## **Bryston SP2 RS-232 Control Protocol**

Proposed forthcoming new and improved version. To be implemented as SP2 firmware update.

	<b>Command String</b>	AutoFeedback Strings	Description	RESUL	.T
Source Switching	SAT₊	"S03 SAT"	switch to SAT input	Υ	
_	$DVD \mathord{\downarrow}$	"S03 DVD"	switch to DVD input	Υ	
	CD₊	"S03 CD"	switch to CD input	Υ	
	AUX↓	"S03 AUX"	switch to AUX input	Υ	
	VCR↓	"S03 VCR"	switch to VCR input	Υ	
	TP↓	"S03 TAPE"	switch to TAPE input	Υ	
	DI↓	"S04 ON" "S04 OFF"	toggle DIGITAL on/off	Υ	
	DIN₊	"S04 ON"	force DIGITAL on	Υ	
	DIF↓	"S04 OFF"	force DIGITAL off	Υ	
Listening Modes	THX₊	"S01 THX"	THX Surround listening mode	Υ	
J	SUR↓	"S01 SUR"	Surround listening mode	Υ	
	ST₊J	"S01 ST"	Stereo listening mode	Υ	
	MN↓	"S01 MN"	Mono listening mode	Υ	
Bypass Modes	BP₊J	"S08 2CH" "S08 6CH" "S08 OFF"	cycle Bypass Modes 2ch/5.1ch/off	Y	
	BP2↓	"S08 2CH"	force Bypass Mode Stereo	Υ	
	BP6↓	"S08 6CH"	force Bypass Mode 5.1 channel	Υ	
	BPF↓	"S08 OFF"	force Bypass Mode off	Υ	
Surround Modes (2CH)	SM₊	2ch matrix modes	,	Υ	
	EF00↓	"S05 EF00"	No Effect	Υ	PASS THRU
	EF01	"S05 EF01"	Pro Logic	Υ	
	EF02↓	"S05 EF02"	PLIIx Music	Υ	
	EF03↓	"S05 EF03"	PLIIx Movie	Υ	
	EF04↓	"S05 EF04"	Neo:6 Music	Υ	
	EF05↓	"S05 EF05"	Neo:6 Cinema	Υ	

	EF06↓ EF07↓ EF08↓ EF09↓ EF10↓ EF11↓ EF12↓ EF13↓	"S05 EF06" "S05 EF07" "S05 EF08" "S05 EF09" "S05 EF10" "S05 EF11" "S05 EF12" "S05 EF13"	Stereo5 Party Hall Church Stadium Club Theatre Natural	Y Y Y Y Y Y
THX Surround Modes (5.1+)	SM₊	THX 5.1+ Modes	cycle through THX Surround Modes (while in THX listening mode)	
	TM01 → TM02 → TM03 → TM04 →	"S05 TM01" "S05 TM02" "S05 TM03" "S05 TM04"	THX Cinema Mode THX Surround EX THX Music Mode THX Games Mode Note: Feedback may vary based on output channel configuration. For example, THX Games mode is only allowed with 7.1 speaker configurations. If THX Games is requested with less than 7.1 speakers, the SP2 will default to THX Cinema mode.	Y Y Y Y
PLIIx Surround Modes (5.1+)	SM₊	PLIIx 5.1+ Modes	cycle through PLIIx Surround Modes (while in Surround mode with 5.1DD signal)	
	SM01	"S05 PM01"	Dolby Digital or DTS 5.1 channel operation	Υ
	SM02↓	"S05 PM02"	Dolby Digital EX (6 channel movie mode)	Υ
	SM03↓	"S05 PM03"	PLIIx 6-channel Music Mode	Υ
	SM04↓	"S05 PM04"	PLIIx 7-channel Movie Mode	Y
	SM05. □	"S05 PM05"	PLIIx 7-channel Music Mode  Note: Feedback may vary based on output channel configuration.  For example, PLIIx 7ch movie mode is only allowed with 7.1 speaker configurations. If PLIIx 7ch movie mode is requested with less than 7.1 speakers, the SP2 will default to 6ch movie mode or 5.1 Dolby	Y
Volume Commands	GVxx↓	"S07 -XX.X"	where xx is –(desired_volume)+12 range: 0 (highest) to 80 (mute) Note: accurate within 3dB	Υ
	VU₊	"S07 -XX.X"	Volume Up, where XX.X is the dB attenuation level on LCD	Υ

