

**MPT9500 Series  
Transmitter/  
Controller**

**Installation/  
Operation Manual**

**C535M-B (8/98)**

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## REVISION HISTORY

<b>Manual #</b>	<b>Date</b>	<b>Comments</b>
C535M	12/93	Original version.
C535M-A	1/95	Updated manual to include preset tour programming and other software updates. Sections 5.0 through 5.3.9 are totally new material as per ECO #95-006.
C535M-B	1/96	Manual updated per ECO #95-421 to reflect changes in the number of steps available for programming tours (section 5.3.3 rewritten) as well as changes in setting the time display (section 5.3.12.1 rewritten). Changes also included the addition of a "NOTE" at the beginning of section 5.3.3 as well as screen and text updates to section 5.3.11.1 (programming zones). Additional changes per ECO #96-017 were also included.
	8/98	Manual update per PAR #98039 to clarify zone labeling instructions in Section 4.3.11, ZONES. Changed manual to new format.

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## 1.0 GENERAL

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### 1.1 IMPORTANT SAFEGUARDS AND WARNINGS

Prior to installation and use of this product, the following WARNINGS should be observed.

1. Installation and servicing should only be done by qualified service personnel and conform to all local codes.
2. Unless the unit is specifically marked as a 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.
3. Only use replacement parts recommended by Pelco.
4. After replacement/repair of this unit's electrical components, conduct a resistance measurement between line and exposed parts to verify the exposed parts have not been connected to line circuitry.

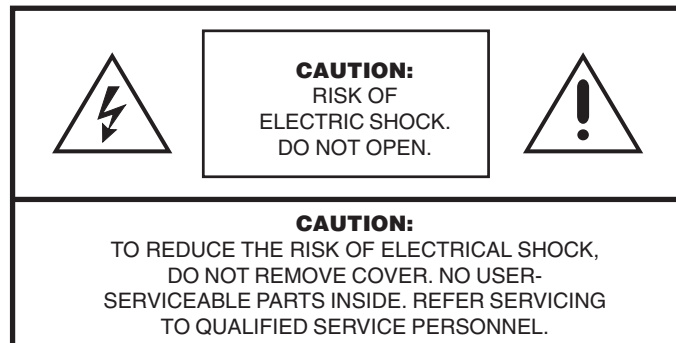
#### The product and/or manual may bear the following marks:



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.



**Please thoroughly familiarize yourself with the information in this manual prior to installation and operation.**

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## 2.0 DESCRIPTION

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The MPT9500 Transmitter/Controller provides control in Vertical Interval Signaling (standard or extended Coaxitron®) and RS-485 formats. The transmitter/controller supports control options of the CX9500, CX9504 and CX9000 Series Coaxitron® receiver/drivers, as well as Intercept® and Legacy® Series receiver/drivers.

The transmitter/controller will actuate the following receiver/driver features:

- Full PTZ (pan/tilt and zoom) including Varispeed
- Programming and actuation of up to 8 auxiliary functions
- Remote adjustment of Intercept® receiver/driver lens speed
- Programming and actuation of ZONES
- Programming and actuation of PRESETS
- Programming and actuation of PATTERNS
- Programming and actuation of LABELS
- Ten-character alphanumeric panel display
- On-screen programming instructions

The MPT9500TD version also offers the following features in addition to those listed above:

- Time and date generation
- Nonvolatile memory storage
- Preset tours
- Auxiliary programming functions
- Keyboard diagnostics

### 2.1 MODELS

MPT9500	Desktop transmitter/controller with pan/tilt joystick; preset, pattern, zone capability; label programming; zoom lens control; programming and actuation of 8 auxiliary functions. Also features a 10-character alphanumeric display. Operates on 120 VAC input power.
MPT9500X	Same as the MPT9500 except operates on 230 VAC input.
MPT9500TD	Offers the same features as the MPT9500, but with the added features of time and date generation and tour programming. Operates on 120 VAC input.
MPT9500TDX	Same as the MPT9500TD except operates on 230 VAC input.

# 3.0 INSTALLATION

## 3.1 THE VIS (COAXITRON®) CONTROL SYSTEM

**NOTE:** "Loss of the Coax Cable and any Splices" is obtained from the cable manufacturer's data sheets. The splice loss can vary, but a good splice can be assumed to add about 0.5 dB loss to the cable.

The operating distance for the Vertical Interval Signaling (VIS) system is probably the most crucial installation parameter. For a VIS control system, the maximum loss allowed across the coax is 4 dB at 1 MHz. The actual distance for a system without equalizing amplifiers can be calculated by the following formula.

$$\text{Distance} = 4 \text{ dB} / \text{Loss of the Coax Cable and any Splices}$$

Terminations for the video must be supplied at the controller end of the coax. The correct termination is 75 ohms. If multiple components such as a VCR or monitors are on the coax line, the piece of equipment at the extreme end should supply the only termination.

Multiple receivers may be controlled from a single transmitter if a manual or bridging switcher is used for selection of the desired receiver. Refer to Figure 1.

## 3.2 THE 4-WIRE RS-485 CONTROL SYSTEM

This system is used in applications where multiple receivers will listen to a single control channel, but duplex operation is desired. The RS-485 system presents several unique installation requirements. These requirements are shown in Figure 2 and discussed next.

Excessive connection lengths are not acceptable because they produce reflections that cause message errors. This means a "star" or "T" topology is not acceptable.

The extreme ends of the cable must have 120-ohm termination resistors to minimize reflections.

