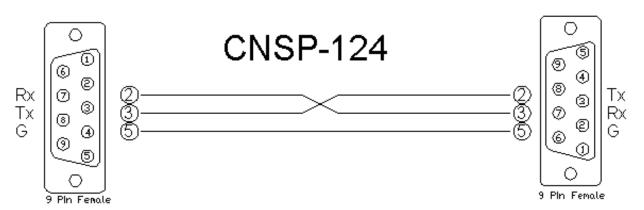






GENERAL INFORMATION			
SIMPLWINDOWS NAME:	LifeSize Room + Room 200 Serial v3.2		
CATEGORY:	Video Conferencing		
VERSION:	3.2		
SUMMARY:	This module provides control and true feedback via RS232 for the LifeSize Room and Room 200.		
GENERAL NOTES:	This module provides control for LifeSize Room and Room 200 video conferencing systems. It also provides true feedback. This module was tested with the Room video conference system, but the protocol documentation indicates it should work for the Room 200 video conference system as well.  Port 2 on the LifeSize Room is set up to allow automation control by default. This demo program was written and tested using Port 2 at 9600.  This module is System Builder compatible.		
CRESTRON HARDWARE REQUIRED:	C2I-COM6, C2-COM2/3, ST-COM		
SETUP OF CRESTRON HARDWARE:	RS232 Baud: 9600 Parity: None Data Bits: 8 Stop Bits: 1		
VENDOR FIRMWARE:	LS_RM1_4.0.7(8)		
VENDOR SETUP:	None		
CABLE DIAGRAM:	CNSP-124		









CONTROL:		
Initialize	D	Pulse to start communications.
Control_*	D	Pulse to control the desired input. This does not select the input; it just allows control of the input.
Camera_Up/Down/Left/Right	D	Press and hold to move camera. Only applies to Current Local and Remote.
Camera_Zoom_In/Out	D	Press and hold to zoom the camera in and out. Only applies to Current Local and Remote.
Camera_Preset_*	D	Pulse to select the desired preset. If the Camera_Save_Preset_Is_Active output is high, this will store the current camera position in the desired preset number. If the Camera_Save_Preset_Is_Active is low, this will recall the desired preset.
Camera_Save_Preset	D	Pulse to enable storing a camera preset. Pulse a second time to disable storing a camera preset. This will reset after 5 seconds.
Room_Primary_Input_*	D	Pulse to select the desired primary input for the Room.
Room_200_Primary_Input_*	D	Pulse to select the desired primary input for the Room 200.
Room_Secondary_Input_*	D	Pulse to select the desired secondary input for the Room.
Room_200_Secondary_Input_*	D	Pulse to select the desired secondary input for the Room 200.
PIP_Mode_On/Off/Auto	D	Pulse to set the PIP mode to on, off or auto. This is for use while NOT In a call.
PIP_Window_On/Off	D	Pulse to turn the PIP window on and off while in a call. The PIP window will turn off when the Interface Fadeout Time expires. The PIP window will not turn off if the Interface Fadeout Time is set to Never.
Auto_Answer_On/Off/Toggle	D	Pulse to turn the auto answer on and off.
Volume_Up/Down	D	Press and hold to adjust the volume.
Volume_Mute_On/Off/Toggle	D	Pulse to turn the volume mute on and off. NOTE: Volume mute sets the volume level to 0.
Audio_Privacy(Mic Mute)_On/Off/Toggle	D	Pulse to turn the mic mute on and off.
Dial_Call_Quality_*	D	Pulse to select the desired call quality.
Dial_Call_Type_*	D	Pulse to select the desired call type.
Dial_Call_Interface_*	D	Pulse to select the desired call interface.







Dial_Call_Dial	D	Pulse to dial to call.
Dial_Call_Hang_Up_All	D	Pulse to hang up all connected calls.
Hang_Up_Call_*	D	Pulse to hang up the desired call.
Answer_Incoming_Call	D	Pulse to answer the incoming call.
Reject_Incoming_Call	D	Pulse to reject the incoming call.
Request_*_Directory	D	Pulse to request either the local or corporate directory.
Search_Directory	D	Pulse to search the directory using the keyboard to enter a search string.
Directory_First/Previous/Next/Last	D	Pulse to move through the address book pages.
Directory_*	D	Pulse to select the desired directory entry.
Directory_Dial	D	Pulse to dial the selected directory entry.
Control_Call_*	D	Pulse to send controls commands to the desired call. This applies to the camera controls, DTMF and presentation.
DTMF_Key_*	D	Pulse to dial DTMF commands. These will only be sent when in a call.
Presentation_Mode_On/Off/Toggle	D	Pulse to turn the presentation on and off.
Ir_Key_*	D	Pulse to send the IR commands. These emulate the IR remote.
Keyboard_*	D	Pulse to use the keyboard to enter phone numbers and IP addresses.
Numeric_Keypad_*	D	Pulse to use the numeric keypad to enter phone numbers and IP addresses.
Poll_Enable	D	Hold high to enable polling.
From_Device	S	Serial signal to be routed from a 2-way serial com port.

