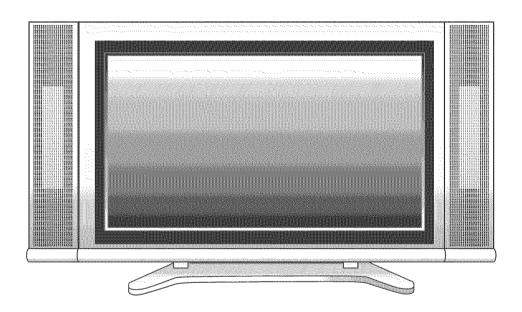


PLTV-32

32" Liquid Crystal Display

User's Manual



Protron PLTV-32 Liquid Crystal Display User's Manual.

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Disclaimer

Protron Digital Corporation has reviewed this manual and provides it only as a guide to operation. All statements, technical information, and recommendations in this manual and in any guides or related documents are believed reliable, but the accuracy and completeness thereof are not guaranteed or warranted, and they are not intended to be, nor should they be understood to be, representations or warranties concerning the products described.

Specifications are subject to change without notice.

Trademarks

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Protron Digital Corporation 2133 S. Green Privado Ontario, CA 91761

Printed in China

Product Cautions



TO PREVENT POSSIBLE DANGER, ELECTRIC SHOCK, AND OTHER INJURIES WHEN HANDLING YOUR DISPLAY, PLEASE BE AWARE OF OF ALL WARNINGS AND SAFETY PRECAUTIONS LISTED BELOW.



Never spill any liquid of any kind on the display.

Never insert anything into the display where objects can come into contact with high voltage nodes or damage internal components.



Do not attempt to service the display yourself. Opening or removing covers exposes high voltage nodes and other hazards. Refer all servicing to qualified service personnel.



Do not touch the display or antenna during thunderstorms. Unplug the display during thunderstorms or if it will not be used for extended periods. Failure to do so may result in electric shock or fire.



Before cleaning the display, unplug it from the wall. Use a damp cloth for cleaning. Never use liquid or aerosol cleaners.



To prevent overheating and ensure reliable operation, place the display only in a well ventilated location. Avoid cramped or inadequately ventilated locations. Place the display at least 10 cm (4") from walls or other objects. Always keep the vent clean. Never place the display upside down.

Note: Read all safety and operating instructions before operating your new display.

Conformity and Compliance

FCC Compliance Statement

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 when the equipment is operated 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 (this can be determined by turning the device 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 the receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution:

To comply with the limits for an FCC Class B computing device, the user should use the shielded signal cable and power cord supplied with the unit. The FCC warns that changes or modifications of the unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Radio Frequency Interference Statement

Warning:

This is a Class B product. In a domestic environment this product may cause radio interference, in which case the user may be required to take adequate measures.

Canadian DOC Notice for Class B Computing Devices

This digital apparatus does not exceed the Class B limits for radio noise emissions from a digital apparatus as set out in the Radio Interference Regulations of the Canadian Department of Communications.

CE Marking and Declaration of Conformity

This device complies with the requirements of related European standards, which include the following:

Emission: EN 55022, EN 61000-3-2, EN 61000-3-3

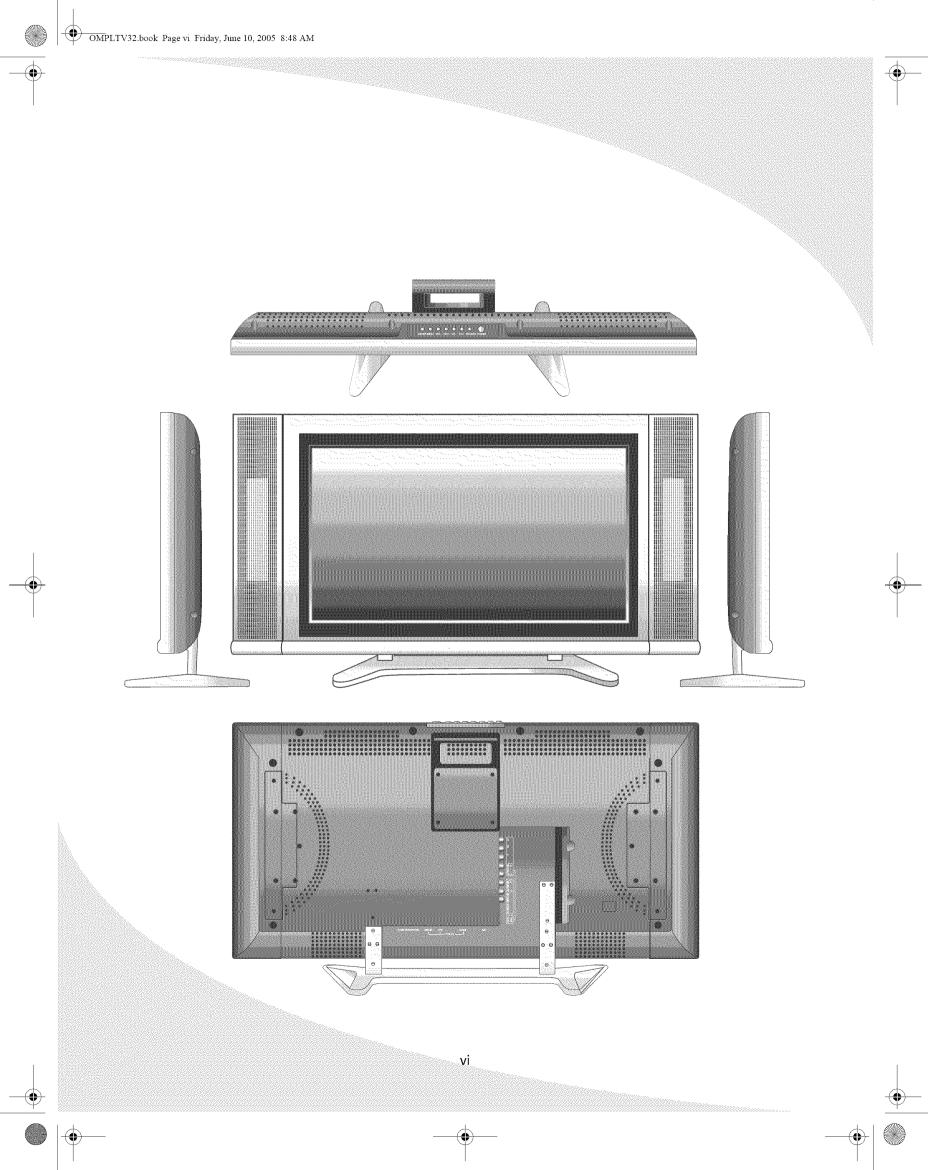
Immunity: EN 50082-1

Safety: EN 60950 Low-Voltage Directive (73/23/EEC)



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Introduction

Congratulations on purchasing your new Protron 32" Liquid Crystal Display!

You can use your new display as a television, in a home theater system, or even as a computer monitor. With component, composite, and S-Video video inputs, you can connect numerous devices to your display, including DVD players, VCRs, HDTV receivers, video game systems, camcorders, and so on.

The component video inputs on your display give you the highest quality video available, allowing you to view crystal-clear DVDs and HDTV. With a resolution of 1366×768 , your display gives you plenty of high-resolution screen real estate when connected to a computer.

Features

- 32" viewable display area
- Analog TV tuner with coax input
- · RCA component video input
- D4 component video input
- RCA composite video input
- S-Video input
- 2 RCA audio inputs
- VGA and DVI computer video inputs
- 1/8" stereo audio input jack for computer audio
- Resolution of 1366 × 768 pixels
- Wide viewing angle
- · Large tilt angle
- Digital character smoothing
- Versatile, functional, and user-friendly On-Screen Display (OSD)
- VESA DPMS-compliant power saving—automatically turns off the display after a configurable period of inactivity
- Windows 95/98/2000/XP Plug and Play compliant
- Conforms to VESA standards and supports the DDC1 and DDC2B specifications



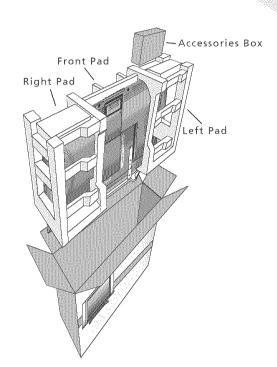


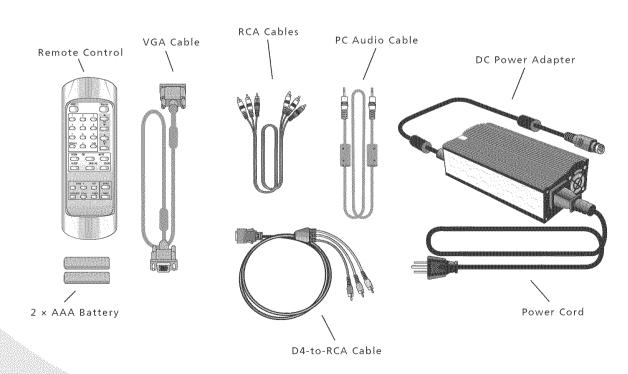
Before using your new display, you should unpack the contents of the box and check to make sure everything is present and undamaged.

To unpack the display:

- 1. Set the box upright near the intended display location
- 2. Open the top set of flaps.
- 3. Remove the Accessories Box and set it aside.
- 4. Remove the styrofoam pad from the front of the display.
- 5. Pull the display out with the left and right styrofoam pads and set it down.
- 6. Remove the left and right styrofoam pads.
- 7. Remove the plastic bag and plastic screen protector.

The Accessories Box should contain the items indicated below. If any items are missing or damaged, contact the seller immediately.







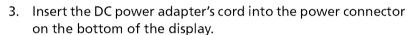
Setting Up the Display

The display requires a stable, level, and clean surface near a power outlet, 10 cm (4") away from walls or other large objects. The rear ventilation grid should be unobstructed, and the display should not be exposed to water or heat. Before setting up the display, prepare such a space.

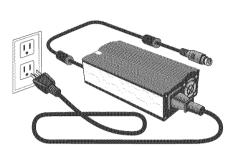
To set up the display:

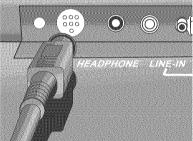
- 1. Remove the power cord and DC power adapter from the accessories box.
- 2. Insert the appropriate end of the cord into the power connector on the DC power adapter, then insert the other end into a free power outlet.

The blue light on the DC power adapter should come on. If it doesn't, check that the cord is securely connected and that the power outlet works properly.



Note: Make sure you plug the power connector into the display with the arrow on top. Failure to do so will cause a short circuit.



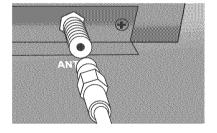


Connecting to a TV Signal Source

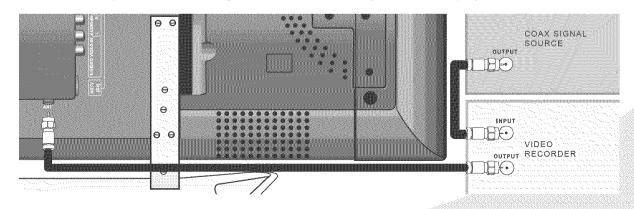
A TV signal may come from a cable box, satellite receiver, antenna, or similar device.

To connect a TV signal source to the display:

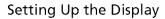
1. Connect a coax cable between the antenna jack on the bottom of the display and the signal source (that is, the cable box, satellite receiver, or antenna).



Note: If you would like to be able to record the TV signal with a VCR or similar device, connect the signal source to the input of the recording device with one cable, then connect the output of the recording device to the antenna jack on the display with another cable.