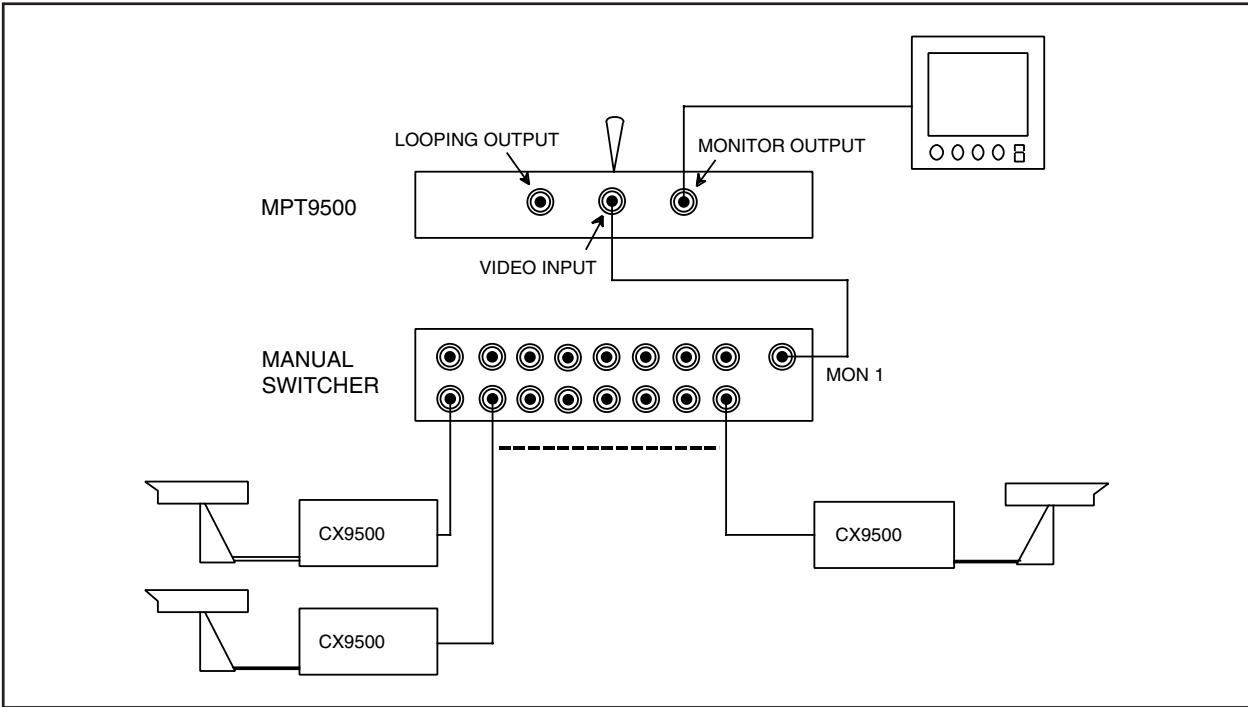
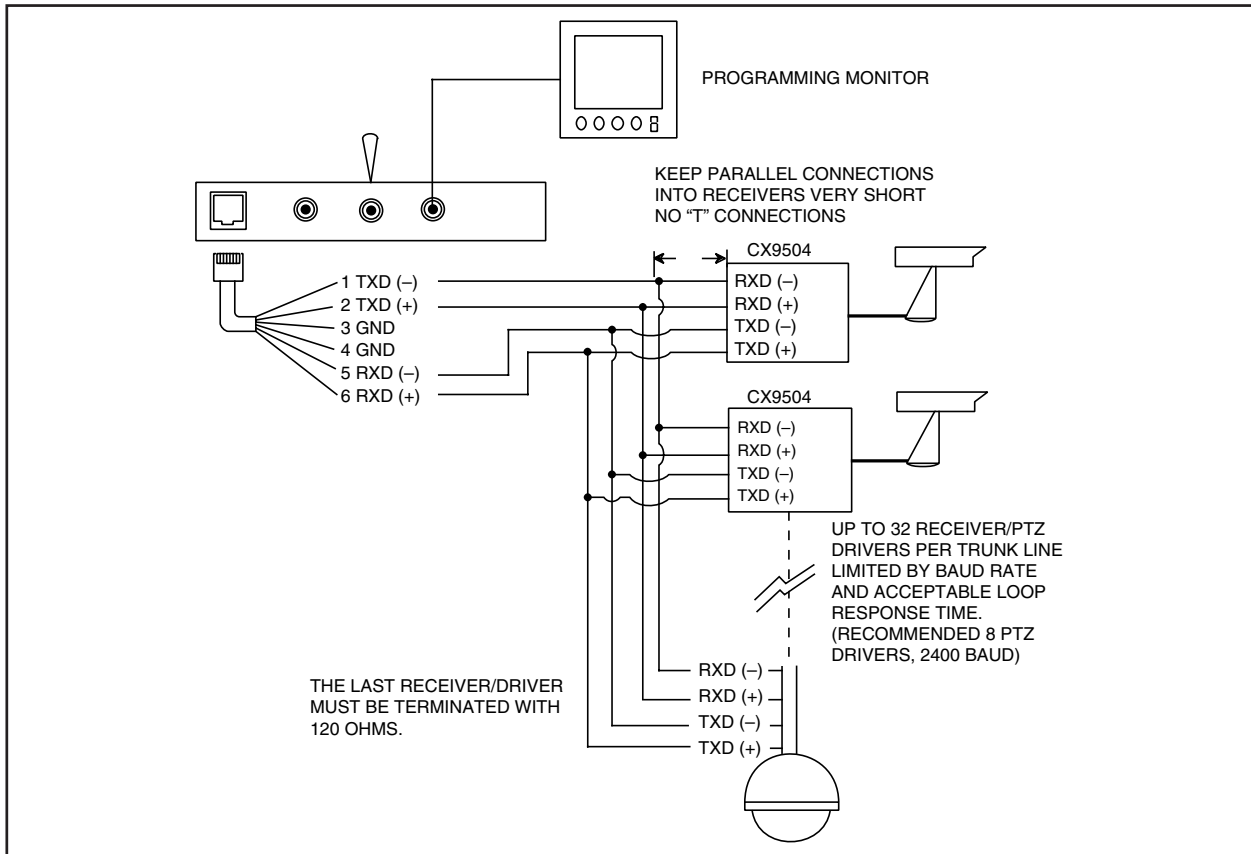


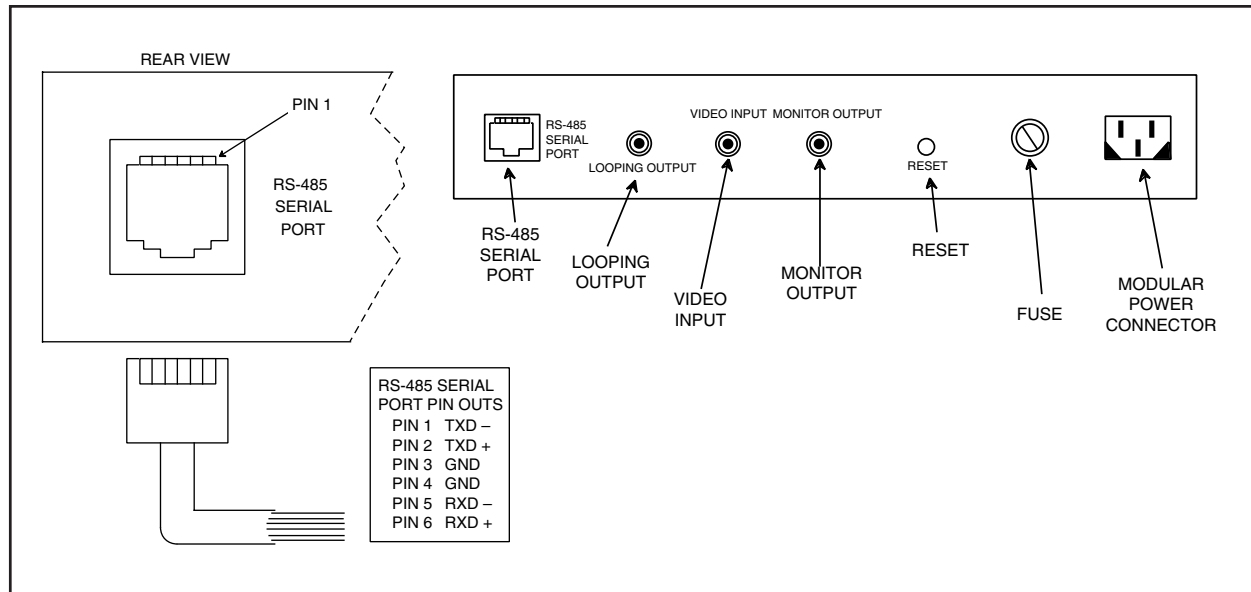
Figure 1. Multiple Camera Coaxitron® System

