Partner: Yamaha
Model: RX-A820
Device Type: Surround Sound Receiver
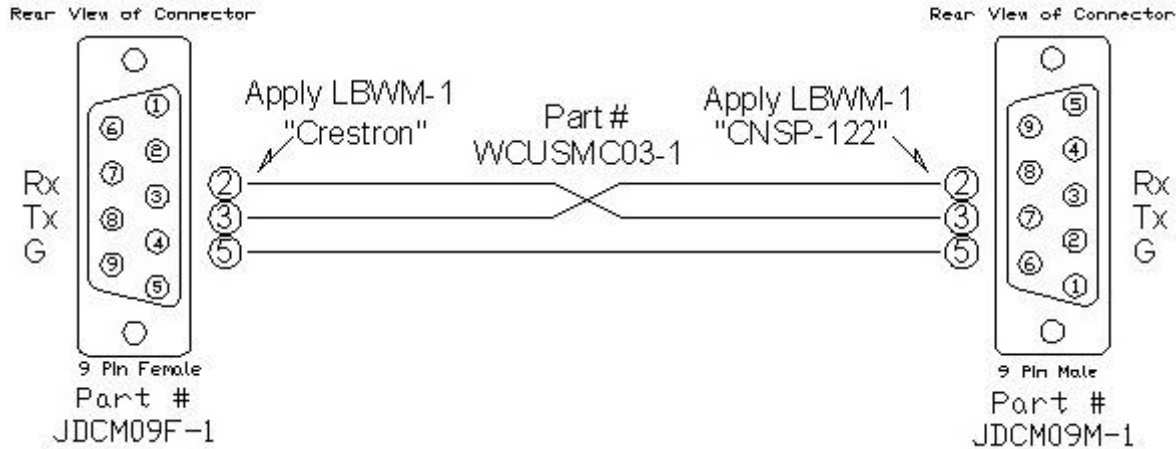
GENERAL INFORMATION

SIMPLWINDOWS NAME:	Yamaha RX-A820 RS232 v1.0
CATEGORY:	Receivers / Processors
VERSION:	1.0
SUMMARY:	Controls all standard functions and provides true feedback via RS232.
GENERAL NOTES:	This module will control all Basic functions of the receiver. At start up the module will poll for feedback for functions, during which time the "Receiver Is Initializing feedback will remain high.
CRESTRON HARDWARE REQUIRED:	2-Series Processor, 3-Series Processor, C2COM3
SETUP OF CRESTRON HARDWARE:	RS232 Baud: 9600 Parity: None Data Bits: 8 Stop Bits: 1
VENDOR FIRMWARE:	1.64
VENDOR SETUP:	All Internet Services require a login account to be entered into the setup screens of the receivers OSD in order to operate. Latest firmware for the receiver is required.
CABLE DIAGRAM:	CNSP-122

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1

Partner: Yamaha
Model: RX-A820
Device Type: Surround Sound Receiver

CNSP-122

CONTROL:		
System_Power_On	D	Turns on Receivers System Power
System_Standby	D	Puts the entire receiver into standby
System_Party_On	D	Turns the party mode on
System_Party_Off	D	Turns the party mode off
System_Party_Vol_Up	D	Ramps the volume up on all zones
System_Party_Vol_Down	D	Ramps all the zones volume down
System_Party_Mute_On	D	Mutes all audio zones
System_Party_Mute_Off	D	Turns the mute off on all zones
Main_HDMI_Output_Off	D	Shuts off the HDMI output
Main_HDMI_Output_1	D	Routes the selected input to HDMI Out 1 Only

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2

Partner: Yamaha
Model: RX-A820
Device Type: Surround Sound Receiver

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CONTROL:		
Main_HDMI_Output_2	D	Routes the current input to HDMI Out 2 only
Main_HDMI_Output_1+2	D	Routes the selected input to HDMI Outs 1&2 At The Same Time
Main_HDMI_Processor_On	D	Turns on the HDMI processing
Main_HDMI_Processor_Off	D	Turns off the HDMI processing
Main_HDMI_Aspect_Through	D	Changes the HDMI output aspect ratio to Through
Main_HDMI_Aspect_16x9_Normal	D	Changes the HDMI output aspect ratio to 16x9 Normal
Main_HDMI_Aspect_Smart_Zoom	D	Changes the HDMI output aspect ratio to Smart Zoom
Main_HDMI_Resolution_Auto	D	Changes the HDMI resolution to Auto
Main_HDMI_Resolution_480p_/_576p	D	Changes the HDMI resolution to 480p / 576p
Main_HDMI_Resolution_720p	D	Changes the HDMI resolution to 720p
Main_HDMI_Resolution_1080i	D	Changes the HDMI resolution to 1080i
Main_HDMI_Resolution_1080p	D	Changes the HDMI resolution to 1080p
Main_HDMI_Resolution_Through	D	Changes the HDMI resolution to through
Main_Power_On	D	Turns the main zone power on
Main_Standby	D	Puts the main zone onto standby
Main_Sleep_Off	D	Turns the main zone sleep timer off
Main_Sleep_120_Minutes	D	Turns the main zone sleep timer to 120min
Main_Sleep_90_Minutes	D	Turns the main zone sleep timer to 90min

