings on the Image Page.

Or

Press the EXIT button to save the setting and return to the OSD menu.

- 6 Press the Exit button to remove the OSD menu from your display.

You can make the following adjustments in the Image Page:

Image Page	Function	Options
Brightness	Adjusts the darkness and lightness of the display.	0 to 100
Contrast	Adjusts the color brightness of the display.	0 to 100
H – Size	Widens image.	0 to 100
Phase	Video timing adjustment	
H – Position	Moves image to the left or right.	
V – Position	Moves image up or down.	

Color Page

- 1 Press the ENTER button on the remote control to bring up the OSD menu.
- 2 Press the Down arrow button once to highlight the Color Page icon, and then press ENTER.
- 3 Use the Up and Down arrow buttons to highlight a setting and press ENTER.
- 4 Press the Left and Right arrow buttons to scroll through your options.
- 5 Press the Up and Down arrow buttons to select other settings on the OSD Page.

Or

Press the EXIT button to save the setting and return to the OSD menu.

- 6 Press the Exit button to remove the OSD menu from your display.

You can make the following adjustments in the Color Page:

Color Page	Function	Options
6500k	Color temperature	
7500k	Color temperature	
9300k	Color temperature	
User R	Adjusts the shade of Red	0 to 255
User G	Adjusts the shade of Green	0 to 255
User B	Adjusts the shade of Blue	0 to 255

OSD Page

- 1 Press the ENTER button on the remote control to bring up the OSD menu.
- 2 Press the Down arrow button twice to highlight the OSD Page icon, and then press ENTER.
- 3 Use the Up and Down arrow buttons to highlight a setting and press ENTER.
- 4 Press the Left and Right arrow buttons to scroll through your options.
- 5 Press the Up and Down arrow buttons to select other settings on the OSD Page.

Or

Press the EXIT button to save the setting and return to the OSD menu.

- 6 Press the Exit button to remove the OSD menu from your display.

You can make the following adjustments in the OSD Page:

OSD Page	Function	Options
Language	Set the language for the OSD menu.	English
Timeout	Set the number of seconds for OSD to remain displayed before disappearing after final use.	5 to 60 seconds (in increments of 5)
H-Position	Moves the OSD to the left and right on your display.	0 to 100
V-Position	Moves the OSD up and down on your display.	0 to 100
Transparency	Use the left and right arrow buttons on your remote control to make the OSD see through.	0 to 100

Audio Page

- 1 Press the ENTER button on the remote control to bring up the OSD menu.
- 2 Press the Down arrow button three times to highlight the Audio Page icon, and then press ENTER.
- 3 Use the Up and Down arrow buttons to highlight a setting and press ENTER.
- 4 Press the Left and Right arrow buttons to scroll through your options.
- 5 Press the Up and Down arrow buttons to select other settings on the OSD Page.

Or

Press the EXIT button to save the setting and return to the OSD menu.

- 6 Press the Exit button to remove the OSD menu from your display.

You can make the following adjustments in the Audio Page:

Audio Page	Function	Options
Sound Effect	Select a preset customized sound effect.	<ul style="list-style-type: none"> • Standard • WOW • BBE
Volume	Increases and decreases the level of sound.	0 to 100
Balance	Switches amount of sound coming from each speaker.	-50 to +50
Treble	Increases and decreases the level of treble (only available when Standard option is selected).	-12 to +12 (standard) -3 to +3 (WOW/BBE)
Bass	Increases and decreases the level of bass (only available when Standard option is selected).	-12 to +12 (standard) -3 to +3 (WOW/BBE)
Sub Woofer	Increases and decreases the level of sub woofer (only available when Standard option is selected).	0 to 100

PIP/PAP Page

- 1** Press the ENTER button on the remote control to bring up the OSD menu.
- 2** Press the Down arrow button four times to highlight the PIP/PAP Page icon, and then press ENTER.
- 3** Use the Up and Down arrow buttons to highlight a setting and press ENTER.
- 4** Press the Left and Right arrow buttons to scroll through your options.
- 5** Press the Up and Down arrow buttons to select other settings on the PIP/PAP Page.

Or

Press the EXIT button to save the setting and return to the OSD menu.

- 6** Press the Exit button to remove the OSD menu from your display.

