ADDENDUM

Addendum No.: C1577M-A

Date: August 4, 2004

Manuals Affected: CM9760 Series Manuals – **C538M, 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-C, 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-SAT QUICK START REFERENCE GUIDE FOR:

■ the 9760-SAT physical interface

■ setup parameters for **SAT** programming from the 9760-KBD

■ alarm implementation issues

CONNECT

THE CC1 TO THE **SAT** (RS-422)

Figure 1 shows a CM9760-SAT connected to a 9760 system. Of particular interest are the COMM and tie line connections. The **COMM** connection shown in **Figure 1** is the line between **port 7** on the CC1 and the **COM 2** connection on the **SAT**. This is detailed in **Figure 2**.
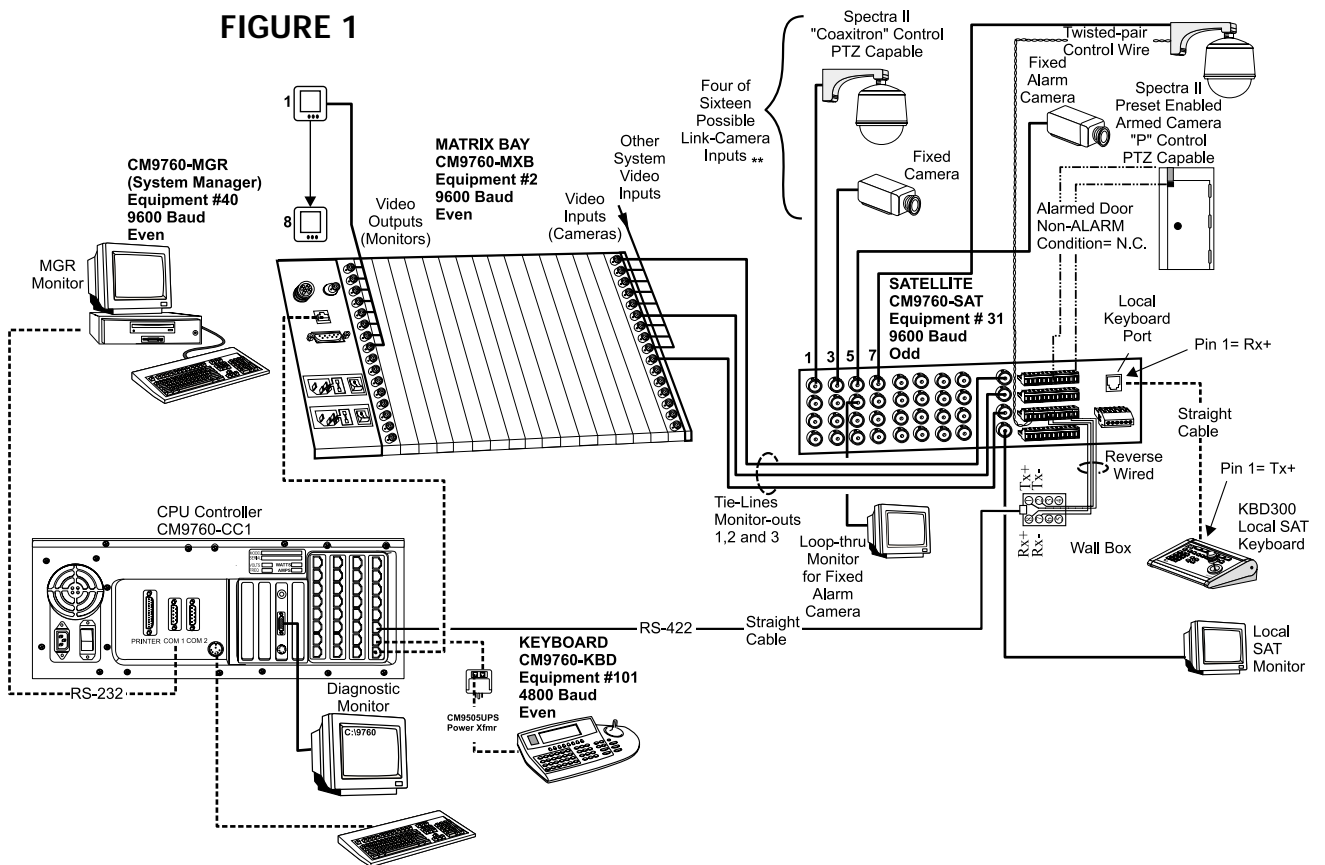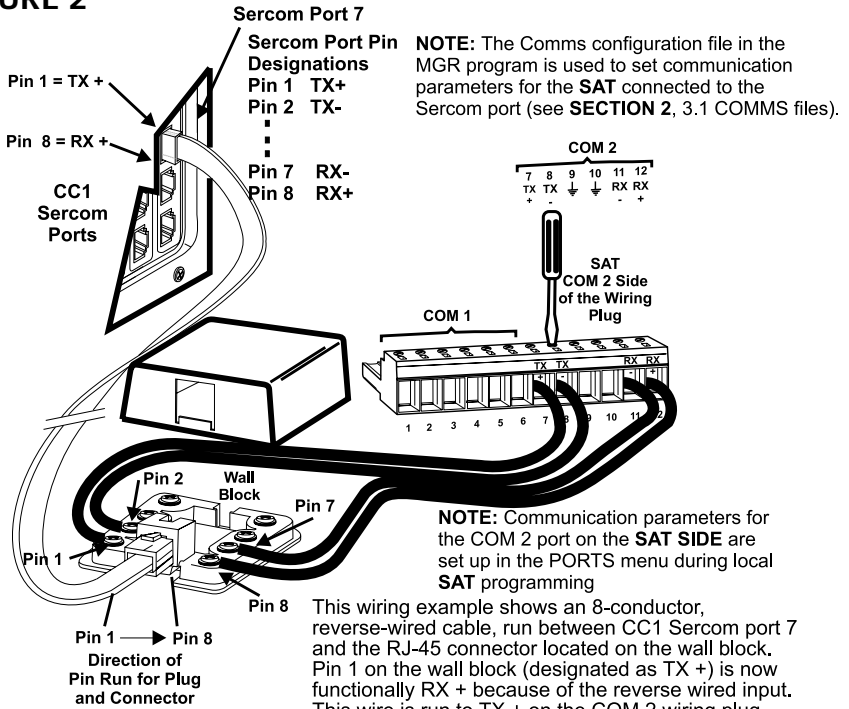
FIGURE 1

