

PELCO

by **Schneider** Electric

INSTALLATION/OPERATION

PMCL500 Series FHD Narrow Bezel LCD Monitor



42-, 46-, and 55-Inch Models

C2988M-A (6/11)

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Important Notices

REGULATORY NOTICES

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.

RADIO AND TELEVISION INTERFERENCE

This equipment has been tested and found to comply with the limits of 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 the 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 the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

You may also find helpful the following booklet, prepared by the FCC: "How to Identify and Resolve Radio-TV Interference Problems." This booklet is available from the U.S. Government Printing Office, Washington D.C. 20402.

Changes and modifications not expressly approved by the manufacturer or registrant of this equipment can void your authority to operate this equipment under Federal Communications Commission's rules.

In order to maintain compliance with FCC regulations shielded cables must be used with this equipment. Operation with non-approved equipment or unshielded cables is likely to result in interference to radio and television reception.

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

KOREAN CLASS B

이 기기는 가정용 (B 급) 전자파 적합기기로서 주로 가정에서 사용하는 것을 목적으로 하며, 모든 지역에서 사용할 수 있습니다.

Important Safety Instructions

This product is designed and manufactured to operate within defined design limits, and misuse may result in electric shock or fire. To prevent the product from being damaged, the following rules should be observed for the installation, use and maintenance of the product. Read the following safety instructions before operating the display. Keep these instructions in a safe place for future reference.

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one blade wider than the other. A grounding plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the points where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Only use with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
14. Unplug the apparatus during lightning storms or when unused for long periods of time.
15. Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases shall be placed on the apparatus.
16. **WARNING:** To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.
17. Installation should be done only by qualified personnel and conform to all local codes.
18. Unless this unit is specifically marked as NEMA Type 3, 3R, 3S, 4, 4X, 6, or 6P enclosure, it is designed for indoor use only and it must not be installed where exposed to rain and moisture.
19. Only use installation methods and materials capable of supporting four times the maximum specified load.
20. Only use replacement parts recommended by Pelco.
21. Avoid touching the screen directly with your fingers as the oils from your skin may be difficult to remove from the LCD.
22. Do not apply direct pressure on the screen.
23. Keep the monitor in a dust-free environment and away from strong electromagnetic fields.
24. Do not use attachments, such as mounts, that are not recommended by Pelco. They may be hazardous.
25. Do not place the monitor on an unstable stand, bracket, or mount. The unit may fall, causing serious damage to the unit or injury to a person. Only use mounts recommended by Pelco.
26. A CCC-approved power cord must be used to power this equipment when used in China.
27. A still image displayed too long may cause permanent damage to the LCD panel. Watching the LCD in 4:3 format for a long time may leave traces of borders displayed on the left, right and center of the screen caused by the difference of light emission on the screen. Using a camera or a system may cause a similar effect to the screen. Damages caused by this effect are not covered by the warranty.

The product and/or manual may bear the following marks:



This symbol indicates that dangerous voltage constituting a risk of electric shock is present within this unit.



This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit

CAUTION:
RISK OF ELECTRIC SHOCK. DO NOT OPEN.

Description

Pelco's PMCL500 Series high-definition narrow bezel (NB) monitors deliver 1920 x 1080 resolution with high performance and the truest color reproduction available. Multiple video streams can be arranged on a single monitor to reduce installation power requirements. These FHD displays use low-power components to meet regulatory compliance while retaining compatibility with Pelco and third-party megapixel cameras.

When used with other lower resolution camera systems, Pelco FHD displays can seamlessly scale down to 720p, guaranteeing detailed images from all cameras.

Standard monitor display parameters can be adjusted with on-screen menus and side panel controls.

MODELS

PMCL542NB	42-inch LCD monitor (1,067 mm)
PMCL546NB	46-inch LCD monitor (1,168 mm)
PMCL555NB	55-inch LCD monitor (1,397 mm)

RECOMMENDED MOUNTS

PMCLNBWMT	Tilt wall mount
PMCLNBWMF	Flat wall mount
PMCLNBWMS	Swingout arm wall mount

