



Digital Projector X90w

Operator's Guide

TECHNICAL

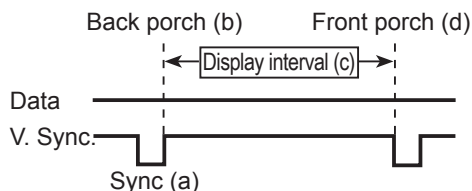
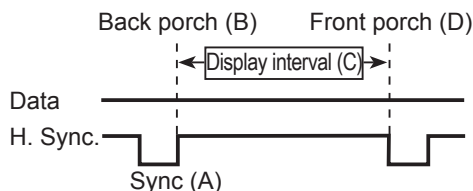
Example of computer signal

Resolution (H x V)	H. frequency (kHz)	V. frequency (Hz)	Rating	Signal mode
720 x 400	37.9	85.0	VESA	TEXT
640 x 480	31.5	59.9	VESA	VGA (60Hz)
640 x 480	37.9	72.8	VESA	VGA (72Hz)
640 x 480	37.5	75.0	VESA	VGA (75Hz)
640 x 480	43.3	85.0	VESA	VGA (85Hz)
800 x 600	35.2	56.3	VESA	SVGA (56Hz)
800 x 600	37.9	60.3	VESA	SVGA (60Hz)
800 x 600	48.1	72.2	VESA	SVGA (72Hz)
800 x 600	46.9	75.0	VESA	SVGA (75Hz)
800 x 600	53.7	85.1	VESA	SVGA (85Hz)
832 x 624	49.7	74.5		Mac 16" mode
1024 x 768	48.4	60.0	VESA	XGA (60Hz)
1024 x 768	56.5	70.1	VESA	XGA (70Hz)
1024 x 768	60.0	75.0	VESA	XGA (75Hz)
1024 x 768	68.7	85.0	VESA	XGA (85Hz)
1152 x 864	67.5	75.0	VESA	1152 x 864 (75Hz)
1280 x 960	60.0	60.0	VESA	1280 x 960 (60Hz)
1280 x 1024	64.0	60.0	VESA	SXGA (60Hz)
1280 x 1024	80.0	75.0	VESA	SXGA (75Hz)
1280 x 1024	91.1	85.0	VESA	SXGA (85Hz)
1600 x 1200	75.0	60.0	VESA	UXGA (60Hz)
1280 x 768	47.7	60.0	VESA	W-XGA (60Hz)
1400 x 1050	65.2	60.0	VESA	SXGA+ (60Hz)

- NOTE** • Be sure to check jack type, signal level, timing and resolution before connecting this projector to a computer.
- Some computers may have multiple display screen modes. Use of some of these modes will not be possible with this projector.
 - Depending on the input signal, full-size display may not be possible in some cases. Refer to the number of display pixels above.
 - Although the projector can display signals with resolution up to UXGA (1600x1200), the signal will be converted to the projector's panel resolution before being displayed. The best display performance will be achieved if the resolutions of the input signal and projector panel are identical.
 - Automatically adjustment may not function correctly with some input signals.
 - The image may not be displayed correctly when the input sync signal is a composite sync or a sync on G.

Initial set signals

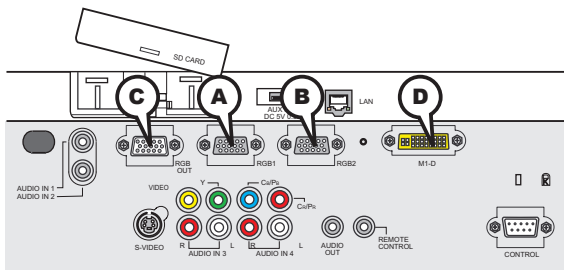
The following signals are used for the initial settings. The signal timing of some computer models may be different. In such case, adjust the items V POSITION and H POSITION in the IMAGE menu.



Computer/ Signal	Horizontal signal timing (μs)			
	(A)	(B)	(C)	(D)
TEXT	2.0	3.0	20.3	1.0
VGA (60Hz)	3.8	1.9	25.4	0.6
VGA (72Hz)	1.3	4.1	20.3	0.8
VGA (75Hz)	2.0	3.8	20.3	0.5
VGA (85Hz)	1.6	2.2	17.8	1.6
SVGA (56Hz)	2.0	3.6	22.2	0.7
SVGA (60Hz)	3.2	2.2	20.0	1.0
SVGA (72Hz)	2.4	1.3	16.0	1.1
SVGA (75Hz)	1.6	3.2	16.2	0.3
SVGA (85Hz)	1.1	2.7	14.2	0.6
Mac 16" mode	1.1	3.9	14.5	0.6
XGA (60Hz)	2.1	2.5	15.8	0.4
XGA (70Hz)	1.8	1.9	13.7	0.3
XGA (75Hz)	1.2	2.2	13.0	0.2
XGA (85Hz)	1.0	2.2	10.8	0.5
1152 x 864 (75Hz)	1.2	2.4	10.7	0.6
1280 x 960 (60Hz)	1.0	2.9	11.9	0.9
SXGA (60Hz)	1.0	2.3	11.9	0.4
SXGA (75Hz)	1.1	1.8	9.5	0.1
SXGA (85Hz)	1.0	1.4	8.1	0.4
UXGA (60Hz)	1.2	1.9	9.9	0.4
W-XGA (60Hz)	1.7	2.5	16.0	0.8
SXGA+ (60Hz)	1.2	2.0	11.4	0.7

Computer/ Signal	Vertical signal timing (lines)			
	(a)	(b)	(c)	(d)
TEXT	3	42	400	1
VGA (60Hz)	2	33	480	10
VGA (72Hz)	3	28	480	9
VGA (75Hz)	3	16	480	1
VGA (85Hz)	3	25	480	1
SVGA (56Hz)	2	22	600	1
SVGA (60Hz)	4	23	600	1
SVGA (72Hz)	6	23	600	37
SVGA (75Hz)	3	21	600	1
SVGA (85Hz)	3	27	600	1
Mac 16" mode	3	39	624	1
XGA (60Hz)	6	29	768	3
XGA (70Hz)	6	29	768	3
XGA (75Hz)	3	28	768	1
XGA (85Hz)	3	36	768	1
1152 x 864 (75Hz)	3	32	864	1
1280 x 960 (60Hz)	3	36	960	1
SXGA(60Hz)	3	38	1024	1
SXGA (75Hz)	3	38	1024	1
SXGA (85Hz)	3	44	1024	1
UXGA (60Hz)	3	46	1200	1
W-XGA (60Hz)	3	23	768	1
SXGA+ (60Hz)	3	33	1050	1

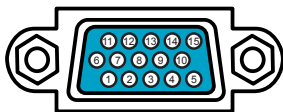
Connection to the ports



ⒶRGB IN1, ⒷRGB IN2, ⒸRGB OUT

D-sub 15pin mini shrink jack

- Video signal: RGB separate, Analog, 0.7Vp-p, 75Ω terminated (positive)
- H/V. sync. Signal: TTL level (positive/negative)
- Composite sync. Signal: TTL level