FIGURE 2

Sercom Port 7

Sercom Port Pin Designations
Pin 1   TX+
Pin 2   TX-
:
Pin 7   RX-
Pin 8   RX+

Pin 1 = TX +

Pin 8 = RX +

CC1 Sercom Ports

NOTE: The Comms configuration file in the MGR program is used to set communication parameters for the **SAT** connected to the Sercom port (see **SECTION 2**, 3.1 COMMS files).

COM 2

| 7 | 8 | 9 | 10 | 11 | 12 |
| TX+ | TX- | | | RX- | RX+ |

SAT
COM 2 Side
of the Wiring
Plug

COM 1

| | | | | TX | TX | | | | RX | RX |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | 10 | 11 |

THE CC1 TO THE SAT (TIE LINES)

Tie lines (a minimum of one, a maximum of four) are connected in sequential, ascending order to monitor-outs on the **SAT**. Don't skip around. Use **Figure 3** as a guide.

Pin 2   Wall Block   Pin 7

Pin 1

Pin 8

Pin 1 ———► Pin 8
Direction of Pin Run for Plug and Connector

NOTE: Communication parameters for the COM 2 port on the **SAT SIDE** are set up in the PORTS menu during local **SAT** programming

This wiring example shows an 8-conductor, reverse-wired cable, run between CC1 Sercom port 7 and the RJ-45 connector located on the wall block. Pin 1 on the wall block (designated as TX +) is now functionally RX + because of the reverse wired input. This wire is run to TX + on the COM 2 wiring plug, fulfilling the basic wiring requirement that TX + goes to RX +. Remaining wires are run in a similar manner (as shown) to satisfy RS-422 communication requirements. Had a "straight-" rather than a "reverse-wired" cable been used, the wiring from the wall block would be opposite that shown (see **Appendix I** if you need further clarification).

