# ADDENDUM

- Addendum No.: C1577M-A
  - **Date:** August 4, 2004

 Manuals Affected:
 CM9760 Series Manuals – C538M-A, C539M-A, C540M-B, C541M-C, C542M-B,

 C543M-A, C544M, C549M-A, C572M, C573M-D, C578M, C579M, C1501M, C1503M,

 C1510M-QS, C1510M-A, C1520M-B, C1528M-D, C1940M, C1941M, C1942M, and

 C1943M

**Manual Update:** The CM9760-CC1 has been replaced with the CM9700-CC1 and the CM9760-MGR management software has been replaced with the CM9700-MGR management software.

Keep the following in mind when referring to the instructions contained in these manuals:

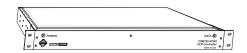
- The CM9700-CC1 contains the latest CC1 software (version 9.01 or higher), and is programmed with the new CM9700-MGR management software.
- Despite the difference in model numbers, the CM9700-CC1 functions the same as the CM9760-CC1 and most of the information in these manuals applies to version 9.01 (or higher) CPU.
- You can add the CM9700-CC1 to an existing CM9760 system if you upgrade the existing CM9760-CC1 units with the current software (version level 9.01 or higher).

Software version 9.01 requires a minimum of 16 MB of RAM in the CPU. If required, you can upgrade the RAM in older CM9760-CC1 units using the software upgrade kit appropriate for your CPU.

• Do not use the CM9760-MGR instructions contained in these manuals. Refer to the CM9700-MGR Getting Started Software Guide, on-screen help, or Online Help for instructions.







# CM9760-VCRC VCR Controller

Installation/ Operation Manual

C1941M (7/98)

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## **REVISION HISTORY**

<u>Manual #</u>	<u>Date</u>	<u>Comments</u>
C1941M	7/98	Original version.

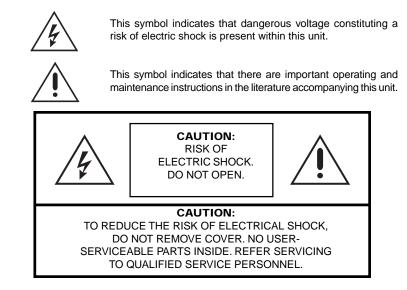
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#### **1.1 IMPORTANT SAFEGUARDS AND WARNINGS**

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:



#### **1.2 REGULATORY NOTICES**

NOTE: 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 and 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.

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

## 2.0 DESCRIPTION

The CM9760-VCRC is another optional accessory of the System 9760<sup>™</sup>. This VCRC gives security and surveillance operators the ability to automatically or manually control appropriate VCRs from the 9760 matrix system. It is designed to remotely control seven basic VCR functions using two different control methods; resistive ladder remote control and S-Link remote control.

Currently, it supports Sanyo and Sony model resistive ladder VCRs and Sony model S-Link VCRs.

Some of the more important features of the VCR unit are as follows:

- Each unit can handle up to 64 VCRs.
- Controls seven VCR functions: play, stop, fast forward, reverse, pause, record and eject.
- Up to 11 units can be chained together giving a total of up to 700 VCRs controllable from a single Sercom port on the CM9760-CC1.
- VCR inputs can be configured in blocks of 16 for use by specific VCR type.
- There is one relay output per unit.
- The unit is powered by an auto-ranging power supply.
- Unique, one rack-unit chassis (1.75 inches or 4.45 cm) accommodates multiple types of mounting.
- Transparent system software operates with the CM9760-IRC as well as the future CM9760-REL.

#### 2.1 MODELS

CM9760-VCRC

CRC VCR control unit capable of controlling 64 VCRs per unit. VCR control is specific to Sanyo and Sony VCRs.

#### 2.2 CERTIFICATIONS

The products identified below have been tested and certified for agency compliance as noted.

		Agency Compliance Certification			
	Model	CE	FCC	UL	CSA/cUL
Г	CM9760-VCRC	Х	Х		

Applicable CE, FCC, UL, and CSA/cUL directives/standards:

- 93/68/EEC–CE Mark Directive 89/336/EEC, 92/31/EEC–Electromagnetic Compatibility (EMC) Directives EN 55022: 1984 Class B–Radio-frequency emissions limits EN 50082-2: 1992–Immunity standard IEC 801-2: 1984–ESD immunity IEC 801-3: 1984–Radiated field immunity IEC 801-4: 1988–Electrical transients
- FCC-47 CFR, Part 15, Subpart B, Class B

Additional applicable standards:

- NEMA Type 1
- IP 20

#### 2.3 OPTIONS

CM9760-VCRC-TX A 20-foot (61 cm) VCR control cable with 1/8" jack on one end (for connecting to VCR) and cord/shield (signal/ground) bare wires at the opposite end for connection to input mating plugs located on rear of VCRC.