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CONTROL:		
Main_Sleep_60_Minutes	D	Turns the main zone sleep timer to 60min
Main_Sleep_30_Minutes	D	Turns the main zone sleep timer to 30min
Main_Volume_Up	D	Ramp the volume up for the main zone
Main_Volume_Down	D	Ramp the volume down for the main zone
Main_Initial_Volume_Mode_On	D	Turns on the main zones initial volume mode
Main_Initial_Volume_Mode_Off	D	Turns off the main zones initial volume mode
Main_Mute_Toggle	D	Toggles the main zones mute on and off
Main_Mute_On	D	Turns the main zones mute on
Main_Mute_Off	D	Turns the main zones mute off
Main_Input_ *	D	Sets the main zone to the * Input
Main_Scene1 *	D	Triggers scene * for the main zone
Main_Input_Audio_Type_Auto	D	Sets the main zone audio input type to auto
Main_Input_Audio_Type_HDMI	D	Sets the main zone audio input type to HDMI
Main_Input_Audio_Type_Coax/Optical	D	Sets the main zone input audio type to Coax / Optical
Main_Input_Audio_Analog	D	Sets the main zone input audio type to Analog
Main_Decoder_Auto	D	Sets the main decoder to auto mode
Main_Decoder_DTS	D	Sets the main decoder to dts mode
Main_Pure_Diect_Mode_On	D	Sets the main zone pure direct mode on

Partner: Yamaha
Model: RX-A820
Device Type: Surround Sound Receiver

CONTROL:		
Main_Pure_Direct_Mode_Off	D	Sets the main zone pure direct mode off
Main_Adaptive_Dynamic_Range_Auto	D	Sets the main zone dynamic range auto
Main_Adaptive_Dynamic_Range_Off	D	Sets the main zone dynamic range off
Main_Lip_Sync_Mode_Manual	D	Sets the main zone lip sync mode manual
Main_Lip_Sync_Mode_Auto	D	Sets the main zone lip sync mode auto
Main_Straight_Mode_On	D	Sets the main zone straight mode on
Main_Straight_Mode_Off	D	Sets the main zone straight mode off
Main_Sound_Program_*	D	Changes the main sound program to *
Main_Adaptive_DSP_Auto	D	Sets the adaptive DSP mode to auto
Main_Adaptive_DSP_Off	D	Sets the adaptive DSP mode to Off
Main_3D_Cinema_Auto	D	Set the 3D Cinema mode to auto
Main_3D_Cinema_Off	D	Set the 3D Cinema mode to off
Main_EX_Decoder_Mode *	D	Sets the ex decoder mode to off
Main_2_Channel_Decoder *	D	Sets the 2 channel decoder to *
Main_Enhancer_On	D	Turns on the enhancer mode on
Main_Enhancer_Off	D	Turns on the enhancer mode off
Zone*_Power_On	D	Turns the power on for zone *
Zone*_Standby	D	Turns the power off for zone *

Partner: Yamaha
Model: RX-A820
Device Type: Surround Sound Receiver

CONTROL:		
Zone*_Sleep_Off	D	Sets the zone * sleep timer to off
Zone*_Sleep_ Sleep_120_Minutes	D	Sets the zone * sleep timer to 120 min
Zone*_ Sleep_90_Minutes	D	Sets the zone * sleep timer to 90 min
Zone*_ Sleep_60_Minutes	D	Sets the zone * sleep timer to 60 min
Zone*_ Sleep_30_Minutes	D	Sets the zone * sleep timer to 30 min
Zone*_ Volume_Up	D	Ramps the volume up for zone *
Zone*_ Volume_Down	D	Ramps the volume down for zone *
Zone*_ Volume_Fixed	D	Sets the output for zone * to a fixed level
Zone*_ Volume_Variable	D	Sets the output for zone * to a variable level
Zone*_ Initial_Volume_Mode_On	D	Sets the initial volume level mode on for zone *
Zone*_ Initial_Volume_Mode_Off	D	Sets the initial volume level mode off for zone *
Zone*_ Mute_On/Off	D	Toggle the zone * mute on and off
Zone*_ Mute_On	D	Mutes the output for zone *
Zone*_ Mute_Off	D	Un mutes the output for zone *
Zone*_input *	D	Set zone * to the * input
Zone*_Scene *	D	Triggers scene * for zone *
Tuner_FM_Band	D	Sets the Tuner to the fm band
Tuner_AM_Band	D	Sets the Tuner to the am band