Wall Block Pin Designations

Pin 1	TX+	Pin 5	GND
Pin 2	TX-	Pin 6	Not Used
Pin 3	12VAC/DC	Pin 7	RX-
Pin 4	Non-Polar	Pin 8	RX+

NOTE: The terminal connections on the wall block are passive and functionally become whatever you connect to them. The wall block cap sometimes contains a pasted label which ascribes specific communication functions to each terminal. For a specific application, this might be alright but it can become confusing if you are using the wall block to do reverse-wiring and the functional description on the label doesn't match what you connected there.

FIGURE 3

CM9760-MXB

Proper tie line configuration also includes programming. On the **SAT SIDE**, the monitor menu is affected. On the **9760 SIDE**, flat files (COMMS, LINK CAMERAS, and CAMERAS) must be configured using the 9760 System Manager program.

Video Input Ports

Illustrated here, are two monitor-out connections (Mon 1 and Mon 2), run as tie lines to Matrix bay video inputs four and five, respectively.

CM9760-SAT

Monitor Out (Video Out)

NOTE:
Tie line assignments begin with the Mon 1 output. It should be connected to the lowest nuimbered available video input on the MXB. The next tie line is connected to the next highest available video input, and so on. This is shown in the illustration.
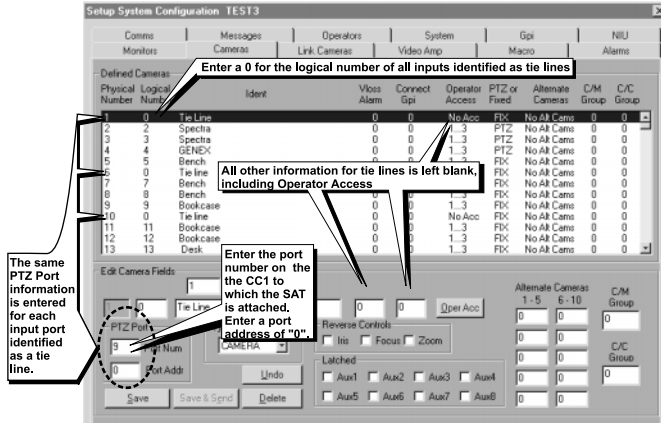
Video Tie Lines

PARAMETERS FOR SAT PROGRAMMING

In order to program and operate the SAT from the 9760-KBD, some preparatory groundwork must be laid by programming the following 9760 configuration files: the Comms, Camera and Link Camera files. Use Figures 4, 5 and 6, respectively, as guides. These are essentially the only files that need to be programmed on the 9760 SIDE for basic SAT operation.

FIGURE 4

The reference "TEST3" that appears in the title line below is the global name for the configuration files of this sample configuration set.

Note the Alarm Base Number. This should always be set equal to the number 1. The alarm base is reserved for possible future use. Until then it must be configured as noted.

COMM Parameters

In this example, the SAT is attached to port 9 of the CC1. The rest of the COMM parameters are entered into the Edit Port Fields and then saved.

FIGURE 5

Enter a 0 for the logical number of all inputs identified as tie lines

All other information for tie lines is left blank, including Operator Access

The same PTZ Port information is entered for each input port identified as a tie line.

Enter the port number on the the CC1 to which the SAT is attached. Enter a port address of "0".

FIGURE 6

Enter unique logical #'s. These numbers are used by 9760KBDs to call link-cams

Check for and allow appropriate operator access.

Enter the port number on the CC1 to which the SAT is attached. This should be the same for all defined cameras attached to the SAT in question.

The port address for each defined camera is unique and corresponds to the input port (1 of 16) on the SAT to which each camera is attached.

Programming **SAT** menus using a KBD200, 300 or 300V is the preferred method (it's easier and faster); otherwise, the 9760-KBD can be used. To access the **SAT** Main menu screen from the 9760-KBD requires that:

■ the programming files listed in SETUP be configured and loaded

■ the CC1 is initialized and the COMM link between the CC1 and SAT is active

■ at least one tie line is physically connected between the SAT and CC1

Next, ensure no one else (9760 SIDE) is using an **SAT** tie line.

Then:

1. Call up any link camera programmed in the Link Camera file of the MGR (see **Figure 6**). Use the associated logical number for the camera.

