

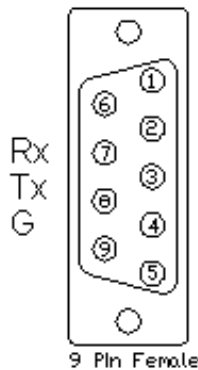
**Partner: Canon**  
**Model: XU-80**  
**Device Type: Integrated Camera Unit**



**GENERAL INFORMATION**

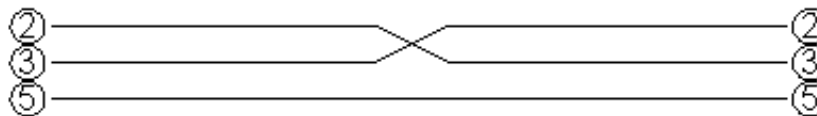
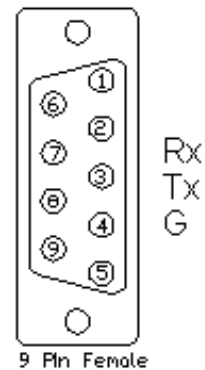
<b>SIMPLWINDOWS NAME:</b>	Canon XU-80 v1.0
<b>CATEGORY:</b>	Camera
<b>VERSION:</b>	1.0
<b>SUMMARY:</b>	This module will control the Canon XU-80 via RS-232.
<b>GENERAL NOTES:</b>	This module will control the Canon XU-80 camera via RS-232. This module was tested using a Canon XU-80 camera.
<b>CRESTRON HARDWARE REQUIRED:</b>	C2I-COM, ST-COM, C2-COM-* or CNX-COM2
<b>SETUP OF CRESTRON HARDWARE:</b>	RS232 Baud: 9600 Parity: None Data Bits: 8 Stop Bits: 1
<b>VENDOR FIRMWARE:</b>	v1
<b>VENDOR SETUP:</b>	For RS-422 control an RS-232 to RS422 converter and RJ-45F to DB-9M converter is required for connection to camera.
<b>CABLE DIAGRAM:</b>	CNSP-124

Rear View of Connector



**CNSP-124**

Rear View of Connector



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**CONTROL:**

Camera_<On/Off>	D	Pulse to turn camera on or off.
Pan_Speed_<Increase/Decrease>	D	Press to increase or decrease the pan speed.
Pan_Speed_Analog_In	A	Analog value to set pan speed. To be used with a slider definition on touchpanel.
Tilt_Speed_<Increase/Decrease>	D	Press to increase or decrease the tilt speed.
Tilt_Speed_Analog_In	A	Analog value to set tilt speed. To be used with a slider definition on touchpanel.
Zoom_Speed_<Increase/Decrease>	D	Press to increase or decrease the zoom speed.
Zoom_Speed_Analog_In	A	Analog value to set zoom speed. To be used with a slider definition on touchpanel.
Pan_<Left/Right>	D	Press to pan the camera left or right.
Tilt_<Up/Down>	D	Press to tilt the camera up or down.
Zoom_<In/Out>	D	Press to zoom the camera in or out.
Zoom_<In/Out>_Wide	D	Press to zoom the camera in or out wide.
Focus_<In/Out>	D	Press to focus the camera lens in or out.
Focus_Manual	D	Pulse to set focus mode to manual.
Focus_Auto	D	Pulse to set focus mode to auto.
Focus_Fixed_At_Infinity	D	Pulse to set focus to infinity.
Focus_One_Shot_AF	D	Pulse to set focus to one shot auto focus.
Wiper_Control	D	Pulse to perform one reciprocating wiper operation.
Washer_Control	D	Pulse to execute four washer cycles and set washer terminal to ON during the first two cycles.
Washer_Output_<On/Off>	D	Pulse to set washer output on or off.
White_Balance_Auto	D	Pulse to set white balance to auto.

