MPTAZ Series Pan/Tilt and Scanner Control

Contents

List of Illustrations

Important Safety Instructions

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.

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 A 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 commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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.

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

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

Description

The controls in the MPTAZ Series operate 120 VAC, 230 VAC, and 24 VAC pan/tilts or scanners. All models include auto/random/manual scan operation, pan/tilt operation with a joystick, and lens control.
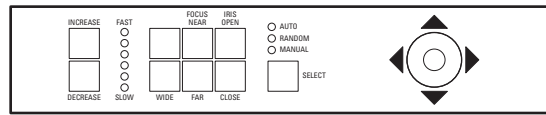
MODELS

MPTAZ115DT	Desktop joystick control module for 120 VAC pan/tilts and scanners, 120 VAC input
MPTAZ24DT	Desktop joystick control module for 24 VAC pan/tilts and scanners, 120 VAC input
MPTAZ24DT/220	Same as MPTAZ24DT except 230 VAC input

PACKAGE CONTENTS

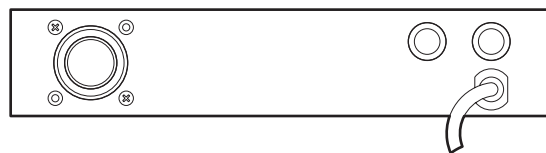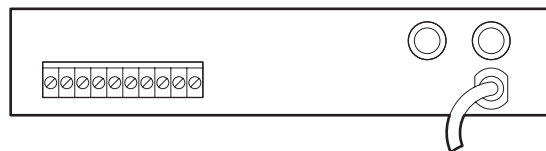| Qty	Description
1	MPTAZ Series desktop joystick control module
1	Mating connection assembly CPC kit (CONA14P) for MPTAZ115DT only
1	Installation/Operation manual

FRONT AND REAR PANELS

Figure 1. Front Panel

Figure 2. Side Panel

Figure 3. Rear Panel, MPTAZ115DT

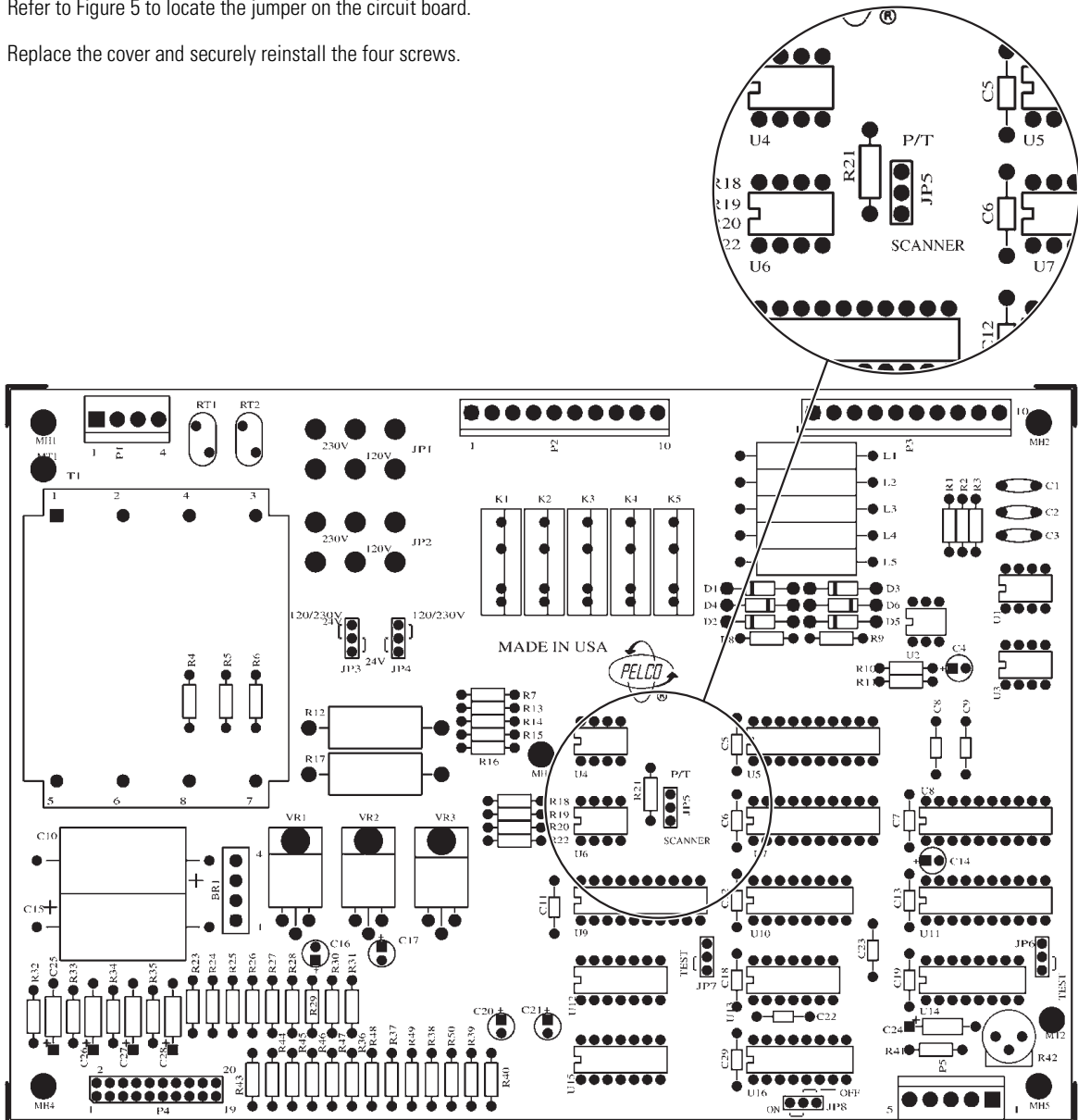**Figure 4.** Rear Panel, MPTAZ24DT and MPTAZ24DT/220