   NOTE: It is not necessary for the Link camera called to actually be connected to the **SAT** at this time. All that is happening here is that you, as the operator, are "isolating" a video tie line for the display transfer of the **SAT** menu to a 9760 monitor.

2. Press the ESC or the key, then press the **DEF** key. If this is the first time accessing that menu, enter the default PIN (**1234**).

3. Enter **89** in the keypad and press the **PRST** key (while still in the **DEF** menu). The main **SAT** programming menu will appear on the monitor in front of you. You may now proceed to program the **SAT**.
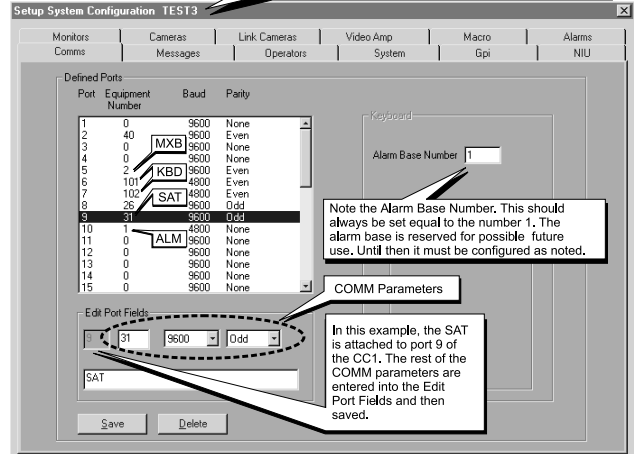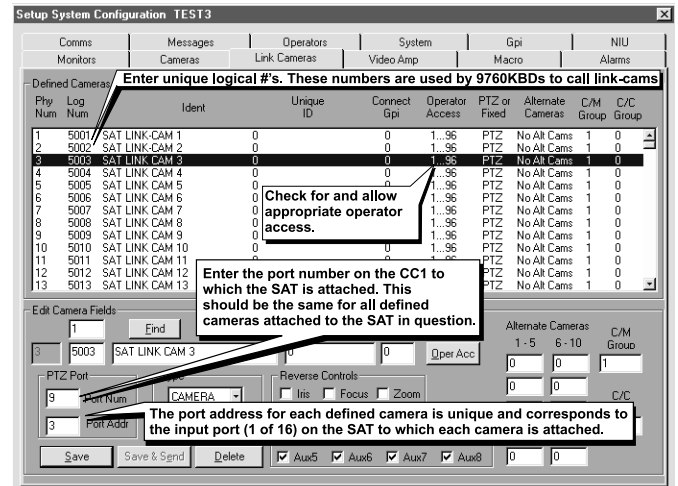
(if needed, reference the attached Default SAT Menu Settings Sheet)

Alarm programming involves configuring **SAT** Monitor and Alarm menus and, possibly, some 9760 System configuration files. If you program alarm functions without regard to the status of the monitor-out lines on the SAT, you are going to get into trouble. There is only one source of alarms on the **SAT**: the physical actuation of a relay input, going from its non-alarm to its alarm state. On the other hand, there are three alarm-reporting destinations possible and each destination is dependent on associated programming configurations. In one, the alarm is seen and acted upon by the **LOCAL SAT** only. In another, the alarm is seen and acted upon by the **9760 System** only. Finally, the alarm can be seen and acted upon by both the **LOCAL SAT** and the **9760 System** at the same time.

For each destination to be programmed, Pelco recommends that you not stray outside the guidelines outlined below for programming the various menus until you are quite familiar with the ramifications of doing so. Improper programming can lead to unexpected (but not uncorrectable) results that might lead you to believe that your equipment isn't operating properly. This built-in alarm reporting flexibility allows for a more versatile, dynamic, alarm environment. The trade-off is that you must be observant when configuring the menus.

LOCAL ONLY

For **LOCAL SAT** alarm viewing and reporting, at least one monitor-out line on the **SAT** must be configured as **LOCAL** and, connected to it, there should be a physical monitor for viewing purposes.