Partner: Yamaha
Model: RX-A820
Device Type: Surround Sound Receiver

CONTROL:		
Tuner_Preset_Mode_Recall	D	Sets the tuners preset buttons to recall mode
Tuner_Preset_Mode_Save	D	Sets the tuners preset buttons to save mode
Tuner_Audio_Mode_Mono	D	Sets the tuner to mono mode
Tuner_Audio_Mode_Auto	D	Sets the tuner to auto mode
Tuner_Preset_Up	D	Selects the next tuner preset
Tuner_Preset_Down	D	Selects the previous tuner preset
Tuner_Preset *	D	Selects tuner preset *
Tuner_Auto_Tuning	D	Sets tuner the auto tuning mode
Tuner_Manual_Tuning	D	Sets tuner the manual tuning mode
Tuner_Program_Up	D	Sends the tuner program up
Tuner_Program_Down	D	Sends the tuner program down
Tuner_Keypad *	D	Selects the tuner keypad * digit
Tuner_Keypad_Clear	D	Clears the keypad direct tune value
Tuner_Keypad_Enter	D	Sends the tuner direct tune value
Tuner_Tune_Up	D	Tunes the tuner to the next station
Tuner_Tune_Down	D	Tunes the tuner to the previous station
Net_Radio_Play	D	Pulse to start playing NET RADIO
Net_Radio_Stop	D	Pulse to stop NET RADIO

Partner: Yamaha
Model: RX-A820
Device Type: Surround Sound Receiver

CONTROL:		
Net_Radio_List_Page_Up	D	Pulse to scroll up a page in the NET RADIO browse list
Net_Radio_List_Page_Up	D	Pulse to scroll down a page in the NET RADIO browse list
Net_Radio_List_Line*_Select	D	Pulse to select the item in the NET RADIO browse list
Net_Radio_List_Back	D	Pulse to go back a level in the NET RADIO browse list
USB_Play	D	Pulse to start playing USB
USB_Pause	D	Pulse to pause USB
USB_Stop	D	Pulse to stop USB
USB_Skip_Forward	D	Pulse to skip the USB track forward
USB_Skip_Reverse	D	Pulse to skip the USB track back
USB_Repeat_Mode	D	Pulse to cycle through the USB repeat modes
USB_Repeat_*	D	Pulse to turn the USB repeat mode *
USB_Shuffle_Mode	D	Pulse to cycle through the USB shuffle modes
USB_Shuffle_*	D	Pulse to turn the USB shuffle mode to *
USB_List_Line*_Select	D	Pulse to select the item in the USB browse list
USB_List_Back	D	Pulse to go back a level in the USB browse list
USB_List_Page_Up	D	Pulse to scroll up a page in the USB browse list
USB_List_Page_Down	D	Pulse to scroll down a page in the USB browse list
USB_Memory_Preset_Auto_Save	D	Pulse to auto save the current USB station to the first available memory location

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8

Partner: Yamaha
Model: RX-A820
Device Type: Surround Sound Receiver

CONTROL:		
USB_Memory_Preset_Location_Up	D	Pulse to increment the memory location to store the current USB station
USB_Memory_Preset_Location_Down	D	Pulse to decrement the memory location to store the current USB station
USB_Memory_Preset_Location_Save	D	Pulse to save the current USB station to the selected memory location
iPod-USB_Play	D	Pulse to start playing iPod-USB
iPod-USB_Pause	D	Pulse to pause iPod-USB
iPod-USB_Stop	D	Pulse to stop iPod-USB
iPod-USB_Skip_Forward	D	Pulse to skip the iPod-USB track forward
iPod-USB_Skip_Reverse	D	Pulse to skip the iPod-USB track back
iPod-USB_Repeat_Mode	D	Pulse to cycle through the iPod-USB repeat modes
iPod-USB_Repeat_*	D	Pulse to turn the iPod-USB repeat mode *
iPod-USB_Shuffle_Mode	D	Pulse to cycle through the iPod-USB shuffle modes
iPod-USB_Shuffle_*	D	Pulse to turn the iPod-USB shuffle mode *
iPod-USB_List_Line*_Select	D	Pulse to select the item in the iPod-USB browse list
iPod-USB_List_Back	D	Pulse to go back a level in the iPod-USB browse list
iPod-USB_List_Page_Up	D	Pulse to scroll up a page in the iPod-USB browse list
iPod-USB_List_Page_Down	D	Pulse to scroll down a page in the iPod-USB browse list
iPod-USB_Mode_Normal	D	Pulse to put the iPod-USB Dock in Normal Mode
iPod-USB_Mode_Extended	D	Pulse to put the iPod-USB Dock into Extended mode