You can make the following adjustments in the PIP/PAP Page:

PIP/PAP Page	Function	Options
PIP/PAP	Turns on or off Picture-In-Picture and Picture-And-Picture.	<ul style="list-style-type: none">• PIP• PAP• Off
Sub Source	Select an input source to be displayed in Picture-In-Picture or Picture-And-Picture mode.	available sources
Display Size	Select a size for the PIP display.	<ul style="list-style-type: none">• Small• Middle• Large
H-Position	Moves the PIP to the left and right on your display.	0 to 100
V-Position	Moves the PIP up and down on your display.	0 to 100

Factory Page

- 1** Press the ENTER button on the remote control to bring up the OSD menu.
- 2** Press the Down arrow button five times to highlight the Factory Page icon, and then press ENTER.
- 3** Use the Up and Down arrow buttons to highlight a setting and press ENTER.
- 4** Press the Left and Right arrow buttons to scroll through your options.
- 5** Press the Up and Down arrow buttons to select other settings on the Factory Page.
Or
Press the EXIT button to save the setting and return to the OSD menu.
- 6** Press the EXIT button to remove the OSD menu from your display.

You can make the following adjustments in the Factory Page:

Factory Page	Function	Options
Recall Default	Puts all of your settings back to their default.	Left arrow button resets all settings to their default.
Auto Adjust	(VGA mode only) Adjusts the image-related functions.	<ul style="list-style-type: none">• H Position• V Position• Size• Phase

TV Mode

Adjusting the Volume

Press the (+) or (-) VOL buttons on the remote control to increase or decrease the volume.

Changing Channels

Press the (+) or (-) CH buttons on the remote control to change the channel up or down a channel.

TV mode operation

- 1** Press the ENTER button on the remote control to display the following On Screen Display (OSD) menu items: System Page, Image Page, OSD Page, Audio Page, PIP/POP Page, and Factory Page. (Press the EXIT button to return one level back in the OSD menu.)
- 2** Press the Up and Down arrow buttons to move up and down the Page icons. Press the ENTER button when you arrive at your selection.
- 3** Use the Up and Down arrow buttons to highlight a function.
- 4** Press the Left or Right arrow buttons to either scroll through the options of a specific function or view the submenu.
- 5** Press the EXIT button to save your change and return to the OSD menu.

System Page

- 1 Press the ENTER button on the remote control to bring up the OSD menu.
- 2 Press the ENTER button again to highlight the first setting of the System Page.
- 3 Use the Up and Down arrow buttons to highlight a setting and press ENTER.
- 4 Press the Left and Right arrow buttons to scroll through your options.
- 5 Press the Up and Down arrow buttons to select other settings on the System Page.

Or

Press the EXIT button to save the setting and return to the OSD menu.

- 6 Press the EXIT button to remove the OSD menu from your display.

You can make the following adjustments in the System Page:

System Page	Function	Options
TV System	Select a video standard.	NTSC
TV Country	Select a cable or antenna input.	<ul style="list-style-type: none">• CATV (FCC)• CATV (HRC)• CATV (IRC)• AIRTV (FCC)
Channel Search	Scans channels 2 ~ 69 (AIRTV), 1 ~ 125 (CATV), and adds the channels that return a signal to your channel listing.	Yes or No
Channel Edit	Add or erase channels.	<ul style="list-style-type: none">• Up and down arrows scroll through your channels.• Left arrow erases a current channel.• Right arrow adds current channel.
Fine Tuning	Adjusts the strength of the signal.	<ul style="list-style-type: none">• TV Channel• TV Frequency
Clear Memory	Resets all settings to the factory default.	Yes or No

Image Page

- 1 Press the ENTER button on the remote control to bring up the OSD menu.
- 2 Press the Down arrow button to highlight the Image Page icon, and then press ENTER.
- 3 Use the Up and Down arrow buttons to highlight a setting and press ENTER.
- 4 Press the Left and Right arrow buttons to scroll through your options.
- 5 Press the Up and Down arrow buttons to select other settings on the Image Page.

Or

Press the EXIT button to save the setting and return to the OSD menu.

- 6 Press the Exit button to remove the OSD menu from your display.

You can make the following adjustments in the Image Page:

Image Page	Function	Options
Picture Mode	Select a preset customized picture setting.	<ul style="list-style-type: none">• Favorite• Standard• Vivid• Movie
Brightness	Adjusts the darkness and lightness of the display (only available when Favorite option is selected).	0 to 100
Contrast	Adjusts the color brightness of the display (only available when Favorite option is selected).	0 to 100
Sharpness	Adjusts the clarity of images (only available when Favorite option is selected).	0 to 100
Color	Adjusts the shades of color (only available when Favorite option is selected).	0 to 100
Hue	Adjusts the color properties (only available when Favorite option is selected).	0 to 100

OSD Page

Refer to "OSD Page" on page 34 for information.