For the monitor connected to the monitor-out line just referenced, do the following:

In the SAT menus listed below	Do the following
MONITOR MENU	Set **ALM TYPE** to **AUTO** or **MAN**
	Set **VIEW** to **LOCAL**
	In the **ALARM ENABLE** sub-menu: *enable* alarms to be viewed
ALARM MENU	For the alarm inputs desired, choose an activation **TYPE** (**N.O.** or **N.C.**)
	ARM the alarm in the **LOCAL** column*
	Assign a preset # (**PRE**) if the alarm camera is preset capable and you want a preset called
	Make sure the System Alarm columns are zeroed-out.
	** Remember, **ALM 1** calls **SAT** camera 1, **ALM 2** calls **SAT** camera 2, and so on.*

SYSTEM ONLY

For **9760 SIDE** alarm viewing and reporting, at least one monitor-out line on the SAT must be configured as a **TIE LINE** and it should be connected to a video input line on the CM9760-MXB for viewing purposes.

For the monitor-out line just referenced as a **tie line**, do the following:

In the SAT menus listed below	Do the following
MONITOR MENU	Set **ALM TYPE** to **OFF**
	Set **VIEW** to **TIE LINE**
	In the **ALARM ENABLE** sub-menu, disable all alarms
ALARM MENU	For the alarm inputs desired, choose an activation **TYPE** (**N.O.** or **N.C.**)
	DIS-ARM (- -) all alarms in the **LOCAL ARM** column
	Zero-out all presets
	Enter a physical alarm # (as configured in the 9760-CC1) in the SYSTEM ALARMS column. *
	* This is the alarm that will be triggered on the CM9760-CC1.

System-only implementation of alarms also requires that configuration files be programmed on the **9760 SIDE** of the configuration. In the **Systems** Configuration file, specify an Alarm Control Mode of operation.

FIGURE 7

More importantly, in the **Comms** Configuration file:

⫸ *Assign* alarm monitors for the 9760 operator to view alarms on.

Alarm monitors, which the operator connected to port 6 can see, are assigned in the Comms file. Monitor display attributes are under control of the operation mode chosen in the System configuration file
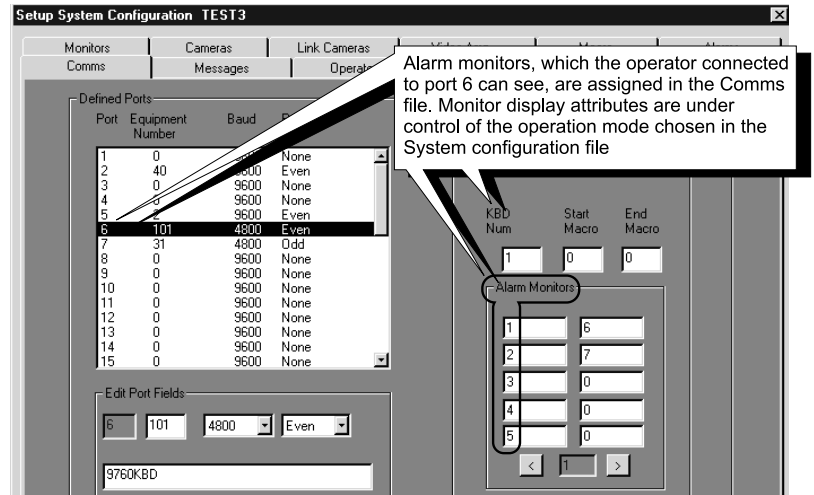
FIGURE 8

Of equal importance is the CC1 **Alarms** file:

⫸ Fill in the alarm information fields opposite the physical alarm # that matches the System Alarm # entered in the contact menu of the **SAT** Alarms file (see the **SYSTEM ALARMS** column reference under **SYSTEM ONLY** in the **SAT** Alarm Menu).

Enter an Alarm Dwell and grant Operator Access

The physical number chosen here corresponds to the number entered into the System Alarm column in the Alarm Programming menu on the SAT SIDE of the configuration

The associated logical number entered here is used on the 9760 SIDE as the reference number for ARMing alarms for the defined alarm from the 9760-KBD.

Be sure to assign at least one alarm camera for each defined alarm. The display from this camera is called in response to the defined alarm being activated on the SAT SIDE of the configuration.

COMBINED LOCAL AND SYSTEM

Here, you need to pay close attention to the specific monitor-out line you are setting menu attributes for. For all monitor-outs connected to a *LOCAL* monitor, assign *Monitor menu attributes* just as they were listed and discussed under LOCAL ONLY.