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White_Balance_Preset	D	Pulse to set white balance to preset memory.
White_Balance_Fixed_1	D	Pulse to set white balance to fixed 1.
White_Balance_Fixed_2	D	Pulse to set white balance to fixed 2.
White_Balance_ATW	D	Pulse to set white balance to auto tracing white balance.
Shutter_Speed_Detailed_<Increase/Decrease>	D	Press to increase or decrease the shutter speed.
Shutter_Speed_Detailed_Analog_In	A	Analog value to set shutter speed. To be used with a slider definition on touchpanel.
Shutter_Speed_*	D	Pulse to set the shutter speed.
WDR_<On/Off>	D	Pulse to enable or disable wide dynamic range mode.
ND_Filter_<On/Off>	D	Pulse to enable or disable natural density filter.
IR_Filter_<On/Off>	D	Pulse to enable or disable IR filter.
Auto_IR_On_(Shutter)	D	Pulse to enable auto IR on (shutter) mode.
Auto_IR_On_(Gain)	D	Pulse to enable auto IR on (gain) mode.
Auto_IR_Off	D	Pulse to disable auto IR mode.
Shooting_Mode_Auto	D	Pulse to set shooting mode to auto.
Shooting_Mode_Manual	D	Pulse to set shooting mode to manual.
Shooting_Mode_Night	D	Pulse to set shooting mode to night.
Shooting_Mode_Shutter	D	Pulse to set shooting mode to shutter.
Shooting_Mode_Priority	D	Pulse to set shooting mode to priority.
Preset_Memory_<0-31>	D	Pulse to recall preset memory. If Preset Store is active, this pulse will store the current camera settings (pan, tilt, zoom, focus) to preset memory selected.
Preset_Recall_Speed_<Up/Down>	D	Press to adjust the time it takes for the camera to recall a stored preset.
Preset_Store	D	Pulse to enable or disable storing of presets.
Tally_<On/Off>	D	Pulse to turn tally on or off.

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Aux_<On/Off>	D	Pulse to set the Aux terminal on or off.
Color_Bar_<On/Off>	D	Pulse to turn color bar on or off.
Camera_Gain_ *dB	D	Pulse to set camera gain.
Gamma_Curve_Normal	D	Pulse to set the gamma curve to normal.
Gamma_Curve_Cine1	D	Pulse to set the gamma curve to cine1.
Gamma_Curve_Cine2	D	Pulse to set the gamma curve to cine2.
Gain_Detailed_<Increase/Decrease>	D	Press to increase or decrease the gain.
Gain_Detailed_Analog_In	A	Analog value to set gain. To be used with a slider definition on touchpanel.
R_Gain_<Up/Down>	D	Press to adjust the R gain. Enabled only when camera shooting mode is manual.
B_Gain_<Up/Down>	D	Press to adjust the G gain. Enabled only when camera shooting mode is manual.
Cr_Gain_<Up/Down>	D	Press to adjust the Cr gain. Enabled only when camera shooting mode is manual.
Cb_Gain_<Up/Down>	D	Press to adjust the Cb gain. Enabled only when camera shooting mode is manual.
Edge_<Up/Down>	D	Press to increase edge setting. Enabled only when camera shooting mode is manual.
Iris_AE_Level_<Up/Down>	D	Press to adjust the AE level. Enabled only when camera shooting mode is manual.
AE_Maximum_Gain_ *dB	D	Pulse to set AE maximum gain. Enabled only when camera shooting mode is manual.
Initialize_Home	D	Pulse to initialize the camera and move to home position.
Initialize_Original	D	Pulse to initialize the camera and move to original position.
From_Device	S	Pulse to initialize the camera and move to home position.

