Product: SentryVMS –Client/Monitor Station, Pelco Spectra IV camera, Vivotek VS70100 Encoder, Talk-A-Phone.

Document Brief: This document explain how to enter presets and pattern in to a system composed of a Pelco Spectra IV camera and a Vivotek VS7100 encoder. To setup default Pelco camera presets in the camera itself you must connect a Pelco intelligent keyboard such as a KBD300. These presets will be over written by Vivotek encoder Presets, but not originated by the Encoder. As discussed below Pelco preset #1 cannot be overwritten.

Keyboard Configuration for KBD300

KBD300 Notes:

1. The KBD300 is fixed 4800 baud and channel 02. If a KBD300A is used, these parameters may be changed.
2. Notation like [KEYNAME] means to press that named key on the KBD300.
3. Set Dip Switch next to RJ45 (undercover) Switch 5 ON
4. RJ45 Wiring with Standard Ethernet Colors

EIA/TIA 568B	
WIRING STANDARD	
PIN	**Wire Color**
1	White w/**Orange** Stripe
2	**Orange**
3	White w/**Green** Stripe
4	**Blue**
5	White w/**Blue** Stripe
6	**Green**
7	White w/**Brown** Stripe
8	**Brown**
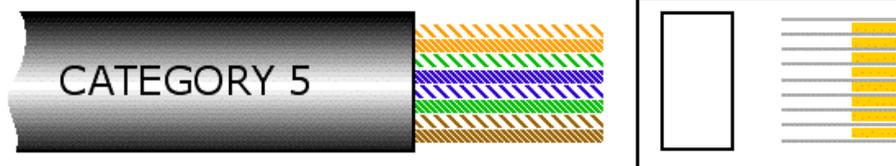
- Pins 5 and 6 (White/Blue and Green wire) are 12 volt supply
- Pin 7 (White/Brown) goes to Pelco camera Rx-
- Pin 8 (Brown Wire) goes to Pelco camera Rx+

PWR- GND PWR+ RX- RX+ TX- TX+ UTP+ UTP-
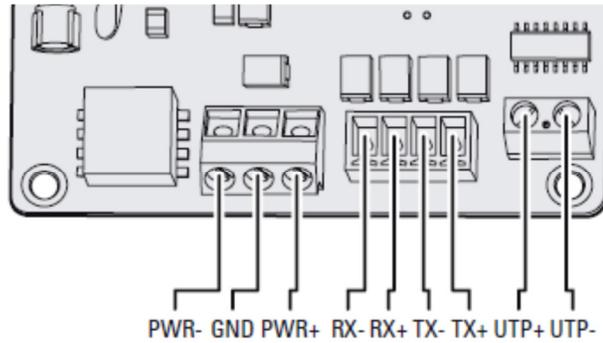
Camera Setup Spectra IV

Task: Set physical switches in the camera

SW 1 - Switch One – **ON**

SW2 – Switch Six – **ON**

All other DIP switches **OFF**

Programming Spectra IV

Open the Vivotek Browser window for viewing the camera image
Verify camera DIP switch settings and baud rate selection in the power up screen
Wait until the power screen leaves then:

Enter 02 [MON]

Enter 02 [CAM]

Verify joystick control operation

Task: Enter programming mode using preset 95 on the keyboard numeric keypad

Enter 95 [PRESET] Hold PRESET until menu appears on screen

Task: Select what to do on power-up

Joystick down to **DOME SETTINGS [OPEN]**

Joystick down to **POWER-UP [OPEN]**

 Press **[OPEN]** again and joystick down until your selection is **PATTERN 1 [OPEN]**

Select **BACK [OPEN]**

Task: Enter bench presets

> Note: Select the desired view for this preset using the joystick. Preset #1 must be straight down and wide angle and will not be changed in the future. All others may be anywhere including straight down wide angle as they will be changed after installation. But, we recommend making them random around your shop to check pattern operation.

You should be back at the **DOME SETTINGS** menu

Joystick down to PRESETS **[OPEN]** Hit the Open Key

Top line selects the **PRESET NUMBER [OPEN]** Hit the Open Key

Choose your PRESET Number – start with 1 **[OPEN]** Hit the Open Key

Joystick down to **EDIT PRESET SCENE [OPEN]** Hit the Open Key

Joystick to **SAVE** and repeat this for each of your bench presets.