PACKAGE CONTENTS

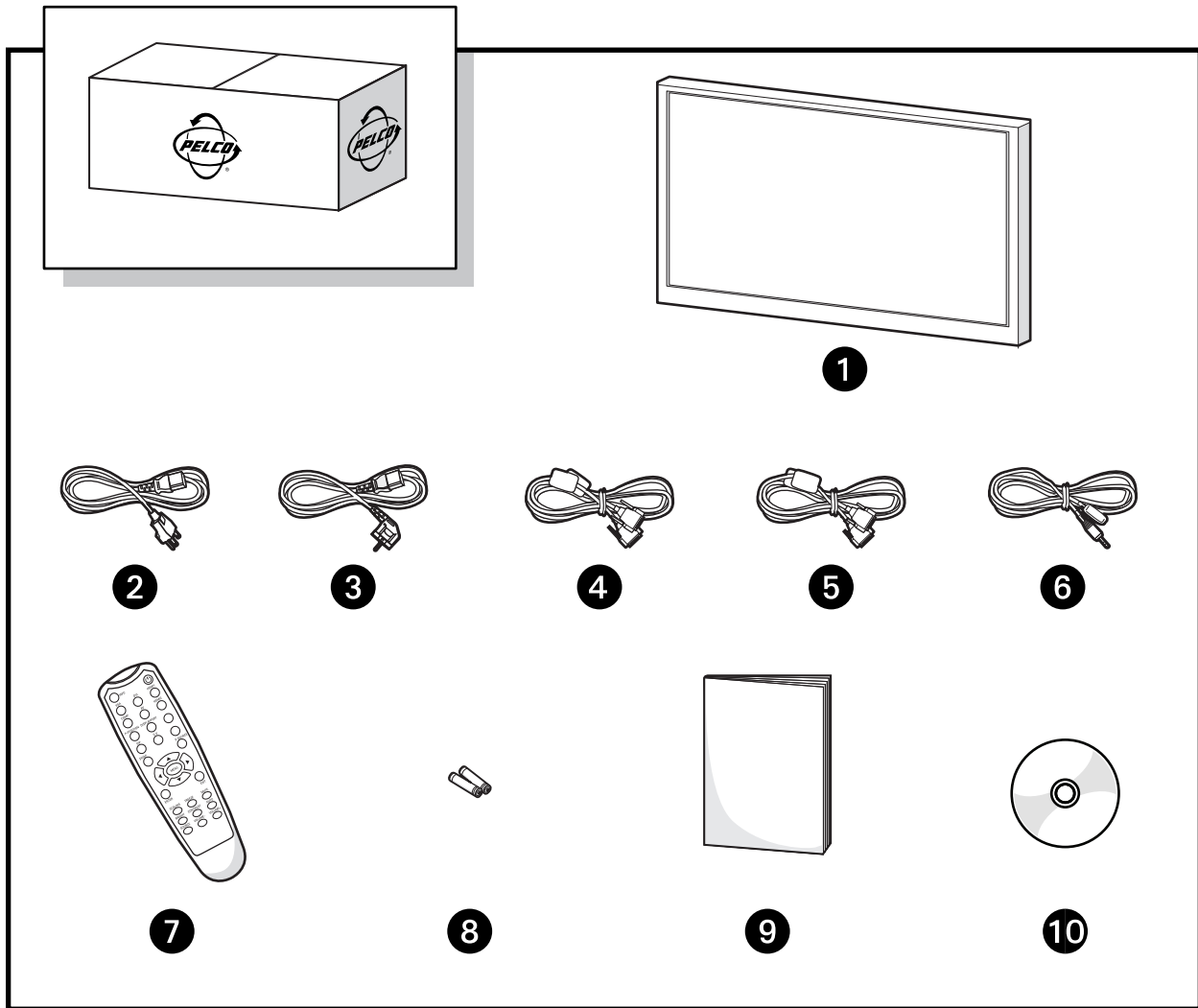


Figure 1. Package Contents

- | | |
|--|-----------------------------|
| 1 42/46/55-inch FHD Monitor (1 ea.) | 6 Infrared Extender (1 ea.) |
| 2 USA Standard Power Cord (1 ea.) | 7 Remote Control (1 ea.) |
| 3 European Standard Power Cord (1 ea.) | 8 AAA Batteries (2 ea.) |
| 4 DVI Cable (1 ea.) | 9 Quick Start Guide (1 ea.) |
| 5 VGA Cable with 15-pin D-Sub Connection (1 ea.) | 10 Resource Disc (1 ea.) |

USER-SUPPLIED PARTS

Only one DVI cable and one VGA cable is supplied by Pelco. Additional video (RS-232/RS-485), VGA, or DVI cables are required to configure video walls using multiple monitors. Refer to *Video Wall* on page 19 to determine the needs for your particular installation.

INDICATOR LIGHTS, CONTROLS, AND CONNECTIONS

FRONT PANEL

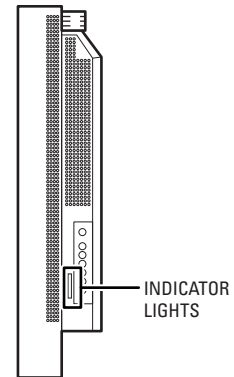


Figure 2. Front Panel and Indicator Lights

Table A. Light Indicators

Indicator	Function
Green	Normal operation
Blinking orange	No signal
Orange	Power saving mode
Not lit	Power/AC off

CONTROL PANEL

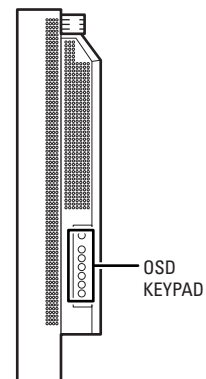
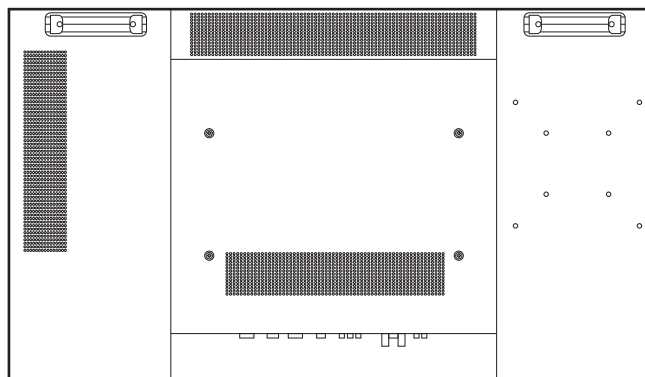