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Partner: Yamaha
Model: RX-A820
Device Type: Surround Sound Receiver

CONTROL:		
SERVER_Play	D	Pulse to start playing SERVER content
SERVER_Pause	D	Pulse to pause SERVER
SERVER_Stop	D	Pulse to stop SERVER
SERVER_Skip_Forward	D	Pulse to skip the SERVER track forward
SERVER_Skip_Reverse	D	Pulse to skip the SERVER track back
SERVER_Repeat_Mode	D	Pulse to cycle through the SERVER repeat modes
SERVER_Repeat_Off	D	Pulse to turn the SERVER repeat mode off
SERVER_Repeat_Single	D	Pulse to turn the SERVER repeat mode to single
SERVER_Repeat_All	D	Pulse to turn the SERVER repeat mode to all
SERVER_Shuffle_Mode	D	Pulse to cycle through the SERVER shuffle modes
SERVER_Shuffle_On	D	Pulse to turn the SERVER shuffle mode On
SERVER_Shuffle_Off	D	Pulse to turn the SERVER shuffle mode to Off
SERVER_List_Line*_Select	D	Pulse to select the item in the SERVER browse list
SERVER_List_Back	D	Pulse to go back a level in the SERVER browse list
SERVER_List_Page_Up	D	Pulse to scroll up a page in the SERVER browse list
SERVER_List_Page_Down	D	Pulse to scroll down a page in the SERVER browse list
SERVER_List_Page_Up	D	Pulse to scroll the SERVER browse list up
SERVER_List_Page_Down	D	Pulse to scroll the SERVER browse list down

Partner: Yamaha
Model: RX-A820
Device Type: Surround Sound Receiver

CONTROL:		
AirPlay_Play	D	Pulse to start playing AirPlay content
AirPlay_Pause	D	Pulse to pause AirPlay
AirPlay_Stop	D	Pulse to stop AirPlay
AirPlay_Skip_Foward	D	Pulse to skip the AirPlay track forward
AirPlay_Skip_Reverse	D	Pulse to skip the AirPlay track back
Pandora_Pause	D	Pulse to pause Pandora
Pandora_Stop	D	Pulse to stop Pandora
Pandora_Skip_Forward	D	Pulse to skip the track forward for Pandora
Pandora_Bookmark_Song	D	Pulse to bookmark the current song to the Pandora account
Pandora_Bookmark_Artist	D	Pulse to bookmark the current artist to the Pandora account
Pandora_Thumbs_Up	D	Pulse to set the rating to thumbs up on the current track
Pandora_Thumbs_Down	D	Pulse to set the rating to thumbs down on the current track
Pandora_List_Line*_Select	D	Pulse to select the item in the Pandora browse list
Pandora_List_Page_Up	D	Pulse to scroll the Pandora browse list up
Pandora_List_Page_Down	D	Pulse to scroll the Pandora browse list down
Pandora_List_Cursor_Down	D	Pulse to move cursor down within Pandora list
Pandora_List_Cursor_Up	D	Pulse to select list item within Pandora
Pandora_List_Cursor_Select	D	Pulse to select list item within Pandora

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Partner: Yamaha
Model: RX-A820
Device Type: Surround Sound Receiver