### 3.3 CONNECTING TO THE RECEIVERS

The rear panel view and pin out for the 6 pin modular cable is shown in Figure 3. Refer to Figures 4 and 5 for additional system configurations.

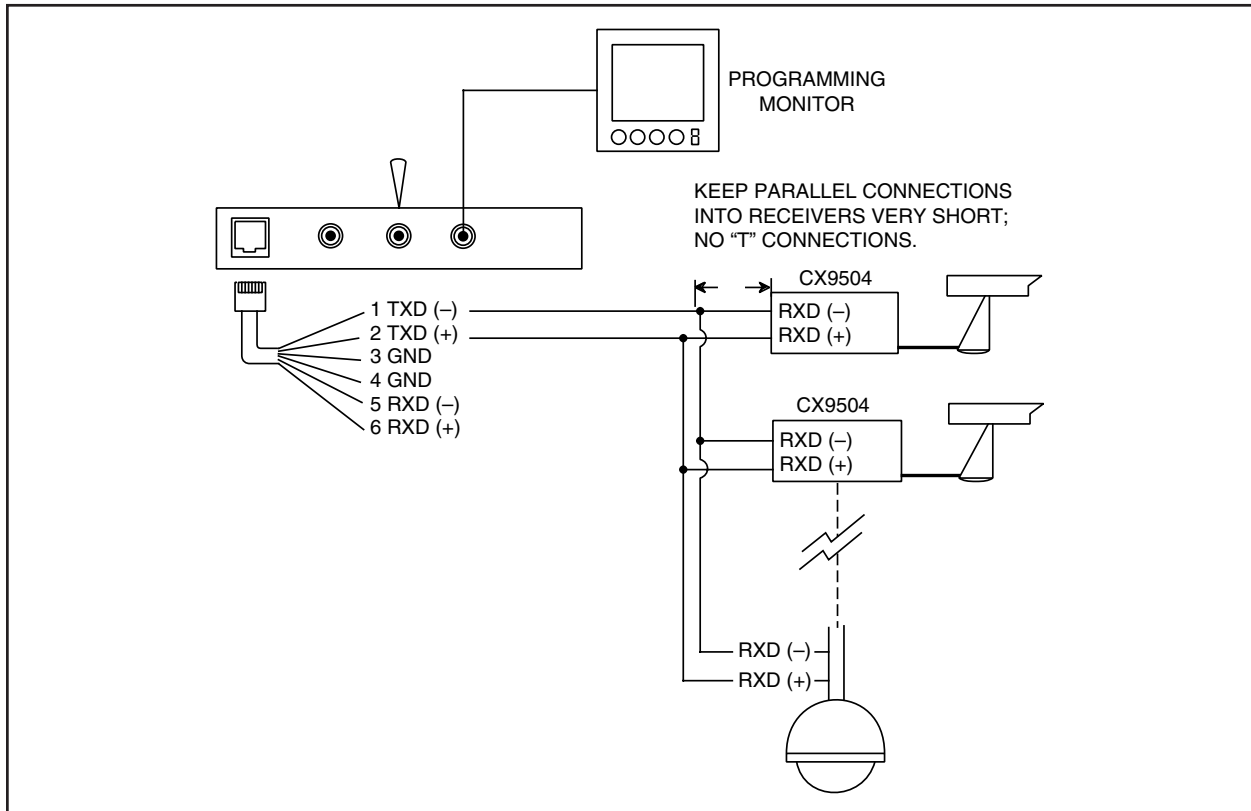


**Figure 2.** RS-485 Duplex Control System (PTZ Control and Alarm Reporting)

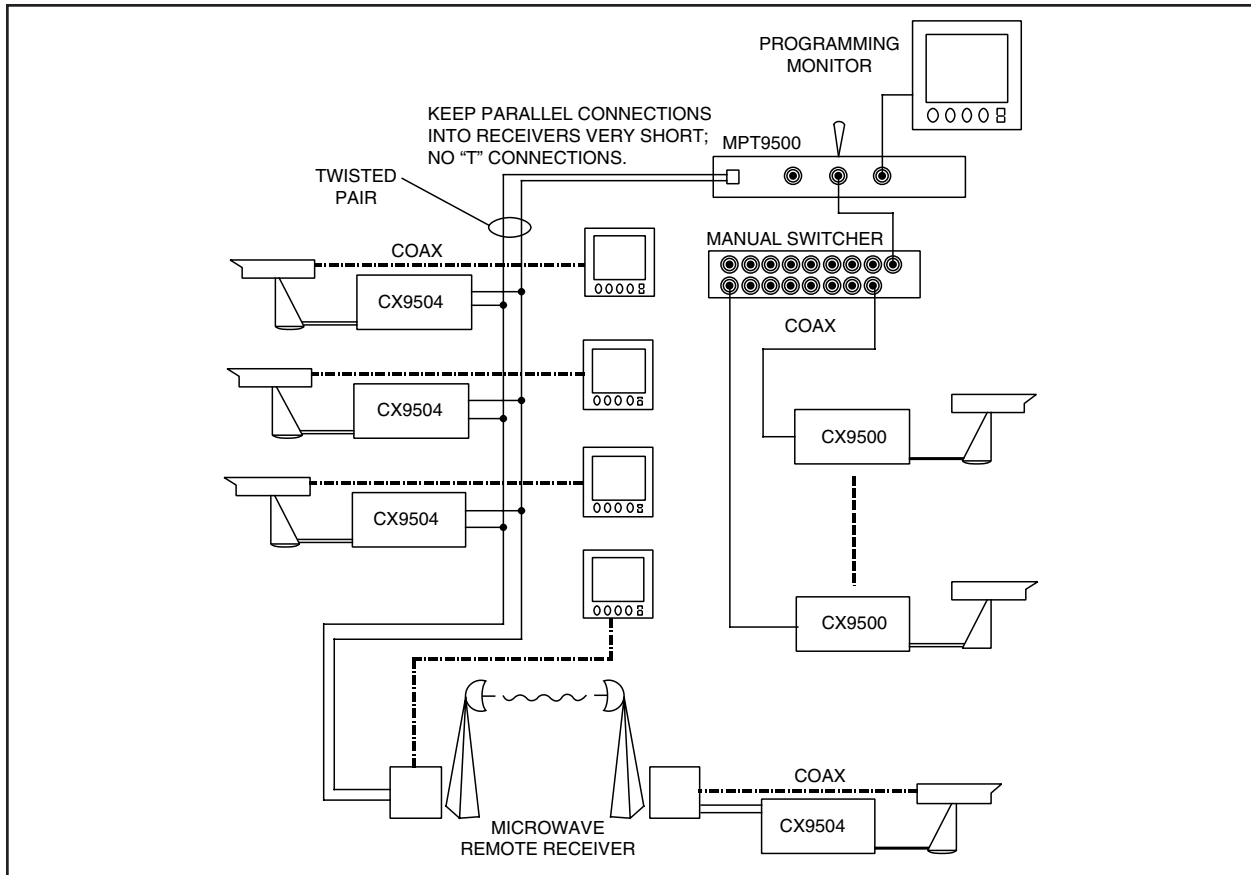


**Figure 3.** MPT9500 Rear View and RS-485 Serial Port Pin Out





**Figure 4.** RS-485 Simplex System (PTZ Control Only)



**Figure 5.** Combination Coaxitron® and RS-485 (Simplex) System

## 4.0 OPERATION

The MPT9500 operates in one of three modes: Coaxitron® Standard (15-bit protocol), Coaxitron® Extended (32-bit protocol) and RS-485. Which mode is usable depends upon receiver configuration; however, upon power up or reset the transmitter will wake up in the default Coaxitron® “extended commands” mode. The keyboard display will indicate “EXT CXTRN” when in this mode.

### Default keyboard display



Normal pan/tilt and lens functions will operate by pressing the appropriately labeled buttons on the keypad. In general, operation and control functions of receivers are actuated by the grouped keys on the left side of the keyboard while programming functions utilize the grouped keys on the right side of the keyboard. Refer to Figure 6 and Figure 7 for keypad layout and keyboard control descriptions respectively