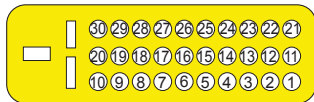


At RGB signal

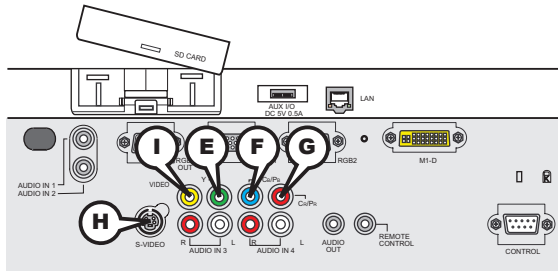
Pin	Signal	Pin	Signal
1	Video Red	9	(No connection)
2	Video Green	10	Ground
3	Video Blue	11	(No connection)
4	(No connection)	12	Ⓐ: SDA (DDC data), Ⓑ/Ⓒ : (No connection)
5	Ground	13	H. sync / Composite sync.
6	Ground Red	14	V. sync.
7	Ground Green	15	Ⓐ: SCL (DDC clock), Ⓑ/Ⓒ : (No connection)
8	Ground Blue		

ⒹM1-D

- Type: T.M.D.S
- Amplitude differential: DC 150-1200mV/AC 1.56 Vp-p
- Amplitude: TTL level (positive/negative)



Pin	Signal	Pin	Signal	Pin	Signal
1	T.M.D.S. Data2 +	11	T.M.D.S. Data1 +	21	T.M.D.S. Data0 +
2	T.M.D.S. Data2 -	12	T.M.D.S. Data1 -	22	T.M.D.S. Data0 -
3	T.M.D.S. Data2 Return	13	T.M.D.S. Data1 Return	23	T.M.D.S. Data0 Return
4	T.M.D.S. Clock Return	14	T.M.D.S. Clock +	24	USB +5V DC Input
5	(No connection)	15	T.M.D.S. Clock -	25	DDC & USB Return
6	V.Sync.	16	USB Data +	26	DDC Data (SDA)
7	(No connection)	17	USB Data -	27	DDC Clock (SCL)
8	Hot Plug Detect (+5V DC Output)	18	(No connection)	28	DDC +5V DC Input
9	(No connection)	19	(No connection)	29	(No connection)
10	(No connection)	20	(No connection)	30	(No connection)



COMPONENT VIDEO **E**Y, **F**CB/PB, **G**CR/PR

RCA jack x3

- System: 525i(480i), 525p(480p), 625i(576i), 750p(720p), 1125i(1080i)

Port	Signal
Y	Component video Y, 1.0±0.1Vp-p, 75Ω terminator with composite
CB/PB	Component video CB/PB, 0.7±0.1Vp-p, 75Ω terminator
CR/PR	Component video CR/PR, 0.7±0.1Vp-p, 75Ω terminator

HS-VIDEO

Mini DIN 4pin jack

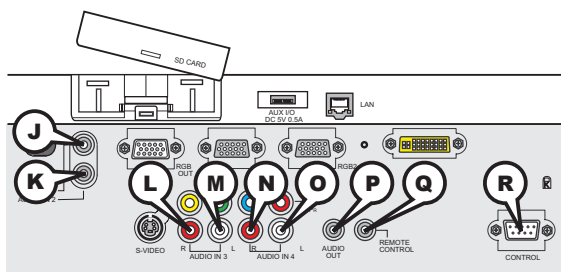


Pin	Signal
1	Color signal 0.286Vp-p (NTSC, burst), 75Ω terminator Color signal 0.300Vp-p (PAL/SECAM, burst) 75Ω terminator
2	Brightness signal, 1.0Vp-p, 75Ω terminator
3	Ground
4	Ground

IVIDEO

RCA jack

- System: NTSC, PAL, SECAM, PAL-M, PAL-N, NTSC4.43
- 1.0±0.1Vp-p, 75Ω terminator



JAUDIO IN 1, **K**AUDIO IN 2

Ø3.5 stereo mini jack

- 500 mVrms 47kΩ terminator

AUDIO IN 3 **L**R, **M**L, **AUDIO IN 4** **N**R, **O**L

RCA jack x2

- 500 mVrms 47kΩ terminator

PAUDIO OUT

Ø3.5 stereo mini jack

- 500 mVrms 1kΩ output impedance

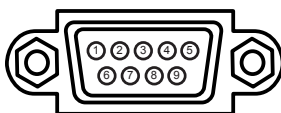
QREMOTE CONTROL

Ø3.5 stereo mini jack

- To be connected with the remote control that came with the projector.

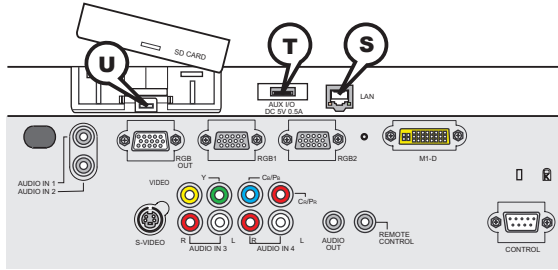
RCONTROL

D-sub 9pin plug



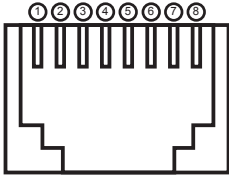
- About the details of RS-232C communication, please refer to the following page.

Pin	Signal	Pin	Signal	Pin	Signal
1	(No connection)	4	(No connection)	7	RTS
2	RD	5	Ground	8	CTS
3	TD	6	(No connection)	9	(No connection)



S LAN

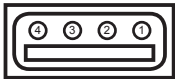
RJ-45 jack



Pin	Signal	Pin	Signal	Pin	Signal
1	TX+	4	-	7	-
2	TX-	5	-	8	-
3	RX+	6	RX-		

T AUX I/O

USB A type jack



Pin	Signal
1	+5V
2	- Data
3	+ Data
4	Gtound

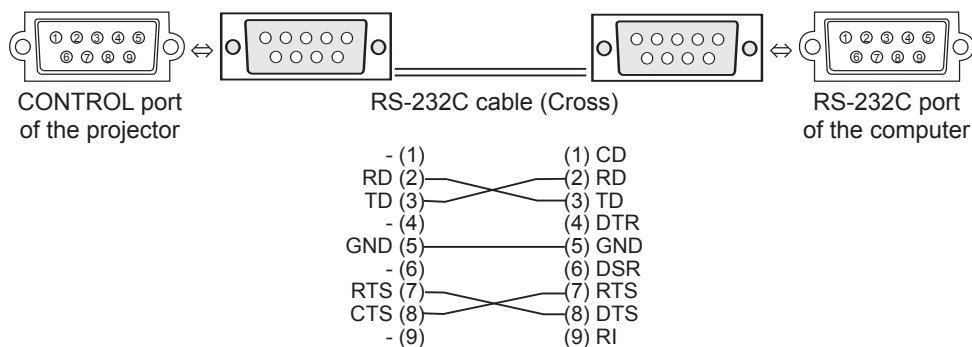
U SD card slot

SD card slot



Pin	Signal	Pin	Signal	Pin	Signal
1	CD/DAT 3	4	VDD	7	DAT 0
2	CMD	5	CLK	8	DAT 1
3	VSS	6	VSS	9	DAT 2

RS-232C Communication



Connecting the cable

1. Turn off the projector and the computer.
2. Connect the CONTROL port of the projector with a RS-232C port of the computer by a RS-232C cable (cross). Use the cable that fulfills the specification shown in the previous page.
3. Turn the computer on, and after the computer has started up turn the projector on.

Communications setting

19200bps, 8N1

1. Protocol

Consist of header (7 bytes) + command data (6 bytes).