For all monitor-outs configured as a *TIE LINE*, assign *Monitor menu attributes* just as they were listed and discussed under **SYSTEM ONLY**.

The difference between LOCAL ONLY and SYSTEM ONLY as opposed to COMBINED or shared alarm implementation appears when the menu attributes in the Contact menu of the SAT ALARM file are assigned. It is here that we accommodate both LOCAL and SYSTEM alarm activation at the same time. This can best be seen in a side-by-side comparison of the menus for the three states of alarm activation.
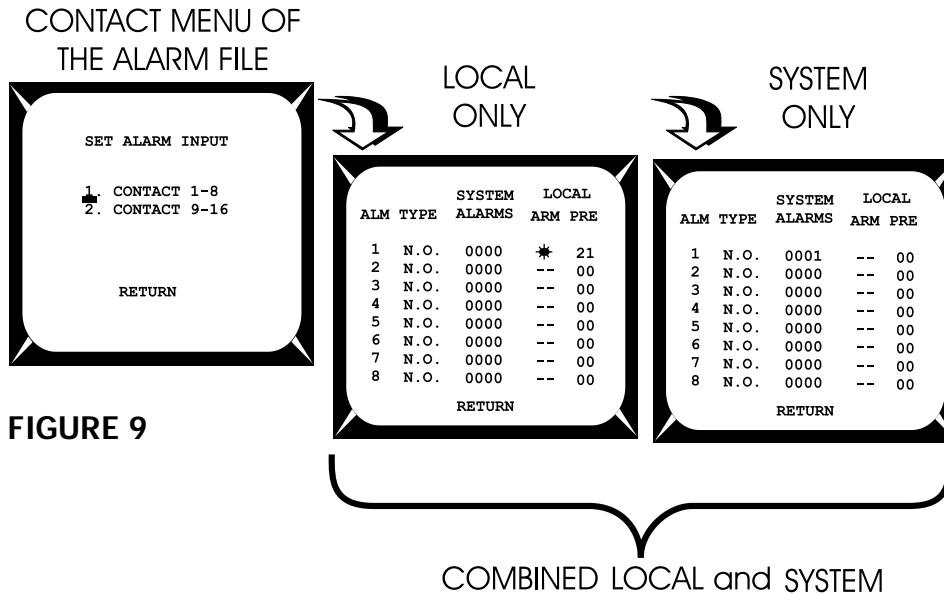
CONTACT MENU OF
THE ALARM FILE

```
SET ALARM INPUT

1. CONTACT 1-8
2. CONTACT 9-16


    RETURN
```

LOCAL ONLY

```
             SYSTEM    LOCAL
ALM TYPE     ALARMS   ARM PRE

1   N.O.     0000     ☀   21
2   N.O.     0000     --  00
3   N.O.     0000     --  00
4   N.O.     0000     --  00
5   N.O.     0000     --  00
6   N.O.     0000     --  00
7   N.O.     0000     --  00
8   N.O.     0000     --  00

          RETURN
```

SYSTEM ONLY

```
             SYSTEM    LOCAL
ALM TYPE     ALARMS   ARM PRE

1   N.O.     0001     --  00
2   N.O.     0000     --  00
3   N.O.     0000     --  00
4   N.O.     0000     --  00
5   N.O.     0000     --  00
6   N.O.     0000     --  00
7   N.O.     0000     --  00
8   N.O.     0000     --  00

          RETURN
```

FIGURE 9

COMBINED LOCAL and SYSTEM

```
             SYSTEM    LOCAL
ALM TYPE     ALARMS   ARM PRE

1   N.O.     0001     ☀   21
2   N.O.     0000     --  00
3   N.O.     0000     --  00
4   N.O.     0000     --  00
5   N.O.     0000     --  00
6   N.O.     0000     --  00
7   N.O.     0000     --  00
8   N.O.     0000     --  00

          RETURN
```

To complete alarm implementation for the combined example, you must carry through the System Alarm portion of the menu settings in the same manner that was done for System Alarm Only. That is, configure the 9760 CC1 configuration menus (System, Comms, and Alarm files), just as they were listed and discussed under **SYSTEM ONLY**.

```
         CAMERA 01


CAMERA TITLE
CAM1

RX TYPE: EXT COAXITRON



          RETURN
```