CONTROL:		
Pandora_List_Cursor_Back	D	Pulse to move back one list layer within Pandora
Pandora_List_Cursor_Back_To_Home	D	Pulse to move back to Home menu of Pandora
Rhapsody_Play	D	Pulse to start playing Rhapsody
Rhapsody_Pause	D	Pulse to pause Rhapsody
Rhapsody_Stop	D	Pulse to stop Rhapsody
Rhapsody_Skip_Forward	D	Pulse to skip the Rhapsody track forward
Rhapsody_Skip_Reverse	D	Pulse to skip the Rhapsody track back
Rhapsody_Repeat_Mode	D	Pulse to cycle through the Rhapsody repeat modes
Rhapsody_Repeat_Off	D	Pulse to turn the Rhapsody repeat mode off
Rhapsody_Repeat_Single	D	Pulse to turn the Rhapsody repeat mode to single
Rhapsody_Repeat_All	D	Pulse to turn the Rhapsody repeat mode to all
Rhapsody_Shuffle_Mode	D	Pulse to cycle through the Rhapsody shuffle modes
Rhapsody_Shuffle_Off	D	Pulse to turn the Rhapsody shuffle mode off
Rhapsody_Shuffle_On	D	Pulse to turn the Rhapsody shuffle mode on
Rhapsody_List_Line*_Select	D	Pulse to select the item in the Rhapsody browse list
Rhapsody_List_Back	D	Pulse to go back a level in the Rhapsody browse list
Rhapsody_List_Page_Up	D	Pulse to scroll up a page in the Rhapsody browse list
Rhapsody_List_Page_Down	D	Pulse to scroll down a page in the Rhapsody browse list

Partner: Yamaha
Model: RX-A820
Device Type: Surround Sound Receiver

CONTROL:		
Rhapsody_List_Page_Up	D	Pulse to scroll the Rhapsody browse list up
Rhapsody_List_Page_Down	D	Pulse to scroll the Rhapsody browse list down
SiriusXM_Play	D	Pulse to start playing SiriusXM
SiriusXM_Stop	D	Pulse to stop SiriusXM
SiriusXM_List_Line*_Select	D	Pulse to select the item in the SiriusXM browse list
SiriusXM_List_Back	D	Pulse to go back a level in the SiriusXM browse list
SiriusXM_List_Page_Up	D	Pulse to scroll up a page in the SiriusXM browse list
SiriusXM_List_Page_Down	D	Pulse to scroll down a page in the SiriusXM browse list
SiriusXM_List_Page_Up	D	Pulse to scroll the SiriusXM browse list up
SiriusXM_List_Page_Down	D	Pulse to scroll the SiriusXM browse list down
IR_Up	D	Pulse to send the IR up command
IR_Down	D	Pulse to send the IR down command
IR_Left	D	Pulse to send the IR left command
IR_Right	D	Pulse to send the IR right command
IR_Enter	D	Pulse to send the IR enter command
IR_On_Screen	D	Pulse to send the IR on screen command
IR_Option	D	Pulse to send the IR option command
IR_Return	D	Pulse to send the IR return command

Partner: Yamaha
Model: RX-A820
Device Type: Surround Sound Receiver

CONTROL:		
IR_Display	D	Pulse to send the IR display command
From_Device	S	Serial information returned from a 2-way serial port.

FEEDBACK:		
System_Power_Is_On	D	High to indicate that the receiver system power is on
System_Power_Is_Standby	D	High to indicate that the receiver system power is standby
System_Party_Mode_Is_On	D	High to indicate that the receiver party mode is on
System_Party_Mode_Is_Off	D	High to indicate that the receiver party mode is off
Main_HDMI_Output_Configuration_Text	S	Displays the current HDMI output configuration
Main_HDMI_Processor_State_Text	S	Displays the HDMI processors current state
Main_HDMI_Aspect_Text	S	Displays the HDMI outputs aspect ratio
Main_HDMI_Resolution_Text	S	Displays the HDMI outputs resolution
Main_Zone_Name_Text	S	Displays the name stored in the receiver for the main zone
Main_Power_Is_On	D	High to indicate the main zone power is on
Main_Power_Is_Standby	D	High to indicate the main zone power is standby
Main_ Sleep_Is_Off	D	High to indicate the main zone sleep timer is off
Main_ Sleep_Is_120_Minutes	D	High to indicate the main zone sleep timer is 120 min
Main_ Sleep_Is_90_Minutes	D	High to indicate the main zone sleep timer is 90 min
Main_Sleep_Is_60_Minutes	D	High to indicate the main zone sleep timer is 60 min