2. Header

BE + EF + 03 + 06 + 00 + CRC_low + CRC_high

CRC_low : Lower byte of CRC flag for command data

CRC_high : Upper byte of CRC flag for command data

3. Command data

Command data chart

byte_0	byte_1	byte_2	byte_3	byte_4	byte_5
Action		Type		Setting code	
low	high	low	high	low	high

Action (byte_0 - 1)

Action	Classification	Content
1	SET	Change setting to desired value.
2	GET	Read projector internal setup value.
4	INCREMENT	Increment setup value by 1.
5	DECREMENT	Decrement setup value by 1.
6	EXECUTE	Run a command.

Requesting projector status (Get command)

- (1) Send the request code Header + Command data ('02H'+ '00H'+ type (2 bytes)+ '00H' + '00H') from the computer to the projector.
- (2) The projector returns the response code '1DH'+ data (2 bytes) to the computer.

Changing the projector settings (Set command)

- (1) Send the setting code Header + Command data ('01H'+ '00H'+ type (2 bytes) + setting code (2 bytes)) from the computer to the projector.
- (2) The projector changes the setting based on the above setting code.
- (3) The projector returns the response code '06H' to the computer.

Using the projector default settings (Reset Command)

- (1) The computer sends the default setting code Header + Command data ('06H'+ '00H' + type (2 bytes) + '00H'+ '00H') to the projector.
- (2) The projector changes the specified setting to the default value.
- (3) The projector returns the response code '06H' to the computer.

Increasing the projector setting value (Increment command)

- (1) The computer sends the increment code Header + Command data ('04H'+ '00H'+ type (2 bytes) + '00H'+ '00H') to the projector.
- (2) The projector increases the setting value on the above setting code.
- (3) The projector returns the response code '06H' to the computer.

Decreasing the projector setting value (Decrement command)

- (1) The computer sends the decrement code Header + Command data ('05H'+ '00H'+ type (2 bytes) + '00H' + '00H') to the projector.
- (2) The projector decreases the setting value on the above setting code.
- (3) The projector returns the response code '06H' to the computer.

When the projector cannot understand the received command

When the projector cannot understand the received command, the error code '15H' is sent back to the computer.

Sometimes the projector cannot properly receive the command. In such a case, the command is not executed and the error code '15H' is sent back to the computer. If this error code is returned, send the same command again.

When the projector cannot execute the received command.

When the projector cannot execute the received command, the error code '1CH' + 'xxxxH' is sent back to the computer. When the data length is greater than indicated by the data length code, the projector ignore the excess data code.

Conversely when the data length is shorter than indicated by the data length code, an error code will be returned to the computer.

NOTE • Operation cannot be guaranteed when the projector receives an undefined command or data.

- Provide an interval of at least 40ms between the response code and any other code.
- The projector outputs test data when the power supply is switched ON, and when the lamp is lit. Ignore this data.
- Commands are not accepted during warm-up.

RS-232C Communication (continued)

Names	Operation Type	Header				Command Data		
		CRC				Action	Type	Setting Code
Power	Set	Turn off	BE EF	03	06 00	2A D3	01 00	00 60
		Turn on	BE EF	03	06 00	BA D2	01 00	00 60
	Get		BE EF	03	06 00	19 D3	02 00	00 60
		[Example return] 00 00 01 00 02 00 [Off] [On] [Cool down]						
Input Source	Set	RGB1	BE EF	03	06 00	FE D2	01 00	00 20
		RGB2	BE EF	03	06 00	3E D0	01 00	00 20
		M1-D	BE EF	03	06 00	0E D2	01 00	00 20
		VIDEO	BE EF	03	06 00	6E D3	01 00	00 20
		S-VIDEO	BE EF	03	06 00	9E D3	01 00	00 20
		COMPONENT	BE EF	03	06 00	AE D1	01 00	00 20
		MIU	BE EF	03	06 00	5E D1	01 00	00 20
	Get		BE EF	03	06 00	CD D2	02 00	00 20
Error Status	Get		BE EF	03	06 00	D9 D8	02 00	20 60
		[Example return] 00 00 01 00 02 00 03 00 [Normal] [Cover error] [Fan error] [Lamp error] 04 00 05 00 06 00 07 00 [Temp error] [Air flow error] [Lamp time error] [Cool error] 08 00 [Filter error]						
BRIGHTNESS	Get		BE EF	03	06 00	89 D2	02 00	03 20
	Increment		BE EF	03	06 00	EF D2	04 00	03 20
	Decrement		BE EF	03	06 00	3E D3	05 00	03 20
BRIGHTNESS Reset	Execute		BE EF	03	06 00	58 D3	06 00	00 70
CONTRAST	Get		BE EF	03	06 00	FD D3	02 00	04 20
	Increment		BE EF	03	06 00	9B D3	04 00	04 20
	Decrement		BE EF	03	06 00	4A D2	05 00	04 20
CONTRAST Reset	Execute		BE EF	03	06 00	A4 D2	06 00	01 70
PICTURE MODE	Set	NORMAL	BE EF	03	06 00	23 F6	01 00	BA 30
		CINEMA	BE EF	03	06 00	B3 F7	01 00	BA 30
		DYNAMIC	BE EF	03	06 00	E3 F4	01 00	BA 30
		BOARD(BLACK)	BE EF	03	06 00	E3 EF	01 00	BA 30
		BOARD(GREEN)	BE EF	03	06 00	73 EE	01 00	BA 30
		WHITEBOARD	BE EF	03	06 00	83 EE	01 00	BA 30
			BE EF	03	06 00	10 F6	02 00	BA 30
	Get		BE EF	03	06 00	10 F6	02 00	BA 30
GAMMA	Set	#1 DEFAULT	BE EF	03	06 00	07 E9	01 00	A1 30
		#1 CUSTOM	BE EF	03	06 00	07 FD	01 00	A1 30
		#2 DEFAULT	BE EF	03	06 00	97 E8	01 00	A1 30
		#2 CUSTOM	BE EF	03	06 00	97 FC	01 00	A1 30
		#3 DEFAULT	BE EF	03	06 00	67 E8	01 00	A1 30
		#3 CUSTOM	BE EF	03	06 00	67 FC	01 00	A1 30
		#4 DEFAULT	BE EF	03	06 00	F7 E9	01 00	A1 30
		#4 CUSTOM	BE EF	03	06 00	F7 FD	01 00	A1 30
		#5 DEFAULT	BE EF	03	06 00	C7 EB	01 00	A1 30
		#5 CUSTOM	BE EF	03	06 00	C7 FF	01 00	A1 30
			BE EF	03	06 00	F4 F0	02 00	A1 30
	Get		BE EF	03	06 00	F4 F0	02 00	A1 30

RS-232C Communication (continued)