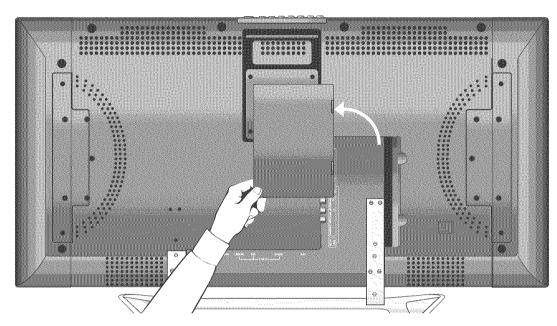






Accessing the Connector Panel

All audio and video connections other than those for a television signal or a PC are located on the connector panel. To access the jacks on the panel, remove the cover as shown below—release the two tabs to the right, then pull the cover out.



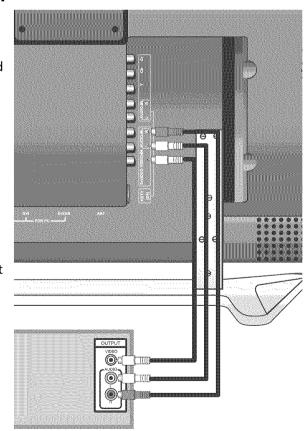
Connecting to Composite Video Output Devices

Many video devices, such as VCRs, DVD players, video game systems, and camcorders, have composite video outputs. Composite video uses one RCA cable to transmit video information and generally provides lower quality than S-Video and component video (see below).

Note: The composite video and S-Video inputs share an audio input.

To connect a composite video source to the display:

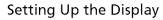
- 1. Remove the connector panel cover from the rear of the display.
- Using the included RCA cables (shown on page 2), connect the composite video output (yellow) on the source device to the VIDEO-IN jack on the connector panel.
- 3. Connect the right (red) and left (white) audio outputs on the source to the corresponding AUDIO-IN jacks next to the VIDEO-IN jack.
- 4. Replace the connector panel cover.











Connecting to S-Video Output Devices

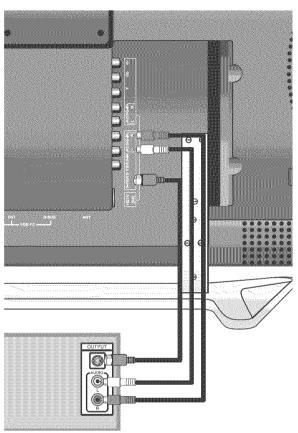
Many video devices that have composite video outputs also have S-Video outputs. S-Video uses a single four-wire cable to transmit video information. Two of the wires are used to transmit video. Because it splits the video signal into two components, S-Video generally provides higher quality than composite video, but lower quality than component video (see below).

Note: The composite video and S-Video inputs share an audio input.

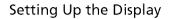
Note: The pins used in S-Video connectors are somewhat fragile. Take care to avoid bending the pins, as a bent or broken pin can cause loss of color information or total signal loss.

To connect an S-Video source to the display:

- 1. Remove the connector panel cover.
- 2. Using an S-Video cable, connect the S-Video output on the source device to the S-Video jack on the connector panel.
- 3. Using two RCA cables, connect the right (red) and left (white) audio outputs on the source to the corresponding AUDIO-IN jacks next to the VIDEO-IN jack.
- 4. Replace the connector panel cover.







Connecting to Component Video (Progressive Scan) Output Devices

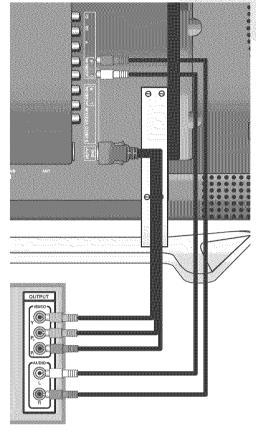
High-quality video devices, such as HDTV receivers and high-end DVD players, have component video outputs. Component video uses three RCA connections to transmit video information. Because the information is split into three signals, component video offers higher quality than either composite video or S-Video.

Progressive scan component video uses three signals labeled Y, Pb, and Pr. Use this procedure only for progressive scan video (video formats 480p, 525p, 720p, and so on). See the next section for information on connecting interlaced component video signals to the display.

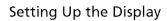
Note: The two component video inputs (RCA and D4) share an audio input.

To connect a progressive scan component video source to the display:

- 1. Remove the connector panel cover.
- 2. Using the included D4-to-RCA cable (shown on page 2), connect the three component video outputs (Y, Pb, and Pr) on the output device to the D4 jack on the connector panel. On the output device, connect the green RCA connector to Y, the blue connector to Pb, and the red connector to Pr. Then connect the D4 connector to the D4 jack on the connector panel.
- 3. Using two RCA cables, connect the right (red) and left (white) audio outputs on the source to the corresponding AUDIO-IN jacks next to the component inputs on the connector panel.
- 4. Replace the connector panel cover.







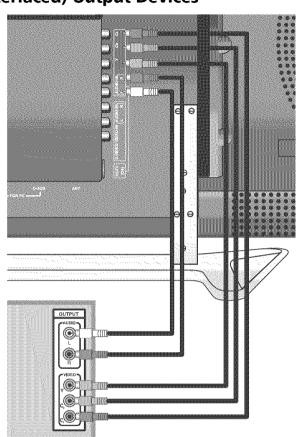
Connecting to Component Video (Interlaced) Output Devices

Interlaced component video uses three signals labeled Y, Cb, and Cr. Use this procedure only for interlaced video (video formats 480i, 525i, 720i, and so on). See the previous section for information on connecting progressive scan signals to the display.

Note: The two component video inputs (RCA and D4) share an audio input.

To connect an interlaced component video source to the display:

- 1. Remove the connector panel cover.
- 2. Using three RCA cables, connect the three component video outputs (Y, Cb, and Cr) to the corresponding jacks on the connector panel.
- 3. Using two RCA cables, connect the right (red) and left (white) audio outputs on the source to the corresponding AUDIO-IN jacks next to the component inputs on the connector panel.
- 4. Replace the connector panel cover.