Main_Sleep_Is_30_Minutes	D	High to indicate the main zone sleep timer is 30 min
Main_Sleep_Timer_Text	S	Indicates the Main zone sleep timer time
Main_Volume_Level_Text	S	Indicates the Main zone volume level
Main_Initial_Volume_Mode_is_On	D	High to indicate the main zone initial volume mode is on
Main_Initial_Volume_Mode_is_Off	D	High to indicate the main zone initial volume mode is off
Main_Mute_Is_On	D	High to indicate the main zone is muted
Main_Input_Is *	D	High to indicate the main zone is on *
Main_Scene_*_Name_Text	S	Displays The Name For Main Zone Scene *
Main_Input_Audio_Type_Text	S	Displays the type of audio used for the main zone's current input
Main_Decoder_Mode_Text	S	Displays the decoder mode for the surround processor
Main_Pure_Direct_Mode_Status_Text	S	Displays the pure direct mode state
Main_Adaptive_Dynamic_Range_Mode_Text	S	Displays the adaptive dynamic range mode state
Main_Lip_Sync_Mode_Status_Text	S	Displays the lip sync mode state
Main_Straight_Mode_Status_Text	S	Displays the straight mode state
Main_Sound_Program_Mode_Text	S	Displays the sound program mode
Main_Adaptive_DSP_Mode_Text	S	Displays the adaptive dsp mode
Main_3D_Cinema_Mode_Text	S	Displays the 3d cinema mode
Main_EX_Decoder_Mode_Text	S	Displays the ex decode mode
Main_2Channel_Decoder_Mode_Text	S	Displays the 2 Channel decode mode

Main_Enhancer_Mode_Text	S	Displays the Enhancer mode
Zone*_Name_Text	S	Displays the name stored in the receiver for zone *
Zone*_Power_Is_On	D	High to indicate the zone * power is on
Zone*_Power_Is_Standby	D	High to indicate the zone * power is standby
Zone*_Sleep_Timer_Text	D	Indicates the Zone * sleep timer time
Zone*_Sleep_is_Off	D	High to indicate the zone * sleep timer is off
Zone*_Sleep_Is_120_Minutes	D	High to indicate the zone * sleep timer is 120 min
Zone*_Sleep_Is_90_Minutes	D	High to indicate the zone * sleep timer is 90 min
Zone*_Sleep_Is_60_Minutes	D	High to indicate the zone * sleep timer is 60 min
Zone*_Sleep_Is_30_Minutes	D	High to indicate the zone * sleep timer is 30 min
Zone*_Volume_Level_Text	S	Indicates the zone * volume level
Zone*_Volume_Is_Variable	D	High to indicate that zone * has a fixed volume level
Zone*_Volume_Is_Variable	D	High to indicate that zone * has a variable volume level
Zone*_ Initial_Volume_Mode_is_On	D	High to indicate zone * initial volume mode is on
Zone*_Initial_Volume_Mode_is_Off	D	High to indicate zone * initial volume mode is off
Zone*_Mute_Is_On	D	High to indicate the zone * is muted
Zone*_input_Is *	D	High to indicate zone * input is on *
Zone*_Scene_*_Name_Text	S	Displays The Name For Zone 2 Scene *
Tuner_Band_Is_FM	D	High to indicate that the tuner is on the fm band

Tuner_Band_Is_AM	D	High to indicate that the tuner is on the am band
Tuner_Preset_Mode_Is_Recall	S	High to indicate that the tuner preset mode is recall
Tuner_Preset_Mode_Is_Save	D	High to indicate that the tuner preset mode is save
Tuner_Audio_Mode_Is_Mono	D	High to indicate that the tuner audio mode is mono
Tuner_Audio_Mode_Is_Stereo	D	High to indicate that the tuner audio mode is stereo
Tuner_Preset_Is_*	D	High to indicate that tuner preset * is active
Tuner_Mode_Is_Auto	D	High to indicate that the tuner mode is auto
Tuner_Mode_Is_Manual	D	High to indicate that the tuner mode is manual
Tuner_Station_Is_Tuned	D	High to indicate that the station is tuned
Tuner_Station_Is_Stereo	D	High to indicate that the current station is in stereo
Tuner_Station_Is_Mono	D	High to indicate that the current station is in mono
Tuner_Keypad_Value	A	Shows The Value for Tuner Direct Tune Function
Tuner_AM_Scan_Is_Cancelled	D	Shows signal displaying search mode is on preset
Tuner_FM_Scan_Is_Cancelled	D	High signal displaying search mode is on tuning
Tuner_Current_Station_Text	S	Shows The Currently Tuned Station
Net_Radio_Is_Not_Ready	D	High to indicate that there is an error with Net Radio
Net_Radio_Is_Ready	D	High to indicate that Net Radio is ready to be used
Net_Radio_Is_Playing	D	High to indicate that Net Radio is playing
Net_Radio_Is_Stopped	D	High to indicate that Net Radio is stopped