Names	Operation Type	Header					Command Data		
						CRC	Action	Type	Setting Code
User Gamma Pattern	Set	Off	BE EF	03	06 00	FB FA	01 00	80 30	00 00
		9 step gray scale	BE EF	03	06 00	6B FB	01 00	80 30	01 00
		15 steps gray scale	BE EF	03	06 00	9B FB	01 00	80 30	02 00
		Ramp	BE EF	03	06 00	0B FA	01 00	80 30	03 00
	Get		BE EF	03	06 00	C8 FA	02 00	80 30	00 00
User Gamma Point 1	Get		BE EF	03	06 00	08 FE	02 00	90 30	00 00
	Increment		BE EF	03	06 00	6E FE	04 00	90 30	00 00
	Decrement		BE EF	03	06 00	BF FF	05 00	90 30	00 00
User Gamma Point 2	Get		BE EF	03	06 00	F4 FF	02 00	91 30	00 00
	Increment		BE EF	03	06 00	92 FF	04 00	91 30	00 00
	Decrement		BE EF	03	06 00	43 FE	05 00	91 30	00 00
User Gamma Point 3	Get		BE EF	03	06 00	B0 FF	02 00	92 30	00 00
	Increment		BE EF	03	06 00	D6 FF	04 00	92 30	00 00
	Decrement		BE EF	03	06 00	07 FE	05 00	92 30	00 00
User Gamma Point 4	Get		BE EF	03	06 00	4C FE	02 00	93 30	00 00
	Increment		BE EF	03	06 00	2A FE	04 00	93 30	00 00
	Decrement		BE EF	03	06 00	FB FF	05 00	93 30	00 00
User Gamma Point 5	Get		BE EF	03	06 00	38 FF	02 00	94 30	00 00
	Increment		BE EF	03	06 00	5E FF	04 00	94 30	00 00
	Decrement		BE EF	03	06 00	8F FE	05 00	94 30	00 00
User Gamma Point 6	Get		BE EF	03	06 00	C4 FE	02 00	95 30	00 00
	Increment		BE EF	03	06 00	A2 FE	04 00	95 30	00 00
	Decrement		BE EF	03	06 00	73 FF	05 00	95 30	00 00
User Gamma Point 7	Get		BE EF	03	06 00	80 FE	02 00	96 30	00 00
	Increment		BE EF	03	06 00	E6 FE	04 00	96 30	00 00
	Decrement		BE EF	03	06 00	37 FF	05 00	96 30	00 00
User Gamma Point 8	Get		BE EF	03	06 00	7C FF	02 00	97 30	00 00
	Increment		BE EF	03	06 00	1A FF	04 00	97 30	00 00
	Decrement		BE EF	03	06 00	CB FE	05 00	97 30	00 00
COLOR TEMP	Set	LOW	BE EF	03	06 00	6B F4	01 00	B0 30	01 00
		MID	BE EF	03	06 00	9B F4	01 00	B0 30	02 00
		HIGH	BE EF	03	06 00	0B F5	01 00	B0 30	03 00
		Hi-BRIGHT-1	BE EF	03	06 00	3B F2	01 00	B0 30	08 00
		Hi-BRIGHT-2	BE EF	03	06 00	AB F3	01 00	B0 30	09 00
		CUSTOM-LOW	BE EF	03	06 00	AB F9	01 00	B0 30	11 00
		CUSTOM-MID	BE EF	03	06 00	5B F9	01 00	B0 30	12 00
		CUSTOM-HIGH	BE EF	03	06 00	CB F8	01 00	B0 30	13 00
		CUSTOM-Hi-BRIGHT-1	BE EF	03	06 00	FB FF	01 00	B0 30	18 00
		CUSTOM-Hi-BRIGHT-2	BE EF	03	06 00	6B FE	01 00	B0 30	19 00
	Get		BE EF	03	06 00	C8 F5	02 00	B0 30	00 00
COLOR TEMP GAIN R	Get		BE EF	03	06 00	34 F4	02 00	B1 30	00 00
	Increment		BE EF	03	06 00	52 F4	04 00	B1 30	00 00
	Decrement		BE EF	03	06 00	83 F5	05 00	B1 30	00 00
COLOR TEMP GAIN G	Get		BE EF	03	06 00	70 F4	02 00	B2 30	00 00
	Increment		BE EF	03	06 00	16 F4	04 00	B2 30	00 00
	Decrement		BE EF	03	06 00	C7 F5	05 00	B2 30	00 00

RS-232C Communication (continued)

Names	Operation Type	Header				Command Data			
						CRC	Action	Type	Setting Code
COLOR TEMP GAIN B	Get	BE EF	03	06 00	8C F5	02 00	B3 30	00 00	
	Increment	BE EF	03	06 00	EA F5	04 00	B3 30	00 00	
	Decrement	BE EF	03	06 00	3B F4	05 00	B3 30	00 00	
COLOR TEMP OFFSET R	Get	BE EF	03	06 00	04 F5	02 00	B5 30	00 00	
	Increment	BE EF	03	06 00	62 F5	04 00	B5 30	00 00	
	Decrement	BE EF	03	06 00	B3 F4	05 00	B5 30	00 00	
COLOR TEMP OFFSET G	Get	BE EF	03	06 00	40 F5	02 00	B6 30	00 00	
	Increment	BE EF	03	06 00	26 F5	04 00	B6 30	00 00	
	Decrement	BE EF	03	06 00	F7 F4	05 00	B6 30	00 00	
COLOR TEMP OFFSET B	Get	BE EF	03	06 00	BC F4	02 00	B7 30	00 00	
	Increment	BE EF	03	06 00	DA F4	04 00	B7 30	00 00	
	Decrement	BE EF	03	06 00	0B F5	05 00	B7 30	00 00	
COLOR	Get	BE EF	03	06 00	B5 72	02 00	02 22	00 00	
	Increment	BE EF	03	06 00	D3 72	04 00	02 22	00 00	
	Decrement	BE EF	03	06 00	02 73	05 00	02 22	00 00	
COLOR Reset	Execute	BE EF	03	06 00	80 D0	06 00	0A 70	00 00	
TINT	Get	BE EF	03	06 00	49 73	02 00	03 22	00 00	
	Increment	BE EF	03	06 00	2F 73	04 00	03 22	00 00	
	Decrement	BE EF	03	06 00	FE 72	05 00	03 22	00 00	
TINT Reset	Execute	BE EF	03	06 00	7C D1	06 00	0B 70	00 00	
SHARPNESS	Get	BE EF	03	06 00	F1 72	02 00	01 22	00 00	
	Increment	BE EF	03	06 00	97 72	04 00	01 22	00 00	
	Decrement	BE EF	03	06 00	46 73	05 00	01 22	00 00	
SHARPNESS Reset	Execute	BE EF	03	06 00	C4 D0	06 00	09 70	00 00	
MY MEMORY Load	Set	1	BE EF	03	06 00	0E D7	01 00	14 20	00 00
		2	BE EF	03	06 00	9E D6	01 00	14 20	01 00
		3	BE EF	03	06 00	6E D6	01 00	14 20	02 00
		4	BE EF	03	06 00	FE D7	01 00	14 20	03 00
MY MEMORY Save	Set	1	BE EF	03	06 00	F2 D6	01 00	15 20	00 00
		2	BE EF	03	06 00	62 D7	01 00	15 20	01 00
		3	BE EF	03	06 00	92 D7	01 00	15 20	02 00
		4	BE EF	03	06 00	02 D6	01 00	15 20	03 00
PROGRESSIVE	Set	TURN OFF	BE EF	03	06 00	4A 72	01 00	07 22	00 00
		TV	BE EF	03	06 00	DA 73	01 00	07 22	01 00
		FILM	BE EF	03	06 00	2A 73	01 00	07 22	02 00
	Get	BE EF	03	06 00	79 72	02 00	07 22	00 00	
3D-YCS	Set	TURN OFF	BE EF	03	06 00	E6 70	01 00	0A 22	00 00
		MOVIE	BE EF	03	06 00	76 71	01 00	0A 22	01 00
		STILL	BE EF	03	06 00	86 71	01 00	0A 22	02 00
	Get	BE EF	03	06 00	D5 70	02 00	0A 22	00 00	
VIDEO NR	Set	LOW	BE EF	03	06 00	26 72	01 00	06 22	01 00
		MID	BE EF	03	06 00	D6 72	01 00	06 22	02 00
		HIGH	BE EF	03	06 00	46 73	01 00	06 22	03 00
	Get	BE EF	03	06 00	85 73	02 00	06 22	00 00	