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**FEEDBACK:**

<b>Camera_Is_&lt;On/Off&gt;</b>	D	Indicates whether the camera is on or off.
<b>Pan_Speed_Analog_Out</b>	A	Represents the pan speed of the camera. For bargraph or slider definition on touchpanel.
<b>Tilt_Speed_Analog_Out</b>	A	Represents the tilt speed of the camera. For bargraph or slider definition on touchpanel.
<b>Zoom_Speed_Analog_Out</b>	A	Represents the zoom speed of the camera. For bargraph or slider definition on touchpanel.
<b>Pan_Is_&lt;Busy/Inactive&gt;</b>	D	Indicates that the camera's pan motion is active or inactive.
<b>Pan_Is_&lt;At/Not_At&gt;_Limit</b>	D	Indicates whether the camera's current pan position is at limit or not.
<b>Tilt_Is_&lt;Busy/Inactive&gt;</b>	D	Indicates that the camera's tilt motion is active or inactive.
<b>Tilt_Is_&lt;At/Not_At&gt;_Limit</b>	D	Indicates whether the camera's current tilt position is at limit or not.
<b>Zoom_Is_&lt;Busy/Inactive&gt;</b>	D	Indicates if the camera's zoom motion is busy or inactive.
<b>Focus_Is_&lt;Busy/Inactive&gt;</b>	D	Indicates if the camera's focus motion is busy or inactive.
<b>Focus_Manual/Auto_Status_Text</b>	S	Displays whether the current focus mode is manual or auto.
<b>White_Bal_Is_&lt;Auto/Not_Auto&gt;</b>	D	Indicates if the white balance mode is set to auto or not.
<b>Shutter_Speed_Detailed_Analog_Out</b>	A	Represents the shutter speed of the camera. For bargraph or slider definition on touchpanel.
<b>Preset_Recall_Speed_Text</b>	S	Text field indicating the current preset recall speed.
<b>Preset_Store_Active</b>	D	Flashes to indicate that the preset store mode is active. When this mode is active and a preset memory button is pulsed, the current camera's pan, tilt, focus and zoom settings will be stored in the camera for that memory preset button and the Preset Store Active mode will clear.
<b>Gain_Detailed_Analog_Out</b>	A	Represents the gain of the camera. For bargraph or slider definition on touchpanel.
<b>R_Gain_Analog_Gauge</b>	A	Represents the R Gain setting sent to the camera from the module (this is one-way, will not represent R Gain set locally on camera). For bargraph or slider definition on touchpanel.
<b>B_Gain_Analog_Gauge</b>	A	Represents the B Gain setting sent to the camera from the module (this is one-way, will not represent B Gain set locally on camera). For bargraph or slider definition on touchpanel.

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<b>Cr_Gain_Analog_Gauge</b>	A	Represents the Cr Gain setting sent to the camera from the module (this is one-way, will not represent Cr Gain set locally on camera). For bargraph or slider definition on touchpanel.
<b>Cb_Gain_Analog_Gauge</b>	A	Represents the Cb Gain setting sent to the camera from the module (this is one-way, will not represent Cb Gain set locally on camera). For bargraph or slider definition on touchpanel.
<b>Edge_Analog_Gauge</b>	A	Represents the edge setting sent to the camera from the module (this is one-way, will not represent edge set locally on camera). For bargraph or slider definition on touchpanel.
<b>Iris_AE_Level_Analog_Gauge</b>	A	Represents the Iris AE Level setting sent to the camera from the module (this is one-way, will not represent Iris AE Level set locally on camera). For bargraph or slider definition on touchpanel.
<b>Camera_Is_Busy</b>	D	Camera is currently busy initializing, powering on or setting white balance to preset a memory.
<b>Camera_Mode_Is_&lt;Auto/Manual&gt;</b>	D	Indicates if the camera mode is set to auto or manual.
<b>To_Device</b>	S	Serial data signal to be routed to a 2 way com port.

## TESTING:

<b>OPS USED FOR TESTING:</b>	2-Series: v4.007.0004 3-Series: v1.005.0015
<b>SIMPL WINDOWS USED FOR TESTING:</b>	v3.11.15
<b>DEVICE DB USED FOR TESTING:</b>	v47.01.001.00
<b>CRES DB USED FOR TESTING:</b>	v36.00.007.00
<b>SYMBOL LIBRARY USED FOR TESTING:</b>	v845
<b>SAMPLE PROGRAM:</b>	2 Series: Canon XU-80 v1.0 Demo PRO2 3 Series: Canon XU-80 v1.0 Demo MC3
<b>REVISION HISTORY:</b>	v1.0 – Initial release