

PMM1501

Monitor

Installation/Operation Manual

C933M (2/97)

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1.1 IMPORTANT SAFEGUARDS

Before installing your equipment, please read the following important safeguards as outlined by Underwriters Laboratories Inc.

Read Instructions

All the safety and operating instructions should be read before the appliance is operated.

Retain Instructions

The safety and operating instructions should be retained for future reference.

Heed Warnings

All warnings on the appliance and in the operating instructions should be followed.

Follow Instructions

All operating and use instructions should be followed.

Cleaning

Do not use liquid cleaners or aerosol cleaners. Use a **Damp Cloth** for cleaning.

Attachments

Do not use attachments not recommended by Pelco as they may cause hazards.

Water and Moisture

Do not use this CCTV product near water - for example, near a kitchen sink, wash bowl, bath tub, sprinkler, in a wet basement or near a swimming pool, and the like unless it is specifically marked "for use in wet locations".

Accessories

Do not place this CCTV product on an unstable cart, stand, tripod, bracket, or table. The CCTV product may fall, causing serious injury to a child or adult, and serious damage to the appliance. Use only with a cart, stand, tripod, bracket or table recommended by Pelco, or supplied by Pelco with the product. When mounting the appliance, follow Pelco's installation instructions, and use only mounting accessories recommended by Pelco.

Cart & Stand

An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.

Ventilation

Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the CCTV product, and to protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the CCTV product on furniture, carpet, or similar surfaces. The CCTV product should never be placed near or over radiators or heat registers. This CCTV product should not be placed in a built-in installation, such as a book case or rack unless proper ventilation is provided or Pelco's installation instructions are adhered to.

Power Sources

This CCTV product should only be operated from the type of power source indicated on the marketing label. If you are not sure of the type of power supply to your installation location, consult your local electrical building official or power company. Refer to the operating instructions for appliances intended to operate from battery or other power sources.

Grounding

This CCTV product is equipped with a "grounding" type plug. This plug will only fit into a "grounding" type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the "grounding" type plug since it is provided to ensure your safety.

Power-Cord Protection

Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.

Overloading

Do not overload wall outlets and extension cords as this can result in a risk of fire or electric shock.

Object and Liquid Entry

Never push objects of any kind into this CCTV product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the CCTV product.

Servicing

Do not attempt to service this CCTV product yourself as opening or removing covers may expose you to dangerous voltages or other hazards. Refer all servicing to qualified service personnel.

Damage Requiring Servicing

Unplug this CCTV product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- a. When the power-supply cord or plug is damaged.
- b. If liquid has been spilled, or objects have fallen into the CCTV product.
- c. If the CCTV product is not marked "Suitable for Wet Locations" and it has been exposed to rain or water.
- d. If the CCTV product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage, and will often require extensive work by a qualified technician to restore the CCTV product to its normal operation.
- e. If the CCTV product has been dropped or the cabinet has been damaged.
- f. When the CCTV product exhibits a distinct change in performance - this indicates a need for service.

Replacement Parts

When replacement parts are required, be sure the service technician has used replacement parts specified by Pelco or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.

Safety Checks

Upon completion of any service or repairs to this CCTV product, ask the service technician to perform safety checks to determine that the CCTV product is in proper operating condition.

WARNING

This product has been evaluated for **INDOOR USE ONLY** unless it bears the marking **FOR USE IN WET LOCATIONS**.

WARNING

To reduce the risk of electric shock hazard, do not remove the cover of the unit. This unit can not be serviced by the user and must be sent to a qualified service person for repair when it fails to function.



The Lightning Flash with an arrow head symbol within an equilateral triangle means that if the enclosure is opened, electrical circuitry is exposed which imposes an electric shock hazard to persons present.



The Exclamation Point within an equilateral triangle means the operating instructions contain important information on how to operate and maintain the appliance.

1.2 UNPACKING INSTRUCTIONS

Unpack and inspect all parts carefully.