RS-232C Communication (continued)

Names	Operation Type		Header				Command Data		
						CRC	Action	Type	Setting Code
ASPECT	Set	4:3	BE EF	03	06 00	9E D0	01 00	08 20	00 00
		16:9	BE EF	03	06 00	0E D1	01 00	08 20	01 00
		14:9	BE EF	03	06 00	CE D6	01 00	08 20	09 00
		SMALL	BE EF	03	06 00	FE D1	01 00	08 20	02 00
		NORMAL	BE EF	03	06 00	5E DD	01 00	08 20	10 00
OVER SCAN	Get		BE EF	03	06 00	AD D0	02 00	08 20	00 00
			BE EF	03	06 00	91 70	02 00	09 22	00 00
			BE EF	03	06 00	F7 70	04 00	09 22	00 00
	Decrement		BE EF	03	06 00	26 71	05 00	09 22	00 00
OVER SCAN Reset	Execute		BE EF	03	06 00	EC D9	06 00	27 70	00 00
V POSITION	Get		BE EF	03	06 00	0D 83	02 00	00 21	00 00
			BE EF	03	06 00	6B 83	04 00	00 21	00 00
	Decrement		BE EF	03	06 00	BA 82	05 00	00 21	00 00
V POSITION Reset	Execute		BE EF	03	06 00	E0 D2	06 00	02 70	00 00
H POSITION	Get		BE EF	03	06 00	F1 82	02 00	01 21	00 00
			BE EF	03	06 00	97 82	04 00	01 21	00 00
	Decrement		BE EF	03	06 00	46 83	05 00	01 21	00 00
H POSITION Reset	Execute		BE EF	03	06 00	1C D3	06 00	03 70	00 00
H PHASE	Get		BE EF	03	06 00	49 83	02 00	03 21	00 00
			BE EF	03	06 00	2F 83	04 00	03 21	00 00
	Decrement		BE EF	03	06 00	FE 82	05 00	03 21	00 00
H SIZE	Get		BE EF	03	06 00	B5 82	02 00	02 21	00 00
			BE EF	03	06 00	D3 82	04 00	02 21	00 00
	Decrement		BE EF	03	06 00	02 83	05 00	02 21	00 00
H SIZE Reset	Execute		BE EF	03	06 00	68 D2	06 00	04 70	00 00
AUTO ADJUST	Execute		BE EF	03	06 00	91 D0	06 00	0A 20	00 00
COLOR SPACE	Set	AUTO	BE EF	03	06 00	0E 72	01 00	04 22	00 00
		RGB	BE EF	03	06 00	9E 73	01 00	04 22	01 00
		SMPTE240	BE EF	03	06 00	6E 73	01 00	04 22	02 00
		REC709	BE EF	03	06 00	FE 72	01 00	04 22	03 00
		REC601	BE EF	03	06 00	CE 70	01 00	04 22	04 00
COMPONENT	Get		BE EF	03	06 00	3D 72	02 00	04 22	00 00
			BE EF	03	06 00	4A D7	01 00	17 20	00 00
			BE EF	03	06 00	DA D6	01 00	17 20	01 00
	Get		BE EF	03	06 00	79 D7	02 00	17 20	00 00
C-VIDEO FORMAT	Set	AUTO	BE EF	03	06 00	A2 70	01 00	11 22	0A 00
		NTSC	BE EF	03	06 00	C2 74	01 00	11 22	04 00
		PAL	BE EF	03	06 00	52 75	01 00	11 22	05 00
		SECAM	BE EF	03	06 00	52 70	01 00	11 22	09 00
		NTSC4.43	BE EF	03	06 00	62 77	01 00	11 22	02 00
		M-PAL	BE EF	03	06 00	C2 71	01 00	11 22	08 00
		N-PAL	BE EF	03	06 00	32 74	01 00	11 22	07 00
S-VIDEO FORMAT	Get		BE EF	03	06 00	31 76	02 00	11 22	00 00
			BE EF	03	06 00	E6 70	01 00	12 22	0A 00
			BE EF	03	06 00	86 74	01 00	12 22	04 00
			BE EF	03	06 00	16 75	01 00	12 22	05 00
			BE EF	03	06 00	16 70	01 00	12 22	09 00
			BE EF	03	06 00	26 77	01 00	12 22	02 00
			BE EF	03	06 00	86 71	01 00	12 22	08 00
			BE EF	03	06 00	76 74	01 00	12 22	07 00
	Get		BE EF	03	06 00	75 76	02 00	12 22	00 00

RS-232C Communication (continued)

Names	Operation Type		Header				Command Data		
							Action	Type	Setting Code
M1-D	Set	NORMAL	BE EF	03	06 00	3E D9	01 00	20 20	00 00
		ENHANCED	BE EF	03	06 00	AE D8	01 00	20 20	01 00
		Get	BE EF	03	06 00	0D D9	02 00	20 20	00 00
RGB 1	Set	SYNC ON G OFF	BE EF	03	06 00	5E D7	01 00	10 20	02 00
		SYNC ON G ON	BE EF	03	06 00	CE D6	01 00	10 20	03 00
		Get	BE EF	03	06 00	0D D6	02 00	10 20	00 00
RGB 2	Set	SYNC ON G OFF	BE EF	03	06 00	A2 D6	01 00	11 20	02 00
		SYNC ON G ON	BE EF	03	06 00	32 D7	01 00	11 20	03 00
		Get	BE EF	03	06 00	F1 D7	02 00	11 20	00 00
FRAME LOCK	Set	TURN OFF	BE EF	03	06 00	CB D6	01 00	14 30	00 00
		TURN ON	BE EF	03	06 00	5B D7	01 00	14 30	01 00
		Get	BE EF	03	06 00	F8 D6	02 00	14 30	00 00
KEYSTONE V		Get	BE EF	03	06 00	B9 D3	02 00	07 20	00 00
		Increment	BE EF	03	06 00	DF D3	04 00	07 20	00 00
		Decrement	BE EF	03	06 00	0E D2	05 00	07 20	00 00
KEYSTONE V Reset		Execute	BE EF	03	06 00	08 D0	06 00	0C 70	00 00
KEYSTONE H		Get	BE EF	03	06 00	E9 D0	02 00	0B 20	00 00
		Increment	BE EF	03	06 00	8F D0	04 00	0B 20	00 00
		Decrement	BE EF	03	06 00	5E D1	05 00	0B 20	00 00
KEYSTONE H Reset		Execute	BE EF	03	06 00	98 D8	06 00	20 70	00 00
ACTIVE IRIS	Set	TURN OFF	BE EF	03	06 00	0B 22	01 00	04 33	00 00
		THEATER	BE EF	03	06 00	CB 2F	01 00	04 33	10 00
		PRESENTATION	BE EF	03	06 00	5B 2E	01 00	04 33	11 00
		Get	BE EF	03	06 00	38 22	02 00	04 33	00 00
WHISPER	Set	NORMAL	BE EF	03	06 00	3B 23	01 00	00 33	00 00
		WHISPER	BE EF	03	06 00	AB 22	01 00	00 33	01 00
		Get	BE EF	03	06 00	08 23	02 00	00 33	00 00
MIRROR	Set	NORMAL	BE EF	03	06 00	C7 D2	01 00	01 30	00 00
		H:INVERT	BE EF	03	06 00	57 D3	01 00	01 30	01 00
		V:INVERT	BE EF	03	06 00	A7 D3	01 00	01 30	02 00
		H&V:INVERT	BE EF	03	06 00	37 D2	01 00	01 30	03 00
		Get	BE EF	03	06 00	F4 D2	02 00	01 30	00 00
VOLUME-RGB1		Get	BE EF	03	06 00	CD CC	02 00	60 20	00 00
		Increment	BE EF	03	06 00	AB CC	04 00	60 20	00 00
		Decrement	BE EF	03	06 00	7A CD	05 00	60 20	00 00
VOLUME-RGB2		Get	BE EF	03	06 00	FD CD	02 00	64 20	00 00
		Increment	BE EF	03	06 00	9B CD	04 00	64 20	00 00
		Decrement	BE EF	03	06 00	4A CC	05 00	64 20	00 00
VOLUME-M1-D		Get	BE EF	03	06 00	89 CC	02 00	63 20	00 00
		Increment	BE EF	03	06 00	EF CC	04 00	63 20	00 00
		Decrement	BE EF	03	06 00	3E CD	05 00	63 20	00 00
VOLUME-Video		Get	BE EF	03	06 00	31 CD	02 00	61 20	00 00
		Increment	BE EF	03	06 00	57 CD	04 00	61 20	00 00
		Decrement	BE EF	03	06 00	86 CC	05 00	61 20	00 00
VOLUME-S-Video		Get	BE EF	03	06 00	75 CD	02 00	62 20	00 00
		Increment	BE EF	03	06 00	13 CD	04 00	62 20	00 00
		Decrement	BE EF	03	06 00	C2 CC	05 00	62 20	00 00