Audio Page

Refer to "Audio Page" on page 34 for information.

PIP/PAP Page

Refer to "PIP/PAP Page" on page 35 for information.

Factory Page

- 1 Press the ENTER button on the remote control to bring up the OSD menu.
- 2 Press the Down arrow button five times to highlight the Factory Page icon, and then press ENTER.
- 3 Use the Up and Down arrow buttons to highlight a setting and press ENTER.
- 4 Press the Left and Right arrow buttons to scroll through your options.
- 5 Press the Up and Down arrow buttons to select other settings on the Factory Page.

Or

Press the EXIT button to save the setting and return to the OSD menu.

- 6 Press the Exit button to remove the OSD menu from your display.

You can make the following adjustments in the Factory Page:

Factory Page	Function	Options
Close Caption	Displays text.	<ul style="list-style-type: none">• Off• CC1• CC2
V-chip	Blocks channels.	
Sleep Timer	Select the number of minutes you would like the display to power off.	<ul style="list-style-type: none">• Off• 30 Minutes• 60 Minutes• 90 Minutes• 120 Minutes
Aspect	Select the display ratio for your screen.	<ul style="list-style-type: none">• Normal• 4:3• Panorama
Noise Reduce	Enhances quality of standard definition, off air media, and standard definition video.	<ul style="list-style-type: none">• Off• Weak• Medium• Strong
Recall Default	Puts all of your settings back to their default.	Left arrow button resets all settings to their default.

AV/SV Mode

Adjusting the Volume

Press the (+) or (-) VOL buttons on the remote control to increase or decrease the volume.

AV/SV Operation

- 1 Press the ENTER button on the remote control to display the following On Screen Display (OSD) menu items: Image Page, OSD Page, Audio Page, PIP/PAP Page, and Factory Page. (Press the Exit key to return one level back in the OSD menu.)
- 2 Press the Up and Down arrow buttons to move up and down the Page icons. Press the ENTER button when you arrive at your selection.
- 3 Use the Up and Down arrow buttons to highlight a function.
- 4 Press the Left or Right arrow buttons to either scroll through the options of a specific function or view the submenu.
- 5 Press the Exit button to save your change and return to the OSD menu.

Factory Page

- 1 Press the ENTER button on the remote control to bring up the OSD menu.
- 2 Press the Down arrow button four times to highlight the Factory Page icon, and then press ENTER.
- 3 Use the Up and Down arrow buttons to highlight a setting and press ENTER.
- 4 Press the Left and Right arrow buttons to scroll through your options.
- 5 Press the Up and Down arrow buttons to select other settings on the Factory Page.

Or

Press the EXIT button to save the setting and return to the OSD menu.

- 6 Press the Exit button to remove the OSD menu from your display.

Factory Page	Function	Options
Close Caption	Displays text.	<ul style="list-style-type: none">• Off• CC1• CC2
V-chip	Blocks channels.	
Sleep Timer	Select the number of minutes you would like the display to power off.	<ul style="list-style-type: none">• Off• 30 Minutes• 60 Minutes• 90 Minutes• 120 Minutes
Aspect	Select the display ratio for your screen.	<ul style="list-style-type: none">• Normal• 4:3• Panorama
Noise Reduce	Enhances quality of standard definition, off air media, and standard definition video.	<ul style="list-style-type: none">• Off• Weak• Medium• Strong
Recall Default	Puts all of your settings back to their default.	Left arrow button resets all settings to their default.

YPbPr Mode

Adjusting the Volume

Press the (+) or (-) VOL buttons on the remote control to increase or decrease the volume.

YPbPr Operation

- 1 Press the ENTER button on the remote control to display the following On Screen Display (OSD) menu items: Image Page, OSD Page, Audio Page, PIP/PAP Page, and Factory Page. (Press the Exit key to return one level back in the OSD menu.)
- 2 Press the Up and Down arrow buttons to move up and down the Page icons. Press the ENTER button when you arrive at your selection.
- 3 Use the Up and Down arrow buttons to highlight a function.
- 4 Press the Left or Right arrow buttons to either scroll through the options of a specific function or view the submenu.
- 5 Press the Exit button to save your change and return to the OSD menu.