Figure 3. Control Panel and OSD Keypad

ON-SCREEN DISPLAY (OSD) KEYPAD FUNCTION LIST

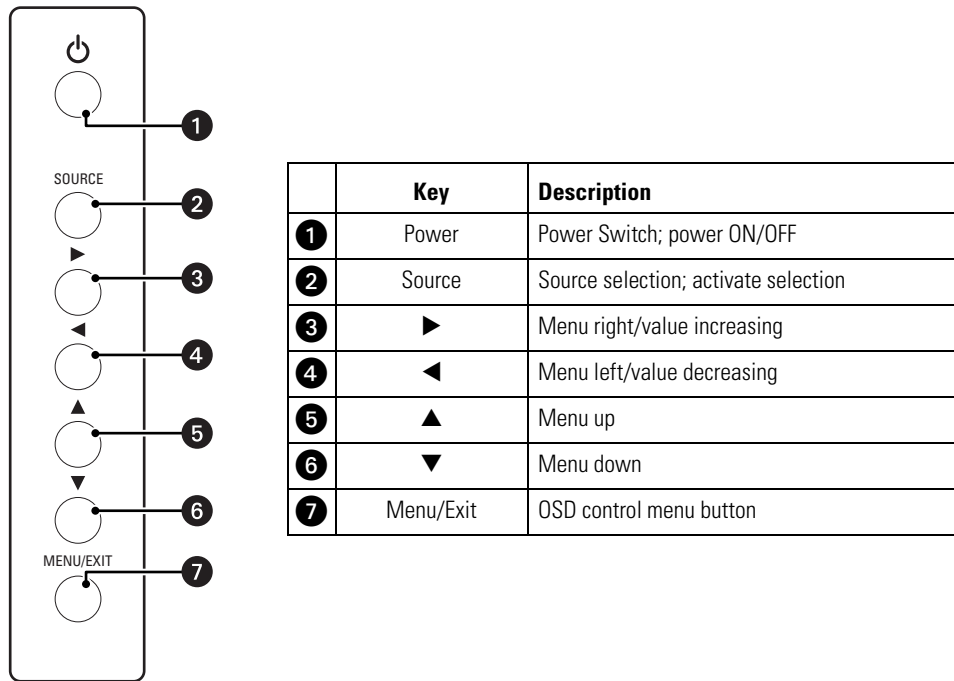


Figure 4. OSD Keypad and Functions

CONNECTION PANEL

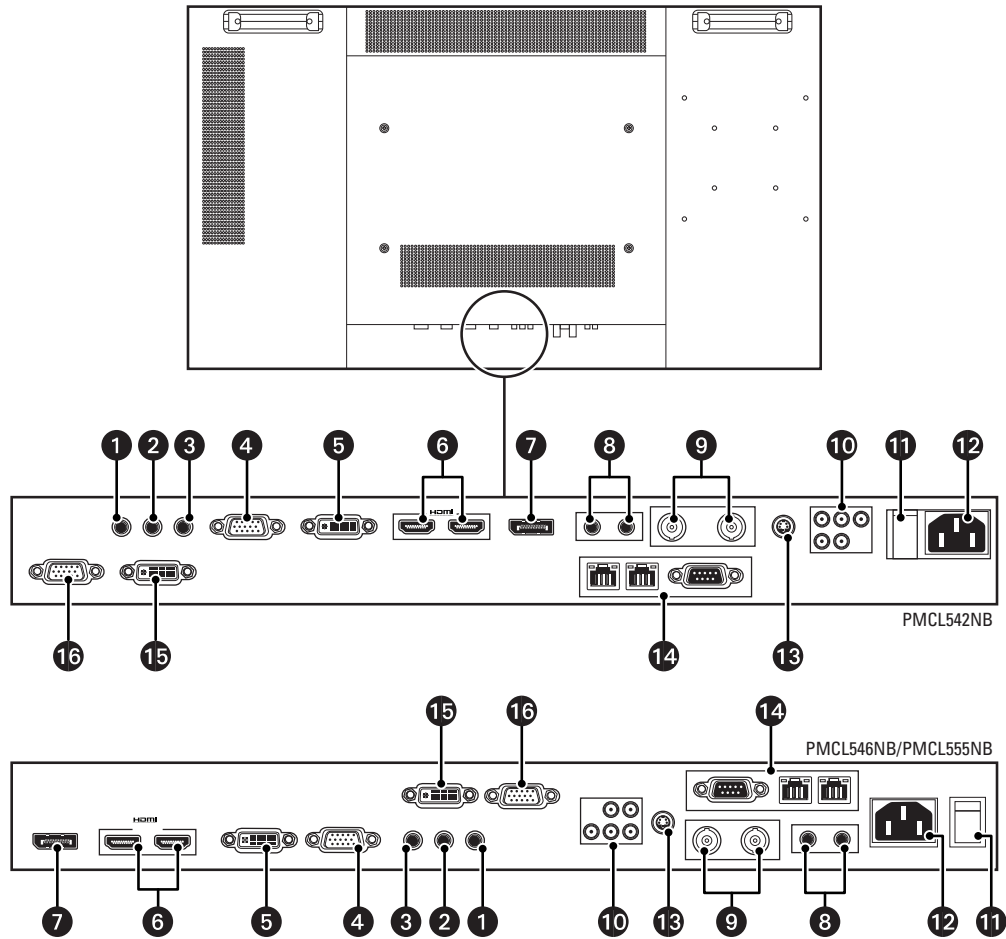


Figure 5. Connection Panel

Table B. Connection Panel

	Name	Connector
1	Line out	Mini jack
2	IR extender	Mini jack
3	PC audio in	Mini jack
4	VGA (PC) input	15-pin, D-sub
5	DVI-D input	24 pin, D-sub
6	HDMI input	(input only)
7	DisplayPort™	(input only)
8	Audio for S-Video/video input	RCA W/R
9	Video input/output	BNC
10	Y-Pb-Pr (Y-Cb-Cr) input	RCA G/B/R
	Audio for component input	RCA W/R
11	Main power switch	—
12	Power cord input	AC input
13	S-Video input	4-pin, mini-DIN
14	RS-232C input	9-pin, D-sub/RJ-485
15	DVI-D output	24-pin, D-sub
16	VGA (PC) output	15-pin, D-sub

Installation

SETUP

NOTES:

- Before connecting, turn off the monitor and any connected source equipment. After making all connections, turn on the monitor before turning on other devices.
- When connecting a computer, be sure that the computer is the last device turned on, after all connections are made.
- Read the operation manuals of the video source equipment before making connections.

UNPACKING

The PMCL500 Series NB monitor is packed inside a box carton. Additional packing material has been placed within the carton to protect the monitor during transport.

1. Before unpacking your monitor, prepare a stable, level, and clean surface near a wall outlet.
2. Set the monitor box in an upright position and pull out the white carton locks.
3. Lift up the top cover of the carton.
4. Remove the electrostatic discharge (ESD) bag before removing the display from the bottom tray carton.

CONNECTING VIDEO SOURCE EQUIPMENT

Video source equipment can be connected to any of the following interfaces:

- High Definition Multimedia Interface (HDMI)
- Component (Y, Pb, Pr)
- S-Video
- Composite (AV)
- HD-15 for VGA
- BNC
- DVI
- DisplayPort

CONNECTING THE POWER CORD

Connect the supplied power cord to the AC socket on the side of the monitor.

CONNECTING THE INFRARED (IR) EXTENDER

1. Connect the IR extender (supplied) to the IR extender jack.
2. Attach the extender to a bezel on the front of the monitor.

NOTE: The IR extender must be connected properly and affixed to one of the front bezels on the monitor for the remote control to operate effectively.

CONNECTING TO VIDEO EQUIPMENT

Use component (Y, Pb, Pr), S-Video, or composite (AV) cable when connecting to video equipment.

CONNECTING TO VIDEO SOURCES

It is recommended that you use HDMI cable when connecting to video sources that use HDMI output.

CONNECTING TO A COMPUTER

1. Connect the monitor to the computer using a high definition 15-pin VGA/DVI cable (supplied).
2. Secure the cable connectors by tightening the screws on both sides of the connector.

Operation

This section describes basic operating instructions for the PMCL500 Series NB monitors. Be sure that you have connected the required external source equipment to the monitor before following these procedures.

GENERAL INFORMATION

The default language for the OSD is English. To change the OSD language, refer to the *On-Screen Display (OSD) Menus* on page 16.

CONNECTING THE POWER CABLE

1. Connect the power cord to the power cord connector on the side of the monitor.
2. Connect the power cord to an AC power source.
3. Press the main power switch on the bottom of the monitor to the (I) position.
4. Press the power switch on the control panel or on the remote control to turn on (I) or turn off (O) power to the monitor.

TURNING POWER ON

Once the power switch is set to the on position (refer to *Connecting the Power Cable*), press the power button located on the control panel or on the remote control. It takes several seconds for the monitor to warm up after the power is turned on.

SELECTING INPUT SOURCE

To select the Input Source for the monitor, press the SOURCE button on the control panel or press the desired source key on the control panel or on the remote control; pressing the AUTO key on the remote control will cycle to the next active source input.

TURNING POWER OFF

Press the power button located on the control panel or on the remote control.

USING THE MENU SCREEN

The image and display settings can be adjusted through the menu as listed on the control panel or by using the remote control.

REMOTE CONTROL

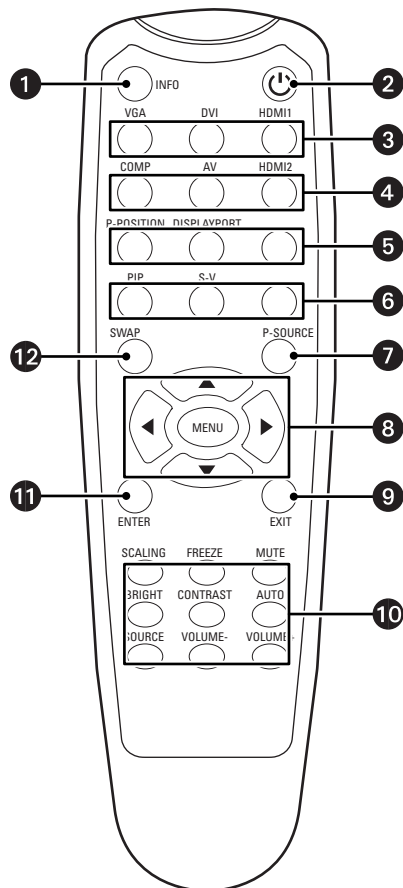


Figure 6. Remote Control Functions

- ❶ **INFO:** Provides source and resolution information.
- ❷ **POWER:** Turns the monitor on and off.
- ❸ **VGA:** Selects the PC RGB source.
DVI: Selects the PC DVI source.
HDMI 1: Selects the HDMI source 1.
- ❹ **COMP:** Selects the component source.
AV (VIDEO): Selects the composite video source.
HDMI 2: Selects the HDMI source 2.
- ❺ **P POSITION:** Selects the PIP position.
DISPLAY PORT: Selects the DisplayPort source.
- ❻ **PIP:** Turns the PIP feature on and off.
S-V: Selects the S-Video source.
- ❼ **P-SOURCE:** Selects the secondary subsource.
- ❽ **MENU:** Displays the monitor's on-screen menu system. When the menu system is displayed, pressing this button will select the previous submenu.
▲, ◀, ▶, ▼: Navigates through submenus and settings.
- ❾ **EXIT:** Closes the menu system.
- ❿ **SCALING:** Toggles between different aspect ratios (Full Screen, Native, Letter Box, and Pillar Box)
FREEZE: Freezes the current source image.
MUTE: Turns off the sound.
BRIGHT: Adjusts the brightness.
CONTRAST: Adjusts the contrast.
AUTO: Adjusts the VGA source automatically.
SOURCE: Allows selection of the different sources.
VOLUME-: Decreases the sound.
VOLUME+: Increases the sound.
- ⓫ **ENTER:** Selects highlighted menu choices.
- ⓬ **SWAP:** Swaps the main source and subsource picture.