RS-232C Communication (continued)

Names	Operation Type	Header				Command Data		
						Action	Type	Setting Code
VOLUME-Component	Get	BE EF	03	06 00	01 CC	02 00	65 20	00 00
	Increment	BE EF	03	06 00	67 CC	04 00	65 20	00 00
	Decrement	BE EF	03	06 00	B6 CD	05 00	65 20	00 00
VOLUME – MIU	Get	BE EF	03	06 00	45 CC	02 00	66 20	00 00
	Increment	BE EF	03	06 00	23 CC	04 00	66 20	00 00
	Decrement	BE EF	03	06 00	F2 CD	05 00	66 20	00 00
TREBLE-RGB1	Get	BE EF	03	06 00	0D C8	02 00	70 20	00 00
	Increment	BE EF	03	06 00	6B C8	04 00	70 20	00 00
	Decrement	BE EF	03	06 00	BA C9	05 00	70 20	00 00
TREBLE-RGB2	Get	BE EF	03	06 00	3D C9	02 00	74 20	00 00
	Increment	BE EF	03	06 00	5B C9	04 00	74 20	00 00
	Decrement	BE EF	03	06 00	8A C8	05 00	74 20	00 00
TREBLE-M1-D	Get	BE EF	03	06 00	49 C8	02 00	73 20	00 00
	Increment	BE EF	03	06 00	2F C8	04 00	73 20	00 00
	Decrement	BE EF	03	06 00	FE C9	05 00	73 20	00 00
TREBLE-Video	Get	BE EF	03	06 00	F1 C9	02 00	71 20	00 00
	Increment	BE EF	03	06 00	97 C9	04 00	71 20	00 00
	Decrement	BE EF	03	06 00	46 C8	05 00	71 20	00 00
TREBLE-S-Video	Get	BE EF	03	06 00	B5 C9	02 00	72 20	00 00
	Increment	BE EF	03	06 00	D3 C9	04 00	72 20	00 00
	Decrement	BE EF	03	06 00	02 C8	05 00	72 20	00 00
TREBLE-Component	Get	BE EF	03	06 00	C1 C8	02 00	75 20	00 00
	Increment	BE EF	03	06 00	A7 C8	04 00	75 20	00 00
	Decrement	BE EF	03	06 00	76 C9	05 00	75 20	00 00
TREBLE – MIU	Get	BE EF	03	06 00	85 C8	02 00	76 20	00 00
	Increment	BE EF	03	06 00	E3 C8	04 00	76 20	00 00
	Decrement	BE EF	03	06 00	32 C9	05 00	76 20	00 00
BASS-RGB1	Get	BE EF	03	06 00	0D FB	02 00	80 20	00 00
	Increment	BE EF	03	06 00	6B FB	04 00	80 20	00 00
	Decrement	BE EF	03	06 00	BA FA	05 00	80 20	00 00
BASS-RGB2	Get	BE EF	03	06 00	3D FA	02 00	84 20	00 00
	Increment	BE EF	03	06 00	5B FA	04 00	84 20	00 00
	Decrement	BE EF	03	06 00	8A FB	05 00	84 20	00 00
BASS-M1-D	Get	BE EF	03	06 00	49 FB	02 00	83 20	00 00
	Increment	BE EF	03	06 00	2F FB	04 00	83 20	00 00
	Decrement	BE EF	03	06 00	FE FA	05 00	83 20	00 00
BASS-Video	Get	BE EF	03	06 00	F1 FA	02 00	81 20	00 00
	Increment	BE EF	03	06 00	97 FA	04 00	81 20	00 00
	Decrement	BE EF	03	06 00	46 FB	05 00	81 20	00 00
BASS-S-Video	Get	BE EF	03	06 00	B5 FA	02 00	82 20	00 00
	Increment	BE EF	03	06 00	D3 FA	04 00	82 20	00 00
	Decrement	BE EF	03	06 00	02 FB	05 00	82 20	00 00
BASS-Component	Get	BE EF	03	06 00	C1 FB	02 00	85 20	00 00
	Increment	BE EF	03	06 00	A7 FB	04 00	85 20	00 00
	Decrement	BE EF	03	06 00	76 FA	05 00	85 20	00 00

RS-232C Communication (continued)

