

**SIMPLWINDOWS
NAME:**

None

CATEGORY:

Camera

VERSION:

None

SUMMARY:

This module is used to control a ParkerVision Cameraman System II with the addition of joystick control over PAN, TILT, ZOOM, FOCUS, and IRIS. 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 25 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
Data 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
PAN-LEFT	Activate pan left for as long as input is high
PAN-RIGHT	Activate pan right for as long as input is high
ZOOM-IN	Activate zoom in for as long as input is high
ZOOM-OUT	Activate zoom out for as long as input is high
FOCUS-NEAR	Activate focus near for as long as input is high
FOCUS-FAR	Activate focus far for as long as input is high
FOCUS-AUTO-ON	Activate Auto focus
IRIS-OPEN	Activate iris open at rate of 1 step per second
IRIS-CLOSE	Activate iris close at rate of 1 step per second
GAIN-UP	Activate gain up at rate of 1 step per second
GAIN-DOWN	Activate gain down at rate of 1 step per second
IMAGE-AUTO-ON	Activate auto image
PRESET-1-25	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
PRESET-STORE	Toggles STORE function on and off for preset storing and recalling
SPEED-SLOW	Set pan/tilt speed to slow - no ramping
SPEED-MEDIUM	Set pan/tilt speed to medium - no ramping
SPEED-FAST	Set pan/tilt speed to fast - no ramping
SPEED-RAMP	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
SET-LOW-RAMP-UP	Increase the setting of the low end of ramp - reflected at SET-LOW-RAMP-AN output
SET-LOW-RAMP-DN	Decrease the setting of the low end of ramp - reflected at SET-LOW-RAMP-AN output
SET-HIGH-RAMP-UP	Increase the setting of the high end of ramp - reflected at SET-HIGH-RAMP-AN output
SET-HIGH-RAMP-DN	Decrease the setting of the high end of ramp - reflected at SET-HIGH-RAMP-AN output
TRACK-PSET-1-16	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
TRACK-STORE	Toggles STORE function on and off for autotrack storing and recalling
PAN-OFFSET-L	Autotrack adjust pan offset to the left
PAN-OFFSET-R	Autotrack adjust pan offset to the right
TILT-OFFSET-L	Autotrack adjust tilt offset up
TILT-OFFSET-R	Autotrack adjust tilt offset down
INCREMENT-PAN	Autotrack increase the size of the pan window
DECREMENT-PAN	Autotrack decrease the size of the pan window
INCREMENT-TILT	Autotrack increase the size of the tilt window
DECREMENT-TILT	Autotrack decrease the size of the tilt window
INCREASE-SENS	Autotrack increase the tracking sensitivity
DECREASE-SENS	Autotrack decrease the tracking sensitivity
WINDOW-CENTER	Autotrack set window relative to center of view
WINDOW-SUBJECT	Autotrack set window relative to subject

TILT_JOY	Analog input for joystick control over camera's tilt function
PAN_JOY	Analog input for joystick control over camera's pan function
ZOOM_JOY	Analog input for joystick control over camera's zoom function
IRIS_JOY	Analog input for joystick control over camera's iris function
TILT_RANGE	Analog input to adjusts the sensitivity for tilt control
PAN_RANGE	Analog input to adjusts the sensitivity for pan control

FEEDBACK:

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

PARAMETERS:

DEADBAND_MAX (%) Sets deadband maximum (in %) for joystick control

DEADBAND_MIN (%) Sets deadband minimum (in %) for joystick control

(DEADBAND is an area defined as a "dead band" where the joystick controllers do not generate any information out of the module. A suggested setting for MAX is 55% and for MIN is 45%. This allows for a 10% (-5% to +5%) area of inactivity)

OPS USED FOR TESTING:	5.11.65
COMPILER USED FOR TESTING:	1.00.40 SIMPL Windows Version 1.51.08
SAMPLE PROGRAM:	A sample program was written - parkerjoy.smw, CT-1500.vtp, CT-3200.vtp to demonstrate the use of the module
REVISION HISTORY:	None