Factory Page

- 1 Press the ENTER button on the remote control to bring up the OSD menu.
- 2 Press the Down arrow button four times to highlight the Factory Page icon, and then press ENTER.
- 3 Use the Up and Down arrow buttons to highlight a setting and press ENTER.
- 4 Press the Left and Right arrow buttons to scroll through your options.
- 5 Press the Up and Down arrow buttons to select other settings on the Factory Page.

Or

Press the EXIT button to save the setting and return to the OSD menu.

- 6 Press the Exit button to remove the OSD menu from your display.

You can make the following adjustments in the Factory Page:

Factory Page	Function	Options
Sleep Timer	Select the number of minutes you would like the display to power off.	<ul style="list-style-type: none">• Off• 30 Minutes• 60 Minutes• 90 Minutes• 120 Minutes
Aspect	Select the display ratio for your screen.	<ul style="list-style-type: none">• Normal• 4:3• Panorama
Noise Reduce	Enhances quality of standard definition, off air media, and standard definition video.	<ul style="list-style-type: none">• Off• Weak• Medium• Strong
Recall Default	Puts all of your settings back to their default.	Left arrow button resets all settings to their default.

Troubleshooting

Problem	Solutions
There is no picture or sound.	<ul style="list-style-type: none"> • Make sure the power cord is properly inserted in the power outlet. • Reception other than those of broadcasting stations can be considered. • Make sure the input mode is correctly set in Input Select.
There is no sound.	<ul style="list-style-type: none"> • Make sure the volume is not set to minimum. • Make sure the sound is not set to mute. • Make sure that headphones are not connected.
There is no picture or sound, just noise.	<ul style="list-style-type: none"> • Make sure the antenna cable is properly connected. • Consider whether TV/PC/AV/SV/YPbPr signals are being properly received.
The picture is not clear.	<ul style="list-style-type: none"> • Make sure the antenna cable is properly connected. • Consider whether TV signals are being properly received.
The picture is light or improperly tinted.	<ul style="list-style-type: none"> • Check the color adjustments. • Check the tint settings.
The picture is too dark.	<ul style="list-style-type: none"> • Check the brightness settings. • The fluorescent lamp may have reached the end of its service life.
The remote control does not work.	<ul style="list-style-type: none"> • Check the batteries in the remote control. • Make sure the remote sensor window is not under strong fluorescent lighting.
The picture is not sharp.	<ul style="list-style-type: none"> • The reception may be weak. • Make sure the antenna is facing the right direction. • Check the sharpness function.
The picture is doubled or tripled.	<ul style="list-style-type: none"> • Make sure the antenna is facing the right direction. • There may be reflected electric waves from mountains or buildings.

Problem	Solutions
The picture is spotted.	<ul style="list-style-type: none"> • There may be interference from automobiles, trains, high-voltage lines, neon lights, or other factors. • There may be interference between the antenna cable and power cable. Try positioning them further apart.
There are stripes on the screen or colors fade.	<ul style="list-style-type: none"> • The unit may be receiving interference from other devices. Transmission antennas of radio broadcasting stations and transmission antennas of amateur radios and cellular phones may also cause interference. • Use the unit as far apart as possible from devices that may cause possible interference.

Troubleshooting the remote control programming

Problem	Solution
Red light does not blink when you press a key.	Replace the batteries with two (2) new AA alkaline batteries.
Red light blinks when you press a key, but home entertainment component does not respond.	Make sure the remote control is aimed at your home entertainment component and is not farther than 15 feet away.
Remote control does not control home entertainment components or commands are not working properly.	Try all listed codes for the component brands being set up. Make sure they can be operated with an infrared remote control.
No volume on a 2nd TV.	Follow instructions in "Changing Volume Lock."
CH+, CH-, and CH.RTN do not work for your RCA TV.	Due to RCA design (1983–1987), only the original remote control will operate these functions.
Changing channels does not work properly.	If original remote control required pressing ENTER to change channels, press ENTER on the Remote control after entering the channel number.
Tried "Search Method" and still could not find a working code.	Try the "Search Method" again after clearing out the component button as follows: Press and hold SETUP until red light blinks twice, then release. Next enter 9 - 9 - 2. Then press and release the component button to be cleared twice.