Names	Operation Type	Header				Command Data		
				CRC		Action	Type	Setting Code
BASS – MIU	Get	BE EF	03	06 00	85 FB	02 00	86 20	00 00
	Increment	BE EF	03	06 00	E3 FB	04 00	86 20	00 00
	Decrement	BE EF	03	06 00	32 FA	05 00	86 20	00 00
SRS WOW – RGB1	Set	TURN OFF	BE EF	03	06 00	FE FF	01 00	90 20
		MID	BE EF	03	06 00	9E FE	01 00	90 20
		HIGH	BE EF	03	06 00	0E FF	01 00	90 20
	Get	BE EF	03	06 00	CD FF	02 00	90 20	00 00
SRS WOW – RGB2	Set	TURN OFF	BE EF	03	06 00	CE FE	01 00	94 20
		MID	BE EF	03	06 00	AE FF	01 00	94 20
		HIGH	BE EF	03	06 00	3E FF	01 00	94 20
	Get	BE EF	03	06 00	FD FE	02 00	94 20	00 00
SRS WOW – M1-D	Set	TURN OFF	BE EF	03	06 00	BA FF	01 00	93 20
		MID	BE EF	03	06 00	DA FE	01 00	93 20
		HIGH	BE EF	03	06 00	4A FF	01 00	93 20
	Get	BE EF	03	06 00	89 FF	02 00	93 20	00 00
SRS WOW – Video	Set	TURN OFF	BE EF	03	06 00	02 FE	01 00	91 20
		MID	BE EF	03	06 00	62 FF	01 00	91 20
		HIGH	BE EF	03	06 00	F2 FE	01 00	91 20
	Get	BE EF	03	06 00	31 FE	02 00	91 20	00 00
SRS WOW – S-Video	Set	TURN OFF	BE EF	03	06 00	46 FE	01 00	92 20
		MID	BE EF	03	06 00	26 FF	01 00	92 20
		HIGH	BE EF	03	06 00	B6 FE	01 00	92 20
	Get	BE EF	03	06 00	75 FE	02 00	92 20	00 00
SRS WOW – Component	Set	TURN OFF	BE EF	03	06 00	32 FF	01 00	95 20
		MID	BE EF	03	06 00	52 FE	01 00	95 20
		HIGH	BE EF	03	06 00	C2 FF	01 00	95 20
	Get	BE EF	03	06 00	01 FF	02 00	95 20	00 00
SRS WOW – MIU	Set	TURN OFF	BE EF	03	06 00	76 FF	01 00	96 20
		MID	BE EF	03	06 00	16 FE	01 00	96 20
		HIGH	BE EF	03	06 00	86 FF	01 00	96 20
	Get	BE EF	03	06 00	45 FF	02 00	96 20	00 00
MUTE	Set	TURN OFF	BE EF	03	06 00	46 D3	01 00	02 20
		TURN ON	BE EF	03	06 00	D6 D2	01 00	02 20
	Get	BE EF	03	06 00	75 D3	02 00	02 20	00 00
SPEAKER	Set	TURN OFF	BE EF	03	06 00	6E D5	01 00	1C 20
		TURN ON	BE EF	03	06 00	FE D4	01 00	1C 20
	Get	BE EF	03	06 00	5D D5	02 00	1C 20	00 00
AUDIO - RGB1	Set	TURN OFF	BE EF	03	06 00	FE DD	01 00	30 20
		Audio1	BE EF	03	06 00	6E DC	01 00	30 20
		Audio2	BE EF	03	06 00	9E DC	01 00	30 20
		Audio3	BE EF	03	06 00	0E DD	01 00	30 20
		Audio4	BE EF	03	06 00	3E DF	01 00	30 20
	Get	BE EF	03	06 00	CD DD	02 00	30 20	00 00

RS-232C Communication (continued)

Names	Operation Type		Header			Command Data			
						CRC	Action	Type	Setting Code
AUDIO - RGB2	Set	TURN OFF	BE EF	03	06 00	CE DC	01 00	34 20	00 00
		Audio1	BE EF	03	06 00	5E DD	01 00	34 20	01 00
		Audio2	BE EF	03	06 00	AE DD	01 00	34 20	02 00
		Audio3	BE EF	03	06 00	3E DC	01 00	34 20	03 00
		Audio4	BE EF	03	06 00	0E DE	01 00	34 20	04 00
	Get		BE EF	03	06 00	FD DC	02 00	34 20	00 00
AUDIO - M1-D	Set	TURN OFF	BE EF	03	06 00	BA DD	01 00	33 20	00 00
		Audio1	BE EF	03	06 00	2A DC	01 00	33 20	01 00
		Audio2	BE EF	03	06 00	DA DC	01 00	33 20	02 00
		Audio3	BE EF	03	06 00	4A DD	01 00	33 20	03 00
		Audio4	BE EF	03	06 00	7A DF	01 00	33 20	04 00
	Get		BE EF	03	06 00	89 DD	02 00	33 20	00 00
AUDIO - Video	Set	TURN OFF	BE EF	03	06 00	02 DC	01 00	31 20	00 00
		Audio1	BE EF	03	06 00	92 DD	01 00	31 20	01 00
		Audio2	BE EF	03	06 00	62 DD	01 00	31 20	02 00
		Audio3	BE EF	03	06 00	F2 DC	01 00	31 20	03 00
		Audio4	BE EF	03	06 00	C2 DE	01 00	31 20	04 00
	Get		BE EF	03	06 00	31 DC	02 00	31 20	00 00
AUDIO - S-Video	Set	TURN OFF	BE EF	03	06 00	46 DC	01 00	32 20	00 00
		Audio1	BE EF	03	06 00	D6 DD	01 00	32 20	01 00
		Audio2	BE EF	03	06 00	26 DD	01 00	32 20	02 00
		Audio3	BE EF	03	06 00	B6 DC	01 00	32 20	03 00
		Audio4	BE EF	03	06 00	86 DE	01 00	32 20	04 00
	Get		BE EF	03	06 00	75 DC	02 00	32 20	00 00
AUDIO - Component	Set	TURN OFF	BE EF	03	06 00	32 DD	01 00	35 20	00 00
		Audio1	BE EF	03	06 00	A2 DC	01 00	35 20	01 00
		Audio2	BE EF	03	06 00	52 DC	01 00	35 20	02 00
		Audio3	BE EF	03	06 00	C2 DD	01 00	35 20	03 00
		Audio4	BE EF	03	06 00	F2 DF	01 00	35 20	04 00
	Get		BE EF	03	06 00	01 DD	02 00	35 20	00 00
AUDIO - MIU	Set	TURN OFF	BE EF	03	06 00	76 DD	01 00	36 20	00 00
		Audio1	BE EF	03	06 00	E6 DC	01 00	36 20	01 00
		Audio2	BE EF	03	06 00	16 DC	01 00	36 20	02 00
		Audio3	BE EF	03	06 00	86 DD	01 00	36 20	03 00
		Audio4	BE EF	03	06 00	B6 DF	01 00	36 20	04 00
	MIU		BE EF	03	06 00	B6 D0	01 00	36 20	10 00
IR REMOTE Front	Set	Off	BE EF	03	06 00	45 DD	02 00	36 20	00 00
		On	BE EF	03	06 00	FF 32	01 00	00 26	00 00
	Get		BE EF	03	06 00	6C 33	01 00	00 26	01 00
IR REMOTE Rear	Set	Off	BE EF	03	06 00	FF 32	01 00	00 26	00 00
		On	BE EF	03	06 00	03 33	01 00	01 26	00 00
	Get		BE EF	03	06 00	93 32	01 00	01 26	01 00
IR REMOTE Top	Set	Off	BE EF	03	06 00	30 33	02 00	01 26	00 00
		On	BE EF	03	06 00	47 33	01 00	02 26	00 00
	Get		BE EF	03	06 00	D7 32	01 00	02 26	01 00
IR REMOTE FREQ. NORMAL	Set	Off	BE EF	03	06 00	74 33	02 00	02 26	00 00
		On	BE EF	03	06 00	FF 3D	01 00	30 26	00 00
	Get		BE EF	03	06 00	6F 3C	01 00	30 26	01 00
	Get		BE EF	03	06 00	CC 3D	02 00	30 26	00 00

RS-232C Communication (continued)

