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## C3 Pelco P ptz

### GENERAL INFORMATION

**SIMPLWINDOWS FILE NAME:** C3 pelco p ptz.umc

**CATEGORY:** Camera

**CURRENT VERSION:** 1.00

**PROGRAMMER:** GO

**SUMMARY:** This module will control PTZ cameras that comply with the Pelco P protocol

**SYSTEMBUILDER COMPATIBLE** Yes

### GENERAL NOTES:

This module provides most of the functional commands required to control a PTZ camera complying with the Pelco P format.

It is capable of pan/tilt and zoom functions plus many other commands that are documented below.

The module supports x/y joystick functions to allow for pan/tilt with speed control. This will mimic the action of a standard PTZ joystick on the touchpanel using a 'trackpad'.

This module should work directly from the processor com ports which simply need to be set to RS-485. A suitable RS-485 cable will need to be prepared. The wiring info for this is detailed below.

Note: If using an electrostatic screen on the RS-485 cable, it should only be connected at one end. A termination resistor may be required depending on cable infrastructure & number of cameras.

#### Setup:

- Ensure that the PTZ camera can be controlled using a standard camera keypad
- Within the simpl windows program configure the port to RS-485 and set the baud rate to match the camera
- Prepare a suitable RS-485 2-wire connection (details below)
- Set the module 'address' parameter to match the PTZ camera

#### Touchpanel setup:

To use the pan/tilt joystick functions; the VT-Pro project will need some setting up.

- Place a slider object in the project
- Select the slider Properties
- Select the 'Design' tab
- Set 'Dimension' to 2D
- Check 'Signed Feedback'
- Select the 'Analog Touch/Feedback Join' from the drop down & set the join number. (the second join will be filled automatically)  
Note: the first assigned join will be 'Pan', the second join will be 'Tilt'
- Select 'Signed Touch' from the drop down & enable it
- Select 'Spring Return' from the drop down & enable it
- Select [OK]

Joystick values for the 2D slider are as follows:

Pan Left: -32768 to 0d  
Pan Right: 0 to 32767d  
Tilt Up: 0 to 32767d  
Tilt Down: -32768 to 0d



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|                                  |  |
|----------------------------------|--|
| <b>REQUIRED AUXILIARY FILES:</b> | Pelco p crc.usp  |
| <b>COMMS SETUP:</b>              | RS-485 4800 (Default), 8, 1, N. Handshaking: None. RTS/CTS is not used   |
| <b>CABLE DIAGRAM:</b>            | <p>The diagram shows an RS485 interface with a 6-pin connector. Pin 1 is connected to a shield. Pin 2 is connected to the A (-) terminal of the first camera module. Pin 3 is connected to the B (+) terminal of the first camera module. Pin 4 is connected to the A (-) terminal of the second camera module. Pin 5 is connected to the B (+) terminal of the second camera module. Pin 6 is connected to the A (-) terminal of the third camera module. A 120 ohm resistor (Rt) is connected between pins 2 and 4. An optional ground connection is shown between pins 1 and 6.</p> |

| INPUT DEFINITIONS           |          |  |
|-----------------------------|----------|--|
| <b>tx\$</b>                 | <b>S</b> | RS-485 serial data to camera   |
| <b>[pan.left]</b>           | <b>D</b> | Pan left. Speed is determined by <b>[pan.speed]</b> input & 'default pan speed' parameter  |
| <b>[pan.right]</b>          | <b>D</b> | Pan right. Speed is determined by <b>[pan.speed]</b> input & 'default pan speed' parameter   |
| <b>[pan]</b>                | <b>A</b> | Joystick control providing x co-ordinates for pan. This works in a similar fashion to a PTZ keyboard. The further from the default rest point the faster the panning action  |
| <b>[pan.speed]</b>          | <b>A</b> | Slider input to set the speed for the <b>[pan.left/right]</b> inputs. Value is 0-65535d<br>Note: If turbo mode has been enabled, adjusting this value will cancel turbo mode |
| <b>[turbo]</b>              | <b>D</b> | Enables turbo speed mode. When this mode is enabled the current speed setting is stored. When turbo is disabled the stored speed setting is recalled                         |
| <b>[tilt.up]</b>            | <b>D</b> | Tilt up. Speed is determined by <b>[tilt.speed]</b> input & 'default tilt speed' parameter   |
| <b>[tilt.down]</b>          | <b>D</b> | Tilt down. Speed is determined by <b>[tilt.speed]</b> input & 'default tilt speed' parameter   |
| <b>[tilt]</b>               | <b>A</b> | Joystick control providing y co-ordinates for tilt. This works in a similar fashion to a PTZ keyboard. The further from the default rest point the faster the tilt action    |
| <b>[tilt.speed]</b>         | <b>A</b> | Slider input to set the speed for the <b>[tilt.up/down]</b> inputs. Value is 0-65535d  |
| <b>[iris.open/close]</b>    | <b>D</b> | Open or close the camera iris  |
| <b>[focus+/-]</b>           | <b>D</b> | Set the camera focus   |
| <b>[focus.lens.speed.n]</b> | <b>D</b> | Set the focus speed time. 1-4  |
| <b>[zoom+/-]</b>            | <b>D</b> | Zoom between wide & tele mode  |
| <b>[zoom.lens.speed.n]</b>  | <b>D</b> | Set the zoom speed time. 1-4   |
| <b>[set.preset]</b>         | <b>D</b> | Usually will store position for the currently selected preset. These functions may change from camera to camera  |

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|                |   |   |
|----------------|---|---|
| [goto.preset]  | D | Usually will position the camera to a stored preset |
| [clear.preset] | D | Clears the currently selected preset                |
| [preset]       | A | Select a preset (1-255)                             |

## OUTPUT DEFINITIONS

|                 |   |   |
|-----------------|---|---|
| [rx\$]          | S | Currently serves no function & may be omitted                     |
| [ack.fb]        | D | Currently serves no function & may be omitted                     |
| [pan.speed.fb]  | A | Indicates the current pan speed. Feedback to panel slider object  |
| [turbo.fb]      | D | Indicates turbo mode. Feedback to panel button                    |
| [tilt.speed.fb] | A | Indicates the current tilt speed. Feedback to panel slider object |
| [preset.fb]     | A | Feedback for the currently selected preset                        |

## PARAMETERS

|                    |     |   |
|--------------------|-----|---|
| address            | (s) | Set the module address for the camera. Remember to set in hex or decimal equivalent<br>For instance address 16 decimal is 10 hex  |
| default pan speed  | (a) | Set the initial pan speed after a system boot. The following are valid:<br>Decimal (d), Hexadecimal (h) & Percentage (%).<br>Default value is 50%<br>Range is 1-65535d  |
| default tilt speed | (a) | Set the initial tilt speed after a system boot. The following are valid:<br>Decimal (d), Hexadecimal (h) & Percentage (%).<br>Default value is 50%<br>Range is 1-65535d |

## REVISION NOTES

|      |    |   |
|------|----|---|
| 1.00 | GO | <ul style="list-style-type: none"><li>Initial Release</li></ul> |
|------|----|---|

### COMMENTS:

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