#### 3.1 FRONT VIEW

Figure 1 illustrates the front view of the unit. Power and data LEDs occupy opposite ends of the front panel. The power LED on the left is green and the data LED on the right is red. All other connectors, switches, inputs and outputs are on the rear of the unit except for two DIP switches and a reset switch located behind the front panel cover plate.

The DIP switches can be accessed easily by removing the five flat-head Phillips screws that hold the front panel in place as illustrated in Figure 2.

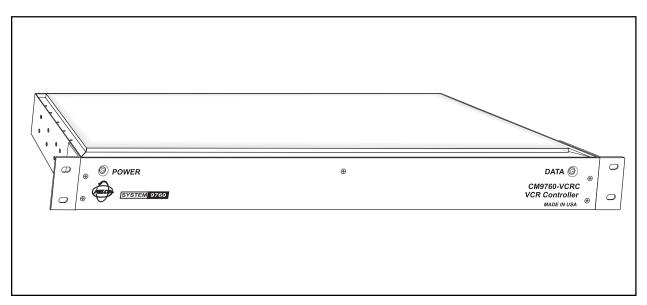
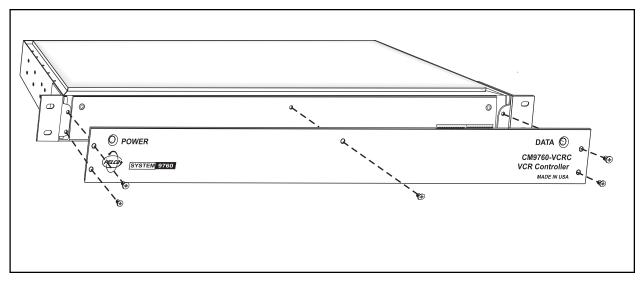


Figure 1. Front View of CM9760-VCRC





#### 3.1.1 DIP Switches

With the front panel removed, DIP switch 1 and DIP switch 2 are visible. These two ten-position DIP switches configure and define many functions of the CM9760-VCRC.

#### 3.1.1.1 DIP Switch Locations

Figure 3 identifies the relative locations of DIP switches 1 and 2.

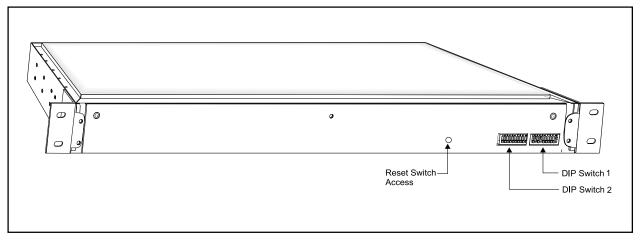
#### 3.1.1.2 DIP Switch Functions

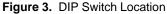
DIP switch functions are discussed in Section 3.3, SETUP.

#### 3.1.2 LEDs

The green POWER LED located on the left front panel of the unit comes ON at power up.

The red DATA LED located on the right side of the front panel continually flashes on and off at a regular rate (about 1/2 second intervals) until the first valid command is received. The LED will not flash again until another valid command is received. Also, in cascaded situations, if a command is meant for a VCRC further down the chain, the command will be relayed down the chain and the LED will not come on until the appropriate VCRC processes the command. In other words, LED activity is address specific. Additionally, if power is cycled, or if the DIP switch slide positions are moved, or if a front panel reset occurs, then the LED will again flash intermittently until the first valid command is received.

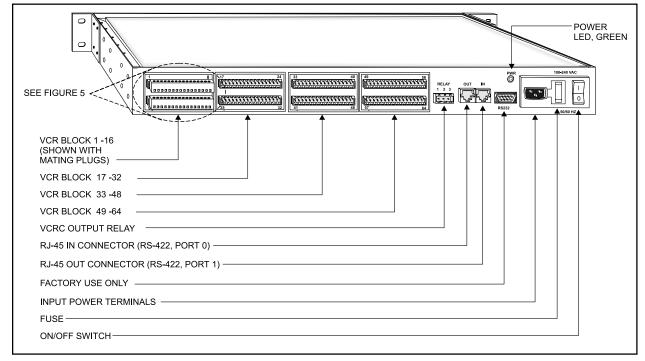




#### 3.2 REAR VIEW

The rear of the unit is illustrated in Figure 4. From left to right are the following:

- 1. The four 16-input blocks of VCR connectors in the form of screw-type connectors with associated mating plugs (one shown in Block 1) running from the left rear to middle right of the unit
- 2. The VCRC output relay (one per unit)
- 3. RS-422 input/output communication connectors (RJ-45 type)
- 4. One DB-9 type connector for factory use only
- 5. The grouped input power functions, consisting of input power terminals, a fuse and an ON/OFF switch





**NOTE:** VCR block ranges are assigned specific VCR type via slide switches 7 through 10 on DIP switch 2.

#### 3.2.1 Input VCR Connectors



**IMPORTANT:** Control cable length should not be extended further than the supplied 20 feet because resistive ladder input circuits are very susceptible to additional line impedance. It is also recommended that shielded cable be used to minimize external electrical interference with VCRC control signals. See important note in Figure 9 regarding power hookup and interference. Physically, each of the four VCRC input connectors consists of the same number of input screw-type terminals. Each input group uses a dual-row removable plug and each plug is associated with 8 VCR inputs.

For example, refer to the leftmost group represented in Figure 5, which shows VCR inputs 1-16. Of these VCR inputs, 1-8 are wired using the top 16 screw terminal positions. VCR inputs on this connector physically alternate with their associated GND connection for a total of 8 available VCR/GND connections: that is, pin 1 is VCR input 1 and pin 2 is the GND connection associated with VCR input 1; pin 3 is VCR input 2 and pin 4 is VCR input 2's associated GND connection, and so on. The same explanation applies to the lower plug for VCR input 9-16, starting with VCR input 9 which is associated with physical pin 17 on the mating plug.

In a similar manner, the remaining plug (upper/lower) combinations accommodate the three remaining VCR input blocks: that is, inputs 17-32 are handled by header two, inputs 33-48 by header three, and inputs 49-64 by header four.

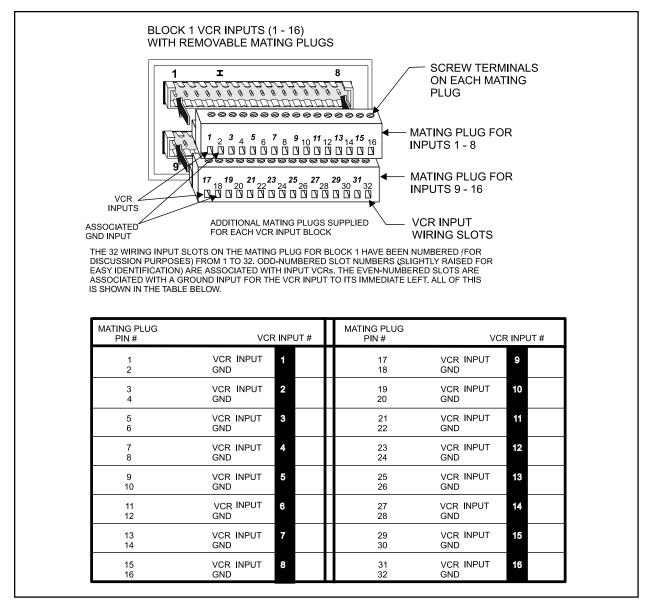


Figure 5. VCR Input Plugs

#### 3.2.2 Relay Output Connector

Figure 6 illustrates the relay output connector and its relative port pin assignments. The connector is a three-position plug with screw-type contacts similar in operation to the mating connectors just discussed.

By default, the relay is in its normal state at power up of the unit as shown in Figure 6. During operation, the relay may be toggled by controlling the 64<sup>th</sup> VCR on the VCRC by entering VCR number 64 on the keypad, then pressing the Camera button which brings up the VCR control functions and then pressing the blue button under the PLAY control icon. Similarly, performing the above but pressing the STOP VCR control command instead of the PLAY command will deactivate the relay. Refer to Section 5.2, OPERATING THE CM9760-VCRC FROM THE CM9760-KBD, for more details on the operational use of the VCRC from the CM9760-KBD.

#### 3.2.3 Communication Connectors

Communication to and from the unit is provided through two RJ-45 ports on the rear of the CM9760-VCRC. The ports are referenced as serial port 0 and serial port 1 (refer to the functional block diagram in Figure 17).

Serial Port 0 is associated with the RJ-45 IN female connector and is configured for RS-422 operation by default. In the configuration, the RJ-45 IN connector allows the VCRC unit to be connected to an appropriate Sercom port on the rear of a CM9760-CC1 controller.

Serial port 1, associated with the RJ-45 OUT connector, is always configured as RS-422 and is used for daisy-chaining subsequent VCRC units (see Section 4.2, REMOTE OPERATION).

Individual connector pin-outs of the communication channels are discussed next.