	VD↓ MT↓	"S07 -XX.X" "S09 ON" "S09 OFF"	Volume Down, where XX.X is the dB attenuation level on LCD user mute Toggle	Y Y
	MTN↓	"S09 ON"	mute ON (the SP2 is muted)	Υ
	MTF↓	"S09 OFF"	mute OFF (the SP2 is unmuted)	Ϋ́
	WIII ←	303 311	mate of t (the of 2 is difficulty)	•
Power	PU↓	"PU"	Power Up	Υ
	PD↓	"PD"	Power Down	Υ
Menu Commands	MU₊	no reply	Menu Up (or Left)	Υ
Mena Commanas	MD↓	no reply	Menu Down (or Right)	Ϋ́
	MS↓	no reply	Menu Select	Ϋ́
	SUB↓	no reply	invoke Subwoofer trim control	N
	CTR↓	no reply	invoke Center Channel trim control	N
	RER↓	no reply	invoke Rear Channels trim control	N
	BAK↓	no reply	invoke Back Channels trim control	N
	DAN←	по теріу	IIIVORE BACK CHAIIITEIS UIIII COITUOI	IN
Preset Speaker Configuration	SC1	no reply	S/S/S/S2/Y (Front,Centre,Surround,Back,Sub)	SSS0Y
_	SC2₊	no reply	L/S/S/S/N	LSS0N
	SC3↓	no reply	L/L/L2/N	LLL0N
	SC4↓	no reply	L/N/N/N (stereo)	LNN0N
	SC5↓	no reply	L/L/L2/Y	SSS2Y
	SC6₊	no reply	L/L/S/S2/Y	LLL1Y
Other Commands	SV₊	no reply	Save settings for current input	Υ
	TST↓	no reply	start Test Noise routine	Y
	OSD₊	"S10 ON"	Toggle OSD	Y
	332	"S10 OFF"		•
	OSN₊	"S10 ON"	Force OSD On	Υ
	OSF↓	"S10 OFF"	Force OSD Off	Ϋ́
	<b>33</b> . ←	0.000.1	10.00 000 011	
Status Query	SS1. J	various	returns listening mode	Υ
		"S01 THX"	THX listening mode is selected	Υ
		"S01 SUR"	Surround listening mode is selected	Υ
		"S01 ST"	Stereo listening mode is selected	Υ
		"S01 MN"	Mono listening mode is selected	Υ
		"S01 TST"	???Test Noise Mode???	Υ

			N
SS2₊J	various	returns input signal type	
	"S02 Analog"	Stereo analog input is being used	Y
	"S02 PCM XXk"	Digital PCM with XX kilohertz sample rate	Y
	"S02 DL D X/X.X"	Dolby Digital with channel format X/X.X	Υ
	"S02 DTS X/X.X"	DTS with channel format X/X.X	Υ
	"S02 Detecting"	SP2 is waiting for a valid digital signal	Υ
SS3. ⊣	various	returns source	Υ
	"S03 SAT"	SAT input is selected	Υ
	"S03 DVD"	DVD input is selected	Υ
	"S03 CD"	CD input is selected	Υ
	"S03 AUX"	AUX input is selected	Υ
	"S03 VCR"	VCR input is selected	Υ
	"S03 TP"	TAPE input is selected	Υ
SS4₊	various	returns Digital Status	Υ
	"S04 ON"	Digital mode is enabled	Υ
	"S04 OFF"	Digital mode is disabled	Y
SS5. □	2ch matrix modes	returns Effect/Surround mode	
	"S05 EF00"	No Effect	
	"S05 EF01"	Pro Logic	Υ
	"S05 EF02"	PLIIx Music	Υ
	"S05 EF03"	PLIIx Movie	Υ
	"S05 EF04"	Neo:6 Music	Υ
	"S05 EF05"	Neo:6 Cinema	Υ
	"S05 EF06"	Stereo5	Υ
	"S05 EF07"	Party	Υ
	"S05 EF08"	Hall	Υ
	"S05 EF09"	Church	Υ
	"S05 EF10"	Stadium	Υ
	"S05 EF11"	Club	Υ
	"S05 EF12"	Theatre	Υ
	"S05 EF13"	Natural	Υ
	THX 5.1+ Modes	when listening mode is THX and signal is 5.1 digital	

		"S05 TM01"	THX Cinema Mode	Υ	5.1/6.1
		"S05 TM02"	THX Surround EX	Υ	6.1/7.1
		"S05 TM03"	THX (advanced) Music Mode	Υ	7.1
		"S05 TM04"	THX Games Mode	Υ	7.1
		PLIIx 5.1+ Modes	when listening mode is SURROUND and signal is 5.1 digital		
		"S05 PM01"	Dolby Digital or DTS 5.1 channel operation	Υ	5.1
		"S05 PM02"	Dolby Digital EX (6 channel movie mode)	Υ	6.1/7.1
		"S05 PM03"	PLIIx 6-channel Music Mode	Υ	6.1/7.1
		"S05 PM04"	PLIIx 7-channel Movie Mode	Υ	7.1
		"S05 PM05"	PLIIx 7-channel Music Mode	Υ	7.1
	SS6.⊣	"S06 lcdstring"	returns LCD decoding mode strings, where <i>lcdstring</i> is the string currently displayed on the LCD (up to 16 characters) ???Publish (long) list of possible LCD strings?	Y	
	SS7₊J	"S07 -XX.X"	returns Master Volume, where XX.X is the dB attenuation level on LCD	Υ	
	SS8₊J	various	returns bypass mode		
		"S08 2CH"	SP2 is in 2 channel bypass mode	Υ	BP2
		"S08 6CH"	SP2 is in 6 channel bypass mode	Υ	BP6
		"S08 OFF"	Bypass mode is disabled	Υ	
	SS9₊	various	returns user mute status		
		"S09 MUTE"	SP2 is muted	Υ	
		"S09 UNMUTE"	SP2 is unmuted	Υ	
	SSA₊	various	returns OSD status	Υ	
		"S10 ON"	OSD in engaged	Υ	
		"S10 OFF"	OSD is disabled	Υ	
	QSN₊	XXXXXX	returns 6-digit serial number	Υ	
Automatic Feedback	AFY₊	"AFY"	enables automatic feedback	Υ	
	AFN↓	"AFN"	disables automatic feedback	Υ	

**NOTE**: Whenever any change is made from the Front Panel, IR, or RS232, the change will be reported through the RS232 port if the Automatic Feedback mode is engaged.