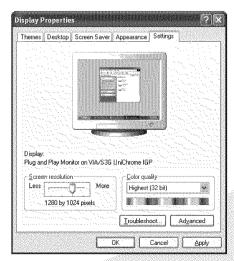
Connecting to a PC

Your display can be used as a computer monitor for any computer with a VGA or DVI video output. In addition, the computer's audio output can be connected to the display and played through the display's speakers.

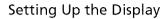
To connect a PC to the display:

1. Set the video resolution on the computer to 1280×1024 or less before connecting to the display.

In Windows, right-click on the desktop and select **Properties** to bring up the Display Properties window. Select the **Settings** tab. Adjust the **Screen resolution** as needed, select **Apply**, then select **OK**.

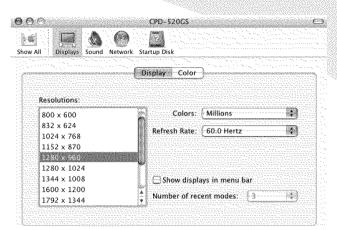






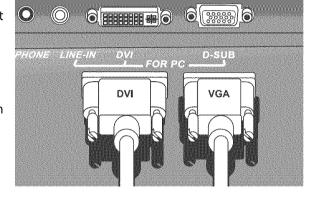
In Mac OS X, select **System Preferences** under the Apple menu.

Open the **Displays** panel and select the **Display** tab. Select the desired resolution from the list.

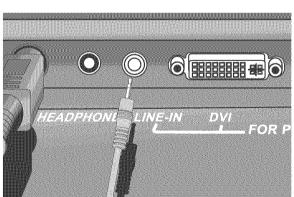


2. If your computer has a DVI output, connect a DVI cable between the DVI output on the computer and the DVI input on the bottom of the display.

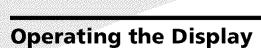
If your computer has a VGA output only, connect the VGA cable included in the Accessories Box between the VGA output on the computer and the VGA input on the display.



3. (OPTIONAL) Using the audio cable included in the Accessories Box, connect the computer's audio output (LINE OUT) to the audio input on the bottom of the display (LINE IN).







Turning the Display On and Off

Once the DC power adapter is connected properly to the display and the wall outlet, the display may be turned on and off from the top of the display or the remote.

To turn the display on or off:

1. Press the **POWER** button.

Selecting the Video and Audio Source

The signal source may come from any of the inputs on the connector panel or the bottom of the display. The **SOURCE** button cycles through these.

To change the audio/video source:

1. Press the **SOURCE** button until the correct source is selected.

The **SOURCE** button cycles through the following sources:

- TV
- HDTV (D4)
- VGA
- DVI
- COMP (Component Video)
- SV (S-Video)
- AV (Composite Video)

Adjusting the Volume

The audio volume may be adjusted from the remote or the top of the display.

To change the volume:

1. Press the **VOL** ▲ and **VOL** ▼ buttons.

Selecting the Channel

The channel may be selected from the remote or the top of the display.

To change the channel:

- 1. Ensure the source is set to TV.
- 2. Press the CH ▲ and CH ♥ buttons.

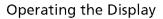
To change to a particular channel directly:

- 1. Ensure the source is set to TV.
- 2. Enter the desired channel number on the remote keypad.









Accessing the On-Screen Display

The On-Screen Display allows you to configure the operation of the display. You can change video and audio settings, activate and configure picture-in-picture (PIP) and closed captioning, select television channels, control access to mature programming, and configure other general display behavior. See "Configuring the Display" on page 15 for more information.

To access the OSD

1. Press the **MENU** button.





When you turn on your LCD for the first time, you will need to set up the display for proper operation by scanning the television spectrum for available channels.

Setting up Television Channels

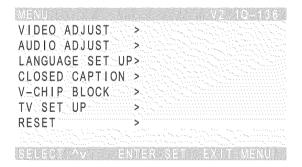
If you are connecting directly to a wall jack or antenna (that is, if you are not using a cable box or satellite receiver), you should scan the signal spectrum to weed out channels with insufficient signal strength once the television signal is connected to the display. This will make it much easier to navigate through the channels.

To scan the signal spectrum:

- 1. Turn the display on using the **POWER** button.
- 2. Change the signal source to "TV" by repeatedly pressing the **SOURCE** button until "TV" shows in the top right corner of the screen.
- 3. Press the **MENU** button to bring up the On-Screen Display (OSD).
- Press the CH ▼ button until TV SETUP is highlighted, then press SET to enter the menu.
- Press the CH ▼ button until BAND is highlighted, then press the VOL ▼ button until the appropriate selection shows: "AIR"

for an antenna, "CATV" for cable TV.

- 6. Press the **CH** ▼ button until **SCAN** is highlighted, then press the **SET** button to start scanning channels. The menu will display "SCAN" until the scan is complete.
- 7. Once the scan is complete, press **MENU** twice to exit the OSD.



TV SET UP V2 1Q-136
BAND [AIR]
SCAN [] [39]CH
ADJUST CH []
FINE TUNE [0]-
ADD/DELETE [ADD]
SOUND [STEREO]
BLANKING [BLACK]
Revenue de la companya del companya della companya della companya de la companya de la companya de la companya della companya

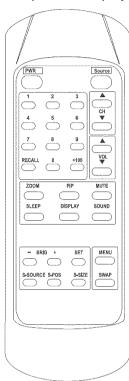






Using the Remote Control

The remote control can be used to control every aspect of the display's operation and includes more functionality than the controls on top of the display.