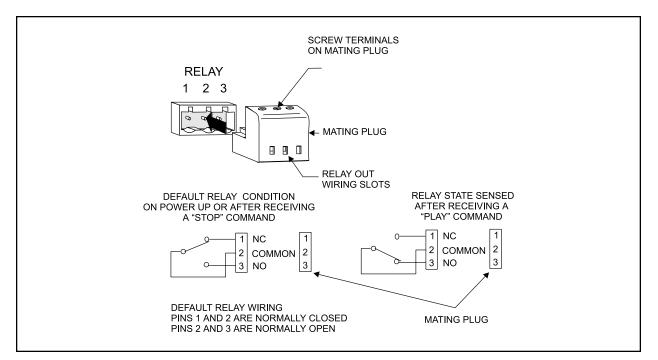


Figure 6. Relay Output Connector

#### 3.2.3.1 DB-9 Connector Pin-outs

The DB-9 connector is reserved for factory use only.

#### 3.2.3.2 RJ-45 Connector

The RJ-45 connector pin-outs are illustrated in Figure 7.

Because both RJ-45 connectors have the same wiring pin-outs, they require the same "flipped" cable. In other words, the IN connector requires a "flipped" cable for connecting the first unit to the CC1, and the OUT connector requires a "flipped" for cascading other units. A "flipped" cable is as follows: Pin 1 of the cable at one end becomes pin 8 at the other end. Refer to Figure 8.

Note that the active pin-outs are associated with the outer four pins; namely, 1, 2, 7 and 8. All accessories on the System 9760<sup>™</sup> require the "flipped" cable to be used to attach peripheral equipment. This presently pertains to the KBD, MXB, CXT, ALM, MDA, CDU-T and now the VCRC unit.

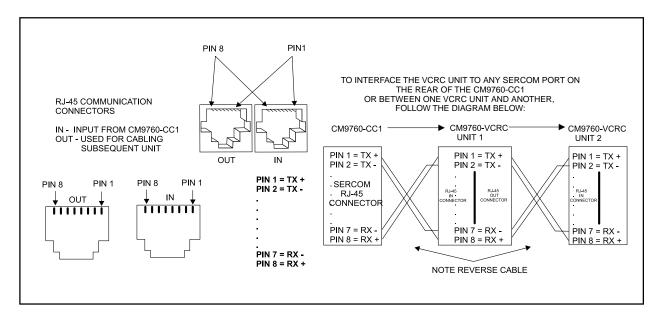
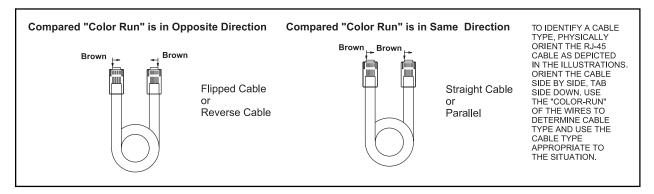
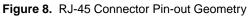


Figure 7. RJ-45 Pin-outs





#### 3.2.4 Power Connections

The CM9760-VCRC utilizes an auto-ranging internal transformer circuit that allows the input power to range from 100-240 VAC @ 50/60 Hz. Associated with the input power is the power ON/OFF switch and the input power fuse. The fuse is easily changed as illustrated in Figure 9.

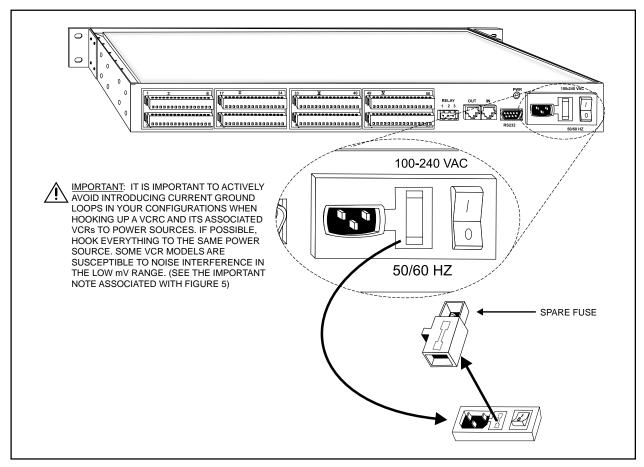


Figure 9. Power Input Fuse Replacement

#### 3.3 SETUP

#### 3.3.1 Preliminary Discussion

The VCR controller (VCRC) enables automatic control (via macro execution) or manual control (from the CM9760-KBD) of seven predefined VCR functions. Each VCRC can control up to 64 VCRs.

VCR control is implemented by associating System 9760<sup>™</sup> GPIs to VCRs. When a GPI is used for VCR control, its first seven auxiliary relays are used to control the seven most common VCR control functions. The seven auxiliary relay numbers and their associated VCR functions are listed below.