Installation

NOTE: For electrical connections, follow the correct instructions for your MPTAZ Series control model. Note the following information for cable distances:

- **Pan/Tilt or Scanner:** Refer to the instruction manual for the specific pan/tilt or scanner to be used with the control.

- **Lens:** The following cable distances are the approximate maximum recommended under the following conditions:
  - Based on a 35 mA load at 12 VDC
  - Single lens function activation
  - 10 percent line loss in voltage at the lens motor

22 AWG (0.3 mm2)	1,062 ft (323 m)
20 AWG (0.5 mm2)	1,688 ft (514 m)
18 AWG (1.0 mm2)	2,686 ft (818 m)

The MPTAZ Series control is shipped from the factory for pan/tilt operation. If you are connecting the control to a pan/tilt, skip steps 1 through 3.

1. Facing the front of the unit, remove the two screws on each side of the unit. Lift the cover off the unit.

2. To operate a scanner with the PMTAZ Series, move the jumper JP5 to the SCANNER position. Jumper JP5 is factory set in the P/T position. Refer to Figure 5 to locate the jumper on the circuit board.

3. Replace the cover and securely reinstall the four screws.

Figure 5. PC Board Configuration

4. To wire the electrical connections, perform one of the following procedures:
   - **MPTAZ24DT and MPTAZ24DT/220:** Wire the connecting cable from the pan/tilt or scanner to the terminal strip on the rear panel. Refer to Figure 6 (scanners) or Figure 7 (pan/tilts).
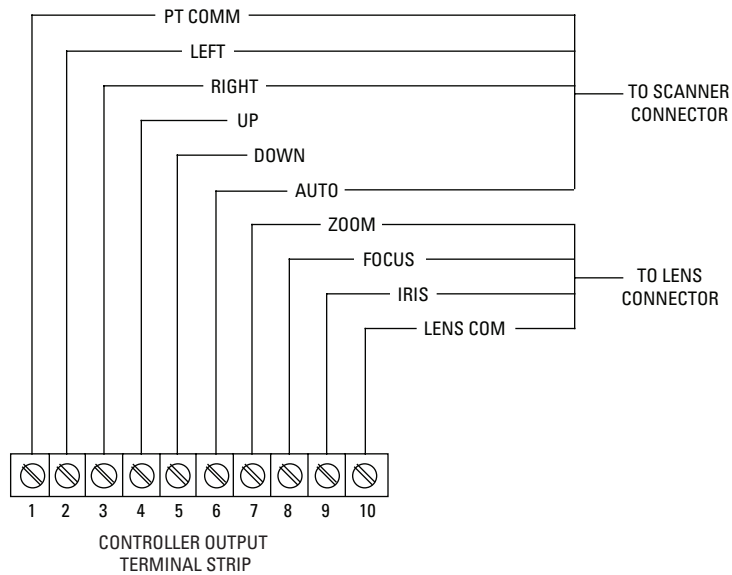

