SIMPLWINDOWS NAME:	Epson 5350/7250/7350/8000/9000 Projector
CATEGORY:	Projector
VERSION:	1.1
SUMMARY:	Controls power/input selection/mute/menu
GENERAL NOTES:	This module will control an Epson EMP/ELP 5350/7250/7350/8000/9000 video projector. It was tested with both the 5350 and the 8000. It uses Epson Level 5 Protocol. It allows control of power, input selections, av. mute, and menu functions. In addition, it will poll the projector for 1 minute after a power or input selection command is sent, for the status of power and input. If it is desired to poll the projector beyond this one minute time, you can assert the POLL-ENABLE input. Then the projector will be polled continuously. The projector provides feedback of not just power on/off but also warm up, cool down, fault and suspend. These STATE-* outputs of the module could be routed to legend buttons to display the actual state of the projector. The POWER-ON-FB output will be high when the projector reports power is fully on, and will be flashing when the projector is in the warm up state. The POWER-OFF-FB output will be high when the projector reports power is off, and will be flashing when it is in the cool down state.
CRESTRON HARDWARE REQUIRED:	CNXCOM, ST-COM
SETUP OF CRESTRON HARDWARE:	Baud Rate -9600 Parity - None Data Bits - 8 Stop Bits - 1
	RTS is required to be high. By default the RTS line on a CNXCOM port is high, so there is no need to assert RTS in the program
VENDOR FIRMWARE:	None
VENDOR SETUP:	The projector has two Mouse/Com ports. Either one can be used for control. However, when switching between the two computer inputs, only the com port of the current computer source will be active. So, for example, if you are controlling the projector using Mouse/Com port 1, and you select the computer 2 input for viewing, you may lose control of the projector.
	This can be corrected by assigning a default control com port. This is done by entering the menus of the projector, selecting "advanced", and then selecting the Mouse/Com port you want to use.
	The cable should be connected from the Crestron com port to the adapter cable provided with the projector. This adapter cable plugs into the projector on one end, and has a block of three connectors on the other end (one 9-pin, one Mouse, and one mac serial). Use the 9 pin connector. The pin out linking Crestron to the 9 pin connector is as follows:

Crestron	to	Epson
9 pin female D	to	9 pin female D
2	to	3
3	to	2
5	to	5
7	to	6

CABLE NUMBER:	T.B.D.

CONTROL:

POWER-ON	D	Pulse to turn the projector on. Feedback will be reflected at the POWER-ON-FB output
POWER-OFF	D	Pulse to turn the projector off. Feedback will be reflected at the POWER-OFF-FB output
INPUT-*	D	Pulse to select the desired input. If the projector is powering on when pulsed, the command will be processed when the projector has finished powering on
AV-MUTE-ON	D	Pulse to blank the projectors video and audio.
AV-MUTE-OFF	D	Pulse to restore the projectors video and audio
MENU-*	D	Emulates menu functions on the projector
POLL-ENABLE	D	If held high, the projector will be polled continuously for power and input status. If held low, the projector will only be polled for 1 minute after a power or input selection command
EPSON-RX$	S	Serial signal to be routed from a 2-way RS232 port

FEEDBACK:

POWER-ON-FB	D	True feedback indicating that power is on. Will flash while the projector is warming up
POWER-OFF-FB	D	True feedback indicating that power is off. Will flash while the projector is cooling down
INPUT-*-FB	D	True feedback indicating which input is currently active
AV-MUTE-ON-FB	D	Indicates if AV mute was activated
AV-MUTE-OFF-FB	D	Indicates if AV mute was deactivated
STATE-*	D	Indicates the various states of the projector. Only one will be high at a time. Could be routed to legend buttons to indicate power-up and power-down states
EPSON-TX$	S	Serial data string to be routed to a 2-way RS232 port

OPS USED FOR TESTING:	5.09.07x
COMPILER USED FOR TESTING:	SimplWindows Version 1.30.01
SAMPLE PROGRAM:	EPS-TSTA
REVISION HISTORY:	None