1.	Play

2. Sto	р

- 3. Rewind
- 4. Fast Forward

(Figure 18 shows the relationship of these relay numbers and the associated VCR control function as seen on the CM9760-KBD LCD screen)

- 5. Pause
   6. Record
- 7. Eject

Two key setup procedures are required in order to accomplish VCR control from the System  $9760^{\text{TM}}$ . The Frame Address Table in Figure 10 can be used as an aid to implement both procedures.

(1) The VCR controller must be assigned an address (1 of 11) that corresponds to a sequential range of 64 GPIs (VCRs).

Use the Frame Address Table to determine the DIP switch settings for assigning an appropriate VCRC address setting.

(2) GPIs must be programmed in order of the 9760 CPU to communicate with the VCRC.

Each physical GPI # corresponds to an individual VCR and its terminal connection point on the VCRC. Therefore, 64 GPIs must be programmed in order to control 64 VCRs from one VCRC controller.

How the physical GPI # is associated with the VCRC is as follows:

- Physical GPI # 1 corresponds to the first VCR control terminal on the VCRC that is addressed as controller # 1 (Frame Address # 0). Likewise, physical GPI # 64 corresponds to the 64<sup>th</sup> control terminal on VCRC # 1.
- The next GPI # (the 65<sup>th</sup>) corresponds to the 1<sup>st</sup> control terminal on VCRC # 2 (Frame Address # 2). This scheme continues until the last GPI is associated with the appropriate control terminal on the last VCRC used, which, in this case, would be controller # 11 (Frame Address # 20).

#### 3.3.2 DIP Switch Settings

L

DIP switch settings are illustrated in Figure 10.

**NOTE:** It is highly recommended that VCRC address #1 (Frame Address 0) be used first, VCRC address # 2 second, and so on, to minimize programming confusion.

**NOTE:** GPIs are programmed using the 9760 System Manager program. See Section 3.3.3, Software Setup–Using the MGR Program to Configure VCRC Operation, for introductory instructions. For detailed programming instructions, refer to the Systems Manager manual.

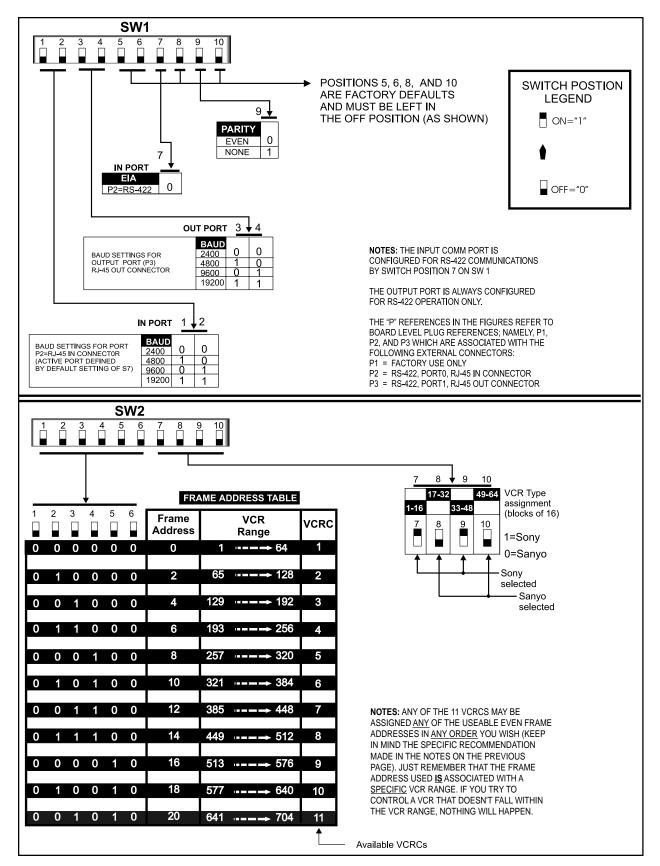


Figure 10. DIP Switch Functions

#### 3.3.3 Software Setup-Using the MGR Program to Configure VCRC Operation

The VCRC unit controls up to 64 VCRs per unit and provides seven basic functions of VCR control direct from the CM9760 keyboard. These controls include Stop, Pause, Play, Eject Fast Forward, Rewind and Record.

The VCRC accepts GPI commands issued under call functions of VCR control via direct key entry or through properly prepared Macros. Access to GPI functionality is setup in the MGR program in the following manner. What follows is a brief introduction to just those files which need to be programmed for successful VCRC operation and does not address other items that might be needed for your particular system operation. Consult your MGR manual and associated software for other specific or more detailed information.