Locking and Unlocking the Remote Key and Keypad

Lock: Press Enter, Enter, Exit, Exit, Enter, and Exit on the controller by sequence and all keys (including remote and keypad) will be locked, except Enter and Exit.

Unlock: Press Enter, Enter, Exit, Exit, Enter and Exit on the controller by sequence again and all keys will be unlocked.

ON-SCREEN DISPLAY (OSD) MENUS

IMAGE SETTINGS

The following menus are used for making common image adjustments. To select the Image Settings menu options and ranges, press the right and left arrows ◀ or ▶ on the remote control or the control panel, and then press ENTER.

The following table lists the image settings, menu options/ranges, and the default settings.

Table C. Image Settings

Settings	Menu Options/Ranges	Default
Scheme	User, Vivid, Cinema, Game, and Sport	User
Brightness	0 to 100	50
Contrast	0 to 100	50
Sharpness	0 to 24	12
Saturation (Video Mode only)	0 to 100	50
Hue (Video Mode only)	0 to 100	50
Backlight	0 to 100	80
Gamma	Off or 2.2	2.2
Color Temperature	User, 5000°K, 6500°K, 7500°K, and 9300°K	9300°K
Red Gain*	128 to 384	256
Green Gain*	128 to 384	256
Blue Gain*	128 to 384	256
Red Offset*	-50 to 50	0 (zero)
Green Offset*	-50 to 50	0 (zero)
Blue Offset*	-50 to 50	0 (zero)

*The color temperature must be set to "User" to adjust this setting.

DISPLAY SETTINGS

This menu is used for common source adjustments. To select the Display Settings menu options and ranges, press the right and left arrows ◀ or ▶ on the remote control or the control panel, and then press ENTER.

The following table lists the display settings, menu options/ranges, and the default settings.

Table D. Display Settings

MAIN		
Settings	Menu Options/Ranges	Default
Aspect Ratio	Full screen, Pillar Box, Letter Box, and Native	Full Screen
Zoom	0 to 10	0
Auto Scan	On, Off	On
Select Source	VGA, HDMI1, HDMI2, DVI, DisplayPort, S-Video, Video, and Component	VGA
PIP		
PIP Mode	Off, Large PIP, Medium PIP, Small PIP, and Side-by-Side	Off
PIP Position	Bottom-Right, Top-Left, Top-Right, and Bottom-Left	Bottom-Right
Aspect Ratio	Full Screen, Pillar Box, and Letter Box	Full Screen
Side-by-Side Scale	Zoom In, Zoom Out, Main, PIP, Default, and Return	—
Auto Scan	On, Off	On
Select Source	HDMI1, HDMI2, DVI, DisplayPort, Component, S-Video, and Video	VGA for Main, Video for PIP

NOTES:

- The maximum number of connecting devices for tiling mode is DVI = 9, VGA = 4, and Video = 4.
- The maximum cable length between displays for tiling mode is 3 meters.

AUDIO SETTINGS

This menu is used for adjusting volume settings. To select the Audio Settings menu options and ranges, press the right and left arrows ◀ or ▶ on the remote control or the control panel, and then press ENTER.

The following table lists the audio settings, menu options/ranges, and the default settings.

Table E. Audio Settings

Settings	Menu Options/Ranges	Default
Volume	0 to 100	50
Bass	0 to 20	10
Treble	0 to 20	10
Balance	0 to 20	10
HDMI Audio Input	HDMI, PC	HDMI

BASIC SETTINGS

This menu is used to make initial setup adjustments to the OSD menu and other on-screen messages. To select the Basic Settings menu options and ranges, press the right and left arrows ◀ or ▶ on the remote control or the control panel, and then press ENTER.

The following table lists the basic settings, menu options/ranges, and the default settings.

Table F. Basic Settings

Settings	Menu Options/Ranges	Default
OSD Transparent	0 to 100	0
OSD Location	Up, Down, Left, and Right	—
OSD Zoom	On, Off	Off
OSD Rotation	Landscape, Portrait	Landscape
OSD Language	English, Simplified Chinese, French, German, Italian, Portuguese, Russian, and Spanish	English
OSD Timeout	5 to 120	30
Sleep Timer	Off, 15, 30, 60, 90, and 120 minutes	Off
Power LED	On, Off	On
Real Time Clock	(press ▶ to display the Real Time Clock submenu)	—

REAL TIME CLOCK

This submenu is used to make adjustments to the monitor's internal clock. To select the Real Time Clock submenu options and ranges, press the right and left arrows ◀ or ▶ on the remote control or the control panel, and then press ENTER.

The following table lists the Real Time Clock settings, submenu options/ranges, and the default settings in Year/Month/Date/Hour:Minutes format.

Table G. Real Time Clock Settings

Settings	Menu Options/Ranges	Default
Real Time	(date and time)	—
Alarm Power On	Disable, Enable	Disable
Alarm Power Off	Disable, Enable	Disable

Refer to *Resolution Tables* on page 26 for more information.

ADVANCED SETTINGS

This menu is used to make advanced settings adjustments. To select the Advanced Settings menu options and ranges, press the right and left arrows ◀ or ▶ on the remote control or the control panel, and then press ENTER.

The following table lists the advanced settings, menu options/ranges, and the default settings for video wall configuration.

Table H. Advanced Settings

Settings	Menu Options/Ranges	Default
Auto Adjustment	No, Yes	No
Image Position	Up, Down, Left, and Right	—
Phase	0 to 63 (only VGA mode)	—
Clocks	0 to 100 (only VGA mode)	—
VGA ADC Settings	Default, User	Default
Flesh Tone	Off, Low, Medium, and High (only video mode)	Off
IRFM	On, Off	Off
Baud Rate	115200, 38400, 19200, and 9600	115200
Video Wall	(press ▶ to display the Video Wall submenu)	—
Factory Reset	No, Yes	No

VIDEO WALL

This submenu is used to make adjustments to the video wall display. To select the Video Wall submenu options and ranges, press the right and left arrows ◀ or ▶ or the up and down arrows ▲ or ▼ on the remote control or control panel, and then press ENTER.

CONNECTION TYPES

Video walls can be configured in a 2 x 2 grid or a 3 x 3 grid, using the following three connection types.

Video (BNC type): Supports a maximum video wall grid of 2 x 2 monitors.