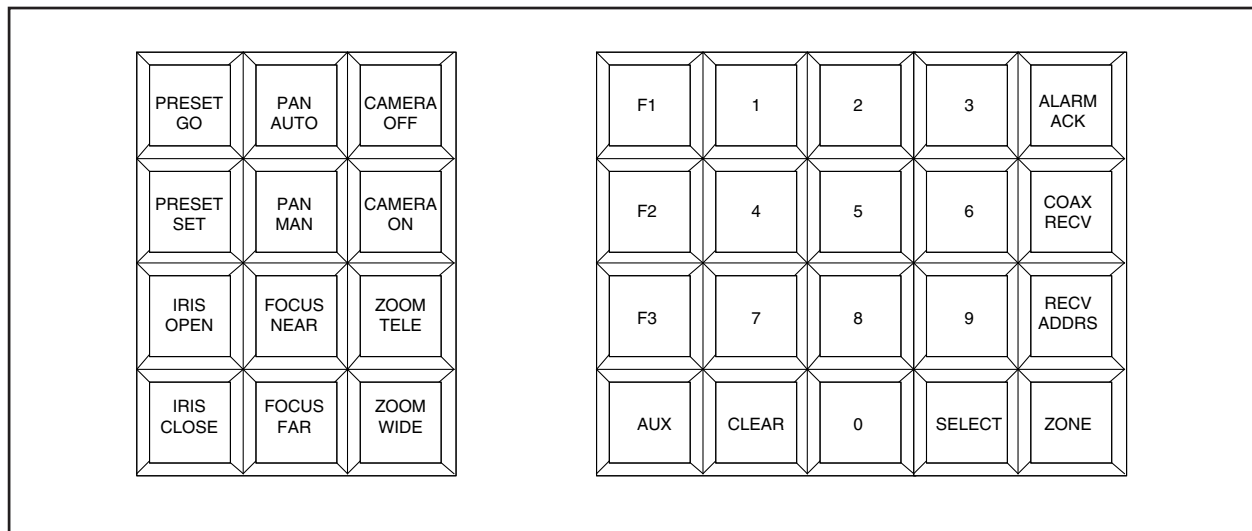


Figure 6. MPT9500 Keypad Layout

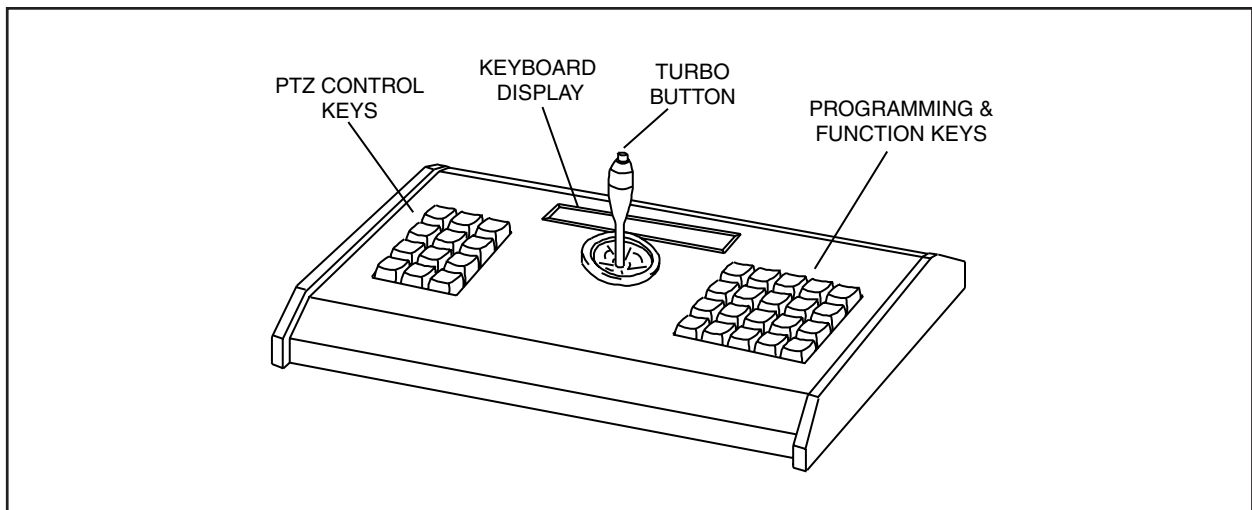


Figure 7. MPT9500 Layout of Operating Controls & Functions

## 4.1 SELECTION OF STANDARD COAXITRON®

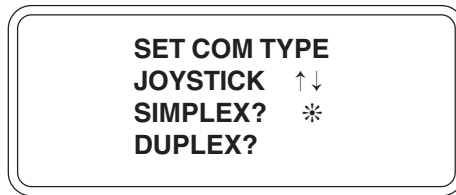
To select the Standard Coaxitron® mode of operation, press the number “1” key and then press the “COAX RECV” key. The default keyboard display will read “STD CXTRN”. This mode will operate the standard 15 bit Coaxitron® receivers and their preset commands.

## 4.2 SELECTION OF RS-485 CONTROL

To switch from Coaxitron® to RS-485 mode, enter the number of the desired receiver address (such as “1”) and press the “RECV ADDRS” key. The keyboard display will show:



The monitor will display communication selection information:

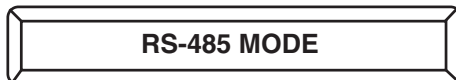


If the receive lines on the transmitter have been utilized, the duplex mode may be selected by moving the \* character with the joystick to the DUPLEX? row and pressing the F1 key to enable that selection. Similarly, to select simplex communication, move the \* character with the joystick to the SIMPLEX? row and press the F1 key to enable that selection.

After pressing the F1 key, the keyboard display will be:



and after approximately 5 seconds the display will default to RS-485 mode:



To check the currently assigned address, press the RECV ADDRS key only. The display will indicate the address number.

Extended commands are programmed as normal.

To revert back to Coaxitron® mode, press the COAX RECV key.

## 4.3 EXTENDED COMMANDS

### 4.3.1 Presets and Preset Labels In Extended Coaxitron® or RS-485 Mode

To create a preset in Extended Coaxitron® or RS-485 mode, move the pan/tilt to the desired location.

There are 32 possible preset position numbers (1-32) available.

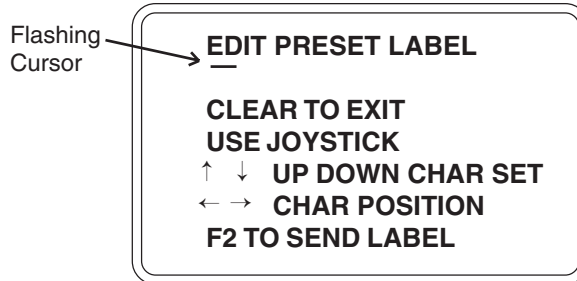
**NOTE:** Video must pass through the MPT9500 for on screen instructions to appear on the monitor.

**NOTE:** The duplex mode is really a half-duplex communication scheme where the transmitter awaits a command acknowledge from the receiver. If there is a bad acknowledge, or the transmitter times out waiting for a receiver response, the command will be re-transmitted up to 5 times. Duplex mode should therefore exhibit better control.

Enter whatever number you desire or need and press the "PRESET SET" key. The keyboard display will show:



and the following screen will pop up on the monitor:



giving you the programming information you need to create a preset label on the monitor.

