



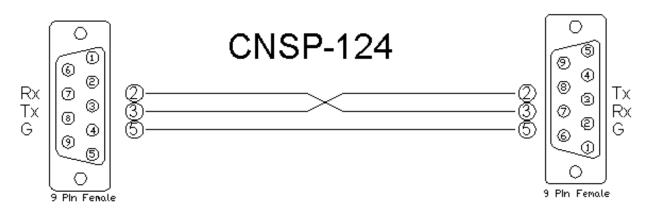


GENERAL INFORMATIO	N
SIMPLWINDOWS NAME:	LG RU-42PX10+42PX11+42PX20+50PX10+50PX11+50PX20
CATEGORY:	TV/Video Projector
VERSION:	1.0
SUMMARY:	Controls power, source selection, Aspect Ratio, PIP, picture controls, and TV tuner functions.
GENERAL NOTES:	This module provides control and true feedback for the LG RU-42/50PX10/11/20 series of plasma displays. Note that on the unit tested at Crestron, if the unit receives an RS232 command while it is powering on (the time between pressing the hard power button on the bottom of the unit, and the point at which the display shows an image), the RS232 port will stop functioning and all further commands would be ignored. The unit would have to be power cycled to correct this. Also note that whenever Crestron polls the unit for status, if the On Screen Display (OSD) is enabled, the status of whatever parameter was polled will briefly flash on the display. Therefore, it is recommended to disable the OSD using the OSD_Off function on this module.
CRESTRON HARDWARE REQUIRED:	C2I-COM, C2COM-2, C2COM-3, ST-COM, CNXCOM, CNXCOM-2
SETUP OF CRESTRON HARDWARE:	RS232 Baud: 9600 Parity: None Data Bits: 8 Stop Bits: 1
VENDOR FIRMWARE:	None
VENDOR SETUP:	None
CABLE DIAGRAM:	CNSP-124









CONTROL:		
Power_On/Off/Toggle	D	Pulse to turn the unit on and off.
Input_*	D	Pulse to select the input.
Aspect_Ratio_*	D	Pulse to select the aspect ratio.
Picture_Mute_On/Off/Toggle	D	Pulse to blank or show the display
OSD_On/Off	D	Pulse to enable or disable the On Screen Display.
PIP/DW_Off	D	Pulse to disable both the PIP and Dual Window functions
PIP_On	D	Pulse to turn on the PIP
DW_1_On	D	Pulse to turn on the Dual Window in format 1
DW_2_On	D	Pulse to turn on the Dual Window in format 2
PIP_Position_*	D	Pulse to specify where the PIP should be displayed
PIP_Input_*	D	Pulse to select the desired input for the PIP. Note that not all main image/secondary image selections are valid
PIP_Swap	D	Pulse to swap the inputs being shown in the two windows
Contrast_Up/Down	D	Press and hold to ramp the contrast up/down
Brightness_Up/Down	D	Press and hold to ramp the brightness up/down







Color_Up/Down	D	Press and hold to ramp the color up/down
Tint_Up/Down	D	Press and hold to ramp the tint up/down
Sharpness_Up/Down	D	Press and hold to ramp the sharpness up/down
Volume_Up/Down	D	Press and hold to adjust the volume level.
Volume_Mute_On/Off/Toggle	D	Pulse to turn the volume mute on and off.
Color_Temperature_*	D	Pulse to select the desired color temperature
Keypad_*	D	Keypad used to enter a TV channel
TV_Preset_Air/Cable	D	You must specify what type of tuning you are using. Either Air (antenna) or Cable. The appropriate selection should be held high. The other selection should be held low. You can put a 1 or 0 on the desired selections.
TV_Preset_Channel	Α	Analog input, which can be used to select a TV channel directly (without using the keypad). Typically connected to an Analog Initialize symbol. After putting a valid channel on this input, pulse the TV_Preset_Enter input to select it.
TV_Preset_Enter	D	Pulse to select the channel specified with the TV_Preset_Channel input
Poll_Enable	D	Hold high to enable polling.
From_Device\$	S	Serial signal to be routed from a 2-way serial com port.







FEEDBACK:		
Power_On/Off_Fb	D	High to indicate the current power state.
Input_*_Fb	D	High to indicate the currently selected input.
Aspect_Ratio_*_Fb	D	High to indicate the currently selected aspect ratio.
Picture_Mute_*_Fb	D	High to indicate the state of picture mute.
OSD_On/Off_Fb	D	Indicates the state of the OSD
PIP_DW_Off_Fb	D	High to indicate both PIP and Dual Window are off
PIP_On_Fb	D	High to indicate that PIP is on
DW_1_On_Fb	D	High to indicate that Dual Window format 1 is active
DW_2_On_Fb	D	High to indicate that Dual Window format 2 is active
PIP_Position_*_Fb	D	Indicates the current position of the PIP
PIP_Input_*_Fb	D	Indicates the current source for the PIP
Contrast_Bar	Α	Shows the relative contrast level. Can be routed to a bargraph on a touch panel
Brightness_Bar	Α	Shows the relative brightness level. Can be routed to a bargraph on a touch panel
Color_Bar	Α	Shows the relative color level. Can be routed to a bargraph on a touch panel
Tint_Bar	Α	Shows the relative tint level. Can be routed to a bargraph on a touch panel
Sharpness_Bar	Α	Shows the relative sharpness level. Can be routed to a bargraph on a touch panel
Volume_Bar	Α	Analog value indicating the current volume level. To be displayed using a bar graph on a touch panel.
Volume_Mute_On/Off_Fb	D	High to indicate the current volume mute state.
TV_Channel	Α	Indicates the currently selected TV Channel
To_Device\$	s	Serial signal to be routed to a 2-way serial com port.







TESTING:	
OPS USED FOR TESTING:	PRO2: 3.137
COMPILER USED FOR TESTING:	2.05.22
SAMPLE PROGRAM:	LG RU-42PX10=42PX11+42PX20+50PX10+50PX11+50PX20 Demo
REVISION HISTORY:	None