

Partner: Sony
Model: STR-DA5700ES
Device Type: AV Receiver



GENERAL INFORMATION

SIMPLWINDOWS NAME:	Sony STR-DA5700ES IP v1.0
CATEGORY:	Receiver/Processor
VERSION:	1.0
SUMMARY:	Controls power, volume, input select and surround mode select, and displays true feedback via TCP/IP.
GENERAL NOTES:	<p>This module will control all available functions on a Sony STR-DA5700ES AV surround receiver. Discrete power on/off, volume adjust/mute, input select, and surround mode select functions are included. True feedback is provided for power state, input selected, surround mode status, and volume status.</p> <p>The Sony STR-DA5700ES surround sound receiver is a three-zone receiver. The receiver can accept commands every 100ms. The zones on this module are referred to Main, Zone_2 and Zone_3.</p> <p>The zones are independently controllable. Only the Main zone's volume level will be displayed on the receiver's front panel. Surround modes are only selected for the Main zone. The Main zone has all input selections available to it. Zones 2 and 3 cannot select the multi-channel inputs, Phono input, USB or internet sources. The user may set Zone 2 or 3 to select the same input as the Main zone by selecting the "Source" input.</p> <p>The tuner has two tuning modes: Auto and Manual. When in Auto tuning mode, a "Tune_Stop" button is necessary for proper operation of the auto tuning functions. Manual tuning mode does not use the "Tune_Stop" button. When using the tuner in auto tuning mode the receiver is polled continuously. Some feedback will disappear during the tuning up or down. The feedback will return after "Tune Stop" is pressed.</p> <p>The unit will be polled for its status after any function is triggered on this module. If it is desired to poll the unit at other times, you can assert the Poll_Enable input. This will cause the unit to be polled every 15 seconds.</p> <p>Note that for controlling the receiver's 12V trigger, the 12V trigger on the STR-DA5700ES has to be set to "CTRL".</p>
CRESTRON HARDWARE REQUIRED:	2-Series Processor w/ Ethernet interface, 3-Series Processor
SETUP OF CRESTRON HARDWARE:	TCP/IP Port 33335d.
VENDOR FIRMWARE:	Software Version 966
VENDOR SETUP:	Serial control must be enabled by going into the Sony On-Screen Menu, selecting Settings->Network->External Control and set to "ON".
CABLE DIAGRAM:	N/A

Partner: Sony
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Device Type: AV Receiver


CONTROL:

Main_Power_<On/Off/Toggle>	D	Pulse to turn main zone power on or off.
Zone_2_Power_<On/Off/Toggle>	D	Pulse to turn zone 2 power on or off.
Zone_3_Power_<On/Off/Toggle>	D	Pulse to turn zone 3 power on or off.
Main_Volume_<Up/Down>	D	Press to adjust main zone volume.
Main_Mute_<On/Off/Toggle>	D	Pulse to turn main zone mute on or off.
Zone_2_Volume_<Up/Down>	D	Press to adjust zone 2 volume.
Zone_2_Mute_<On/Off/Toggle>	D	Pulse to turn zone 2 mute on or off.
Main_Input_*	D	Pulse to select input for main zone.
Zone_2_Input_*	D	Pulse to select input for zone 2.
Zone_3_Input_*	D	Pulse to select input for zone 3.
Tuner_Select_<AM/FM>	D	Pulse to select the AM or FM tuner.
Tuner_Key_<0-9>	D	Pulse to enter a tuner frequency value.
Tuner_Key_Clear	D	Pulse to clear tuner value entry field.
Tuner_Key_Enter	D	Pulse to send tuner value entry to receiver.
Manual_Tuning_<Up/Down>	D	Pulse to tune up or down manually.
Auto_Tuning_<Up/Down/Stop>	D	Pulse to initiate or stop auto tuning up or down.
Preset_<Up/Down>	D	Pulse to select the next/previous tuner preset.
Tuner_Preset_<1-30>	D	Pulse to select tuner preset.
Sirius_Key_<0-9>	D	Pulse to enter a Sirius channel value.
Sirius_Key_Clear	D	Pulse to clear Sirius value entry field.
Sirius_Key_Enter	D	Pulse to send Sirius value entry to receiver.
Sirius_Scan_<Up/Down/Stop>	D	Pulse to scan through Sirius channels.
Sirius_Preset_<Up/Down>	D	Pulse to select the next/previous Sirius preset.