On a separate PC and monitor start the 9760-MGR Setup program and access the Camera File (.CAM file). Refer to Figure 11.

- 1. Select the desired physical camera input that will be associated as a VCR.
- 2. Program a logical input number, title identification (Ident), and operator access (Oper Acc) for the associated VCR selected in the previous step.
- 3. Access the tab labeled "Type" and select VCR as the input type.
- 4. Highlight the GPI box and input a GPI number that corresponds to a specific VCR control signal on the VCR controller.
- 5. Continue to program all desired inputs as VCRs by repeating steps 1-4. Up to 700 VCRs can be defined.
- 6. When all cameras (VCRs) are defined and associated "Connect GPIs" are assigned, save the camera file and click on the GPI tab in the main menu of the MGR program.

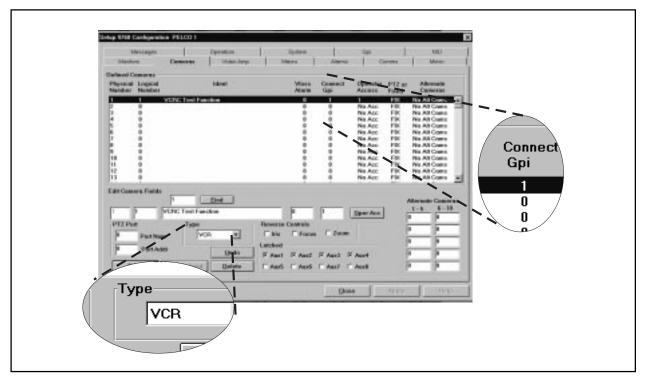


Figure 11. Configuring MGR Camera File for VCRC Operation

**NOTE:** It is a good idea to use the same number for the assigned GPI as is used for the camera (VCR). This leads to less confusion later when calling up the camera (VCRs) from the keyboard that are associated here with a GPI. In other words, associate camera #1 with a GPI connect of 1, camera #2 with a GPI connect of 2 and so on. Also set the logical and physical numbers for cameras (VCRs) equal to each other. **NOTE:** When writing macros to control VCR operation, keep in mind the following:

The macro must reflect your actual equipment configuration; if you change the configuration, you must adjust the macro accordingly. For example, if a macro were written to control VCRs attached to three VCRCs in a daisy-chained configuration and one of the VCRCs was subsequently removed, then any previously written macro that included these three VCRCs would have to be rewritten to reflect that change. Similarly, changing the frame address setting via SW2 on any of the three VCRCs would have the same effect as physically removing the unit from the configuration (as far as the macro is concerned) and, as before, the macro must be edited or rewritten to reflect any changes made.

- 7. This brings up the GPI SETUP file dialog box (.GPI file). Refer to Figure 12.
- Program logical GPI numbers for all the physical numbers that will be used. The physical GPI numbers correspond to a specific VCR control signal on the VCR controller. Also, these GPI numbers correspond with the "Connect GPI" numbers entered previously in the camera file.
- 9. For each associated GPI defined here, make sure none of the relay boxes have been checked. In other words, define all relays as momentary.

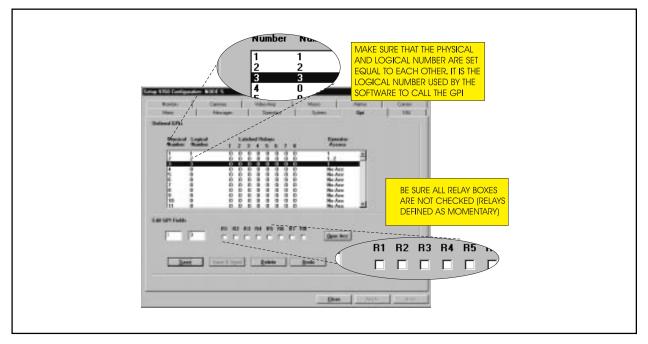


Figure 12. Configuring the GPI SETUP file for VCRC Operation

- 10. Define operator access, save the GPI file, return to the MGR main menu screen and press the tab to bring up the COMMS file (.SCP file). Refer to Figure 13.
- 11. In the COMMs file assign an equipment number "17" to the port on the CC1 that will be used for communicating to the VCRC. Also, set communication settings for 9600 baud and even parity. Save the COMMs file, back out of the MGR program and transfer all appropriate configuration files to disk and load these files onto the CC1 to which your VCRC configuration is attached. You should now be ready to operate your VCR via direct control from the CM9760-KBD.

