SIMPLWINDOWS NAME:	Marantz SR9300/SR8300
CATEGORY:	Receiver/Processor
VERSION:	1.0
SUMMARY:	This module controls a Marantz SR9300/SR8300.
GENERAL NOTES:	This module controls a Marantz SR9300/SR8300. It provides real feedback. If the poll_enable input is set low, it will poll for about 10 seconds after a button is pressed. If the poll_enable is set high, it will still poll for 10 seconds after a button is pressed, but it will also poll continuously. The 30 second poll is a faster poll than the continuous poll.

To select a source for the Multi Room: Turn the Multi Room on. You will then have 10 seconds to select a source. Selecting a source restarts the 10 seconds. In order to select another source after the 10 seconds, you will need to turn the Multi Room off and then back on. Multi Room volume can be adjusted at any time. During the 10 seconds, the Main Room source select buttons will not work.

NOTE: MULTI ROOM INPUTS CAN ONLY BE CHANGED FOR 10 SECONDS AFTER TURNING THE MULTI ROOM POWER ON. ANY INPUT SELECTION MADE DURING THAT 10 SECONDS WILL RESTART THE 10 SECONDS. DURING THE 10 SECONDS THE MAIN ROOM INPUT SELECT WILL BE DISABLED. IF THE MAIN ROOM HAS SELECTED AM AS ITS INPUT, THE MULTI ROOM CANNOT SELECT FM. IF THE MAIN ROOM HAS SELECTED FM AS ITS INPUT, THE MULTI ROOM CANNOT SELECT AM. ALSO, IF THE MAIN HAS SELECTED AN INPUT OTHER THAN AM OR FM, AND THE MULTI ROOM SELECTS AM, THE MULTI ROOM WILL FOLLOW THE MAIN ROOM IF IT THEN SELECTS FM.

NOTE: As of the time that this module was written, December, 2002, this module will only control the SR9300 & the SR8300. It will NOT control the SR9200 or the SR8200. We expect that there will be a future release of firmware for the SR9200 & the SR8200 that will allow this module to control those models.

CRESTRON HARDWARE REQUIRED:	CNMSX Internal COMS ST-COM PRO2 Internal COMS
SETUP OF CRESTRON HARDWARE:	Baud Rate - 4800 Parity - None Data Bits - 8 Stop Bits - 1
VENDOR FIRMWARE:	None
VENDOR SETUP:	None
CABLE NUMBER:	CNSP-143

CONTROL:

poll_enable	D	Set high to enable polling. This will poll the SR9300/SR8300 constantly. The receiver will be polled for 10 seconds after any button press even when this input is low.
cts	D	Needs to be connected from the cts output on the com port

definition.

connect	D	Should be pulsed to start communication. Usually pulsed at system start up or when entering a system.
disconnect	D	Pulse to stop communications. This is not necessary but can be done when exiting a system.
power_on/off/toggle	D	Pulse to turn the SR9300/SR8300 on or off. The toggle input will toggle the power.
input_*	D	Pulse to select main room input. NOTE: THIS WILL NOT BE AVAILABLE FOR 10 SECONDS AFTER MULTI ROOM POWER IS TURNED ON.
m_ch_input_on/off	D	Pulse to turn the 7.1 ch input on and off.
tuner_mode	D	Pulse to toggle the tuner mode from auto/stereo to mono and back.
tuner_freq_auto_tune	D	Pulse to set the tuner to auto frequency tuning.
tuner_freq_up/down	D	Push and hold to adjust the tuner.
tuner_preset_scan	D	Pulse to start scanning the presets. The tuner information will update. Pulse again to stop at the current preset.
tuner_preset_up/down	D	Pulse to step through the tuner presets.
preset_kpd_*	D	Pulse to select a tuner preset.
volume_up/down	D	Push and hold to ramp volume.
volume_mute_on/off	D	Pulse to turn volume mute on and off.
bass_up/down	D	Push and hold to ramp the bass.
treble_up/down	D	Push and hold to ramp the treble.
video_mute_toggle	D	Pulse to toggle the video mute.
menu_on/off	D	Pulse to turn the menu on and off.
menu_cursor_up/down	D	Pulse to move the cursor in the menu.
menu_cursor_left/right	D	Pulse to move the cursor in the menu.
select	D	Pulse to step through the entries on the menu. Same as the select button on the front panel of the SR9300/SR8300.
enter	D	Pulse to enter the current entry on the menu. Same as the enter button on the front panel of the SR9300/SR8300.
surround_*	D	Pulse to select the surround mode. Not all modes are available for every input type.
surround_mode	D	Pulse to step through the surround modes.
multi_room_power_on/off	D	Pulse to turn the multi room power on and off.
multi_room_power_toggle	D	pulse to toggle the multi room power.