The following is a list of all buttons on the remote and their functions:

Button	Function
PWR	Turns the display on and off
Source	Selects the signal source: TV, HDTV, VGA, DVI, COMP, SV, AV
1 2 3 4 5 6 7 8 9	Used to enter numbers on the display and to select the television channel
RECALL	Returns to the previous channel
+100	Gives access to channels over 100. To use, press +100 , then enter the last two digits of the desired channel number.
CH CH	Selects the television channel







Using the Remote Control

Button	Function
A	Adjusts the audio volume
VOL	
ZOOM	Switzbas hatwaan three display formats Aspast (4.2) Danarana (15:0) and
200m	Switches between three display formats: Aspect (4:3), Panorama (15:9), and Fill (16:9)
	FILL/PANORAMA ASPECT
PIP	Selects the PIP mode: Off, Standard PIP, PNP1, or PNP2
	1 1 2 1 2 PNP2
	Note: If there is no signal connected to the secondary source, the PIP secondary window will not appear when in Standard PIP mode.
MUTE	Mutes the audio
SLEEP	Sets the display sleep timer. The timer can be turned off or set to 30, 60, or 90
	minutes.
DISPLAY	Displays current source and television channel information
SOUND	Selects the sound enhancement mode: Off, Stereo Simulation, Surround 1, or
	Surround 2
- BRIG +	Adjusts the display brightness
SET	Selects the highlighted item or confirms the current adjustment
MENU	Brings up the On-Screen Display
S-SOURCE	When PIP is active, selects the signal source used for the secondary PIP window
s-Pos	When PIP is active and set to Standard PIP mode, this button adjusts the position
	of the secondary PIP window.
S-SIZE	When PIP is active and set to Standard PIP mode, this button adjusts the size of
	the secondary PIP window.
SWAP	When PIP is active, swaps the primary and secondary sources







Using the Remote Control

The signal sources available for the PIP secondary window depend on the currently selected primary source (that is, the source displayed in the main window). For example, if TV is selected as the primary source, you can set the secondary window to display video from the HDTV, VGA, or DVI source, but not from the TV, Comp, SV, or AV sources.

The table below gives all possible PIP primary/secondary source combinations.

			Prima	ry Video	Source		
Secondary Video Source	TV	HDTV	VGA	DVI	Comp	sv	AV
TV		•	•	•			
HDTV	•			•	•	•	•
VGA	•			•	•	•	•
DVI	•	•	•		•	•	•
Comp		•	•	•			
sv		•	•	•			
AV		•	•	•			





The On-Screen Display (OSD) allows you to configure the operation of the LCD. You can change video and audio settings, activate and configure picture-in-picture (PIP) and closed captioning, select television channels, control access to mature programming, and configure other general display behavior.

The menu structure varies depending on the selected signal source. The table below gives the available options for each source.

New Art	162 - 168 - 1
VIDEO ADJUST >	100 00 00 00 00 00 00 00 00 00 00 00 00
AUDIO ADJUST >	
LANGUAGE SET UP>	
CLOSED CAPTION >	
V-CHIP BLOCK >	
TV SET UP >	
RESET >	

	TV	HDTV	VGA	DVI	Comp	sv	AV
Video Adjust	•	•	•	•	•	•	•
Audio Adjust	•	•	•	•	•	•	•
Language Setup	•	•	•	•	•	•	•
Closed Caption	•				•	•	•
V-Chip Block	•				•	•	•
TV Setup	•						
Reset	•	•	•	•	•	•	•

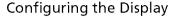
To use the OSD:

- 1. Press the **MENU** button on the remote or the top of the display.
- 2. Once the OSD appears, use the **CH** ▲ and **CH** ♥ buttons to navigate the menu items.
- 3. Press the **SET** button on the remote or the **ENTER** button on the top of the display to select the desired item.
- 4. If an arrow is displayed to the right of the item name, a sub-menu will appear upon pressing **SET**. Repeat steps 2 and 3 to navigate the sub-menu.
- 5. If the selected item is an adjustable parameter, use **VOL** ▲ and **VOL** ▼ to adjust the parameter and then press **SET** to accept.
- 6. Press **MENU** to return to the previous menu and, finally, exit the OSD.









Video Adjust

The Video Adjust menu allows you to change the parameters used in displaying video.

The menu structure varies depending on the selected signal source. The table below gives the available options for each source.

VIDEO ADJUST V2.10-13	
DISPLAY	1
COLOR	
IMAGE >	
ZOOM >	
SUB PICTURE>	
	. i

	TV	HDTV	VGA	DVI	Comp	sv	AV
Display	•	•	•	•	•	•	•
Color	•	•	•	•	•	•	•
Image	•	•	•		•	•	•
Zoom	•	•			•	•	•
Position			•				
Sub-Picture	•	•	•	•	•	•	•

Display

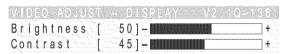
A sub-menu used to adjust display parameters. The parameters are

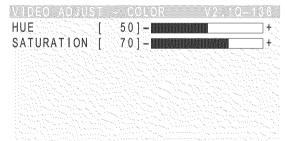
- Brightness—Adjusts the brightness of the
- Contrast—Adjusts the variation between light and dark

Color (Source: TV, HDTV, Comp, SV, AV)

A sub-menu used to adjust the color space used for motion picture video. The parameters are

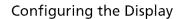
- **Hue**—Adjusts the range of colors available
- Saturation—Adjusts the intensity of the colors displayed











Color (Source: VGA, DVI)

Used to adjust the color space used for computer video. The options are

- sRGB—Turns standard RGB color on and off. When this is on, the other menu items are disabled.
- Gamma—Adjusts the intensity correction used by the display. The options are 1.8, 2.2, 2.4. This menu item is disabled when Temperature is set to User.
- Temperature—Sets the color temperature used for white. The options are 6500K, 9300K, User (VGA only), and Off (DVI only).
- Red (VGA Only)—When Temperature is set to User, this sets the amount of red in the display's white.
- **Green** (VGA Only)—When Temperature is set to User, this sets the amount of green in the display's white.
- **Blue** (VGA Only)—When Temperature is set to User, this sets the amount of blue in the display's white.