The following items are supplied:

- 1 Monitor
- 1 Installation/Operation Manual (C933M)

Be sure to save the shipping carton and any inserts. They are the safest material in which to make future shipments.

If an item appears to have been damaged in shipment, replace it properly in its carton and contact the factory at 1-800-289-9100 or 1-209-292-1981 for a replacement. (International customers fax 1-209-348-1120 for authorization and instructions.)

If an item needs to be returned to the factory for repair, consult the WARRANTY AND RETURN section of this manual for instructions.

1.3 RECOMMENDED TOOLS

Pelco does not supply basic tools needed for the installation process. The following tools are recommended:

None for installation of the monitor

Tools may be required for the video equipment, such as a camera, that connects to the monitor. Consult the documentation for that equipment.

2.0 DESCRIPTION

The PMM1501 is a high resolution, black and white, CCTV video monitor. The cabinet is made of steel for ruggedness and, with the exception of the picture tube, the circuitry is all solid-state for reliability.

2.1 MODELS

PMM1501	Black and white monitor, 15-inch (38.10 cm) picture display, 120 VAC, EIA standard.
PMM1501-X	Black and white monitor, 15-inch (38.10 cm) picture display, 230 VAC, CCIR standard.

3.0 INSTALLATION

3.1 SURFACE MOUNT

The monitor has rubber feet and may be placed on any horizontal surface, such as a desk or table.

3.2 RACK MOUNT

The monitor may be installed in a 19-inch (48.26 cm) rack using the following kits:

RMA1501 Rack kit for one 15-inch (38.10 cm) monitor

Follow the instructions that accompany the rack kit.

3.3 CONNECTIONS

3.3.1 Single-Monitor Installation

Refer to Figure 1 and Table A for the following instructions.

1. Set the termination switch on the back of the monitor to 75 ohms.
2. Connect a 75-ohm video cable from the video source, such as a camera, to the BNC connector labeled IN on the back of the monitor.
3. Plug in the power cord.

