

**SIMPLWINDOWS NAME:** Kenwood Sovereign VR-5900 Receiver

**CATEGORY:** Receiver/Processor

**VERSION:** 1.0

**SUMMARY:** Controls all standard functions and provides true feedback

**GENERAL NOTES:** This module will control all of the standard functions on a Kenwood Sovereign VR-5900 Receiver. True feedback for all functions is provided by the receiver. Functions provided include main zone control, as well as zone B source selection, surround mode selection, some setup functions, and tuner band/preset selection.

Note that for surround mode selection, certain selections are only valid while certain sources are selected. So choosing a particular surround mode may actually cause a slightly different mode to be activated on the Kenwood system. However, since true feedback is provided, the actual surround mode currently active will be reflected on the output of this module. Also note that some adjustments (such as bass/treble) are only valid when Tone is on. If Tone is off, the bass/treble controls will have no effect. Also note that before the system can be turned off, you must first turn off Multizone.

**CRESTRON HARDWARE REQUIRED:** CNXCOM, ST-COM

**SETUP OF CRESTRON HARDWARE:** Baud Rate - 9600  
Parity - None  
Data Bits - 8  
Stop Bits - 1

**VENDOR FIRMWARE:** None

**VENDOR SETUP:** None

**CABLE NUMBER:** CNSP-124

## CONTROL:

<b>POWER_ON/OFF/TOGGLE</b>	D	Power the unit on/off
<b>VOLUME_UP/DOWN/MUTE</b>	D	Adjust the volume level in the main zone
<b>SOURCE_*</b>	D	Select the source to be heard in the main zone
<b>EFFECT_*</b>	D	Select the surround mode for the main zone
<b>LOUDNESS_ON/OFF</b>	D	Turn loudness on/off
<b>TONE_ON/OFF</b>	D	Turn tone on/off
<b>BASS_UP/DOWN/MIDDLE</b>	D	Adjust bass up/down, or set to middle level
<b>TREBLE_UP/DOWN/MIDDLE</b>	D	Adjust treble up/down or set to middle level
<b>SPEAKER_A/B_ON/OFF</b>	D	Turn on/off either speaker A or B
<b>SETUP_FUNCTIONS</b>	D	Adjust assorted setup parameters
<b>TUNER_BAND_AM/FM</b>	D	Select the band for the tuner
<b>TUNER_PRESET_UP/DOWN</b>	D	Step through the tuner presets sequentially
<b>TUNER_PRESET_*</b>	D	Discretely select any tuner

		preset
<b>TUNER_FREQ_UP/DOWN</b>	D	Step through the tuner frequencies
<b>MULTI_ZONE_ON/OFF</b>	D	Turn Multizone on or off
<b>ZONE_B_VOLUME_UP/DOWN/MUTE</b>	D	Adjust the volume in zone B
<b>ZONE_B_SOURCE_*</b>	D	Select the source for zone B
<b>FROM_DEVICE\$</b>	S	Serial signal to be routed from a 2-way RS232 port

## FEEDBACK:

<b>POWER_ON/OFF_FB</b>	D	True feedback indicating if power is on/off
<b>VOLUME_BAR</b>	D	True feedback indicating the relative volume level in the main zone. Should be routed to a bargraph on a touch panel
<b>MUTE_*_FB</b>	D	True feedback indicating if main zone volume is muted
<b>SOURCE_*_FB</b>	D	True feedback indicating the source selected in the main zone
<b>EFFECT_*_FB</b>	D	True feedback indicating the currently active surround mode
<b>LOUDNESS_ON/OFF_FB</b>	D	True feedback indicating if loudness is on or off
<b>TONE_ON/OFF_FB</b>	D	True feedback indicating if Tone is on or off
<b>BASS/TREBLE_LEVEL\$</b>	S	True feedback indicating the current bass/treble level. Should be routed to an indirect text field on a touch panel.
<b>SPEAKER_A/B_ON/OFF_FB</b>	D	True feedback indicating if speaker A or B is on or off
<b>TUNER_BAND_AM/FM_FB</b>	D	True feedback indicating which band is selected
<b>TUNER_PRESET_*_FB</b>	D	True feedback indicating which tuner preset is selected
<b>AM/FM_STATION\$</b>	S	Serial signal containing the frequency currently tuned for AM and FM. Should be routed to indirect text fields on a touch panel.
<b>MULTI_ZONE_ON/OFF_FB</b>	D	True feedback indicating if Multizone is on or off
<b>ZONE_B_ON/OFF_FB</b>	D	Indicates if Zone B is currently on. This was not implemented on the system tested at Crestron.
<b>ZONE_B_VOLUME_BAR</b>	A	True feedback indicating the relative level of volume in Zone B
<b>ZONE_B_SOURCE_*_FB</b>	D	True feedback indicating which source is selected in zone B
<b>TO_DEVICE\$</b>	S	Serial signal to be routed to a 2-way RS232 port.

**COMPILER USED FOR TESTING:** SimplWindows Version 1.61.12  
**SAMPLE PROGRAM:** Kenwood VR-5900 Demo  
**REVISION HISTORY:** None