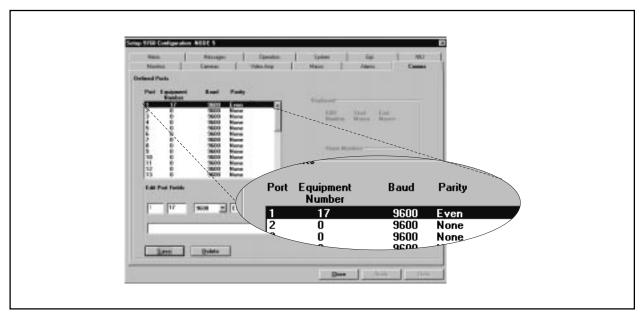


Figure 13. Configuring the COMMS file for VCRC Operation

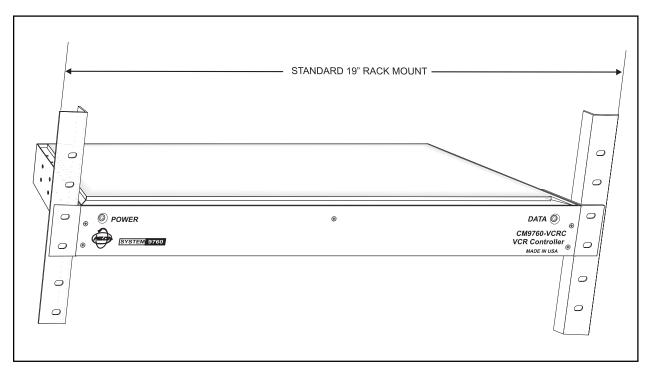
Physical installation of the VCRC unit is relatively simple, although various configurations are possible.

#### 4.1 DIRECT RACK-MOUNT HOOK-UP

Regardless of the location of a VCRC unit, it will more than likely be installed in a rack (refer to Figure 14). The VCRC unit mounts in a standard 19-inch (48.26 cm) rack and occupies only one RU (1.75" or 4.45 cm) of rack space.

#### 4.2 REMOTE OPERATION

If it is desired or necessary to place the VCRC unit some distance from the controller (CM9760-CC1), the wiring run from the CC1 to the RJ-45 IN port should not exceed 4,000 feet (1,219 m).





#### 4.3 DAISY-CHAINING

Up to eleven VCRCs may be daisy-chained together. This enables the system to support up to 700 VCRs. Figure 15 illustrates the required wiring connections for daisy-chaining.

Note that the remarks made in the previous section regarding RS-422 wiring run distances also applies here when considering cables distance runs between daisy-chained units.

Since the VCRC units utilize the same protocol as that for GPIs, they can be bussed together with CM9760-IRCs, and in the future with CM9760-RELs. Figure 16 illustrates this configuration.

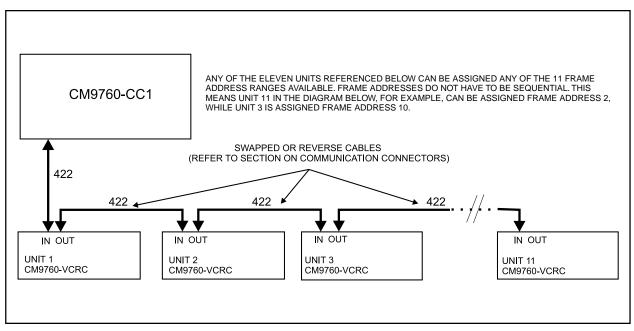


Figure 15. Daisy-Chain Configuration

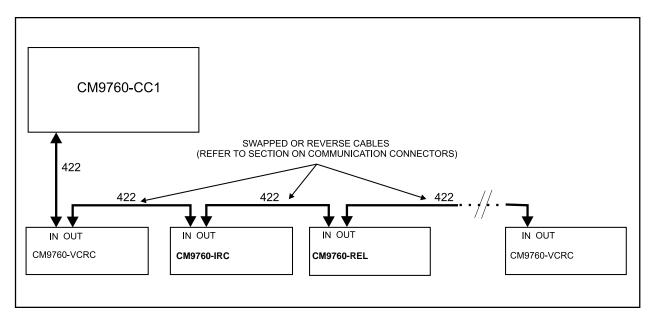


Figure 16. Daisy-Chain Multi-Buss Configuration

## 5.0 OPERATIONAL OVERVIEW

The basic function of the VCRC unit is to act as an interface between the user/ operator of the system and any connected VCRs. Each VCRC processes and executes only commands with addresses that match the controller address. When a VCRC receives a command with an inappropriate address it passes it on to the next unit (if applicable) via its OUT port.

When power is first applied to the unit, RAM is cleared and initialization routines are called. The power LED is lit, operational chips are configured, interrupt priorities are set and the activity LED on the front panel of the unit flashes on and off at about 1/2 second intervals. LED activity is detailed in Section 3.1.2, LEDs. The unit is waiting for its first valid command.