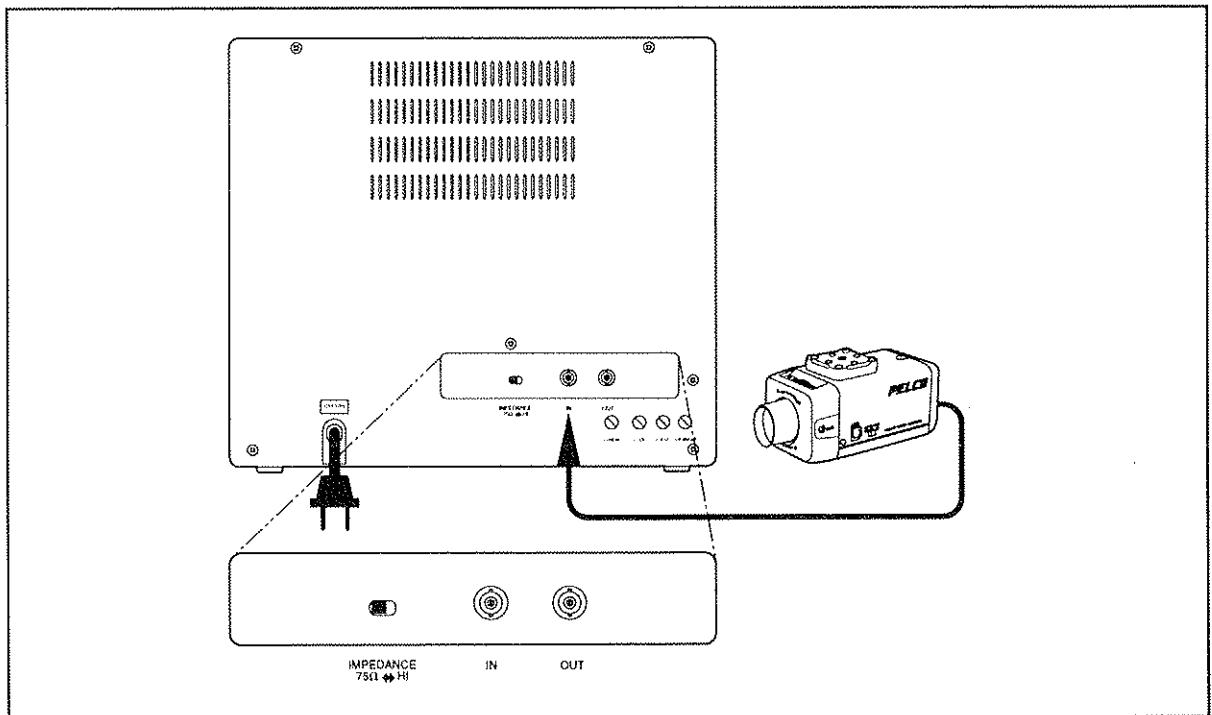


Figure 1. Single-Monitor Installation

3.3.2 Multiple-Monitor Installation

NOTE: In multiple-monitor installations, a maximum of three monitors can be connected together.

Refer to Figure 2 and Table A for the following instructions.

1. Connect a 75-ohm video cable from the video source, such as a camera, to the BNC connector labeled IN on the back of the first monitor.
2. Connect a 75-ohm video cable from the OUT connector on the back of the first monitor to the IN connector on the second monitor.
3. If you are using a third monitor, connect a 75-ohm video cable from the OUT connector on the back of the second monitor to the IN connector on the third monitor.
4. Set the termination switch on the first monitor to HI.

If you are only using two monitors, set the termination switch on the second monitor to 75 ohms.

If you are using three monitors, set the termination switch on the second monitor to HI and on the third monitor to 75 ohms.

5. Plug in the power cords for the monitors.

Table A. Video Coaxial Cable Wiring Distances

Cable Type	Maximum Distance
RG59	750 ft (229 m)
RG6	1,000 ft (305 m)
RG11	1,500 ft (457 m)