At the flashing cursor position, you may cycle through the available characters either continuously or one at a time by appropriate use of the joystick up/down controls. Moving the joystick left or right changes the next label character placement position. Holding the joystick up/down or left/right with the joystick turbo button depressed (see Figure 7) causes the characters to change, or the cursor to move more rapidly. The receiver will accept labels up to 20 characters in length. After the label is completed, press the F2 key to send the label to the receiver.

#### **4.3.1.1 Sending a Preset Only**

In the event that a preset label is not needed or desired for this preset position, then just press the F2 key immediately; your preset will be sent but no label will be associated with it.

#### **4.3.1.2 Exiting Preset and Label Edit Mode**

On the other hand, if you have changed your mind about creating either a preset or a label, or if you had pressed the PRESET SET key accidentally and wish to exit, then simply press the CLEAR button on the keypad.

#### **4.3.1.3 Additional Presets and/or Labels**

After a label and/or preset is created and sent to the receiver, the preset/label process is complete. Additional presets and/or labels may be created by continuing to the next preset position and repeating the appropriate portions of Sections 4.3.1 and 4.3.1.1.

#### **4.3.1.4 Returning to a Preset**

To return to a specific preset, enter the number of the preset and press the PRESET GO key. The pan/tilt should return to the correct preset and display the assigned label.

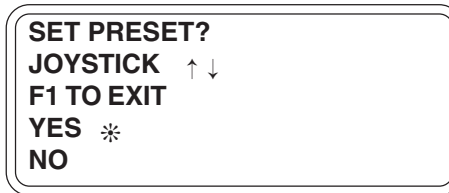
### **4.3.2 Presets In Standard Coaxitron® Mode**

#### **4.3.2.1 Setting a Preset**

In STANDARD COAXITRON® mode, no preset labels are available, so proceed in the normal way. First, move the pan/tilt to the desired location and then enter the desired number for the preset (1-32). Press the PRESET SET key. The keyboard display will then display SET PRST X, where X is the preset address you just picked. Let's say you picked address 4. The keyboard display would be as follows:



and on the monitor the following screen will appear:



Joystick operation for Standard Coaxitron® mode is the same as that already described for Extended and RS-485 mode. If the PRESET SET key has been hit accidentally and you wish to exit, use the joystick to position the \* character in the “NO” row and press the F1 key. If setting a preset was really intended then make sure the \* character is positioned in the “YES” row and press the F1 key. The preset is complete. Continue to the next preset position and repeat this section to add more presets.