Specifications (United States)

Model number/type number		HP LC3040N 30" HD Ready LCD TV HP LC2640N 26" HD Ready LCD TV
TV broadcast system	Tuner	Built-in Dual NTSC TV Tuners with PIP and Side-by-Side viewing capability.
	Antenna	75 ohm external
	Channel coverage	VHF 2 to 13 UHF 14 to 69 CATV 1 to 125
	SDTV broadcast	NTSC (U.S./Japan/Taiwan)
	Tuning system (NTSC)	Auto channel finder Intelligent tuning system Fine-tuning Favorite channel edit
	Cable tuning system	HRC and IRC
	HDTV-supported inputs	YPbPr: 1080i/720p/480p/480i DVI: 1080i/720p/480p/408i
	HDCP (on DVI)	Yes
	Closed Captioning	Yes (TV, AV, SV supported)
	V-chip	Password protect viewing according to Content Rating, TV Rating, and MPAA Rating.
	MTS sound processing	Stereo, mono, SAP
Video processing	3-D comb filter	Yes
	Deinterlacer	3-D motion adaptive deinterlacer
	1080i deinterlacing supported	3-D
	15:9 and 4:3 switchable	Yes
	Nonlinear scaling for 16:9	Yes
	3:2 pulldown (film mode)	Yes
	2:2 pulldown (film mode)	Yes
	Flicker-free film mode detection	Yes
	Black level stretch	Yes
	Cubic-4 interpolation	Cubic-4 interpolation
	PIP/PAP sources	Yes (selected video/TV and PC/TV)
	POP	Yes (selected video/TV and PC/TV)
Multi-PIP	Yes (8 plus 1 TV channels) 8 refresh channels plus 1 active channel	

Video processing <i>(continued)</i>	Frame rate conversion (FRC)	Yes
	RGB	Yes
	ISP	Yes
	Input data processing (scaler)	8-bit
	OSD language	English
Image Processing System	HP Visual Fidelity	One A/D conversion insures superior reproduction and pristine video throughout a lossless digital pipeline.
	Emmy Award winning DCDi video processing	Analyzes video pixel-by-pixel to smooth out staircases and jagged edges. Brings a new tier of realism to sporting events and movies.
	FilmMode processing with 3:2 and 2:2 pull down	Reproduces film-originated content from video sources with superior accuracy. Rearranges frame sequence to reproduce.
	Motion Adaptive Noise Reduction	Greatly enhances purity of standard definition and off air media video.
	Fine Detail Enhancement	Identifies areas of fine detail in a picture, such as skin and hair, and enhances them to a dramatically more life like appearance. Identifies large edges that identify separation of objects, and enhances them to create a greater perception of depth. The result is a stunningly realistic viewing experience.
	Cross Color Suppression	Removes cross color artifacts from composite video sources, delivering consistent, true color every time.
	Picture modes	Standard, Vivid, Favorite, and Movie viewing modes enable the viewer to quickly change screen settings for dim or bright ambient light conditions.
Aspect modes	Wide: Presents material in widescreen format. 4:3: Presents material in regular 4:3 format. Panorama: Creates a more natural looking conversion of 4:3 in to a widescreen format.	

LCD panel	Pixel resolution	WXGA (1,280 × 768 pixels)
	Panel System	High Definition LCD Display
	Video Format	Scales all video signals to native format of 1280 x 768.
	Viewable Image Area (diagonal)	LC2640N 26 inches LC3040N 29.53 inches
	Aspect Ratio	15:9 Widescreen
	Displayable colors	16.7 million
	Anti-reflective coating	Yes
	Backlight life	50,000 hours
	Color temperature	7500K
	TFT active matrix	MVA TFT active matrix color LCD
	Brightness	Brightness 500 Cd/m ² (typical)
	Response Time (Grey to grey) (ms)	Response time 16ms
	Color saturation	Color saturation 72% (NTSC)
	View angle	View angle L/R of 85/85, U/D of 85/85
	Contrast ratio	Contrast ratio of 600:1
	Pixel frequency	65 MHz
	Horizontal scan	31 kHz–64 kHz
	Vertical refresh	56 Hz–75 Hz
	CCFL	16 CCFL
Electrical Interface	One-channel LVDS	
Input connectors	DVI (DVI-HDCP supported)	1
	YPbPr High Definition component inputs	2
	15-pin D-sub (PC analog RGB)	1
	PC audio	1
	S-video (Y/C)	Two pairs SV1 and SV2 rear access
	Composite video	2 pairs AV1 and AV2
	Subwoofer out	1
	Headphone	1
	TV/CATV antenna	TV/CATV antenna (1)
	RS-232 (for service)	1