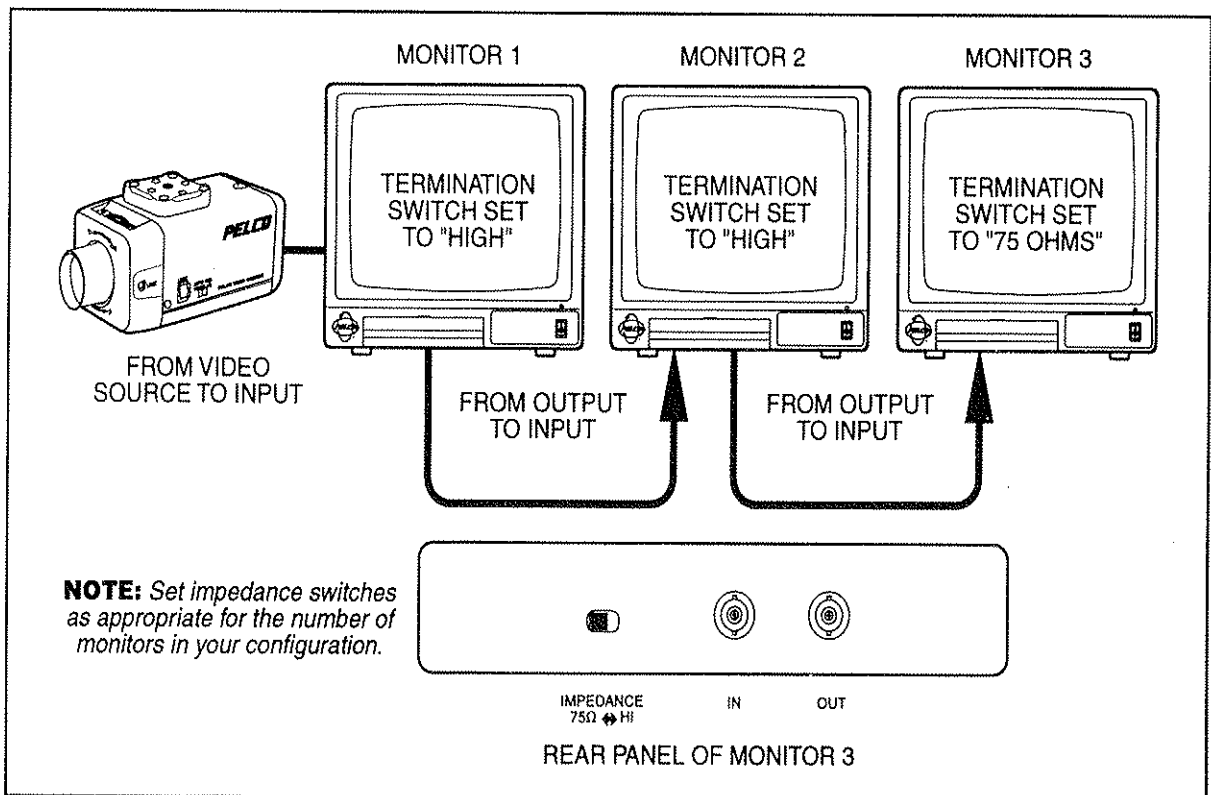


Figure 2. Multiple Monitor Installation

4.0 OPERATION

NOTE: On the back of the monitor there are adjustments for vertical linearity, vertical size, focus, and sub-brightness. These are special adjustments that should be made only by qualified service personnel.

The controls are located behind the door on the front of the monitor beneath the screen. Refer to Figure 3 for the locations of the controls.

Power On/Off Switch - This rocker switch turns the power on or off. Push the side with the white line to turn on the power. Push the side with the white circle to turn the power off.

LED Power Indicator - The LED lights when power is turned on.

Brightness Control - This control adjusts the overall picture brightness to compensate for differences in room lighting.

Contrast Control - This control adjusts the contrast between the black and white portions of the picture. When properly adjusted, you will be able to observe a fine gradation between blacks, grays, and whites.

Vertical Hold Control - This control permits adjustment of vertical stability. If the picture "rolls" upward or downward, as shown in Figure 4, turn the VERTICAL HOLD clockwise or counterclockwise until the picture stabilizes.

Horizontal Hold Control - This control permits adjustment of horizontal stability. If the picture "tears" to the left or right, as shown in Figure 5, turn the HORIZONTAL HOLD clockwise or counterclockwise until the picture stabilizes.

To operate a monitor:

1. Make sure a standard 1.0 V peak-to-peak video signal is applied to the video input of the monitor.
2. Press the power switch to turn on the power. The power indicator LED will illuminate.
3. Adjust the brightness and contrast controls to obtain optimum picture quality.