Net_Radio_Current_Song_Text	S	Displays the current song for Net Radio
Net_Radio_Current_Artist_Text	S	Displays the current artist for Net Radio
Net_Radio_List_Layer_Text	S	Displays the Net Radio list layer info for the Net Radio browse list
Net_Radio_List_Name_Text	S	Displays the Net Radio list layer name for the Net Radio browse list
Net_Radio_List_Line*_Text	S	Displays the information of the Net Radio browse list line *
Net_Radio_Line_*_Available	D	High to indicate that the current line is selectable
USB_Is_Not_Ready	D	High to indicate that there is an error with USB
USB_Is_Ready	D	High to indicate that USB is ready to be used
USB_Is_Playing	D	High to indicate that USB is playing
USB_Is_Paused	D	High to indicate that USB is paused
USB_Is_Stopped	D	High to indicate that USB is stopped
USB_Repeat_Mode_Text	S	Displays the current repeat mode for USB
USB_Shuffle_Mode_Text	S	Displays the current shuffle mode for USB
USB_Current_Song_Text	S	Displays the current song for USB
USB_Current_Artist_Text	S	Displays the current artist for USB
USB_Current_Album_Text	S	Displays the current album for USB
USB_List_Layer_Text	S	Displays the USB list layer info for the USB browse list
USB_List_Name_Text	S	Displays the USB list layer name for the USB browse list
USB_List_Line*_Text	S	Displays the information of the USB browse list line *

USB_Line_*_Is_Available	D	High to indicate that the current line is selectable
iPod-USB_Is_Not_Ready	D	High to indicate that there is an error with the iPod-USB dock
iPod-USB_Is_Ready	D	High to indicate that iPod-USB is ready to be used
iPod-USB_Is_Playing	D	High to indicate that iPod-USB is playing
iPod-USB_Is_Paused	D	High to indicate that iPod-USB is paused
iPod-USB_Is_Stopped	D	High to indicate that iPod-USB is stopped
iPod-USB_Repeat_Mode_Text	S	Displays the current repeat mode for iPod-USB
iPod-USB_Shuffle_Mode_Text	S	Displays the current shuffle mode for iPod-USB
iPod-USB_Current_Song_Text	S	Displays the current song for iPod-USB
iPod-USB_Current_Artist_Text	S	Displays the current artist for iPod-USB
iPod-USB_Current_Album_Text	S	Displays the current album for iPod-USB
iPod-USB_List_Layer_Text	S	Displays the iPod-USB list layer info for the iPod-USB browse list
iPod-USB_List_Name_Text	S	Displays the iPod-USB list layer name for the iPod-USB browse list
iPod-USB_List_Line*_Text	S	Displays the information of the iPod-USB browse list line *
iPod-USB_Line_*_Is_Available	D	High to indicate that the current line is selectable
iPod-USB_Mode_Is_Normal	D	High to indicate that the iPod-USB dock is in normal mode
iPod-USB_Mode_Is_Extended	D	High to indicate that the iPod-USB dock is in extended mode
SERVER_Is_Not_Ready	D	High to indicate that there is an error with SERVER
SERVER_Is_Ready	D	High to indicate that SERVER is ready to be used

SERVER_Is_Playing	D	High to indicate that SERVER is playing
SERVER_Is_Paused	D	High to indicate that SERVER is paused
SERVER_Is_Stopped	D	High to indicate that SERVER is stopped
SERVER_Repeat_Mode_Text	S	Displays the current repeat mode for SERVER
SERVER_Shuffle_Mode_Text	S	Displays the current shuffle mode for SERVER
SERVER_Current_Song_Text	S	Displays the current song for SERVER
SERVER_Current_Artist_Text	S	Displays the current artist for SERVER
SERVER_Current_Album_Text	S	Displays the current album for SERVER
SERVER_List_Layer_Text	S	Displays the SERVER list layer info for the SERVER browse list
SERVER_List_Name_Text	S	Displays the SERVER list layer name for the SERVER browse list
SERVER_List_Line*_Text	S	Displays the information of the SERVER browse list line *
SERVER_Line_*_Is_Available	D	High to indicate that the current line is selectable
AirPlay_Is_Not_Ready	D	High to indicate that there is an error with AirPlay
AirPlay_Is_Ready	D	High to indicate that AirPlay is ready to be used
AirPlay_Is_Playing	D	High to indicate that AirPlay is playing
AirPlay_Is_Stopped	D	High to indicate that AirPlay is stopped
AirPlay_Current_Artist_Text	S	Displays the current artist for AirPlay
AirPlay_Current_Song_Text	S	Displays the current song for AirPlay
AirPlay_Current_Album_Text	S	Displays the current album for AirPlay