Figure 6. MPTAZ24DT, MPTAZ24DT/220 Wiring Diagram for Scanners and Lenses
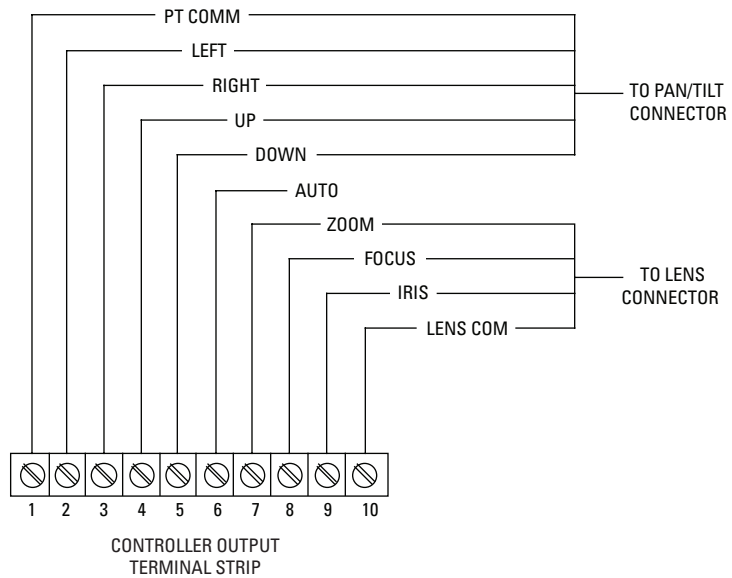
Figure 7. MPTAZ24DT, MPTAZ24DT/220 Wiring Diagram for Pan/Tilts and Lenses

- **MPTAZ115DT:** Assemble the mating connector (refer to Figure 8).

   a. Slide the connector clamp assembly over the conductor cable. If the rubber boot slides easily over the conductor cable, slide it onto the cable at this time. If not, discard the rubber boot.
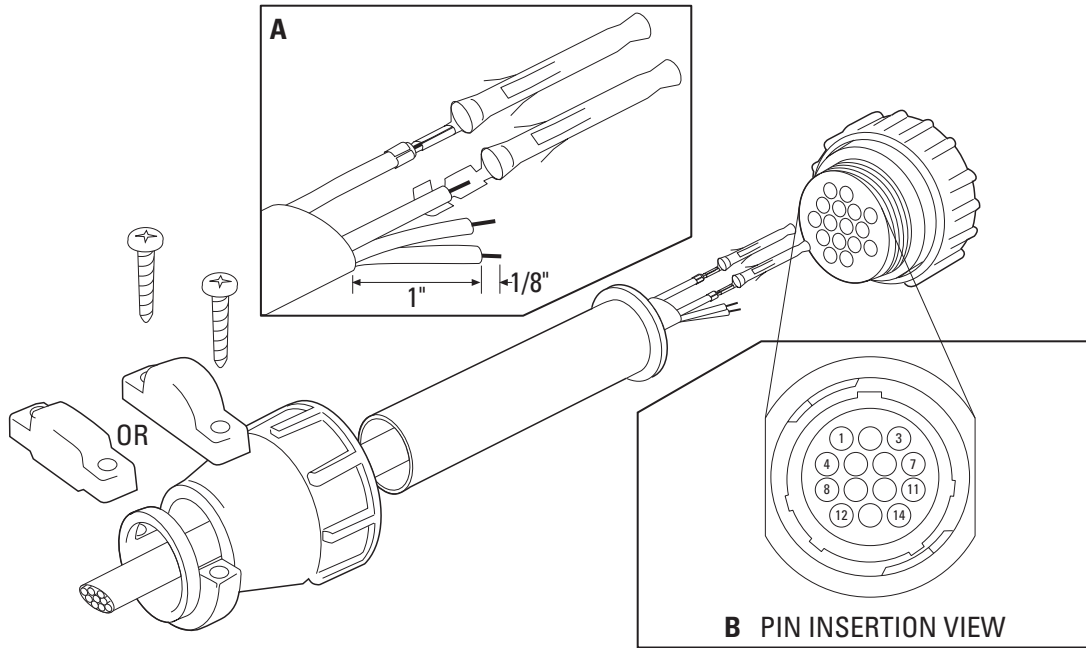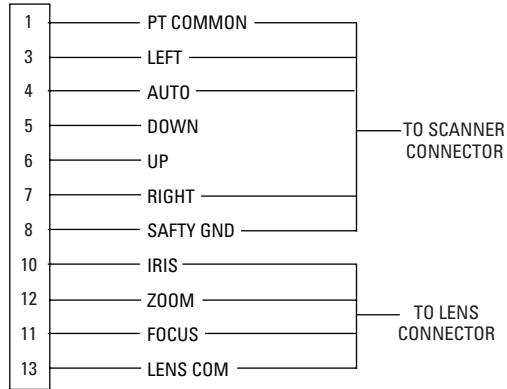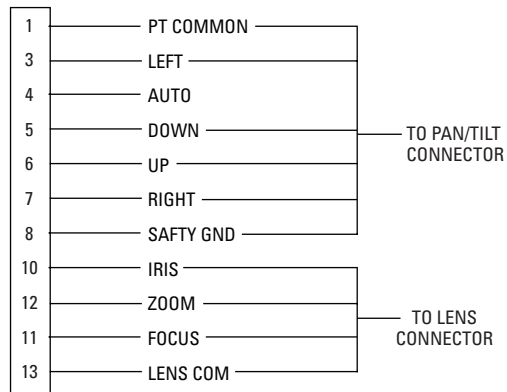