Same settings for each
of the sixteen cameras

```
PELCO VIDEO SWITCHER
MODEL CM9760-SAT V1.03
   SELECT:
      1. CAMERAS
      2. MONITORS
      3. TIME/DATE
      4. ALARMS
      5. PORTS
      6. AUXILIARIES
      7. PASSWORD
      8. ACCESS
      9. EXIT
```

```
        MONITOR 01

ALARM TYPE: OFF
ALARM DWELL: 02
DISPLAY: ★
T/D DISPLAY: --
VIEW: TIE LINE
1. CAMERA SEQUENCE
2. ALARM ENABLE
3. POSITION DISPLAY

        RETURN
```

Same settings for each
main monitor screen (1-4)

```
MONITOR 01 SEQUENCE MENU
 ENTRY 1-8      ENTRY 9-16
 CAM DWL PRE   CAM DWL PRE
 01  02  00     09  02  00
 02  02  00     10  02  00
 03  02  00     11  02  00
 04  02  00     12  02  00
 05  02  00     13  02  00
 06  02  00     14  02  00
 07  02  00     15  02  00
 08  02  00     16  02  00

         RETURN
```

Sequence screen the same
for each of the four monitors

Alarm enable screen the same
for each of the four monitors

```
         ACCESS


1. KEYBOARD TO MONITOR
2. MON TO CAMERA 1-10
3. MON TO CAMERA 11-16
OVERRIDE: LOCAL

        RETURN
```

```
       SET TIME / DATE


DATE:   JAN-01-00
TIME:   12:00:00 AM
STYLE:  MMM-DD-YY
TYPE:   12 HOUR


        SET CLOCK
```

```
MONITOR 01 ALARM ENABLE

ALM SET ALM  SET ALM SET

 1   --  7    --  13  --
 2   --  8    --  14  --
 3   --  9    --  15  --
 4   -- 10    --  16  --
 5   -- 11    --
 6   -- 12    --

        RETURN
```

```
KBD TO MONITOR ACCESS

KBD  MONITOR    PRESET
     1 2 3 4    ENABLE
1    Y Y Y Y      Y
2    Y Y Y Y      Y
4    Y Y Y Y      Y
5    Y Y Y Y      Y
6    Y Y Y Y      Y
7    Y Y Y Y      Y
8    Y Y Y Y      Y

        RETURN
```

```
      SET ALARM INPUT


1. CONTACT 1-8
2. CONTACT 9-16



        RETURN
```

```
                SYSTEM   LOCAL
ALM TYPE  ALARMS   ARM PRE

 1  N.O.   0000    --  00
 2  N.O.   0000    --  00
 3  N.O.   0000    --  00
 4  N.O.   0000    --  00
 5  N.O.   0000    --  00
 6  N.O.   0000    --  00
 7  N.O.   0000    --  00
 8  N.O.   0000    --  00

        RETURN
```

Contact settings for 1-8.
Settings for 9-16 are the same

```
MONITOR TO CAMERA ACCESS

MON  CAMERA
     1 2 3 4 5 6 7 8 9 10
1    Y Y Y Y Y Y Y Y Y Y
2    Y Y Y Y Y Y Y Y Y Y
3    Y Y Y Y Y Y Y Y Y Y
4    Y Y Y Y Y Y Y Y Y Y

        RETURN
```

```
         PORTS


1.  COM1 PORT
2.  COM2 PORT



        RETURN
```

```
          COM 1
        SET PORT



PROTOCOL   422P
BAUD RATE 2400



        RETURN
```

These are the port settings for the
connection to the CM9760-CC1

```
MONITOR TO CAMERA ACCESS

MON  CAMERA
     11 12 13 14 15 16
1     Y  Y  Y  Y  Y  Y
2     Y  Y  Y  Y  Y  Y
3     Y  Y  Y  Y  Y  Y
4     Y  Y  Y  Y  Y  Y

        RETURN
```

```
SET AUXILIARY MENU


AUX    SOURCE    MODE

F1     ALM       ---
F2     KBD       KEY
F3     KBD       LAT


        RETURN
```

```
          COM 2
        SET PORT



BAUD RATE 9600
PARITY    ODD
STOP BITS 1



        RETURN
```

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