> Note: The number of presets you add directly into the camera here should be one less than the number of installed Presets you actually need. This is because entering the "real" names and locations for these presets using the Vivotek encoder will cause ONE MORE preset to be created in the tour and leave preset #1 as un-editable. This is why preset 1 was entered as straight down and wide angle.

Exit Menu System using **[CLOSE]** key

Task: Create the pattern out of these presets.

Enter **01 [PATTERN]**

You should see a two line message on the screen for the amount of Pattern memory that has been used. This will read zero, even after you are done.

Enter **1 [PRESET]**

> Note: The time between entering **PRESETS** is the amount of time the camera will dwell there. This cannot be adjusted later. This is quite rudimentary but it is how a Pelco works.

Enter **2 [PRESET]**

Repeat for all PRESETS that have been entered

Enter **[ACK]**

Wait 60 seconds and your default Pattern should begin to execute. You are done with camera. Test by turning power OFF then ON. Default pattern should resume after reboot.

Power down the camera

Disconnect your Keyboard cable from the camera base and attach your VS7100 Tx+ and Tx- wires.

Vivotek Encoder

Task: Wiring the Vivotek encoder to the Talk-A-Phone

Connect the Vivotek **RS485A** (terminal-5) to Pelco Camera **Rx+** and RS485B (terminal-6) to the Pelco Camera **Rx-**

Connect a momentary switch to Vivotek terminal-2 and 3, this is your panic button. For the Talk-A-Phone use the Red and White wires (Auxiliary Output 1,) if not available, use Orange and Black (Auxiliary Output 2)

1: Power
2: Ground
3: Digital input
4: Digital Output
5: RS485_A
6: RS485_B

Pin	Name	Specification	Remarks
1	Power	12VDC ± 5%, max. 1.5A	Max. rating 2A
2	Ground		
3	Digital input	OPEN/Short-to-GND, isolation 2kV	Internal pull-up
4	Digital output	Max. 40VDC, max. 400mA, isolation 2kV	
5	RS485_A	100Ω termination	
6	RS485_B	100Ω termination	

Rear connector

Task: Configure Vivotek encoder.

Access the Vivotek encoder through its built-in web page.

Select **Configuration [left mouse]**

Select **System [left mouse]**

Verify Digital Input is **High**; the current status will change from **Normal** to **Triggered** as you push the wired panic button.

Select **Save [left mouse}**

Under **Configuration** select **Network [left mouse]**

Enter the encoder's desired fixed IP Address and Port information. Port 80 should not be used for security reasons. Make note of these values. Use the same port but different IP addresses for each server.

Select **Save [left mouse}**

Select **Configuration [left mouse]**

Select **Camera control [left mouse]**

Select **PTZ camera**

Select **PTZ driver : Pelco D protocol**

Select **Baud Rate 4800**

Select **Save [left mouse}**

Verify you have control of the camera in the Vivotek browser **Home** view

Select **Configuration [left mouse]**

Select **Camera control [left mouse]**

Select **Preset Positions [left mouse]**

Enter your visual views (locations) and names for your presets. Enter one less here than the total number you expect in the final pattern. These presets will replace the Pelco's presets in the camera's memory except for Pelco preset 1 which was straight down. These will now be your default pattern (tour) on power up. Assuming you entered 5 presets in the cameras and 5 presets here, the total will now be six (6) in the pattern with the 5 entered here having been shifted by one to become 2 through 6.

Note: The first time you save these presets into the camera from the Encoder, the names you choose in the Encoder are embedded in the camera's pattern and cannot be changed by future editing. The position and zoom of the camera view for each preset can be changed later but the name cannot. So either use generic names like "Preset 01", etc. or get them right the first time! Thanks to Pelco for all this wonderful stuff.

You may add additional presets here that will be available SentryVMS Client only and not become part of the pattern (outside of pattern.) If you jump to a preset or move the camera manually with the digital joystick you will retain the viewed image for 60 seconds before the camera will start its tour once again.

This means that the best way to add the "emergency" presets will be by entering some that are outside of the pattern and calling those from the rules in SentryVMS Client.

Right click on the IP Server icon in your Tray near the system clock.

Select "Restart IP Server" Restart process could take up to 2 minutes depending on camera response

Using Vivotek VS7100 with Montor Station

Note: Ensure username/password are correct and Shared IP Address is selected and Camera number is "1"