

**SIMPLWINDOWS NAME:** None

**CATEGORY:** Camera

**VERSION:** None

**SUMMARY:** This module is used to control a ParkerVision Cameraman System II. A CNXCOM port or ST-COM port must be used. It provides control of up to 16 cameras on a single CNXCOM port. However, only one camera can be controlled at a time. It also provides access to 125 pan/tilt/zoom presets, as well as setup and access to 16 autotracking window presets.

**GENERAL NOTES:** None

**CRESTRON HARDWARE:** CNXCOM, ST-COM

**SETUP OF CRESTRON HARDWARE:** The communications format between the ParkerVision and the Crestron system is as follows:

Baud Rate - 9600  
 Parity - None  
 Bits - 8  
 Stop Bits - 1

**DEVICE FIRMWARE:** None

**DEVICE SETUP:** The cable connecting the Crestron system to the ParkerVision must be plugged into the RS232 input on the Base Station.

The following dip switches need to be set on the camera unit:

- Protocol - must be in the BASIC (up) position
- Memory - must be in the UNLOCK (up) position
- Interlink - must be in the ENABLE (down) position if more than one camera will be on the bus.

The rotary BASE UNIT ADDRESS switch sets the address of the camera. Position 0 corresponds to CAMERA-1 on the module. Position 1 corresponds to CAMERA-2, etc.

**CABLE DIAGRAM:** The cable connecting the CNXCOM port to the ParkerVision should be as follows:

CNXCOM/ST-COM	to	ParkerVision
9 pin female D	to	9 pin male D
2	to	2
3	to	3
5	to	5

**CONTROL:**

**CAMERA-1-16** Digital inputs used to select which camera to control. These inputs should be pulsed (from buttons, buffers, etc.). The camera chosen will be reflected on the CAMERA-1-16-FB outputs

**TILT-UP** Activate tilt up for as long as input is high

**TILT-DOWN** Activate tilt down for as long as input is high

<b>PAN-LEFT</b>	Activate pan left for as long as input is high
<b>PAN-RIGHT</b>	Activate pan right for as long as input is high
<b>ZOOM-IN</b>	Activate zoom in for as long as input is high
<b>ZOOM-OUT</b>	Activate zoom out for as long as input is high
<b>FOCUS-NEAR</b>	Activate focus near for as long as input is high
<b>FOCUS-FAR</b>	Activate focus far for as long as input is high
<b>FOCUS-AUTO-ON</b>	Activate Auto focus
<b>IRIS-OPEN</b>	Activate iris open at rate of 1 step per second
<b>IRIS-CLOSE</b>	Activate iris close at rate of 1 step per second
<b>GAIN-UP</b>	Activate gain up at rate of 1 step per second
<b>GAIN-DOWN</b>	Activate gain down at rate of 1 step per second
<b>IMAGE-AUTO-ON</b>	Activate auto image
<b>PRESET-1-25</b>	Select camera presets. If pressed while PRESET-STORE-FB is high, the current position of the camera will be stored to the selected preset. If pressed while PRESET-STORE-FB is low, then the selected preset will be recalled. Presets 1-3 correspond to the three presets on the ParkerVision remote
<b>PRESET-STORE</b>	Toggles STORE function on and off for preset storing and recalling
<b>SPEED-SLOW</b>	Set pan/tilt speed to slow - no ramping
<b>SPEED-MEDIUM</b>	Set pan/tilt speed to medium - no ramping
<b>SPEED-FAST</b>	Set pan/tilt speed to fast - no ramping
<b>SPEED-RAMP</b>	Set pan/tilt to use ramping function. Camera will start at speed defined by low end of ramp, and gradually increase to speed defined by high end of ramp
<b>SET-LOW-RAMP-UP</b>	Increase the setting of the low end of ramp - reflected at SET-LOW-RAMP-AN output
<b>SET-LOW-RAMP-DN</b>	Decrease the setting of the low end of ramp - reflected at SET-LOW-RAMP-AN output
<b>SET-HIGH-RAMP-UP</b>	Increase the setting of the high end of ramp - reflected at SET-HIGH-RAMP-AN output
<b>SET-HIGH-RAMP-DN</b>	Decrease the setting of the high end of ramp - reflected at SET-HIGH-RAMP-AN output
<b>TRACK-PSET-1-16</b>	Select autotrack presets. If pressed while TRACK-STORE-FB is high, the current autotrack settings will be stored to the selected preset. If pressed while TRACK-STORE-FB is low, then the selected autotrack settings will be recalled. Presets 1-4 correspond to the auto TRACK VIEWS on the ParkerVision remote
<b>TRACK-STORE</b>	Toggles STORE function on and off for autotrack storing and recalling
<b>PAN-OFFSET-L</b>	Autotrack adjust pan offset to the left
<b>PAN-OFFSET-R</b>	Autotrack adjust pan offset to the right
<b>TILT-OFFSET-L</b>	Autotrack adjust tilt offset up
<b>TILT-OFFSET-R</b>	Autotrack adjust tilt offset down
<b>INCREMENT-PAN</b>	Autotrack increase the size of the pan window
<b>DECREMENT-PAN</b>	Autotrack decrease the size of the pan window
<b>INCREMENT-TILT</b>	Autotrack increase the size of the tilt window
<b>DECREMENT-TILT</b>	Autotrack decrease the size of the tilt window
<b>INCREASE-SENS</b>	Autotrack increase the tracking sensitivity
<b>DECREASE-SENS</b>	Autotrack decrease the tracking sensitivity
<b>WINDOW-CENTER</b>	Autotrack set window relative to center of view
<b>WINDOW-SUBJECT</b>	Autotrack set window relative to subject

## FEEDBACK:

<b>CAMERA-1-16-FB</b>	Indicate which camera is currently being controlled
<b>PRESET-1-25-FB</b>	Indicate which preset is currently active for the selected camera
<b>PRESET-STORE-FB</b>	Indicate the state of the preset store function
<b>SPEED-SLOW-FB</b>	Indicate if pan/tilt speed is slow
<b>SPEED-MEDIUM-FB</b>	Indicate if pan/tilt speed is medium
<b>SPEED-FAST-FB</b>	Indicate if pan/tilt speed is fast
<b>SPEED-RAMP-FB</b>	Indicate if pan/tilt speed uses ramp function
<b>SET-LOW-RAMP-AN</b>	Analog value indicating position of low end of ramp speed - can be routed to a bargraph on a touchpanel
<b>SET-HIGH-RAMP-AN</b>	Analog value indicating position of high end of ramp speed - can be routed to a bargraph on a touchpanel
<b>TRACK-PSET-1-16-FB</b>	Indicate which autotracking preset is currently selected for the selected camera
<b>TRACK-STORE-FB</b>	Indicate the state of the autotrack preset store function
<b>PVCAM-TX\$</b>	Serial data string to be routed to a CNXCOM or ST-COM

**OPS USED FOR TESTING:** 3.16.08

**COMPILER USED FOR TESTING:** 3.18.04

**WORKSHOP USED FOR TESTING:** 5.24

**SAMPLE PROGRAM:** A sample program was written - PARKATST.CN2, PARKATST.PRJ to demonstrate the use of the module

**REVISION HISTORY:** None