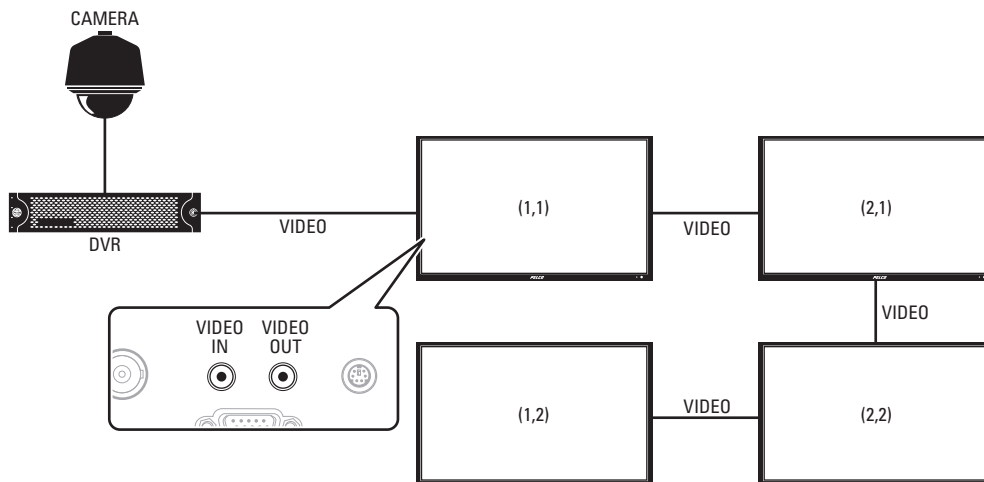


Figure 7. Video (BNC Type) Connection

VGA: Supports a maximum video wall grid of 2 x 2 monitors.

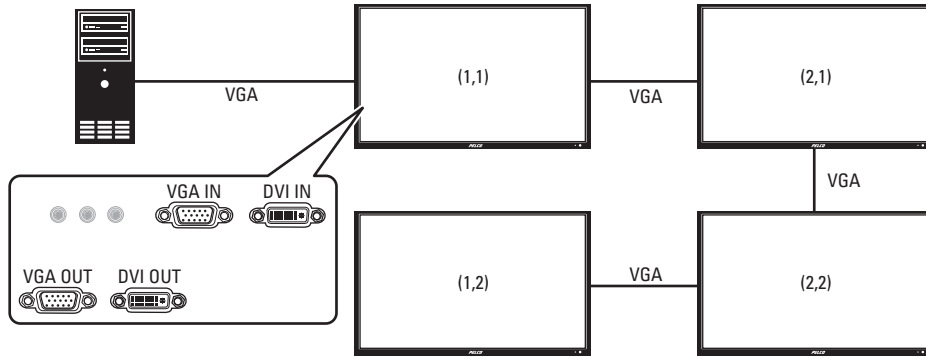


Figure 8. VGA Connection

DVI: Supports a maximum video wall grid of 3 x 3 monitors.

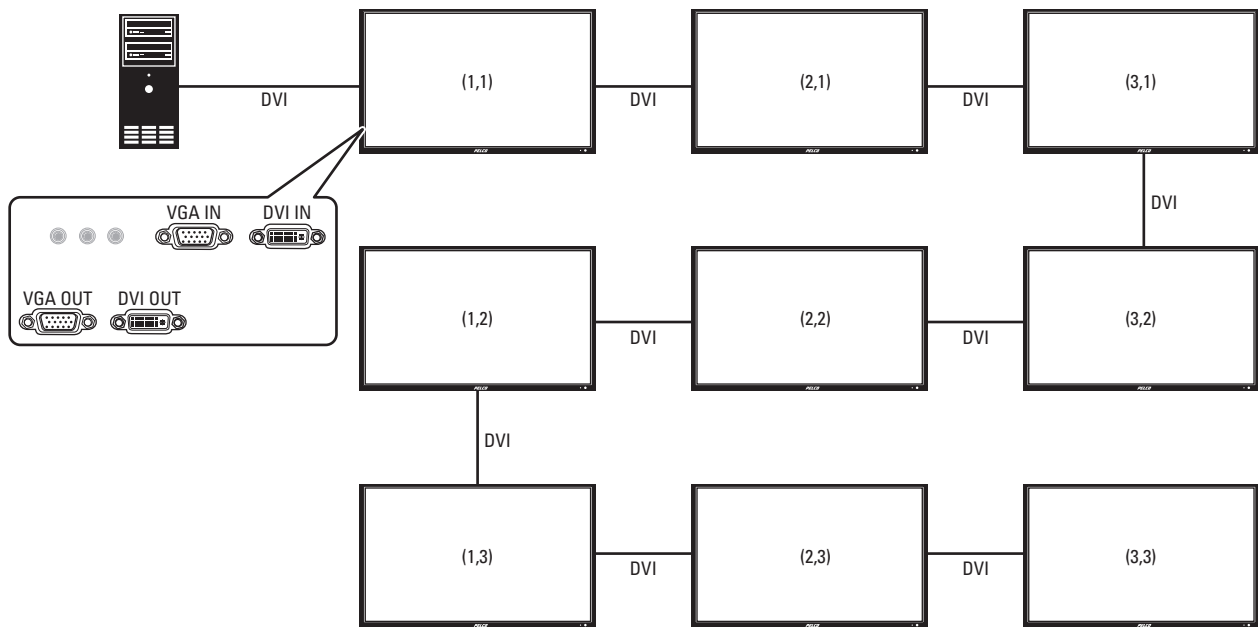


Figure 9. DVI Connection

VIDEO WALL PARAMETERS

The following information describes the settings, and lists the submenu options/ranges and default settings for defining your video wall parameters:

Monitor ID: Allows the user to set an individual monitor ID for each monitor. To control a monitor or multiple monitors that are daisy-chained by RS-232, each monitor must have a unique monitor ID. Numbers 1 to 25 are available to be used as monitor IDs. It is recommended to number each monitor in an RS-232 daisy chain sequentially starting with number 1.

NOTES:

- DVI input can support up to a 3 x 3 grid and loop through directly.
- VGA and video input can support up to a 2 x 2 grid and loop through directly.

Video Wall: Enables or disables the video wall. Select Yes to enable the video wall. The default setting is No, which disables the video wall feature.

DVI Indemnity: Compensates manually for image degradation caused by daisy-chaining too many monitors using DVI cables. It is recommended that you select the On option for the 7th, 8th, and 9th monitors in a DVI daisy-chain. For monitors 1 to 6, it is recommended that you select the default Off option.

Frame: Turns on or off the frame compensation.

Select Yes to turn on frame compensation. Part of the signal will be hidden by the monitors' bezels.

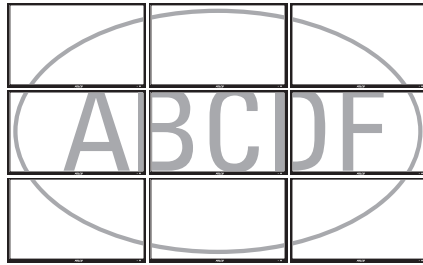


Figure 10. Video Wall Display with Frame On

Select the default No setting to turn off frame compensation. The entire signal will be displayed.