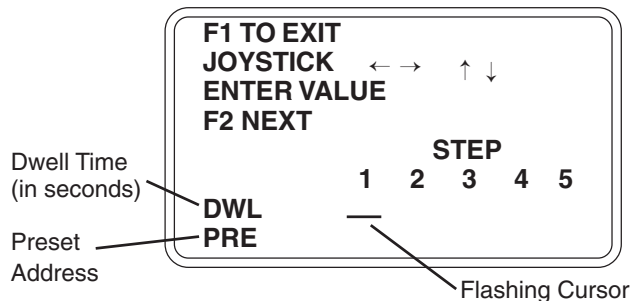
#### 4.3.2.2 Preset Scans

The standard Coaxitron® Preset receiver will sequence through all of its available presets at a predefined dwell. To evoke this option, key in the number from 5 up to 64 seconds. Next, press the PAN/AUTO key. The receiver will cycle through its presets in ascending order up to 360 cycles, then it will stop and need to be initiated again for further sequencing.

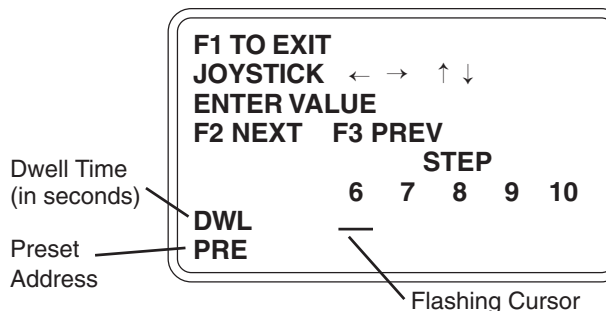
#### 4.3.3 Preset Tours (Standard or Extended Coaxitron® Modes) MPT9500TD Only

**NOTE:** Before programming a tour for the **FIRST TIME**, it is recommended that you clear the programming area by pressing the turbo button on the joystick (see Figure 7).

To program a tour for a Coaxitron® receiver, press the number 4 key followed by the F2 key. On the monitor, the following screen will appear:



Some preliminary remarks regarding preset tours and the terms used in the above screen might be in order. Preset tours consist of the sequential execution of a programmed series of up to 65 previously set presets, viewed one at a time, at the end of which the cycle repeats until interrupted. You will recall that there are 32 possible preset addresses. When programming a “tour” any (up to 32) of the possible preset address positions may be included in the tour since 65 preset positions (called “steps”) are available in a tour. Only 5 programmable steps at a time appear on any given screen and each screen of 5 steps is called a page, giving a total of 13 “pages”. Assuming you had programmed the first 5 steps, hitting the F2 key would bring up page 2 (steps 6-10) which would appear as follows:



Hitting F3 PREV would take you back to the previous page. PRE stands for preset address (1-32). DWL stands for dwell rate entered in seconds (1-99). During the execution of a preset tour, dwell rate is NOT the amount of time spent at any one camera viewing position or preset address. Dwell rate is defined as the amount of time in seconds between the moment the pan/tilt begins moving to the current preset and the next preset in the tour. An example might make this clearer.

Assume you have a programmed preset tour of 5 steps consisting of corresponding preset addresses of 1 through 5 and that you have entered a dwell rate of 10 seconds for each step. Let's say that the pan/tilt has stopped at the first preset address and is getting ready to move onto the second step of the tour. As soon as the pan/tilt begins to move from step 1 to step 2 of the tour, the dwell rate time for step two begins to time out. If it takes 2 seconds for the pan/tilt to reach step 2 of the tour, then the pan/tilt will spend only 8 seconds of actual viewing time at preset address 2. You can clearly see, therefore, that one must make allowances when entering the dwell rate to allow time for the pan/tilt to arrive at one preset before being sent to the next one in the tour. Consequently, actual viewing time at each preset in the tour can be defined as:

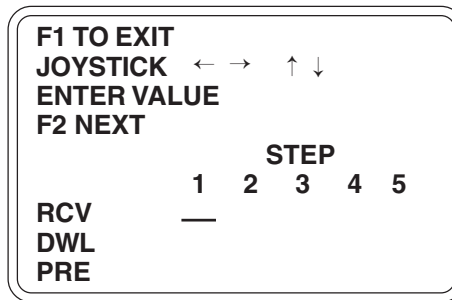
$$\text{VIEW TIME (actual)} = \text{Dwell Rate (in seconds)} - \text{Pan/Tilt Movement (previous to current preset, in seconds)}$$

With these remarks in mind, it should be fairly straightforward to program your preset tour. By default, the initial screen will show a flashing cursor in the DWL row on page 1, step 1 as previously shown. Use the joystick to move the cursor down to the PRE row and enter a preset number (1-32), then move the cursor to the DWL row for step 1 and enter a time in seconds (1-99). Continue programming steps 2-5 in like manner, using the joystick to move to a new column. If an incorrect value is entered, the CLEAR key may be used to erase position specific values. To program steps 6-10, press F2 and continue as before. Press F2 again to program steps 11-15. To move back one page, press the F3 key. When all desired tour steps are programmed, press F1 to return to normal operation mode.

**NOTE & WARNING:** *While in the programming preset tours mode, you may delete all previously programmed tour steps by pressing the turbo button on the joystick (see Figure 7). Make sure you really want to do this before pressing the button.*

#### 4.3.4 Preset Tours (RS-485 Modes) MPT9500TD Only

When programming in the RS-485 mode, an additional row labeled RCV will appear above the DWL row.



RCV stands for receiver number and may be programmed in the same manner as DWL and PRE. Legal receiver numbers range from 1 to 32. All other functions and programming controls operate the same as described in the previous sections.

#### 4.3.5 Running Preset Tours

To run a preset tour, press the number 5 key followed by the F2 key. The keyboard display should be:



The pan/tilt will be sent immediately to the first preset of the tour, and after the dwell time programmed in the first step, will continue to the next tour preset. The tour will continue stepping from one tour preset to the next until the user moves the joystick, at which time the unit will return to normal operation.

### 4.3.6 Programming Lens Speed

This feature is only available on receivers that support programming lens speed. To program lens speed, press the number 8 key followed by the F1 key. The keyboard display should be as follows:

**ZOOM SPD**

The following screen will appear on the monitor.

**ENTER ZOOM SPEED  
1 - 4 and PUSH SELECT  
F1 TO EXIT**

The numerical range 1 - 4 is called the "speed spread". A value of "1" selects the slowest and a value of "4" selects the fastest lens speed. As soon as a value is entered, say for example 3, it is reflected in the keyboard display:

**ZOOM SPD 3**

Press the SELECT key. The keyboard display will change to:

**FOCUS SPD**

The following screen will appear on the monitor:

**ENTER FOCUS SPEED  
1 - 4 and PUSH SELECT  
F1 TO EXIT**

Again, 1-4 or "speed spread" carries the same meaning as just discussed. Any valid numerical value entered is again reflected in the keyboard display. As soon as the SELECT key is pressed, the focus speeds are set and the program automatically returns to normal operation.

