Using a CM9760-DMR to Combine Multiple Control Devices

TechTips

HELPFUL TIPS FOR PELCO PRODUCTS

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Product Affected: CM9760-DMR Data Manager

PROBLEM: How do I combine multiple control devices to operate a camera or group of cameras?

SOLUTION: When configured for use as a data merger, the CM9760-DMR allows up to four keyboards, PelcoNets, matrix switchers or other control devices to share control of up to 32 cameras via Pelco's "P" protocol.

The illustration below shows three KBD300 keyboards and a PelcoNet receiver controlling a Spectra dome. The CM9760-DMR links all four control devices to the camera(s) allowing PTZ operation from any of the keyboards or from a distant PC browser via the PelcoNet receiver.

Up to 16 cameras can be controlled. Because there is no switch in this application, the PelcoNet will observe and control only camera 1. At the keyboards, cameras must be dedicated to individual monitors, looped between keyboard locations. Since PelcoNet doesn't have a looping video input, it would be the last device in the chain. An easy way to monitor 4 cameras is to use quad monitors.

When configured for direct mode, the KBD300 keyboards output "P" protocol. Refer to the illustration for switch settings.
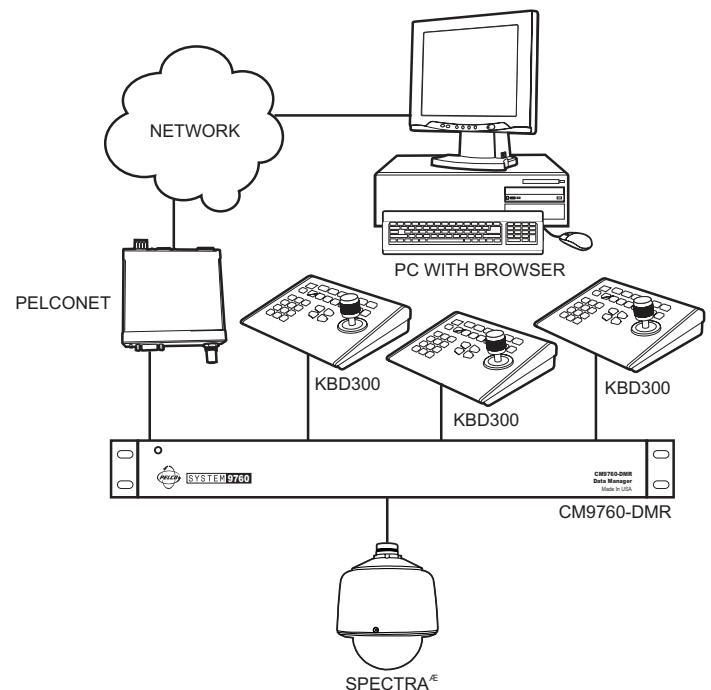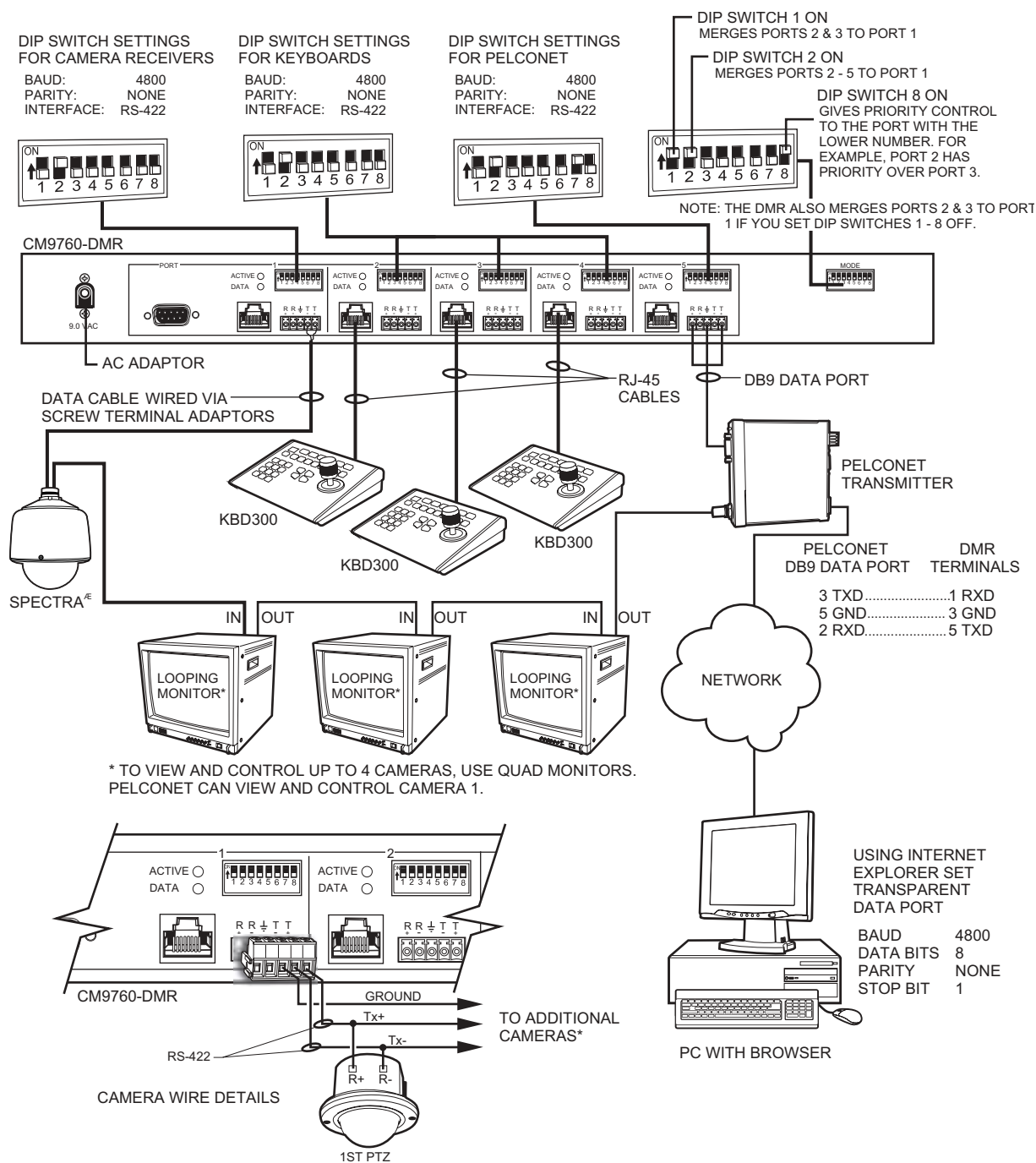