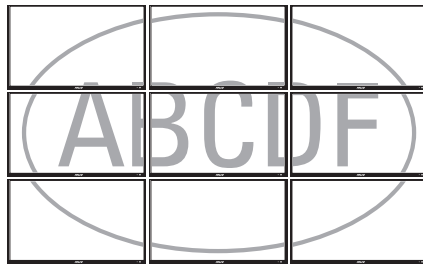


Figure 11. Video Wall Display with Frame Off

Matrix X: The number of monitors arranged horizontally. Matrix X can range from 1 to 3 monitors by connecting with a DVI source, or 1 to 2 monitors by connecting with a VGA or video source.

Matrix Y: The number of monitors arranged vertically. Matrix Y can range from 1 to 3 monitors by connecting with a DVI source, or 1 to 2 monitors by connecting with a VGA or video source.

Division X: Selects the horizontal position in each row for a specific monitor.

Division Y: Selects the vertical position in each column for a specific monitor.

2 X 2 VIDEO WALL GRID

Four monitors are used to construct a 2 x 2 video wall grid.

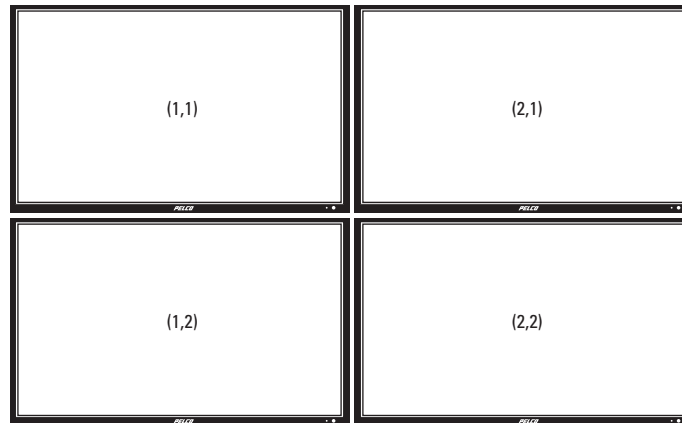


Figure 12. 2 x 2 Video Wall Grid

To configure a 2 x 2 video wall grid:

1. Determine the input signal type and connect the video signal (refer to *Connection Types* on page 19).
2. Connect an RS-232 cable (not supplied) to the first monitor (1,1) to enable the remote control function.
3. Connect the remaining three monitors using RS-485 cables (not supplied). Refer to *RS-232 Control* on page 24 for more information.
4. Set up the video wall parameters according to the following information.

Table I. 2 x 2 Video Wall Parameters

	Monitor Position			
	1,1	2,1	2,2	1,2
Monitor ID	1	2	3	4
Video Wall	Yes	Yes	Yes	Yes
DVI Indemnity	Off	Off	Off	Off
Frame	Yes	Yes	Yes	Yes
Matrix X	2	2	2	2
Matrix Y	2	2	2	2
Division X	1	2	2	1
Division Y	1	1	2	2

3 X 3 VIDEO WALL GRID

Nine monitors are used to construct a 3 x 3 video wall grid.



Figure 13. 3 x 3 Video Wall Grid

To configure a 3 x 3 video wall grid:

1. Connect all monitors using DVI cables. Refer to *Connection Types* on page 19 for the monitor connection sequence.

NOTE: Only one DVI cable is supplied by Pelco. Additional user-supplied cables are required to configure video walls using multiple monitors.

2. Set up the video wall parameters according to the following information:

Table J. 3 x 3 Video Wall Parameters

	Monitor Position								
	1,1	2,1	3,1	3,2	2,2	1,2	1,3	2,3	3,3
Monitor ID	1	2	3	4	5	6	7	8	9
Video Wall	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
DVI Indemnity	Off	Off	Off	Off	Off	Off	On	On	On
Frame	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Matrix X	3	3	3	3	3	3	3	3	3
Matrix Y	3	3	3	3	3	3	3	3	3
Division X	1	2	3	3	2	1	1	2	3
Division Y	1	1	1	2	2	2	3	3	3

OSD MENU FOR VIDEO WALL SETUP

1. Press Menu on the remote control or control panel.
2. Press Up or Down to navigate to the Advanced Settings screen.
3. Press Right to enter the Advanced Settings menu.
4. Press Up or Down to navigate to the Video Wall submenu.
5. Press Right to access the Video Wall settings menu; the default setting is No.
6. Navigate to the Video Wall option, and press Right to change the Video Wall setting from No to Yes. The video wall menu displays.
7. Configure the video wall. Refer to *Video Wall Parameters* on page 20 for more information.
8. Press Menu on the remote control or control panel to exit.

RS-232 CONTROL

Connect an RS-232 terminal or a personal computer to the video wall using an RS-232 cable (not supplied) from the controlling device to the first monitor. Use three RS-485 cables (not supplied) to connect the remaining three monitors.

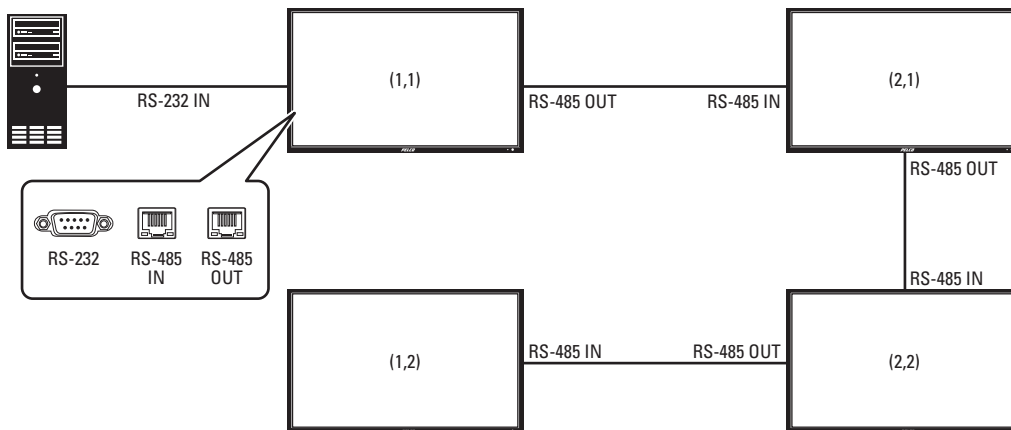


Figure 14. RS-232 Connection

NOTES:

- To function correctly, any monitors using an RS-485 OUT connection can only be connected to another monitor of the same series model.
- RS-232 connections only support 9-pin serial straight cables; crossover or null modem cables are not supported.
- RS-485 connections only support Cat5 straight cables; crossover cables are not supported.

For more information on creating a video wall, contact Pelco Product Support at 1-800-289-9100 (USA and Canada) or +1-559-292-1981 (international) for assistance. Be sure to have the serial number available when calling.

SYSTEM STATUS MENU

This read-only menu provides information on the active sources and the latest firmware version.

USER ANALOG TO DIGITAL CONVERTER (ADC) CALIBRATION

When using VGA as the signal source, you must choose your user ADC calibration.

1. Go to Advanced Settings in the OSD menu.
2. Select VGA ADC Settings, and then choose ADC Calibration.

The "Ready to run ADC Calibration" message appears to verify that the image is displaying properly before ADC calibration begins.