### 4.3.7 Clear Screen

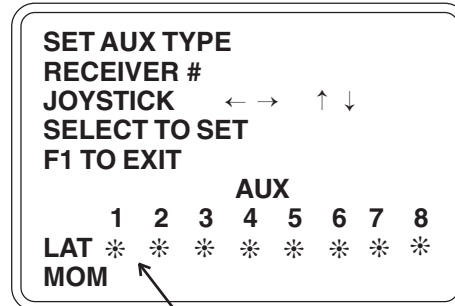
This command will clear from the screen any text generated by the receiver. To activate this command press the number 4 key and press the F1 key.

### 4.3.8 Flip

This command will cause an Intercept® or Spectra™ dome to do a high speed 180 degree change in direction. To activate, press the number 5 key and press the F1 key.

### 4.3.9 Programming Auxiliary Functions

This feature will operate only on receivers that support this option. This programming feature in the new receivers will allow the auxiliary outputs (1-8) to be either latching or momentary. To enter this program mode press the number 6 key followed by the F1 key. The monitor output of the MPT9500 will display the following:



where:

- "LAT" means latching
- "MOM" means momentary and

RECEIVER # identifies 1 of 32 possible receiver addresses (if you're in the Coaxitron® mode the receiver address will, of course, always be one [1]) .

If you program an auxiliary function for latching, this means the function will remain turned on until turned off. If you program an auxiliary function as being momentary, the function will generate a 16 ms ON/OFF pulse.

To program an auxiliary function, position the cursor, which is at the blinking star "default" position, with the joystick in whichever row you want activated for that auxiliary position and press the SELECT button. All stars are initially in the latching row. Pressing the select button while the cursor is in the MOM row for any given AUX position will move the star to the MOM row for that AUX position. Once all choices have been made, hit the F1 key to exit the program. This sends the message to the receiver.

You can program another receiver by selecting its address and repeating the steps just described.

If there is ever a power loss, then the AUX functions will need to be reprogrammed.

#### 4.3.9.1 Sending Auxiliary Commands

To activate an AUX command press the number key (1-8) of the desired Auxiliary function and press the AUX key.

#### 4.3.9.2 Deactivating Auxiliary Commands

To deactivate an auxiliary command in Extended Coaxitron® or RS-485 modes, press the numbered key (1-8) of the desired Auxiliary function, then press the F3 key. The keyboard display will indicate that the auxiliary function has been cleared.

### 4.3.10 Patterns

This feature allows the operator to program a customized sequence of pan/tilt and zoom functions for a limited amount of time. This sequence may be repeatedly run by the operator. This feature will operate only on receivers that support patterns. It is not possible to run more than one pattern at a time.

#### 4.3.10.1 Programming Patterns

To begin programming a pattern, press the number 1 key and then press the F1 key. The receiver will display "PROGRAMMING PATTERN". Activate any pan/tilt (no turbo speed) and lens function required for the extent of time the receiver will allow.



#### 4.3.10.2 Pattern End Point

If the pattern time is less than the maximum allowed, simply end the pattern sequence by pressing the number 2 key and then press the F1 key. This will end the pattern routine.

#### 4.3.10.3 Running a Pattern

To activate the pattern, press the number 3 key followed by the F1 key. The pattern will run indefinitely. To end the pattern send any PTZ command to the receiver.

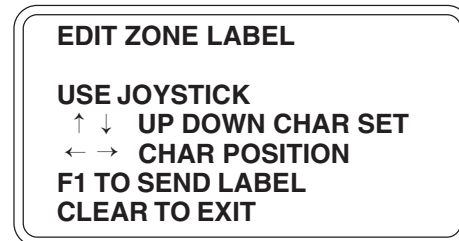
### 4.3.11 Zones

Zones are specific pan areas to which identifying labels can be attached. There are eight possible zones. The larger the number, the higher priority the zone label has. This means if two zones overlap, the higher number zone will be displayed.

#### 4.3.11.1 Programming Zone Labels

1. Zone label must be off. See Section 4.3.11.3
2. Zones cannot span the dead area of the position encoder. To identify the dead area send the receiver to preset 34. See Section 4.3.1.4. The receiver will pan and stop at the dead area. Avoid spanning this area with a zone.
3. This feature will operate only on receivers that support zones.

To begin programming a zone label, press the number 3 key followed by the ZONE key. The instructions will appear on the monitor display as follows:



The joystick is used to move the char set up, down, right and left to the desired position of the characters. The blinking character will indicate which position you are editing. The receiver will allow 20 characters on the screen.

To send the label, press the F1 key and wait a moment for the transmission to be completed. The label will appear on the video from the appropriate receiver.

Next enter a zone number (1-8) and momentarily press the SELECT key. Program the zone by panning **right only** to the desired end of the zone. Now enter the same zone number and momentarily press SELECT.

The zone label is now complete. Repeat these steps for the next zone(s), making certain not to span the dead area.

#### 4.3.11.2 Zone Label On

To turn on the zone label, press the number 1 key followed by the ZONE key.

#### 4.3.11.3 Zone Label Off

To turn off the zone label, press the number 2 key followed by the ZONE key.

**NOTE:** *If you have entered zone labels programming by accident, you can exit by pressing the CLEAR button.*

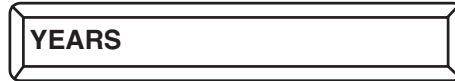
**NOTE:** *There are three precautions that must be taken into account when programming zone labels.*

### 4.3.12 Time (MPT9500TD Only)

The MPT9500 is equipped with a time clock for specific functions requiring reference to time and date.

#### 4.3.12.1 Set Time (MPT9500TD Only)

To set the time, press the number 1 key followed by the F2 key. The keyboard display will be as follows:



YEARS

and on the monitor will appear the following:



ENTER YEAR  
and PUSH SELECT  
F1 TO EXIT

Enter a value for the year and momentarily press SELECT. The program automatically advances to enter the month's value and the corresponding displays on the keyboard and monitor will follow suit. Follow the same procedure for entering each field. The program will automatically advance to days, hours, minutes and seconds. If you enter an incorrect or illogical value for an entry, say "32" for DAY, the entry will clear and the program will not let you advance to the next setting. When all data has been entered, the program will end automatically.

#### 4.3.12.2 Display Time On (MPT9500TD Only)

To display the time on the monitor output press the number 2 key followed by the F2 key.

#### 4.3.12.3 Display Time Off (MPT9500TD Only)

To remove the time from the monitor output press the number 3 key followed by the F2 key.