Figure 8. Connector Assembly

   b. Prepare the wires from the conductor cable (refer to detail A in Figure 8).

      (1) Strip at least one inch (2.54 cm) from the cable jacket to expose the wires. You may need to strip more from the cable jacket if you have more wires.

      (2) Strip 0.125 inches (3 mm) from each wire.

      (3) Use an AMP-style crimper to crimp the wires and insulation onto the connector pins.

     NOTE: Contacts can only be removed from the connector using the AMP extraction tool (ZT305183), which is available from Pelco.

   c. Slide the connector pins into the appropriate holes in the connector body until they snap into place. Refer to detail B in Figure 8 and Figure 9 on page 12 (scanners) or Figure 10 on page 12 (pan/tilts).

   d. Push the connector clamp assembly (with boot, if used) toward the connector body. Screw the clamp assembly onto the connector body, being careful not to disturb the wires.

   e. Attach the appropriate clamp with the screws provided and tighten.

f.   Wire the connecting cable from the pan/tilt or scanner to the controller. Refer to Figure 9 (scanners) or Figure 10 (pan/tilts).

```
1 ──── PT COMMON ────┐
3 ──── LEFT ─────────┤
4 ──── AUTO ─────────┤
5 ──── DOWN ─────────┤──── TO SCANNER
6 ──── UP ───────────┤      CONNECTOR
7 ──── RIGHT ────────┤
8 ──── SAFTY GND ────┘

10 ──── IRIS ────────┐
12 ──── ZOOM ────────┤──── TO LENS
11 ──── FOCUS ───────┤      CONNECTOR
13 ──── LENS COM ────┘
```

Figure 9. MPTAZ115DT Wiring Diagram for Scanners and Lenses

```
1 ──── PT COMMON ────┐
3 ──── LEFT ─────────┤
4 ──── AUTO ─────────┤
5 ──── DOWN ─────────┤──── TO PAN/TILT
6 ──── UP ───────────┤      CONNECTOR
7 ──── RIGHT ────────┤
8 ──── SAFTY GND ────┘

10 ──── IRIS ────────┐
12 ──── ZOOM ────────┤──── TO LENS
11 ──── FOCUS ───────┤      CONNECTOR
13 ──── LENS COM ────┘
```

Figure 10. MPTAZ115DT Wiring Diagram for Pan/Tilts and Lenses

5.   Connect the power cord to a power supply. The unit starts in manual operation mode and the MANUAL LED glows.

Operation

To operate the MPTAZ Series control, use the push-button momentary switches to control the lens functions, and move the joystick to control the pan/tilt or scanner.