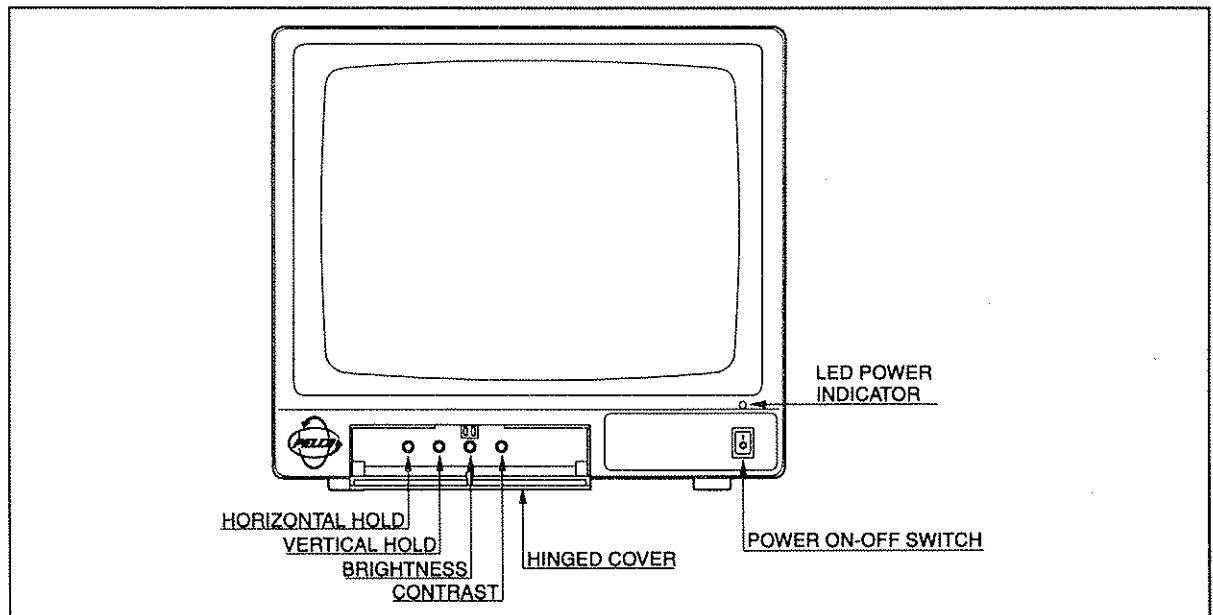


Figure 3. Location of Controls

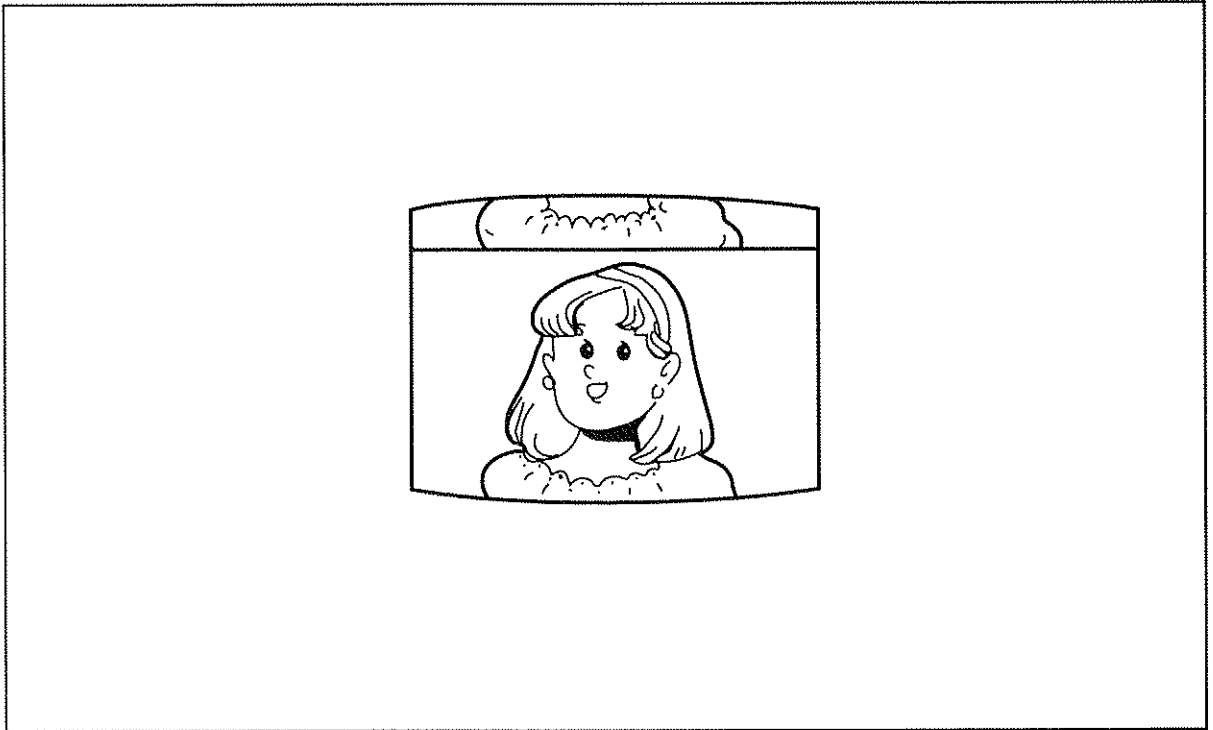


Figure 4. Vertical Roll

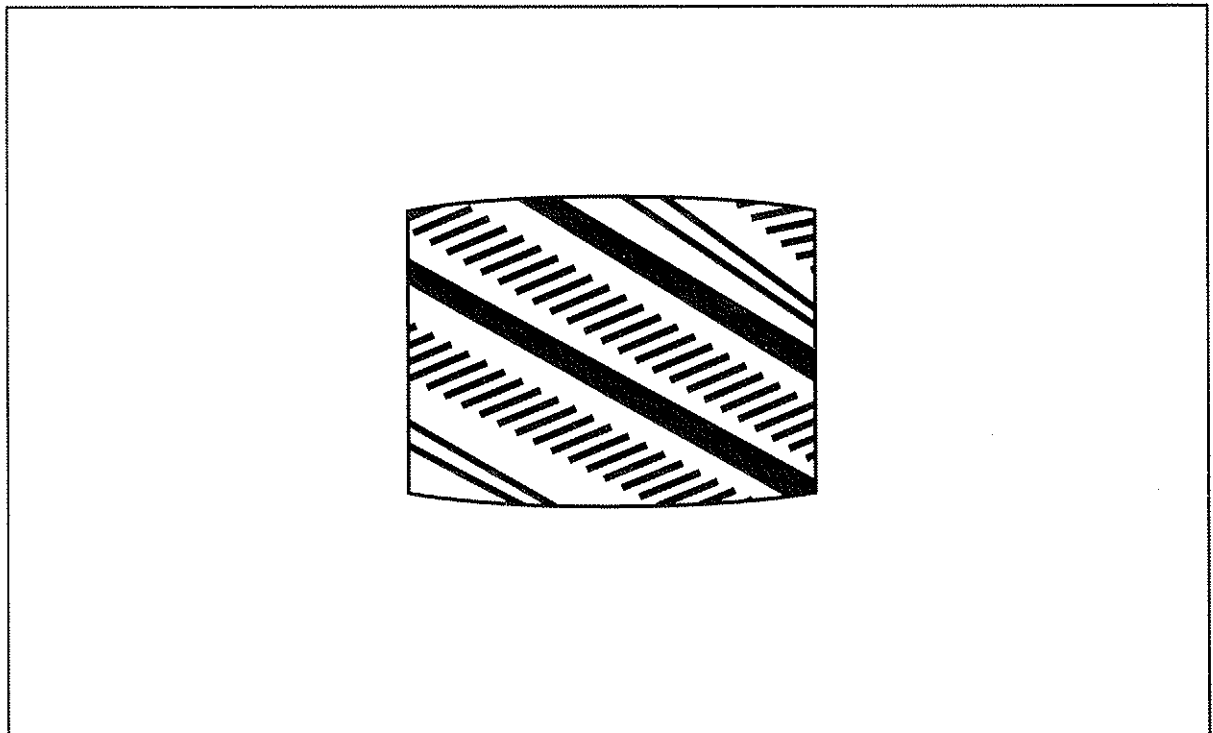


Figure 5. Horizontal Tear

5.0 MAINTENANCE

The only maintenance required is to periodically clean the cabinet and screen.

Use a damp cloth to clean the screen.

Use mild soap and water to clean the cabinet. Some common household aerosol sprays, cleaning agents, solvents, or polishes may damage the cabinet finish. Dry the cabinet with a soft cloth.