Partner: Sony
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Sirius_Category_<Up/Down>	D	Pulse to select next/previous Sirius category.
Sirius_Category_Mode	D	Pulse to select Sirius category mode.
Sirius_Preset_<1-30>	D	Pulse to select tuner preset.
Surround_Mode_*	D	Pulse to select surround mode.
HD_DCS_*	D	Pulse to select HD-D.C.S. mode.
PLIIz_Height_<Low/Mid/High>	D	Pulse to set PLIIz height mode.
True_Concert_<Low/Mid/High>	D	Pulse to set true concert mode.
Sound_Optimizer_<On/Off/Toggle>	D	Pulse to turn sound optimizer on or off.
Main_12V_Trigger_<On/Off/Toggle>	S	Pulse to turn main 12V trigger on or off.
Zone_2_12V_Trigger_<On/Off/Toggle>	D	Pulse to turn zone 2 12V trigger on or off.
Zone_3_12V_Trigger_<On/Off/Toggle>	D	Pulse to turn zone 3 12V trigger on or off.
Enter	D	Pulse to select enter.
Memory	D	Pulse to store an AM/FM/Sirius station to a preset.
GUI_<On/Off/Toggle>	D	Pulse to turn GUI on or off.
Menu	D	Pulse to select menu function.
Display	D	Pulse to select display function.
Cursor_Up	D	Pulse to move on screen selection up.
Cursor_Down	D	Pulse to move on screen selection down.
Cursor_Left	D	Pulse to move on screen selection left.
Cursor_Right	D	Pulse to move on screen selection right.
Cursor_Enter	D	Pulse to select highlighted on screen selection.
Return	D	Pulse to go back one menu item.
Option	D	Pulse to select option function.
Quick_Click	D	Pulse to select quick click function.

Partner: Sony
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Device Type: AV Receiver



Play	D	Pulse to select play.
Stop	D	Pulse to select stop.
Pause	S	Pulse to select pause.
Previous	D	Pulse to select previous file/song to display/play.
Next	D	Pulse to select next file/song to display/play.
Rewind	D	Pulse to scan back through a currently playing song.
Fast_Forward	D	Pulse to scan forward through a currently playing song.
HDMI_Out_<A/B>	D	Pulse to enable HDMI output a or b.
HDMI_Out_A+B	D	Pulse to enable HDMI outputs a and b.
HDMI_Out_Off	D	Pulse to disable HDMI outputs a and b.
Easy_Automation_Scene_<1-4>	D	Pulse to select easy automation scene.
Poll_Enable	D	Latch high to enable polling every 30s.
{{TCP/IP_Client_>>_Connect-F}}	D	To be connected to the "Connect_F" input on the TCP/IP client definition.
{{TCP/IP_Client_>>_status}}	A	To be connected to the "status" input on the TCP/IP client definition that will be communicating with the unit being controlled.
{{TCP/IP_Client_>>_RX\$}}	S	To be connected to the "RX\$" input on the TCP/IP client definition that will be communicating with the unit being controlled.

FEEDBACK:

Main_Power_Is_<On/Off>	D	Indicates the main zone power status.
Zone_2_Power_Is_<On/Off>	D	Indicates the zone 2 power is status.
Zone_3_Power_Is_<On/Off>	D	Indicates the zone 3 power is status.
Main_Volume_Gauge	A	Indicates the main zone volume level. For a gauge object on touchpanel.
Main_Mute_Is_<On/Off>	D	Indicates the main zone mute status.
Zone_2_Volume_Gauge	A	Indicates the zone 2 volume level. For a gauge object on touchpanel.

Partner: Sony
Model: STR-DA5700ES
Device Type: AV Receiver



Zone_2_Mute_Is_<On/Off>	D	Indicates the zone 2 mute status.
Main_Input_Is_*	D	Indicates the currently selected main zone input.
Zone_2_Input_Is_*	D	Indicates the currently selected zone 2 input.
Zone_3_Input_Is_*	D	Indicates the currently selected zone 3 input.
Tuner_<AM/FM>_Is_Selected	D	Indicates that the AM or FM tuner is selected for control.
Tuner_Entry_Text	S	Displays a tuner station request that will be sent to the receiver upon pulsing the "Tuner_Key_Enter" signal.
Tuner_Preset_Text	S	Displays the currently selected tuner preset.
Tuner_Frequency_Text	S	Displays the current tuner frequency.
Tuner_Preset_Is_*	D	Indicates the currently selected tuner preset.
Tuner_Is_Not_Tuning	D	Indicates that the tuner is not scanning through stations.
Tuner_Is_Tuning_<Down/Up>	D	Indicates that the tuner is tuning up or down.
Tuner_Mono_Is_<Off/On>	D	Indicates the tuner is mono mode status.
Tuner_Is_Not_Tuned	D	Indicates that the tuner is not tuned.
Tuner_Is_Tuned	D	Indicates that the tuner is tuned to a frequency.
Tuner_Is_Not_On_RDS_Station	D	Indicates that the tuner is not on an RDS station.
Tuner_Is_On_RDS_Station	D	Indicates that the tuner is on an RDS station.
Sirius_Channel_Text	S	Displays the current Sirius channel selected.
Sirius_Entry_Text	S	Displays a Sirius station request that will be sent to the receiver upon pulsing the "Sirius_Key_Enter" signal.
Sirius_Preset_Text	S	Displays the currently selected Sirius preset.
Sirius_Channel_Name_Text	S	Displays the current Sirius channel name.
Sirius_Category_Text	S	Displays the current Sirius category selected.
Sirius_Artist_Name_Text	S	Displays the current Sirius artist name.
Sirius_Song_Title_Text	S	Displays the current Sirius song title.