NOTES:

- The images in the green Region boxes (left and right) have to be white and black to run the calibration accurately. The black and white images can be made using software such as Microsoft® PowerPoint®.
- The white in the left Region box has to be the brightest white; the black in the right Region box has to be the darkest black.

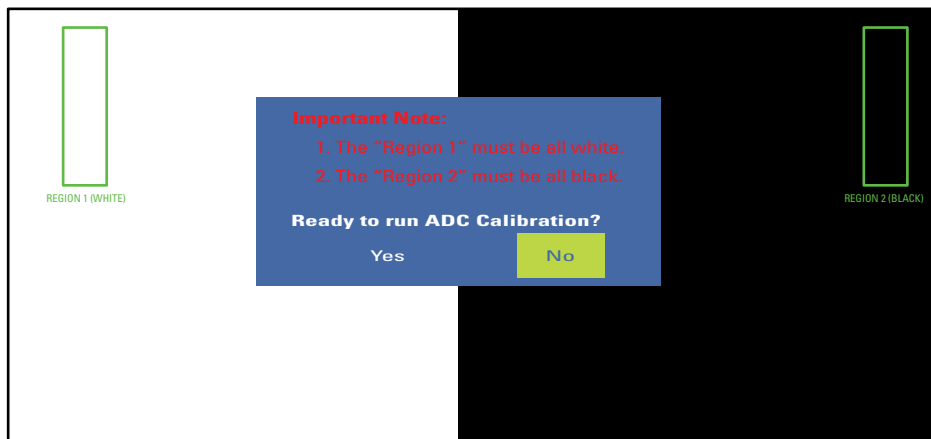


Figure 15. User ADC Calibration

3. After the proper image has been verified, click "Yes" to begin ADC calibration. The User ADC Calibration Wait message appears.

After the calibration is complete, a User ADC Calibration message will indicate if the process has successfully completed or failed.

RESOLUTION TABLES

Table K. Composite/Component/S-Video Mode

Mode	Resolution	Vertical Frequency (Hz)
SDTV 480i (NTSC)*	720 x 480	30
SDTV 576i (PAL)†	720 x 576	25
EDTV 480p‡	720 x 480	60
EDTV 576p‡	720 x 576	50
HDTV 720p‡	1280 x 720	50/60
HDTV 1080i‡	1920 x 1080	50/60
HDTV 1080p‡	1920 x 1080	50/60

*Supported 480i at 60 Hz (YPbPr)

† Supported 576i at 50 Hz (YPbPr)

‡ Component only

Table L. DisplayPort/DVI/HDMI/VGA Mode

Mode	Resolution	Vertical Frequency (Hz)
VGA	640 x 480	60/72/75/85
SVGA	800 x 600	50/60/72/75/85
XGA	1024 x 768	60/70/75/85
WXGA	1280 x 768	60/85
WXGA	1280 x 800	60
SXGA	1280 x 1024	60/75/85
WXGA	1360 x 768	60
SXGA+	1400 x 1050	60
WSXGA	1440 x 900	60
WSXGA+	1680 x 1050	60
UXGA	1600 x 1200	60
EDTV 480P	720 x 480	60
EDTV 576P	720 x 576	50
HDTV 720P	1280 x 720	50/60/75
HDTV 1080i	1920 x 1080	50/60
HDTV 1080p	1920 x 1080	50/60

Troubleshooting

If the following instructions fail to solve your problem, contact Pelco Product Support at 1-800-289-9100 (USA and Canada) or +1-559-292-1981 (international) for assistance. Be sure to have the serial number available when calling.

Do not try to repair the unit yourself. Opening it immediately voids the warranty. Leave maintenance and repairs to qualified technical personnel only. Refer to the *Product Warranty and Return Information* located on the inside back page of this document.



WARNING: To reduce the risk of electrical shock, do not remove the cover or back of the monitor. There are no user-serviceable parts inside.

Table M. Troubleshooting

Problem	Possible Cause	Suggested Solution
No image appears.	The power cord is not connected properly to the power outlet.	Ensure that the power cord is connected properly to the power outlet.
	The main power switch is not in the "I" position.	Ensure that the main power switch in the "I" position.
	Is the power indicator amber? If it is, the ON button might not have been pressed.	Press the ON button on the remote control or control panel.
	The S-Video input and the AV2 input might be connected at the same time.	Ensure that the S-Video input and the AV2 input are not connected at the same time. If they are, remove either the S-Video input or the AV2 input.
The screen color is unstable or monochrome.	The the source cable might not be properly connected.	Check the source cable connection to ensure a proper fit.
There are black dots on the screen.	The screen surface might not be clean.	Wipe the screen surface with a clean, soft cloth.
The screen is partially blurred.	Nearby objects might be generating magnetic fields. Such objects include speakers, steel structures, and high-voltage lines.	Remove any objects that might be generating magnetic fields from the immediate vicinity and use the OSD menu to adjust the screen.
The screen is flickering.	Magnetic material might be interfering with the image.	Move any highly magnetic material away from the monitor, and then adjust the graphic interface (PC Mode) within the allotted frequency parameters.
The image is dark.	The backlight and brightness settings might not be correct.	Adjust the backlight and brightness. It takes several seconds for the monitor to warm up after the power is turned on.
The image appears to be ghosting.	The source equipment connection cables might be too long.	Ensure the source equipment connection cables are shorter than 15 meters (50 ft). If additional length is required, contact your authorized dealer for a signal amplifier (not supplied).
The image size is incorrect.	The image format might not be set correctly.	Adjust the image format to the desired image size.
White does not look bright enough.	The color temperature might need adjusting, or the "User" settings might not be optimal.	Adjust the color temperature or change the "User" settings to your preferred settings.
The image is not centered.	The image format might need to be adjusted.	Adjust the image format to your desired image size.
The remote control does not work.	The IR Extender might not be properly connected.	Ensure that the IR Extender is properly connected and attached to a bezel on the front of the monitor.

Specifications

GENERAL

Viewing Area	
PMCL542NB	950.2 x 523.3 mm
PMCL546NB	1018.1 x 572.7 mm
PMCL555NB	1209.6 x 684.0 mm
Number of Pixels	1920 (H) x 1080 (V)
Pixel Pitch	
PMCL542NB	0.485 x 0.485 mm
PMCL546NB	0.530 x 0.530 mm
PMCL555NB	0.630 x 0.630 mm
Brightness	700 cd/m ² (typical)
Contrast Ratio	
PMCL542NB	3500:1
PMCL546NB	3000:1
PMCL555NB	5000:1
Backlight Type	CCFL
Refresh Rate	60 Hz
Viewing Angle (H/V)	178°/178°
Response Time*	8 ms
Native Resolution	1920 x 1080 at 60 Hz
Optimum Resolution (RGB Mode)	
VGA	640 x 480 at 56/60/72/75/85 Hz
SVGA	800 x 600 at 60/70/75/85 Hz
XGA	1024 x 768 at 60/75/85 Hz
SXGA	1280 x 1024 at 60/75/85 Hz
WXGA	1360 x 768 at 60 Hz
UXGA	1600 x 1200 at 60 Hz
SDTV (480i/576i/480p/576p) [†]	720 x 480 at 60 Hz 720 x 576 at 50 Hz
HDTV (720p/1080i/1080p)	1280 x 720 at 50/60 Hz 1920 x 1080p at 50/60 Hz 1920 x 1080i at 50/60 Hz
Panel Aspect Ratio	16:9
Video Formats	480p, 576p, 720p, 1080i, 1080p
Panel Life	50,000 plus hours
Display Colors	
PMCL542NB	16.7 million
PMCL546NB, PMCL555NB	1.07 billion
PIP (Picture-In-Picture)	Selectable, sizeable, swappable, moveable
Speakers	2, internal (10 W, 4 ohms x 2)
Front Panel Controls	Menu, source, down/up, vol +/-, power
Indicators	LED (power on/off)

*Response time is measured by one monitor with stable signal and without extra IR or keypad control.