- **Lens Speed:** Increases or decreases the lens speed. Press either button (INCREASE or DECREASE) to change the speed. An LED indicates the FAST or SLOW range.
- **Zoom:** Controls the zoom functions. The top button (ZOOM TELE) controls the telephoto zoom; the bottom button (ZOOM WIDE) controls the wide-angle zoom.
- **Focus:** Controls the focus functions: Press the FOCUS NEAR and FOCUS FAR buttons.
- **Iris:** Controls the iris. Press the IRIS OPEN or IRIS CLOSE buttons.
- **Auto/Random/Manual Select:** Controls the scan function. Press the SELECT button to choose AUTO, RANDOM, or MANUAL. An LED indicates the selection.

  The MPTAZ Series control has two modes of automatic pan/tilt operation: random scan and auto scan.

  – **RANDOM:** Initiates scanning between the limit stops in an unpredictable pattern. To activate random mode, press the SELECT button until the LED next to RANDOM glows.
  – **AUTO:** Operates the pan/tilt between limits for 30 minutes. After 30 minutes, the control returns to the random scan mode. To activate auto scan, press the SELECT button until the LED next to AUTO glows.

  To return to manual mode, move the joystick to the left or right. The control will also return to manual operation if power is lost and restored.

- **Joystick:** Operates the scanner when in the manual mode or controls the pan/tilt movements of the camera (eight positions: up, down, left, right, and simultaneous combinations of pan/tilt functions).

Maintenance

Under normal operating conditions and use, maintenance of this equipment is not necessary. However, if maintenance is required, contact a qualified service technician or return the unit to the factory for repair.

Specifications

ELECTRICAL

Input Voltage
    MPTAZ115DT, MPTAZ24DT   120 VAC, 50/60 Hz
    MPTAZ24DT/220   230 VAC, 50/60 Hz

Output Voltage
    MPTAZ115DT   120 VAC
    MPTAZ24DT, MPTAZ24DT/220   24 VAC

Lens Voltage   0 to 12 VDC

Fuse Protection
    MPTAZ115DT, MPTAZ24DT   1 ASB
    MPTAZ24DT/220   0.5 ASB

Power Cord   3-wire grounded, #18 AWG

Connectors
    MPTAZ115DT   AMP CPC type
    MPTAZ24DT, MPTAZ24DT/220   10-position terminal strip

Conductor Requirements   (No additional conductors are required for auto/random scan operation.)
        9 plus ground for MPTAZ115DT (when used with pan/tilt and lens).
        8 plus ground for MPTAZ115DT (when used with scanner and lens).
        9 and no ground for MPTAZ24DT or MPTAZ24DT/220 (when used with pan/tilt and lens).
        8 and no ground for MPTAZ24DT or MPTAZ24DT/220 (when used with scanner and lens).

GENERAL

Construction
    Cover   Steel, black polyester powder coating
    Chassis   Steel, zinc plated
    Panel   Aluminum, black polyester powder coating with white silk screen

Unit Weight
    MPTAZ115DT   5.17 lb (2.34 kg)
    MPTAZ24DT   6.48 lb (2.94 kg)
    MPTAZ24DT/220   6.59 lb (2.99 kg)

(Design and product specifications subject to change without notice.)

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:
  - Pelco-designed fixed network cameras and network dome cameras with Sarix™ technology.
  - Pelco-branded fixed camera models (CCC1390H Series, C10DN Series, C10CH Series, and IP3701H Series)
  - EH1500 Series enclosures
  - Spectra® IV products (including Spectra IV IP)
  - Camclosure® Series (IS, ICS, IP) integrated camera systems
  - DX Series digital video recorders, 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
- 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®, 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.
  - Intelli-M® eIDC controllers
  - PMCL542F, PMCL547F, and PMCL552F FHD monitors
- One year:
  - Video cassette recorders (VCRs), except video heads. Video heads will be covered for a period of six months.

- 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.

10-19-09

REVISION HISTORY

Manual #	Date	Comments
C528M	1992	Original version.
C528M-A	10/92	Revised installation instructions; added Figure 7.
C528M-B	10/93	Revised to include MPTAZ24DT/220.
C528M-C	8/95	Revised figures 2 and 7.
C528M-D	11/99	Revised installation instructions. Updated manual to new format.
C528M-E	4/03	Revised operation instructions; added FCC, Class A statement. Updated manual to new format.
C528M-F	11/09	Added and revised figures. Removed MPTAZ220DT model and RB24/RB115 relay box (obsolete).

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