Partner: Sony
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Sirius_Composer_Text	S	Displays the current Sirius composer.
Sirius_Preset_Is_*	D	Indicates the currently selected Sirius preset.
Sirius_Channel_Is_<Normal/Loading>	D	Indicates that the Sirius channel is normal or loading.
Sirius_Tuner_Is_Not_Connected	D	Indicates that the Sirius tuner is not connected.
Sirius_Tuner_Is_Connected	D	Indicates that the Sirius tuner is connected.
Sirius_Antenna_Is_Not_Connected	D	Indicates that the Sirius antenna is not connected.
Sirius_Antenna_Is_Connected	D	Indicates that the Sirius antenna is connected.
Sirius_Signal_Is_Not_Present	D	Indicates that the Sirius signal is not present.
Sirius_Signal_Is_Present	D	Indicates that the Sirius signal is present.
Sirius_Is_Subscribed	D	Indicates that the Sirius subscription is valid.
Sirius_Is_Unsubscribed	D	Indicates that the Sirius subscription is invalid.
Sirius_Is_<On/Off>_Air	D	Indicates that the Sirius is on or off air.
Sirius_Category_Mode_Is_<All/One>	D	Indicates that the Sirius category mode is set to all or one.
Sirius_Channel_Lock_Is_<Off/On>	D	Indicates that the Sirius channel lock is off or on.
Sirius_Update_Status_Is_Normal	D	Indicates that the Sirius update status is normal.
Sirius_Is_Updating_Channel_List	D	Indicates that the Sirius channel list is being updated.
Sirius_Is_Updating_Subscription	D	Indicates that the Sirius subscription is being updated.
Sirius_Is_Updating_Firmware	D	Indicates that the Sirius firmware is being updated.
Sirius_SST_Power_Is_<Off/On>	D	Indicates that the Sirius SST power is on or off.
Surround_Mode_Is_*	D	Indicates the current surround mode.
HD_DCS_Is_*	D	Indicates the HD-D.C.S. mode.
PLIIZ_Height_Is_<Low/Mid/High>	D	Indicates the PLIIZ height mode.
True_Concert_Is_<Low/Mid/High>	D	Indicates the true concert mode.
Surround_Lock_Is_<Off/On>	D	Indicates that the surround lock is on or off.

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Sound_Optimizer_Is_<On/Off>	D	Indicates that the sound optimizer is on or off.
Sound_Optimizer_Input_Is_Not_OK	D	Indicates that the current input is not compatible with the sound optimizer function. Sound optimizer control will be disabled.
Sound_Optimizer_Input_Is_OK	D	Indicates that the current input is compatible with the sound optimizer function.
Sound_Optimizer_SF_Is_Not_OK	D	Indicates that the current surround mode is not compatible with the sound optimizer function. Sound optimizer control will be disabled.
Sound_Optimizer_SF_Is_OK	D	Indicates that the current surround mode is compatible with the sound optimizer function.
Sound_Optimizer_H_Phone_Is_Not_OK	D	Indicates that the headphone is plugged in and this is not compatible with the sound optimizer function. Sound optimizer control will be disabled.
Sound_Optimizer_H_Phone_Is_OK	D	Indicates that the headphone is not plugged in and the sound optimizer function is available.
Main_12V_Trigger_Is_<On/Off>	D	Indicates the main 12V trigger status.
Zone_2_12V_Trigger_Is_<On/Off>	D	Indicates the zone 2 12V trigger status.
Zone_3_12V_Trigger_Is_<On/Off>	D	Indicates the zone 3 12V trigger status.
Main_Headphone_Is_<On/Off>	D	Indicates that the headphone is plugged in.
Easy_Automation_Scene_<1/2/3/4>_Is_Active	D	Indicates the last easy automation scene that was selected.
Connected	D	High to indicate that there is an IP connection to the unit.
Connection_Status_Text	S	Indicates the current IP connection status to the unit.
{{Connect_>>_TCP/IP_Client}}	D	To be connected to the "Connect" output on the TCP/IP client definition that will be communicating with the unit being controlled.
{{TX\$_>>_TCP/IP_Client}}	S	To be connected to the "TX\$" output on the TCP/IP client definition that will be communicating with the unit being controlled.

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**TESTING:**

OPS USED FOR TESTING:	2-Series: v4.003.0015 3-Series: v1.002.0000
SIMPL WINDOWS USED FOR TESTING:	v3.11.06
DEVICE DB USED FOR TESTING:	v40.05.009.00
CRES DB USED FOR TESTING:	v30.05.013.00
SYMBOL LIBRARY USED FOR TESTING:	v798
SAMPLE PROGRAM:	Sony STR-DA5700ES IP v1.0 Demo PRO2.smw
REVISION HISTORY:	v1.0 – Original release.