

APPENDIX I

RS-232C Protocol

RS232 Setting

Baud rate:	9600
Parity check:	None
Data bit:	8
Stop bit:	1
Flow Control	None

Minimum delay for next command: **1ms**

Control Command Structure

	Header code	Command code	Data code	End code
HEX		Command	Data	0Dh
ASCII	‘V’	Command	Data	CR

Operation Command

Note:
 XX=00-98, projector's ID, XX=99 is for all projectors
 Return Result P=Pass / F=Fail
 n: 0:Disable/1: Enable/Value(0~9999)

Command Group 00			
ASCII	Function	Description	Return Result
VXXS0001	Power On		P/F
VXXS0002	Power Off		P/F
VXXS0003	Resync		P/F
VXXG0004	Get Lamp Hours		Pn/F
VXXS0006	System Reset		P/F
VXXG0007	Get System Status	0:Reset 1:Standby 2:Operation 3:Cooling	Pn/F
VXXG0008	Get F/W Version		Pn/F

Command Group 01			
ASCII	Function	Description	Return Value
VXXG0101	Get Brightness	n=0~100	Pn/F
VXXS0101n	Set Brightness	n=0~100	P/F
VXXG0102	Get Contrast	n=0~100	Pn/F
VXXS0102n	Set Contrast	n=0~100	P/F
VXXG0103	Get Color	n=0~100	Pn/F
VXXS0103n	Set Color	n=0~100	P/F
VXXG0104	Get Tint	n=0~100	Pn/F
VXXS0104n	Set Tint	n=0~100	P/F
VXXG0105	Get Sharpness	0~31	Pn/F
VXXS0105n	Set Sharpness	0~31	P/F

VXXG0106	Get Color Temperature	0: Cold 1: Normal 2: Warm	Pn/F
VXXS0106n	Set Color Temperature	0: Cold 1: Normal 2: Warm	P/F
VXXG0107	Get Gamma	0: PC 1: MAC 2: Video 3: Chart 4: B&W	Pn/F
VXXS0107n	Set Gamma	0: PC 1: MAC 2: Video 3: Chart 4: B&W	P/F

Command Group 02

ASCII	Function	Description	Return Value
VXXS0201	Select RGB		P/F
VXXS0202	Select RGB2		P/F
VXXS0203	Select DVI		P/F
VXXS0204	Select Video		P/F
VXXS0205	Select S-Video		P/F
VXXS0206	Select HDMI		P/F
VXXS0207	Select BNC		P/F
VXXG0220	Get Current Source	Return 1: RGB 2: RGB2 3: DVI 4: Video 5: S-Video 6: HDMI	Pn/F

Command Group 03

ASCII	Function	Description	Return Value
VXXG0301	Get Scaling	0: Fill 1: 4:3 2: 16:9 3 :Letter Box 4 :Native	Pn/F
VXXS0301n	Set Scaling	0: Fill 1: 4:3 2: 16:9 3 :Letter Box 4 :Native	P/F
VXXG0302	Blank	0=off, 1=on	Pn/F
VXXS0302n	Blank	0=off, 1=on	Pn/F
VXXG0303	Auto Keystone On	0=off, 1=on	Pn/F

VXXS0303n	Auto Keystone On	0=off, 1=on	Pn/F
VXXG0304	Freeze On	0=off, 1=on	Pn/F
VXXS0304n	Freeze On	0=off, 1=on	Pn/F
VXXG0305	Volume	n=0~8	Pn/F
VXXS0305n	Volume	n=0~8	P/F
VXXG0308	Projection Mode	0:Front 1:Rear 2:Ceiling 3:Rear+Ceiling	Pn/F
VXXS0308n	Projection Mode	0:Front 1:Rear 2:Ceiling 3:Rear+Ceiling	P/F
VXXG0309	Set vertical keystone value	n= -30~30	Pn/F
VXXS0309n	Set vertical keystone value	n= -30~30	P/F
VXXG0311	Adjust the zoom	n=-10~10	Pn/F
VXXS0311n	Adjust the zoom	n=-10~10	P/F
Command Group 04 (Remote Control)			
ASCII	Function	Description	Return Value
VXXS0401	UP arrow		P/F
VXXS0402	DOWN arrow		P/F
VXXS0403	LEFT arrow		P/F
VXXS0404	RIGHT arrow		P/F
VXXS0405	POWER		P/F
VXXS0406	EXIT		P/F
VXXS0407	INPUT		P/F
VXXS0408	AUTO		P/F
VXXS0409	KEystone+		P/F
VXXS0410	KEystone-		P/F
VXXS0411	MENU		P/F
VXXS0412	STATUS		P/F
VXXS0413	MUTE		P/F
VXXS0414	ZOOM+		P/F
VXXS0415	ZOOM-		P/F
VXXS0416	BLANK		P/F
VXXS0417	FREEZE		P/F
VXXS0418	VOLUME+		P/F
VXXS0419	VOLUME-		P/F
VXXS0420	Enter		P/F