Push and hold to ramp the multi

multi_room_volume_up/down	D	room volume.
multi_room_input_*	D	Pulse to select the multi room input. NOTE: THIS IS ONLY AVAILABLE FOR 10 SECONDS AFTER POWER IS TURNED ON. SELECTING AN INPUT WILL RESTART THE 10 SECOND COUNT DOWN. DURING THIS 10 SECONDS, THE MAIN ROOM INPUT SELECT WILL NOT BE AVAILABLE. THE MULTI ROOM SELECT SOURCE ENABLE OUTPUT WILL BE HIGH WHILE IT IS POSSIBLE TO SELECT A MULTI ROOM INPUT. ALSO THE AM AND FM WILL FOLLOW THE MAIN ROOM IF THE MAIN ROOM HAS THE TUNER AS ITS INPUT. IF THE MAIN ROOM SELECTS THE TUNER AFTER THE MULTI ROOM SELECTS THE TUNER, THE MULTI ROOM WILL FOLLOW WHAT THE MAIN ROOM DOES WITH THE TUNER.
multi_room_speaker_on/off	D	Pulse to turn the mutli room speaker on or off
from_device$	S	Serial data string to be routed from a 2-way com port.

FEEDBACK:

rts	D	Needs to be connected to the rts input on a com port definition.
power_on/off_fb	D	Indicates whether main power is on or off.
video_input_*_fb	D	Indicates which video input is currently selected. NOTE: This may be different than the audio input.
audio_input_*_fb	D	Indicates which audio input is currently selected. NOTE: This may be different than the video input.
tuner_stereo_fb	D	Indicates that the current station on the tuner is stereo.
tuner_mono_fb	D	Indicates that the current station on the tuner is mono.
tuner_frequency_fb	A	Read out showing the current station frequency. In FM it should be displayed XXX.XX, in AM it should be displayed XXXX. Route to a digital gauge.
tuner_preset_number_fb	A	Read out showing the current tuner preset number. Route to a digital gauge.
volume_bar	A	Route to a bargraph to show the current volume level.
volume$	S	Serial signal displaying the volume level from -72 to +18.
bass_bar	A	Route to a bargraph to show the current bass level.
treble_bar	A	Route to a bargraph to show the current treble level.
surround_*_fb	D	Indicates which surround mode is currently selected.

multi_room_power_on/off_fb	D	Indicates whether multi room power is on or off.
multi_room_volume_bar	A	Route to a bargraph to show the current multi room volume level.
multi_room_video_input_*_fb	D	Indicates which video input is selected for multi room. NOTE: This may be different than the audio input.
multi_room_audio_input_*_fb	D	indicates which audio input is selected for the multi room. NOTE: This may be different than the video input.
multi_room_speaker_on/off_fb	D	indicates whether the multi room speaker is on or off.
to_device$	S	Serial data string to be routed to a 2-way com port.

PRO OPS USED FOR TESTING:	5.12.63x
PRO2 CUZ USED FOR TESTING:	3.015
SIMPLWINDOWS USED FOR TESTING:	2.03.12
SAMPLE PROGRAM:	Marantz SR9300/SR8300 Demo.smw
REVISION HISTORY:	None