Image (Source: TV, HDTV, Comp, SV, AV)

A sub-menu used to set options regarding processing of motion picture images to remove artifacts and noise. The options are

- Noise Reduction—Sets the amount of noise reduction used to filter out static. The options are Off, Low, Med, and High.
- Angle Filtering

 —Turns anti-aliasing on and off. This feature removes jagged lines from video images for a better picture.
- Sharpness—Adjusts image sharpness
- Film Mode—Removes artifacts from 2:2 and 3:2 pulldown material

Image (Source: VGA)

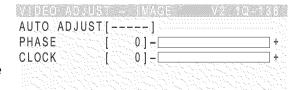
Used to set VGA image display options. The parameters are

- Auto Adjust—Adjusts automatically to the incoming VGA signal
- **Phase**—Adjusts the clock phase used to read the incoming signal
- Clock—Adjusts the clock frequency used to read the incoming signal

sRGB	[OFF]		
GAMMA	[]		
TEMPERATURE	USER		
RED	[220]	-	+
GREEN	215]		+
BLUE	[190]	- / / / / / / / / / / / / / / / / / / /	+

sRGB	OF		and the first time.	- The Control of the	
GAMMA	950 Mgs 0	- 1			
TEMPERATUR	E OI	FÉ			

NOISE REDUCTION[HIGH]
ANGLE FILTERING[ON]
SHARPNESS [5]-
FILM MODE [ON]
SELECT AV ADJUSTUS SE EXILL MENULLI







Configuring the Display

Zoom (Source: TV, HDTV, Comp, SV, AV)

Sets the display format used, using the following parameters:

- Zoom—Zooms in on the image. To zoom in, select IN with the VOL ▼ button and press SET. To zoom out, do the same with OUT.
- Horizontal Pan—Moves the zoom window right and left. This menu item will only appear when **Zoom** is set to IN. To use, select the desired direction with the **VOL** ▲ and **VOL** ▼ buttons and press **SET** to move the window.

ZOOM

VERTICAL POS

Vertical Pan—Moves the zoom window up and down. This menu item will only appear
when Zoom is set to IN. To use, select the desired direction with the VOL ▲ and VOL ▼
buttons and press SET to move the window.

Position (Source: VGA)

A sub-menu used to adjust the VGA image position. The parameters are

- **Horizontal**—Adjusts the horizontal position of the image
- Vertical—Adjusts the vertical position of the image

Sub-Picture

A sub-menu used to adjust the position of the PIP sub-picture. The parameters are

- **Horizontal**—Adjusts the horizontal position of the sub-picture
- Vertical—Adjusts the vertical position of the sub-picture

Audio Adjust

This menu sets audio playback parameters, as follows:

Balance

Adjusts the relative volumes of the left and right speakers

Bass

Sets the volume of low frequencies

Treble

Sets the volume of high frequencies

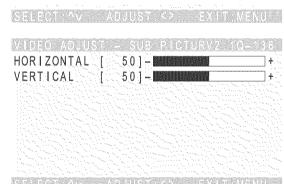
VIDEO ADJUST - POSITION V2.10-13	
HORIZONTAL [44]-	+
VERTICAL [0]-	4

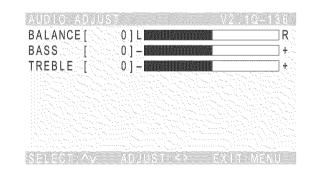
IN.

DOWN UP

HORIZONTAL POS LEFT RIGHT

OUT













Configuring the Display

Language Setup

This menu sets the language used for information displayed on the screen. The options are as follows:

- English
- French
- Spanish

Closed Caption

(Source: TV, Comp, SV, AV)

The Closed Caption menu turns closed captioning on and off and allows you to set options used in displaying it. Closed captioning is a system used to broadcast text, such as subtitles and other information, along with video.

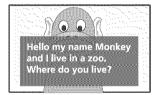
Mode

Sets the closed captioning mode used. The options are

- **Off**—No closed captioning
- Caption—Used for subtitles. This mode displays only a few lines of text at the bottom of the screen.
- Text—Displays more detailed textual information broadcast with the video. This mode displays text across most of the screen.



MODE: CAPTION



MODE: TEXT

Data

Selects the closed captioning channel displayed on the screen. The options are

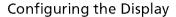
- CH1—Closed caption channel 1
- CH2—Closed caption channel 2



MODE[OFF DATA[CH1]







V-Chip Block

(Source: TV, Comp, SV, AV)

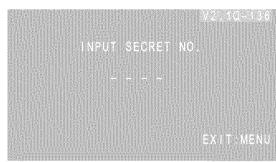
The V-Chip blocks access to mature programming unless a password is entered to bypass it. The V-Chip Block menu allows you to change the password and select which content should be blocked.

Upon entering the V-Chip Block menu, the display asks for the current password. Once the password is entered, you may adjust the V-Chip settings. The factory default password is '1234'.

Upon leaving the menu, the display will ask for a new password. Either enter a new password or press MENU to exit and leave the password as is.

The sub-menus are as follows:







MPAA

This sub-menu allows you to block mature content by its MPAA (Motion Picture Association of America) rating. When a rating is blocked, all higher ratings will automatically be blocked as well. The ratings are

- **G**—General audiences (all ages)
- **PG**—Parental guidance suggested (some material may not be suitable for children)
- PG-13—Parents strongly cautioned (some material may not be suitable for children under 13)

PG

R

PG-13[----

NC-17 [----

- **R**—Restricted (minors under 17 require an accompanying parent or adult guardian)
- NC-17—No one under 17 admitted
- **X**—Adults only (no one under 17 admitted)







Configuring the Display

TV Guidelines

This sub-menu allows you to block mature content by its TV Parental Guideline rating. The information is displayed in a table, where 'U' means unblocked and 'B' means blocked. The rows represent rating categories, and the columns represent specific types of mature content that may be blocked for each rating category. When a rating is blocked, all higher ratings will automatically be blocked as well.