#### 5.1 FUNCTIONAL BLOCK DIAGRAM

The block diagram below represents a combination of internal circuitry as well as software controlled hardware within the CM9760-VCRC unit.

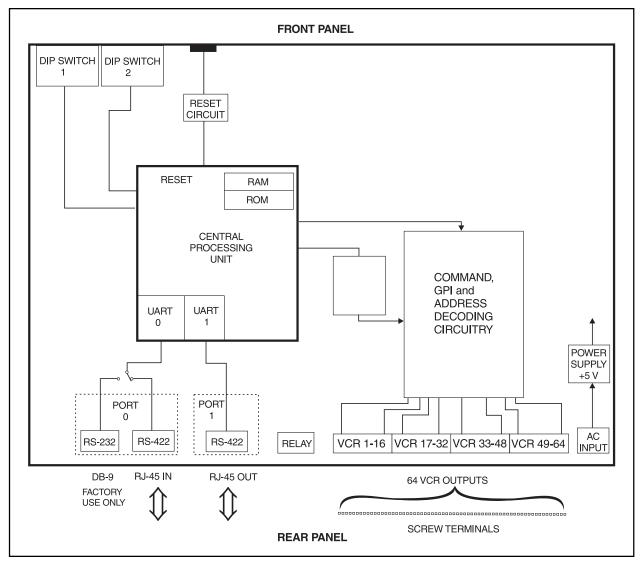


Figure 17. VCRC Functional Block Diagram

#### 5.2 OPERATING THE CM9760-VCRC FROM THE CM9760-KBD

Direct control operation of VCRs attached to VCRCs from a CM9760-KBD is relatively straightforward. Once the system is running and the keyboard is on-line, direct control of a VCR is as follows:

- 1. Select an input (camera) that was programmed as a VCR on the keyboard. This will cause the keyboard's LCD to change to the VCR control menu illustrated in Figure 18.
- Activate a VCR function by pressing the blue button directly below the desired function's icon. All VCR functions require only a momentary key press for activation.
- 3. Control additional VCRs by repeating steps 1 and 2.

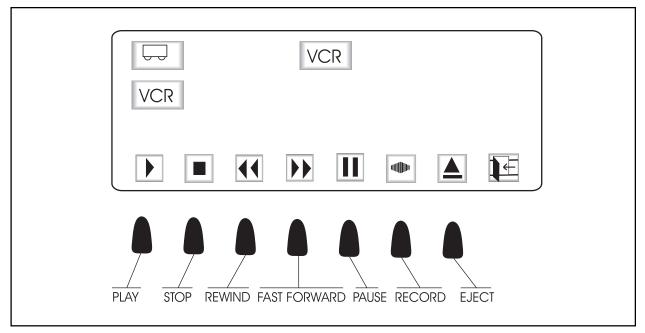


Figure 18. CM9760-KBD VCR Control Functions

# **6.0 SPECIFICATIONS**

<b>Electrical</b>			
Input Voltage:	Auto-ranging 100-240 VAC, 50/60 Hz		
Power:	Consumption: 30 vA		
Data Ports Input:	RS-422, RJ-45 connector DIP switch selectable baud rate		
Output:	RS-422, RJ-45 connector. DIP switch selectable baud rate		
Output:	DB-9 connector Factory use only		
Indicators:	2 power LEDs, green 1 activity LED, red		
Fusing:	500 mA, 250 V		
Relay Out:	Load rating for relay contacts: 0.50 A at 125 VAC or 1 A at 24 VDC		
General			
Dimensions	19.37" W x 1.73" H x 8.15" D (49.2 cm x 4.4 cm x 20.7 cm)		
Operating Temperature:	32°F to 158°F (0°C to 70°C)		
Weight:	7 lb (3.17 kg)		
<b>Mechanical</b>			
Connectors VCRC Input: Power: RS-422: RS-232: Relay Out:	Four dual-header, 32 input connectors with mating plugs 3-wire, #18 AWG Two RJ-45 connectors One DB-9 connector One 3-pin header with mating plug		
(Design and prod	(Design and product 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 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<sup>®</sup> 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<sup>®</sup>, CM6700/CM6800/CM9700 Series matrix, and DF5/DF8 Series fixed dome products.
- Two years on Spectra<sup>®</sup>, Esprit<sup>®</sup>, ExSite<sup>™</sup>, and PS20 scanners, including when used in continuous motion applications.
- Two years on Esprit<sup>®</sup> and WW5700 Series window wiper (excluding wiper blades).
- Eighteen months on DX Series digital video recorders, NVR300 Series network video recorders, and Endura<sup>™</sup> 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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