PARAMETER:		
Directory Entries Per Screen	Р	Number of directory entries to display per page.
Max Characters	Р	Number of characters for the keyboard text.







FEEDBACK:		
Controlling_*	D	High to indicate which input will be controlled.
Camera_Save_Preset_Is_Active	D	When this is high, pulsing a camera preset input will save the current camera position in the selected preset.
Room_Primary_Input_Is_*	D	High to indicate the currently selected primary input for the Room.
Room_200_Primary_Input_Is_*	D	High to indicate the currently selected primary input for the Room 200.
Room_Secondary_Input_Is_*	D	High to indicate the currently selected secondary input for the Room.
Room_200_Secondary_Input_Is_*	D	High to indicate the currently selected secondary input for the Room 200.
PIP_Mode_Is_On/Off	D	High to indicate the current state of the PIP mode.
Auto_Answer_Is_On/Off	D	High to indicate the current state of the auto answer function.
Volume_Gauge	Α	Analog value indicating the current volume level. To be displayed using a gauge on a touch panel.
Volume_Mute_Is_On/Off	D	High to indicate that the volume level is at zero.
Audio_Privacy(Mic Mute)_Is_On/Off	D	High to indicate the current state of the audio privacy. (Mic Mute)
Dial_Call_Quality_ls_*	D	High to indicate the currently selected call quality value that will be sent when the Dial_Call_Dial is pulsed.
Dial_Call_Type_Is_*	D	High to indicate the currently selected call type value that will be sent when the Dial_Call_Dial input is pulsed.
Dial_Call_Interface_Is_*	D	High to indicate the currently selected call interface value that will be sent when the Dial_Call_Dial input is pulsed.
Dial_Call_Number_Text	S	Serial signals indicating the current phone number to be dialed.
Call_Is_Coming_In	D	High to indicate that there is an incoming call.
Incoming_Call_Name/Number/Type_Text	S	Serial signal indicating the incoming call information.
Request_Directory_In_Progress	D	High to indicate that the module is busy requesting the directory.
Request_Directory_Failed	D	Will pulse high to indicate that the request directory failed.
Directory_Selected_Name_Text	S	Serial signal indicating the name of the selected directory entry.







Current_Page_Value	Α	Analog value indicating the current page.
Number_of_Pages_Value	Α	Analog value indicating the number of pages.
Directory_*_Text	S	Serial signals indicating the directory entries.
Controlling_Call_*	D	High to indicate the call that will be controlled.
Presentation_Mode_Is_On/Off	D	High to indicate the current state of the presentation.
Keyboard_Text	S	Serial signal indicating the entered text.
Keyboard_*_Is_Active	D	High to indicate that the shift or the cap lock is active.
Connected_Call_*_Type_Text	S	Serial signal indicating the type of the connected call.
Connected_Call_*_Number_Text	S	Serial signal indicating the number for the connected call.
Connected_Call_*_Name_Text	S	Serial signal indicating the name for the connected call.
Connected_Call_*_State_Text	S	Serial signal indicating the state of the connected call.
Connected_Call_*_Disconnect_Reason_Text	S	Serial signal indicating the reason the connected call disconnected.
To_Device	S	Serial signal to be routed to a 2-way serial com port.







TESTING:	
OPS USED FOR TESTING:	3.155.1240
SIMPL WINDOWS USED FOR TESTING:	2.11.10
DEVICE DB USED FOR TESTING:	20.06.008.01
CRESTRON DB USED FOR TESTING:	20.04.003.02
SAMPLE PROGRAM:	LifeSize Room + Room 200 Serial v3.2 Demo PRO2
REVISION HISTORY:	<ul> <li>V. 1.0 – Not released.</li> <li>V. 2.0 – Original release.</li> <li>V. 2.1 – Changed the Virtual Serial driver inside the module to work at the default baud rate for port 2 on the LifeSize when used in System Builder. Changed the help file to recommend using the default baud rate and port 2.</li> <li>V. 3.0 – Added inputs to allow the module to work with the Room 200.</li> <li>V. 3.1 – Fixed an issue with incoming call notification.</li> <li>V. 3.2 – Added a time out so that if the LifeSize does not respond we will continue to send commands.</li> </ul>