[†] Supported 480i at 60 Hz (YPbPr); supported 576i at 50 Hz (YPbPr)

ELECTRICAL/VIDEO

Power Consumption	
PMCL542NB	261 W
PMCL546NB	251 W
PCML555NB	356 W
Input Voltage	100 to 240 VAC, 50/60 Hz
Video Inputs	1 BNC, looping; 1 S-Video; 1 DisplayPort; 2 HDMI; 1 RGB in; 1 RGB out; 1 DVI in; 1 DVI out; 1 component
Horizontal Frequency	31 KHz to 91 KHz
Vertical Frequency	56 Hz to 85 Hz
Sync Format	NTSC/PAL

AUDIO

Audio Inputs	2, audio, RCA jack; 1 PC Audio in; 1 Line out
Input Voltage	2.5 Vp-p
Channels	2
Input Impedance	40 kohms
Power Output	10 W
Distortion	<10%
Bandwidth	380 to 20kHz
Adjustment	Linear

ENVIRONMENTAL

Operating Temperature	0° to 40°C (32° to 104°F)
Storage Temperature	-20° to 60°C (-4° to 140°F)
Operating Humidity	20% to 80%, noncondensing
Storage Humidity	10% to 90%, noncondensing

PHYSICAL

Dimensions (without stand)	
PMCL542NB	12.6 x 95.9 x 55.0 cm (4.9" D x 37.8" W x 21.7" H)
PMCL546NB	13.2 x 105.0 x 60.3 cm (5.2" D x 41.7" W x 23.7" H)
PMCL555NB	13.7 x 124.8 x 71.9 cm (5.4" D x 49.1" W x 28.3" H)
Unit Weight	
PMCL542NB	27 kb (59 lb)
PMCL546NB	29 kg (64 lb)
PMCL555NB	45 kg (99 lb)
Wall Mount	
PMCL542NB	VESA® 400 x 200 mm (15.7" x 7.9")
PMCL546NB	VESA 400 x 200 mm (15.7" x 7.9")
PMCL555NB	VESA 600 x 400 mm (23.6" x 15.7")

PRODUCT WARRANTY AND RETURN INFORMATION

WARRANTY

Pelco will repair or replace, without charge, any merchandise proved defective in material or workmanship **for a period of one year** after the date of shipment.

Exceptions to this warranty are as noted below:

- Five years:
 - Fiber optic products
 - Unshielded Twisted Pair (UTP) transmission products
 - CC3701H-2, CC3701H-2X, CC3751H-2, CC3651H-2X, MC3651H-2, and MC3651H-2X camera models
- Three years:
 - Fixed network cameras and network dome cameras with Sarix® technology
 - Sarix thermal imaging products (TI and ESTI Series)
 - Fixed camera models (CCC1390H Series, C10DN Series, C10CH Series, and IP3701H Series)
 - EH1500 Series enclosures
 - Spectra® IV products (including Spectra IV IP)
 - Spectra HD dome products
 - Camclosure® Series (IS, ICS, IP) integrated camera systems
 - DX Series video recorders (except DX9000 Series which is covered for a period of one year), DVR5100 Series digital video recorders, Digital Sentry® Series hardware products, DVX Series digital video recorders, and NVR300 Series network video recorders
 - Endura® Series distributed network-based video products
 - Genex® Series products (multiplexers, server, and keyboard)
 - PMCL200/300/400 Series LCD monitors
 - PMCL5xxF Series and PMCL5xxNB Series LCD monitors
- Two years:
 - Standard varifocal, fixed focal, and motorized zoom lenses
 - DF5/DF8 Series fixed dome products
 - Legacy® Series integrated positioning systems
 - Spectra III™, Spectra Mini, Spectra Mini IP, Esprit®, ExSite®, ExSite IP, and PS20 scanners, including when used in continuous motion applications
 - Esprit Ti and TI2500 Series thermal imaging products
 - Esprit and WW5700 Series window wiper (excluding wiper blades)
 - CM6700/CM6800/CM9700 Series matrix
 - Digital Light Processing (DLP®) displays (except lamp and color wheel). The lamp and color wheel will be covered for a period of 90 days. The air filter is not covered under warranty.

- Six months:
 - All pan and tilts, scanners, or preset lenses used in continuous motion applications (preset scan, tour, and auto scan modes)

Pelco will warrant all replacement parts and repairs for 90 days from the date of Pelco shipment. All goods requiring warranty repair shall be sent freight prepaid to a Pelco designated location. Repairs made necessary by reason of misuse, alteration, normal wear, or accident are not covered under this warranty.

Pelco assumes no risk and shall be subject to no liability for damages or loss resulting from the specific use or application made of the Products. Pelco's liability for any claim, whether based on breach of contract, negligence, infringement of any rights of any party or product liability, relating to the Products shall not exceed the price paid by the Dealer to Pelco for such Products. In no event will Pelco be liable for any special, incidental, or consequential damages (including loss of use, loss of profit, and claims of third parties) however caused, whether by the negligence of Pelco or otherwise.

The above warranty provides the Dealer with specific legal rights. The Dealer may also have additional rights, which are subject to variation from state to state.

If a warranty repair is required, the Dealer must contact Pelco at (800) 289-9100 or (559) 292-1981 to obtain a Repair Authorization number (RA), and provide the following information:

1. Model and serial number
2. Date of shipment, P.O. number, sales order number, or Pelco invoice number
3. Details of the defect or problem

If there is a dispute regarding the warranty of a product that does not fall under the warranty conditions stated above, please include a written explanation with the product when returned.

Method of return shipment shall be the same or equal to the method by which the item was received by Pelco.

RETURNS

To expedite parts returned for repair or credit, please call Pelco at (800) 289-9100 or (559) 292-1981 to obtain an authorization number (CA number if returned for credit, and RA number if returned for repair) and designated return location.

All merchandise returned for credit may be subject to a 20 percent restocking and refurbishing charge.

Goods returned for repair or credit should be clearly identified with the assigned CA or RA number and freight should be prepaid.

Revised 5-6-11

 The materials used in the manufacture of this document and its components are compliant to the requirements of Directive 2002/95/EC.



This equipment contains electrical or electronic components that must be recycled properly to comply with Directive 2002/96/EC of the European Union regarding the disposal of waste electrical and electronic equipment (WEEE). Contact your local dealer for procedures for recycling this equipment.

REVISION HISTORY

Manual #	Date	Comments
C2988M	3/11	Original version.
C2988M-A	6/11	Added Video Wall section.

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