### 4.3.13 Alarms

Alarm programming for the MPT9500 is not available.

### 4.3.14 Keyboard Diagnostics

To activate, enter the number 88 followed by pressing the F3 key. At this point, whatever key is depressed is reflected on the keyboard display. This tests the keys only and does not test any other part of the controller. To exit press the CLEAR key.

## 5.0 SPECIFICATIONS

**NOTE:** Operating distances are calculated and based on typical performance. The actual calculations are explained in the installation section of this manual and should be done for each application prior to installation.

### ELECTRICAL

Input Voltage: (50/60 Hz) 120, 230 VAC  
 Power: 12 watts  
 Consumption: Coaxitron® VIS  
 Control Method: 4-wire RS-485

Standard  
 Baud Rates: VIS 1 MHz  
 RS-485 2400 baud

Command  
 Error Rates: DUPLEX 0%  
 SIMPLEX 2%

Input Video Level: 0.5 to 1.5 Vp-p  
 Operating  
 Distances: VIS - 2000 ft (609m) on RG-11  
 RS-485 - 4000 ft (1,219m)  
 24 AWG-TP

### MECHANICAL

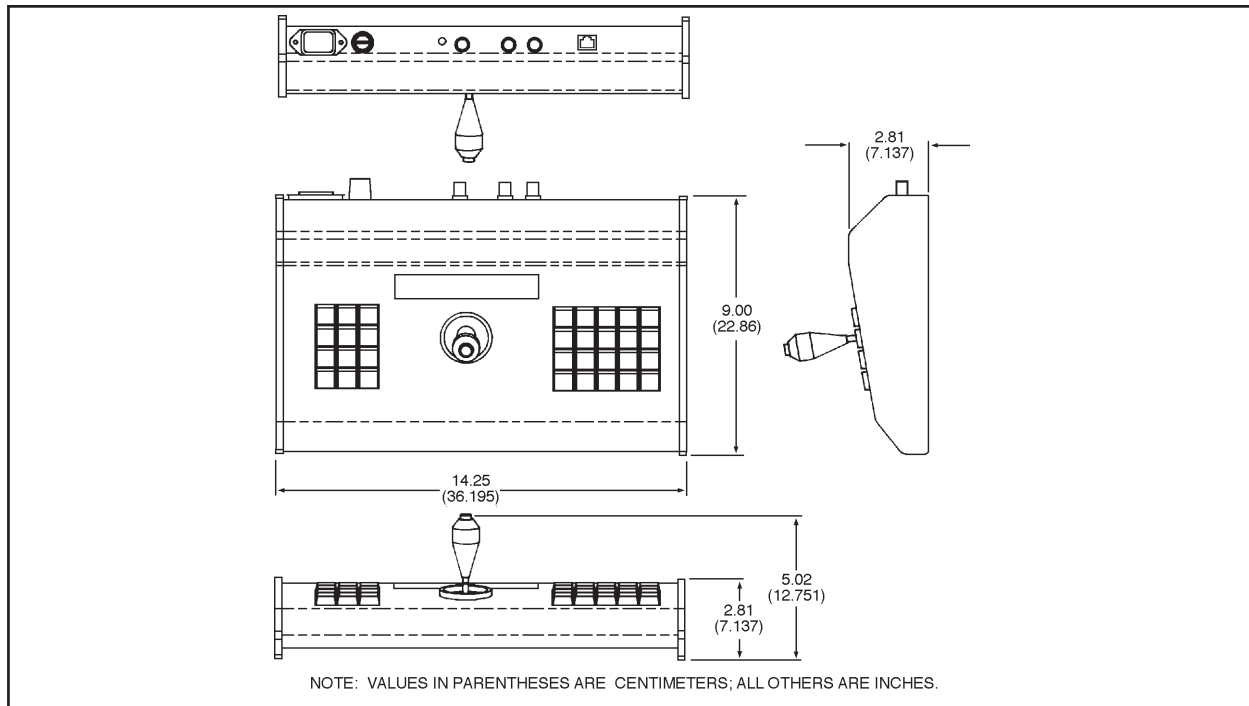
Connectors:  
 Video: 3 BNCs  
 Power: 3-wire #18 AWG molded  
 Fuse: 1/4 ASB @ 120 VAC  
 1/8 ASB @ 230 VAC  
 RS-485: RJ-45 6-pin modular

### GENERAL

Operating  
 Temperature: 0 to 120° F (-18 to 49° C)  
 Dimensions: See Figure 8

Rating: NEMA 1

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



**Figure 8.** MPT9500 and MPT9500TD Dimension Drawing

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## 6.0 WARRANTY AND RETURN INFORMATION

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### 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 on FT/FR8000 Series fiber optic products.
- Three years on Genex® Series products (multiplexers, server, and keyboard).
- Three years on Camclosure® and fixed camera models, except the CC3701H-2, CC3701H-2X, CC3751H-2, CC3651H-2X, MC3651H-2, and MC3651H-2X camera models, which have a five-year warranty.
- Two years on standard motorized or fixed focal length lenses.
- Two years on Legacy®, CM6700/CM6800/CM9700 Series matrix, and DF5/DF8 Series fixed dome products.
- Two years on Spectra®, Esprit®, ExSite™, and PS20 scanners, including when used in continuous motion applications.
- Two years on Esprit® and WW5700 Series window wiper (excluding wiper blades).
- Eighteen months on DX Series digital video recorders, NVR300 Series network video recorders, and Endura™ Series distributed network-based video products.
- One year (except video heads) on video cassette recorders (VCRs). Video heads will be covered for a period of six months.
- Six months on all pan and tilts, scanners or preset lenses used in continuous motion applications (that is, 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 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 (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 which 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

In order to expedite parts returned to the factory for repair or credit, please call the factory 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).

All merchandise returned for credit may be subject to a 20% 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. Ship to the appropriate address below.

If you are located within the continental U.S., Alaska, Hawaii or Puerto Rico, send goods to:

Service Department  
Pelco  
3500 Pelco Way  
Clovis, CA 93612-5699

If you are located outside the continental U.S., Alaska, Hawaii or Puerto Rico and are instructed to return goods to the USA, you may do one of the following:

If the goods are to be sent by a COURIER SERVICE, send the goods to:

Pelco  
3500 Pelco Way  
Clovis, CA 93612-5699 USA

If the goods are to be sent by a FREIGHT FORWARDER, send the goods to:

Pelco c/o Expeditors  
473 Eccles Avenue  
South San Francisco, CA 94080 USA  
Phone: 650-737-1700  
Fax: 650-737-0933

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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.