AirPlay_List_Layer_Text	S	Displays the AirPlay list layer info for the AirPlay browse list
AirPlay_Current_Volume_Text	S	Displays the current volume state for the AirPlay device
Pandora_Is_Not_Ready	D	High to indicate that there is an error with Pandora
Pandora_Is_Ready	D	High to indicate that Pandora is ready to be used
Pandora_Is_Playing	D	High to indicate that Pandora is playing
Pandora_Is_Paused	D	High to indicate that Pandora is paused
Pandora_Is_Stopped	D	High to indicate that Pandora is stopped
Pandora_Current_Song_Text	S	Displays the current Pandora song name
Pandora_Current_Album_Text	S	Displays the current Pandora album name
Pandora_Current_Station_Text	S	Displays the current Pandora station
Pandora_Is_Thumbed_Up	D	High to indicate that the feedback for the current song is thumbs up
Pandora_List_Layer_Text	S	Displays the current layer of the Pandora browse list
Pandora_List_Name_Text	S	Displays the current layer name of the Pandora browse list
Pandora_List_Line*_Text	S	Displays the information of the Pandora browse list line *
Pandora_Line_*_Is_Available	D	High to indicate that the current line is selectable.
Rhapsody_Is_Not_Ready	D	High to indicate that there is an error with Rhapsody
Rhapsody_Is_Ready	D	High to indicate that Rhapsody is ready to be used
Rhapsody_Is_Playing	D	High to indicate that Rhapsody is playing
Rhapsody_Is_Paused	D	High to indicate that Rhapsody is paused

Rhapsody_Is_Stopped	D	High to indicate that Rhapsody is stopped
Rhapsody_Repeat_Mode_Text	S	Displays the current repeat mode for Rhapsody
Rhapsody_Shuffle_Mode_Text	S	Displays the current shuffle mode for Rhapsody
Rhapsody_Current_Song_Text	S	Displays the current song for Rhapsody
Rhapsody_Current_Artist_Text	S	Displays the current artist for Rhapsody
Rhapsody_Current_Album_Text	S	Displays the current album for Rhapsody
Rhapsody_List_Layer_Text	S	Displays the Rhapsody list layer info for the Rhapsody browse list
Rhapsody_List_Name_Text	S	Displays the Rhapsody list layer name for the Rhapsody browse list
Rhapsody_List_Line*_Text	S	Displays the information of the Rhapsody browse list line *
Rhapsody_Line_*_Is_Available	D	High to indicate that the current line is selectable
SiriusXM_Is_Not_Ready	D	High to indicate that there is an error with SiriusXM
SiriusXM_Is_Ready	D	High to indicate that SiriusXM is ready to be used
SiriusXM_Is_Playing	D	High to indicate that SiriusXM is playing
SiriusXM_Is_Stopped	D	High to indicate that SiriusXM is stopped
SiriusXM_Current_Song_Text	S	Displays the current song for SiriusXM
SiriusXM_Current_Artist_Text	S	Displays the current artist for SiriusXM
SiriusXM_Current_Album_Text	S	Displays the current album for SiriusXM
SiriusXM_Current_Channel_Text	S	Displays the current channel for SiriusXM
SiriusXM_List_Layer_Text	S	Displays the SiriusXM list layer info for the SiriusXM browse list

SiriusXM_List_Name_Text	S	Displays the SiriusXM list layer name for the SiriusXM browse list
SiriusXM_List_Line*_Text	S	Displays the information of the SiriusXM browse list line *
SiriusXM_Line_*_Is_Available	D	High to indicate that the current line is selectable
Receiver_is_Initializing	D	High to indicate that the receiver is initializing
To_Device	D	Serial information sent to a 2-way serial port.

TESTING:

OPS USED FOR TESTING:	PRO2 v:4.007.0004 CP3 v:1.006.0026
SIMPL WINDOWS USED FOR TESTING:	V4.01.10
CRES DB USED FOR TESTING:	v36.05.015.00
DEVICE DATABASE:	v47.05.005.00
SYMBOL LIBRARY USED FOR TESTING:	850
SAMPLE PROGRAM:	Yamaha RX-A820 RS232 v1.0 Demo PRO2 Yamaha RX-A820 RS232 v1.0 Demo CP3
REVISION HISTORY:	V1.0 Initial Release