Figure 1. Block Diagram

DIP SWITCH SETTINGS
FOR CAMERA RECEIVERS

BAUD: 4800
PARITY: NONE
INTERFACE: RS-422

DIP SWITCH SETTINGS
FOR KEYBOARDS

BAUD: 4800
PARITY: NONE
INTERFACE: RS-422

DIP SWITCH SETTINGS
FOR PELCONET

BAUD: 4800
PARITY: NONE
INTERFACE: RS-422

DIP SWITCH 1 ON
MERGES PORTS 2 & 3 TO PORT 1

DIP SWITCH 2 ON
MERGES PORTS 2 - 5 TO PORT 1

DIP SWITCH 8 ON
GIVES PRIORITY CONTROL
TO THE PORT WITH THE
LOWER NUMBER. FOR
EXAMPLE, PORT 2 HAS
PRIORITY OVER PORT 3.

NOTE: THE DMR ALSO MERGES PORTS 2 & 3 TO PORT
1 IF YOU SET DIP SWITCHES 1 - 8 OFF.

CM9760-DMR

AC ADAPTOR

DATA CABLE WIRED VIA
SCREW TERMINAL ADAPTORS

RJ-45
CABLES

DB9 DATA PORT

PELCONET
TRANSMITTER

KBD300

KBD300

KBD300

SPECTRA^Æ

IN OUT   IN OUT   IN OUT

LOOPING
MONITOR*

LOOPING
MONITOR*

LOOPING
MONITOR*

NETWORK

PELCONET   DMR
DB9 DATA PORT   TERMINALS

3 TXD.....................1 RXD
5 GND...................3 GND
2 RXD....................5 TXD

* TO VIEW AND CONTROL UP TO 4 CAMERAS, USE QUAD MONITORS.
PELCONET CAN VIEW AND CONTROL CAMERA 1.

USING INTERNET
EXPLORER SET
TRANSPARENT
DATA PORT

BAUD 4800
DATA BITS 8
PARITY NONE
STOP BIT 1

CM9760-DMR

GROUND

Tx+

TO ADDITIONAL
CAMERAS*

Tx-

RS-422

R+ R-

CAMERA WIRE DETAILS

1ST PTZ

PC WITH BROWSER

Figure 2. Wiring Diagram