

**Partner:** Elmo  
**Model:** PTC-100S  
**Device Type:** Camera



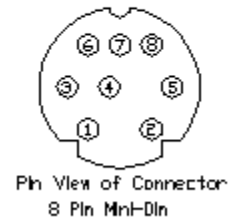
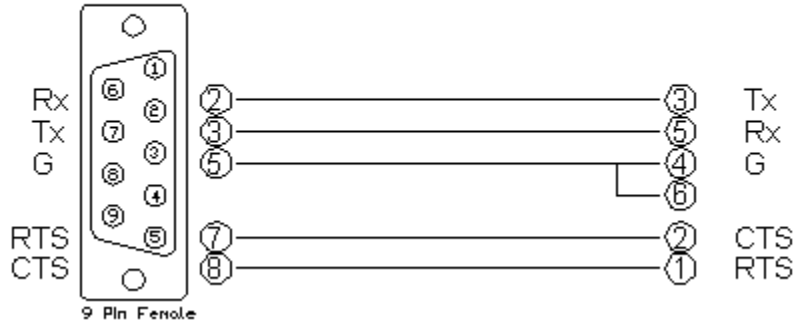
## GENERAL INFORMATION

<b>SIMPLWINDOWS NAME:</b>	Elmo PTC-100S Camera Control with Joysticks
<b>CATEGORY:</b>	Camera
<b>VERSION:</b>	1.0
<b>SUMMARY:</b>	This module controls the Elmo PTC-100S.
<b>GENERAL NOTES:</b>	<p>When controlling the camera using the digital inputs, the speed will automatically change the longer you hold the input high. The pan inputs have three speeds. The tilt inputs have two speeds. The speed changes occur at two-second intervals. It is possible to enter the same speed for the speed parameters, thus eliminating the speed changes. Also, selecting the speed of default will use the default speeds preprogrammed into the module. The digital inputs for zoom will also automatically change speeds.</p> <p>Saving a preset is a three step process:</p> <ol style="list-style-type: none"><li>1. Move the camera to the desired position</li><li>2. Press Save (the Save_Fb will go high)</li><li>3. Preset the preset you wish to save the location to.</li></ol> <p>To recall a preset, just press the preset number.</p> <p>The joystick inputs are designed to come from a Crestron CPC-2000 joystick controller. Both the joysticks and the speed knobs are implemented.</p> <p>It is very important to poll the Request_Speeds input before attempting to use the joystick controls. This will request the maximum speeds that the camera will support. This must be done once for each camera. After the maximum speeds have been requested, they will be saved to non-volatile RAM.</p>
<b>CRESTRON HARDWARE REQUIRED:</b>	CNX Internal com ports, C2 Internal com ports, ST-COM, CNXCOM-2, C2COM-2, C2COM-3
<b>SETUP OF CRESTRON HARDWARE:</b>	RS232 Baud: 9600 Parity: N Data Bits: 8 Stop Bits: 1
<b>VENDOR FIRMWARE:</b>	None
<b>VENDOR SETUP:</b>	If you are using more than one camera with the RS-232 inputs daisy chained, you must pulse the Set_Addresses input. This will set the address of each camera on the daisy chain.
<b>CABLE DIAGRAM:</b>	CNSP-504



# CNSP-504

Rear View of Connector



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**CONTROL:**

<b>Request_Speeds</b>	D	Pulse to get the maximum speeds for the camera. This only needs to be done once for each camera.
<b>Pan_Joystick</b>	A	Analog signal from the pan_joy output of the CPC-2000 Joystick Camera Control symbol.
<b>Tilt_Joystick</b>	A	Analog signal from the tilt_joy output of the CPC-2000 Joystick Camera Control symbol.
<b>Zoom_Joystick</b>	A	Analog signal from the zoom_joy output of the CPC-2000 Joystick Camera Control symbol.
<b>Focus_Joystick</b>	A	Analog signal from the foc_joy output of the CPC-2000 Joystick Camera Control symbol.
<b>Pan_Speed</b>	A	Analog signal from the pan_spd output of the CPC-2000 Joystick Camera Control symbol.
<b>Tilt_Speed</b>	A	Analog signal from the tilt_spd output of the CPC-2000 Joystick Camera Control symbol.
<b>Zoom_Speed</b>	A	Analog signal from the zoom_spd output of the CPC-2000 Joystick Camera Control symbol.
<b>Tilt_Up/Down</b>	D	Press and hold to tilt the camera.
<b>Pan_Left/Right</b>	D	Press and hold to pan the camera.
<b>Zoom_In/Out</b>	D	Press and hold to zoom the camera.
<b>Focus_Near/Far</b>	D	Press and hold to focus the camera. This will focus the camera if the camera is not in auto focus mode.
<b>Auto_Focus_On/Off/Toggle</b>	D	Pulse to turn the auto focus function on and off.
<b>Preset_*</b>	D	Pulse to go to the preset. If pulsed when the Preset_Save_Fb output is high, this will store the current camera position in the selected preset.
<b>Save</b>	D	Pulse to put the module into save mode to allow storage of presets.
<b>Home</b>	D	Pulse to send the camera to the home position for pan and tilt.
<b>Power_On/Off</b>	D	Pulse to turn the camera on and off.



<b>White_Balance_*</b>	D	Pulse to select the white balance mode.
<b>Auto_Exposure_*</b>	D	Pulse to select the auto exposure mode.
<b>Set_Addresses</b>	D	Pulse once to set the addresses for the cameras with the RS-232 inputs daisy chained.
<b>Address (1-7)</b>	P	The address number for the camera this module will control. This corresponds to the camera selector switch on the back of the camera.
<b>Address+8 (9-F)</b>	P	The address plus 8. Address = 1, address+8 = 9; Address = 7, address+8 = F
<b>Pan Speed *</b>	P	The desired speed for the pan function. Select from the list.
<b>Tilt Speed *</b>	P	The desired speed for the tilt function. Select from the list.
<b>Zoom Speed *</b>	P	The desired speed for the zoom function. Select from the list.
<b>From_Device\$</b>	S	Serial signal to be routed from a 2 way serial com port.

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**FEEDBACK:**

<b>Preset*_Fb</b>	D	High to indicate the last preset selected.
<b>Preset_Save_Fb</b>	D	High to indicate that the module is in save mode. Pulsing one of the Preset inputs will store the current camera location to that preset.
<b>Preset_Busy</b>	D	High to indicate that a preset is being recalled. You cannot select another preset while this is high.
<b>To_Device\$</b>	S	Serial signal to be route to a 2 way serial com port.

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**TESTING:**

<b>OPS USED FOR TESTING:</b>	PRO2: 3.088 CNMSX: 5.14.02
<b>COMPILER USED FOR TESTING:</b>	Simpl Windows 2.05.20
<b>SAMPLE PROGRAM:</b>	PRO2: Elmo PTC-100S Demo PRO2 CNMSX: Elmo PTC-100S Demo CNMSX
<b>REVISION HISTORY:</b>	V. 1.0 – Original release.