	LL FV	Λ.	S	L.	D	
UNBLOCK	U					
TV- Y	U					
TV-Y7	U U					
TV- G	U					
TV-PG	U	U	U	U	U	
TV-14	U	U	U	U	U	
TV-MA	U	U	U	U		
				120		

The rows are

- Unblock—Blocks or unblocks all rating levels
- TV-Y-All children
- TV-Y7—Children 7 years and older
- TV-G—General audience
- TV-PG—Parental guidance suggested
- TV-14—Parents strongly cautioned
- TV-MA—Mature audience only

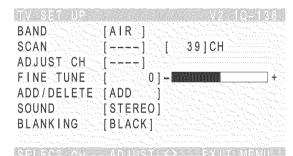
The columns are

- All—All content types
- FV—Fantasy violence
- **V**—Violence
- **S**—Sexual situations
- L—Coarse language
- D—Suggestive dialog

TV Setup

(Source: TV)

The TV Setup menu allows you to adjust television reception and display parameters, including which channels are available for viewing. The options are as follows:



Band

Selects the type of TV signal connected to the display. The options are

- Air—TV signal received by an antenna
- CATV—Cable TV
- CATV-HRC—A form of cable TV mainly used on the west coast of the US
- CATV-IRC—A form of cable TV mainly used on the east coast of the US







Configuring the Display

Scan

Scans all television channels for those with strong signals and disables the rest

Adjust Ch

Allows you to adjust the television channel without exiting the OSD

Fine Tune

Adjusts the center frequency used for the current channel. This feature can help improve reception on channels with weak reception.

Add/Delete

Adds or removes the currently selected channel from the group available for viewing. The options are

- Add—The current channel is available for viewing.
- **Delete**—The current channel is not available for viewing.

Sound

Selects which broadcast sound channel the display plays back. The options are

- Mono—One-channel sound
- **Stereo**—Two-channel sound (left and right)
- SAP—Secondary Audio Programming. Used mainly for foreign language broadcasts

Blanking

Determines which color is used to flood the screen when a channel contains nothing but static. The options are

- Blue
- Black

Reset

This menu resets display options to their factory settings. Two options are available:

Factory Reset

Resets all display settings to factory defaults

Color Reset

Resets the color space to the factory default

		2006273			
	RY RES				
COLOR	RESET	>			
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Symptom	Possible Cause	Resolution		
No picture (power indicator does not light up)	Power cord(s) not securely connected	Make sure the power cable from the DC Power Adapter is firmly inserted into the socket on the display.		
		Make sure the power cord from the wall is connected securely to the DC Power Adapter and wall outlet.		
	Power outlet is off or not working	If the power outlet is working, the blue light on the DC Power Adapter will come on when it is plugged in. If it doesn't, try plugging a different device into the outlet and see if it turns on. If not, check that the outlet is on or use a different outlet.		
No picture (power indicator is	The display is in power- saving mode	If in VGA or DVI mode, press a key on the keyboard or move the mouse. Otherwise, press a button on the remote.		
amber)	The display is off	Press the POWER button on the remote or on top of the display.		
No picture (power indicator is red)	No signal	Make sure the proper source is selected. If there is still no picture, check the signal cable(s) and signal source.		
No picture (power indicator is green)	Contrast or brightness too low	Adjust the contrast and/or brightness until picture appears.		
	Signal cable(s) not securely connected	Make sure the signal cable(s) are firmly connected.		
	Signal source is off	Make sure the device supplying the video signal is on and operational.		
	Poor TV signal	Check the TV signal. If using an antenna, adjust the position for better signal. If using cable or satellite TV, contact your service provider.		





Troubleshooting

Symptom	Possible	Resolution	
	Cause		
Unclear or noisy picture	Signal cable(s) not securely connected	Make sure the signal cable(s) are firmly connected.	
	Poor TV signal	Check the TV signal. If using an antenna, adjust the position for better signal. If using cable or satellite TV, contact your service provider.	
	Radio interference	Check for any electronic devices nearby that might be interfering with the video signal or the display's operation.	
Displayed color is incorrect	Incorrect color settings	Adjust the settings in the Display , Color , and Image submenus under the Video Adjust menu in the OSD (see "Configuring the Display" on page 15).	
No sound	Audio cable(s) not securely connected	Make sure the audio signal cable(s) are firmly connected.	
	Headphones plugged in	Unplug the headphones.	
	Audio muted	Unmute the audio by pressing the MUTE button on the remote.	
Display is too dark or too bright	Contrast or brightness too low or too high	Adjust the contrast and/or brightness to desired setting.	
Display not centered	Position incorrectly adjusted in OSD	Adjust the image position in the Position sub-menu under the Video Adjust menu in the OSD (see "Configuring the Display" on page 15).	
Image vibrating	Signal cable(s) not securely connected	Make sure the signal cable(s) are firmly connected.	
	Power voltage too high or too low	Check the power source to make sure it matches the display specification. Try a different power outlet on a different circuit.	
After-image remains on screen after display is turned off	Inherent LCD characteristics	This is characteristic of an LCD. The after-image will disappear after a few minutes.	
Distorted image	Display format set incorrectly	Check that the correct display format is selected by pressing the ZOOM button on the remote.	







Troubleshooting

Symptom	Possible Cause	Resolution
"Not support mode" message on screen	VGA or DVI input signal is not in a supported mode	Adjust the resolution and refresh rate on the PC to match a supported mode, listed in the "Specifications" section.
Red, green, blue, or white dots on screen	Inherent LCD characteristics	This is characteristic of an LCD and will not cause a malfunction.
Remote control not functioning	Batteries inserted improperly	Make sure the batteries are inserted and oriented properly.
	Batteries low on energy	Replace the batteries.
	A button is stuck	Jog any stuck buttons on the remote to unstick them.
	Obstacle between remote and display	Remove the obstacle.
	The remote is too far from the display	Move closer to the display.