Output connectors	Variable Audio Line Out (L/R)	Yes
	TV (video and audio) for PVR (HP LC2640N only)	Yes (Composite and audio L/R)
	Headphones	Yes
	Subwoofer	Yes
User controls (front panel)	Front panel controls	Input selector: PC, TV1, TV2, AV1, AV2, SV1, SV2, YPbPr1, and YPbPr2. Menu, channel (CH) up/down, volume (Vol) up/down, Exit, and Select.
Remote control	IR remote	IR remote (rubber key pads)
	IR protocol	NEC 6222
Audio	Audio power amplifier	Stereo 15W and 15W Class D
	Audio Enhancement modes	BBE, SRS, WOW with TruBass
	Bass enhancer (TruBass)	TruBass
	Audio controls	Bass, treble, loudness, volume
	Audio input	Yes
	Audio power amplifier	Stereo 15W/channel
	MTS/SAP	Yes
	PC Audio input (mini-jack)	1
	Stereo Headphone jack	1
	Subwoofer Out	1
	Audio out	1
	Speakers	System: 2-way Midrange: 2.75-in. Tweeter: Dome tweeter
Speaker mechanism	Detachable	
OSD controls (PC)	OSD text	Bitmap
	OSD type	Alpha blending
	PC parameters	Contrast, brightness, horizontal position, vertical position, phase (pixel adj.), recall defaults, auto adj., information, clock, language select, OSD position, OSD timeout, volume, mute

OSD controls (TV/video)	TV/video parameters	Channel edit, auto scan, MTS Sharpness, DNR, reset, contrast, brightness, color, timer, OSD transparent, audio source, loudness, balance Standard, SRS WOW, BBE Picture mode, audio mode (digital EQ) PIP/PAP/Multi-CH-PIP (1+8) EPG U.S.: TV/movie rating, closed captioning OSD language
Power/power management	Power-saving VESA DPMS standard	VESA DPMS standard
	Off mode power consumption	< 3W at 110V [~] , < 3W at 240V [~]
	Power supply	Auto-ranging, 00~240V [~] , internal power supply, 50~60Hz
	Nominal current	1.7 A maximum
	Frequency	50~60 Hz
	Maximum	< 150 watts
	Power off mode	< 3W
	PFC	Yes (U.S.)
	AC line voltage	100~240V
	Power cord	6 feet
Miscellaneous	Sleep timer	0, 30, 60, 90, and 120 minutes
	Self-test feature	Flying window/logo
	Burn-in mode	Yes
	Factory mode	Yes
Mechanical	Stand	Detachable stand for wall mount
	Wall mount	VESA mount (100 mm x 200 mm), 6 holes
Environmental	Temperature – Operating	41 to 95 degrees Fahrenheit 5 to 35 degrees Celsius
	Temperature – Non-operating	-4 to 140 degrees Fahrenheit -20 to 60 degrees Celsius
	Humidity – Operating	20% to 80%
	Humidity – Non-operating	5% to 95%
	Altitude – Operating	0 to 12,000 feet (0 to 3,658 meters)
	Altitude – Non-operating	0 to 40,000 feet (0 to 12,192 meters)
Accessories	Optional Accessories	Subwoofer
	Recommended Solution Additions	HP Media Center PC HP Digital Entertainment Center
	VESA Mounting	Yes (comes with stand attached, must be removed for mounting)
	Kensington Lock-ready	No

Agency Regulatory Notice

Federal Communications Commission Notice

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 or television technician for help.

Modifications

The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by Hewlett-Packard Company may void the authority to operate the equipment.

Cables

Connections to this device must be made with shielded cables with metallic RFI/EMI connector hoods in order to maintain compliance with FCC Rules and Regulations.

Declaration of Conformity for products marked with the FCC logo – United States only

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

For questions regarding your product, contact:

Hewlett-Packard Company
P.O. Box 692000, Mail Stop 530113
Houston, Texas 77269-2000

Or call:

1-800-652-6672

For questions regarding this FCC declaration, contact:

Hewlett-Packard Company
P.O. Box 692000, Mail Stop 510101
Houston, Texas 77269-2000

Or call:

(281) 514-3333

To identify this product, refer to the part, series, or model number found on the product.

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