6.0 SPECIFICATIONS

ELECTRICAL

Input Voltage:

PMM1501	120 VAC, 60 Hz
PMM1501-X	230 VAC, 50 Hz

Power Consumption:

PMM1501	
PMM1501-X	48 W

Input Signal: 0.5 to 2.0 V peak-to-peak composite video, negative synchronization

Input Impedance: 75 ohms or high (switchable)

Bandwidth: 100 Hz to 10 MHz

Video Gain: 30 dB

Resolution:

Center	1,000 lines
Corners	800 lines

Linearity:

Horizontal	15% maximum
Vertical	10%

Operating System:

EIA	
Horizontal:	15,750 Hz \pm 400 Hz
Vertical:	60 Hz
CCIR	
Horizontal:	15,625 Hz \pm 400 Hz
Vertical:	50 Hz

GENERAL

Environment: Indoor

Construction: Steel cabinet with black plastic front

Finish: Black matte texture coat finish

Dimensions:

PMM1501, PMM1501-X	14.17" W x 12.40" H x 13.38" D (36.0 cm x 31.5 cm x 34.0 cm)
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Picture Tube Dimension:

PMM1501, PMM1501-X	15" (38.10 cm), measured diagonally
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Operating

Temperature: 50° to 131° F (10° to 55° C)

Weight:

Unit	
PMM1501, PMM1501-X	30.9 lbs (14 kg)
Shipping	
PMM1501, PMM1501-X	33.1 lbs (15 kg)

Specifications subject to change without notice.

6.0 SPECIFICATIONS

ELECTRICAL

Input Voltage:	
PMM1501	120 VAC, 60 Hz
PMM1501-X	230 VAC, 50 Hz
Power Consumption:	
PMM1501	
PMM1501-X	48 W
Input Signal:	0.5 to 2.0 V peak-to-peak composite video, negative synchronization
Input Impedance:	75 ohms or high (switchable)
Bandwidth:	100 Hz to 10 MHz
Video Gain:	30 dB
Resolution:	
Center	1,000 lines
Corners	800 lines
Linearity:	
Horizontal	15% maximum
Vertical	10%
Operating System:	
EIA	
Horizontal:	15,750 Hz \pm 400 Hz
Vertical:	60 Hz
CCIR	
Horizontal:	15,625 Hz \pm 400 Hz
Vertical:	50 Hz

GENERAL

Environment:	Indoor
Construction:	Steel cabinet with black plastic front
Finish:	Black matte texture coat finish
Dimensions:	
PMM1501, PMM1501-X	14.17" W x 12.40" H x 13.38" D (36.0 cm x 31.5 cm x 34.0 cm)
Picture Tube Dimension:	
PMM1501, PMM1501-X	15" (38.10 cm), measured diagonally
Operating Temperature:	50° to 131° F (10° to 55° C)
Weight:	
Unit	
PMM1501, PMM1501-X	30.9 lbs (14 kg)
Shipping	
PMM1501, PMM1501-X	33.1 lbs (15 kg)

Specifications subject to change without notice.

7.0 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 (1) year after the date of shipment. Exceptions to this warranty are as noted below:

- Two (2) years on all standard motorized and fixed focal length lenses.
- Two (2) years on Legacy[®], Intercept[®], CM8500/CM9500/CM9750 Matrix and DF8 Fixed Dome products.
- Two (2) years on WW5700 series window wiper (excluding wiper blades).
- Two (2) years on cameras.
- Six (6) months on all pan and tilts, scanners or preset lenses used in continuous motion applications (e.g., preset scan, tour and auto scan modes).

Pelco will warranty 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 Pelco, Clovis, California. 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 (209) 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 which does not fall under the warranty conditions stated above, please include a written explanation with the product when returned.

Ship freight prepaid to: Pelco
300 West Pontiac Way
Clovis, CA 93612-5699

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

RETURNS

In order to expedite parts returned to the factory for repair or credit, please call the factory at (800) 289-9100 or (209) 292-1981 to obtain an authorization number (CA number if returned for credit, and RA number if returned for repair). Goods returned for repair or credit should be clearly identified with the assigned CA/RA number and freight should be prepaid. All merchandise returned for credit may be subject to a 20% restocking and refurbishing charge.

Ship freight prepaid to: Pelco
300 West Pontiac Way
Clovis, CA 93612-5699

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