Note: Further troubleshooting information may be found on the Protron website at www.protronusa.com.

Support Information



Do not return this product to your retailer until you have performed the steps laid out in the Easy Setup Instructions and contacted the customer service center. Merchandise may not be returned to Protron without a return form authorization.

Before contacting Protron customer service, please record the following information, which may be found on the back of your display:

- Model Number
- Serial Number
- Date of Manufacture

The Protron customer service center may be contacted 24 hours a day, 7 days a week at the following number:

1-888-257-8899





General

Dimensions 40.5"W × 20.5"H × 11"D w/ stand and speakers

Weight 38.8 lbs

Panel TypeActive Matrix TFT LCDScreen Size32" wide-screen (16:9)Color Range24 bits (16.7 million colors)

Max. Resolution 1366 × 768

Pixel Pitch $0.51075 \text{mm (H)} \times 0.51075 \text{mm (V)}$

Sync Range Horizontal: 30–80kHz

Vertical: 50-75Hz

Contrast Ratio 800:1
Brightness 500 cd/m²

Viewing Angle Vertical: +/-85°

Horizontal: +/-85°

Response Time Rise: 6ms

Fall: 10ms

Inputs 1 × component video (RCA)

1 × component video (D4) 1 × composite video (RCA)

1 × S-Video

2 × stereo audio (RCA) 1 × SVGA (15-pin D-Sub) 1 × DVI-D (single link)

1 × stereo audio line in, 0 dBV nominal (1/8" TRS)

Outputs1 × headphone (1/8" TRS)TV TunerNTSC-M, CATV, 181 channels

TV Formats Supported SDTV: 480i

EDTV: 480p

HDTV: 720p, 1080i

TV Audio MTS (mono, stereo, SAP), SRS

Parental Controls V-Chip (TV PG, MPAA)

Picture-In-Picture PIP

Closed Captioning CC1-2, TEXT1-2

Speakers 2 × 10W

Plug and Play Compliance VESA DDC1/DDC2B

DC Power Adapter Input: 100–240VAC, 50–60Hz

Output: 12/16VDC

Power Consumption 100W typ.

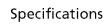
120W max.

Storage Temperature 0 to 60°C **Operating Temperature** 5 to 35°C









Supported VGA Timing Modes

Display Resolution	Vertical Frequency (Refresh Rate)	Horizontal Frequency
	Hz	kHz
640 × 350	60.00	31.47
	70.00	31.47
	85.08	37.86
640 × 400	70.00	31.47
	85.00	37.86
640 × 480	60.00	31.50
	72.80	37.86
	75.00	37.50
	85.00	43.27
800 × 600	56.30	35.15
	60.32	37.90
	72.19	48.08
	75.00	46.90
	85.06	53.70
832 × 624	74.53	47.71
1024 × 768	60.00	48.08
	70.00	56.50
	75.00	60.00
	85.00	68.70
1152 × 876	75.06	68.68
1280 × 768	60.00	47.70
1280 × 1024	60.02	63.98
	70.00	74.62
	75.03	79.98
	85.02	91.15
1600 × 1200	60.00	75.00





Limited Warranty

Protron warrants this product to be free from manufacturing defects in material and workmanship under normal use for the period listed at the bottom of this section.

How to obtain service:

- Call the Protron Customer Support line at 1-888-257-8899. If the issue cannot be resolved over the phone, a service tag number will be issued, and the nearest authorized Protron Service Center will be identified for you.
- For televisions with screen sizes of 26" or less, you will be requested to bring your unit into the authorized service center and pick up when repairs are complete.
- For televisions with screen sizes 27" and above, you may request in-home service from an authorized Protron Service Center, provided that your television is located within the geographic territory covered by an authorized Protron Service Center. If in-home service is not available in your area, you must take your television to the Service Center location at your own expense, or pay for the additional cost that the Service Center may charge to transport your television to and from your home.
- Proof of purchase in the form of a bill of sale or receipted invoice with product name, model and/or serial #, which provides evidence that the product is within the warranty period, must be presented to obtain warranty service.

This warranty does not cover:

- Physical or cosmetic damages.
- Damage caused by abuse and/ or neglect.
- Ordinary adjustments as outlined in the owners manual that can be performed by the customer.
- Damage to equipment not properly connected to the product.
- Any cost incurred in shipping the product for repair.
- Signal reception problems caused by external antenna, cable systems or interference.
- Incompatibility due to a change in TV/CATV broadcast systems after the product was sold.
- Batteries.
- Images burnt on to the screen.
- Initial installation and related adjustments.
- Power surge and/or damage by lightning.
- Force majeure or uncontrollable external force damage.
- Product shipped for service with inadequate packaging or packaging materials.

What we will do:

- Protron will reimburse an authorized Protron Service Center the labor charges to repair your television.
- Protron will reimburse an authorized Protron Service Center for the new, or at our discretion, refurbished replacement parts required to repair your television.





Limited Warranty



This warranty is void if:

- Product is used in a commercial application or rental.
- Damaged through misuse, negligence or abuse.
- Modified or repaired by anyone other than authorized PROTRON service center.
- Damaged because it is improperly connected to any other equipment.
- If the original proof of purchase cannot be supplied.
- If the identifiable markings on the TV such as Serial # are defaced, unrecognizable, or missing.
- The product is used outside the country in which it was originally sold.

This warranty is not transferable and only applies to the original purchase. Any implied warranties, including the warranty of merchantability, are limited in duration to the period of this expressed warranty and no warranty whether expressed or implied shall apply to the product thereafter. Under no circumstance shall PROTRON be liable for any loss or consequential damage arising out of the use of this product. This warranty gives specific legal right. However, you may have other rights that may vary from state/province to state/province. Some states/ provinces do not allow limitations on implied warranties or exclusions of consequential damage. Therefore these restrictions may not apply to you.

26" and below: 1 year parts/labor Depot Warranty
27" and above: 1 year parts/labor In-home Warranty