Names	Operation Type		Header				Command Data		
					CRC		Action	Type	Setting Code
IR REMOTE FREQ. HIGH	Set	Off	BE EF	03	06 00	03 3C	01 00	31 26	00 00
		On	BE EF	03	06 00	93 3D	01 00	31 26	01 00
	Get		BE EF	03	06 00	30 3C	02 00	31 26	00 00
LANGUAGE	Set	ENGLISH	BE EF	03	06 00	F7 D3	01 00	05 30	00 00
		FRANÇAIS	BE EF	03	06 00	67 D2	01 00	05 30	01 00
		DEUTSCH	BE EF	03	06 00	97 D2	01 00	05 30	02 00
		ESPAÑOL	BE EF	03	06 00	07 D3	01 00	05 30	03 00
		ITALIANO	BE EF	03	06 00	37 D1	01 00	05 30	04 00
		NORSK	BE EF	03	06 00	A7 D0	01 00	05 30	05 00
		NEDERLANDS	BE EF	03	06 00	57 D0	01 00	05 30	06 00
		PORTUGUÊS	BE EF	03	06 00	C7 D1	01 00	05 30	07 00
		日本語	BE EF	03	06 00	37 D4	01 00	05 30	08 00
		简体中文	BE EF	03	06 00	A7 D5	01 00	05 30	09 00
		繁體中文	BE EF	03	06 00	37 DE	01 00	05 30	10 00
		한글	BE EF	03	06 00	57 D5	01 00	05 30	0A 00
		SVENSKA	BE EF	03	06 00	C7 D4	01 00	05 30	0B 00
		РУССКИЙ	BE EF	03	06 00	F7 D6	01 00	05 30	0C 00
		SUOMI	BE EF	03	06 00	67 D7	01 00	05 30	0D 00
		POLSKI	BE EF	03	06 00	97 D7	01 00	05 30	0E 00
		TÜRKÇE	BE EF	03	06 00	07 D6	01 00	05 30	0F 00
	Get		BE EF	03	06 00	C4 D3	02 00	05 30	00 00
MENU POSITION H	Get		BE EF	03	06 00	04 D7	02 00	15 30	00 00
	Increment		BE EF	03	06 00	62 D7	04 00	15 30	00 00
	Decrement		BE EF	03	06 00	B3 D6	05 00	15 30	00 00
MENU POSITION H Reset	Execute		BE EF	03	06 00	DC C6	06 00	43 70	00 00
MENU POSITION V	Get		BE EF	03	06 00	40 D7	02 00	16 30	00 00
	Increment		BE EF	03	06 00	26 D7	04 00	16 30	00 00
	Decrement		BE EF	03	06 00	F7 D6	05 00	16 30	00 00
MENU POSITION V Reset	Execute		BE EF	03	06 00	A8 C7	06 00	44 70	00 00
BLANK	Set	My Screen	BE EF	03	06 00	FB CA	01 00	00 30	20 00
		ORIGINAL	BE EF	03	06 00	FB E2	01 00	00 30	40 00
		BLUE	BE EF	03	06 00	CB D3	01 00	00 30	03 00
		WHITE	BE EF	03	06 00	6B D0	01 00	00 30	05 00
		BLACK	BE EF	03	06 00	9B D0	01 00	00 30	06 00
	Get		BE EF	03	06 00	08 D3	02 00	00 30	00 00
BLANK On/Off	Set	TURN OFF	BE EF	03	06 00	FB D8	01 00	20 30	00 00
		TURN ON	BE EF	03	06 00	6B D9	01 00	20 30	01 00
	Get		BE EF	03	06 00	C8 D8	02 00	20 30	00 00
START UP	Set	My Screen	BE EF	03	06 00	CB CB	01 00	04 30	20 00
		ORIGINAL	BE EF	03	06 00	0B D2	01 00	04 30	00 00
		TURN OFF	BE EF	03	06 00	9B D3	01 00	04 30	01 00
	Get		BE EF	03	06 00	38 D2	02 00	04 30	00 00
My Screen LOCK	Set	TURN OFF	BE EF	03	06 00	3B EF	01 00	C0 30	00 00
		TURN ON	BE EF	03	06 00	AB EE	01 00	C0 30	01 00
	Get		BE EF	03	06 00	08 EF	02 00	C0 30	00 00

RS-232C Communication (continued)

Names	Operation Type	Header	Command Data						
			CRC		Action	Type	Setting Code		
MESSAGE	Set	TURN OFF	BE EF	03	06 00	8F D6	01 00	17 30	00 00
		TURN ON	BE EF	03	06 00	1F D7	01 00	17 30	01 00
	Get		BE EF	03	06 00	BC D6	02 00	17 30	00 00
AUTO SEARCH	Set	TURN OFF	BE EF	03	06 00	B6 D6	01 00	16 20	00 00
		TURN ON	BE EF	03	06 00	26 D7	01 00	16 20	01 00
	Get		BE EF	03	06 00	85 D6	02 00	16 20	00 00
AUTO OFF	Get		BE EF	03	06 00	08 86	02 00	10 31	00 00
		Increment	BE EF	03	06 00	6E 86	04 00	10 31	00 00
		Decrement	BE EF	03	06 00	BF 87	05 00	10 31	00 00
AUTO ON	Set	TURN OFF	BE EF	03	06 00	3B 89	01 00	20 31	00 00
		TURN ON	BE EF	03	06 00	AB 88	01 00	20 31	01 00
	Get		BE EF	03	06 00	08 89	02 00	20 31	00 00
LAMP TIME	Get		BE EF	03	06 00	C2 FF	02 00	90 10	00 00
LAMP TIME Reset	Execute		BE EF	03	06 00	58 DC	06 00	30 70	00 00
FILTER TIME	Get		BE EF	03	06 00	C2 F0	02 00	A0 10	00 00
FILER TIME Reset	Execute		BE EF	03	06 00	98 C6	06 00	40 70	00 00
AUTO KEYSTONE EXECUTE	Execute		BE EF	03	06 00	E5 D1	06 00	0D 20	00 00
AUTO KEYSTONE	Set	TURN OFF	BE EF	03	06 00	EA D1	01 00	0F 20	00 00
		TURN ON	BE EF	03	06 00	7A D0	01 00	0F 20	01 00
	Get		BE EF	03	06 00	D9 D1	02 00	0F 20	00 00
MY BUTTON-1	Set	RGB1	BE EF	03	06 00	3A 33	01 00	00 36	00 00
		RGB2	BE EF	03	06 00	FA 31	01 00	00 36	04 00
		M1-D	BE EF	03	06 00	CA 33	01 00	00 36	03 00
		COMPONENT	BE EF	03	06 00	6A 30	01 00	00 36	05 00
		S-VIDEO	BE EF	03	06 00	5A 32	01 00	00 36	02 00
		VIDEO	BE EF	03	06 00	AA 32	01 00	00 36	01 00
		MIU	BE EF	03	06 00	9A 30	01 00	00 36	06 00
		INFORMATION	BE EF	03	06 00	FA 3E	01 00	00 36	10 00
		AUTO KEYSTONE EXECUTE	BE EF	03	06 00	6A 3F	01 00	00 36	11 00
		MY MEMORY	BE EF	03	06 00	9A 3F	01 00	00 36	12 00
		PICTURE MODE	BE EF	03	06 00	0A 3E	01 00	00 36	13 00
		FILTER RESET	BE EF	03	06 00	3A 3C	01 00	00 36	14 00
		ACTIVE IRIS	BE EF	03	06 00	AA 3D	01 00	00 36	15 00
		e-SHOT	BE EF	03	06 00	5A 3D	01 00	00 36	16 00
		VOLUME +	BE EF	03	06 00	CA 3C	01 00	00 36	17 00
		VOLUME -	BE EF	03	06 00	3A 39	01 00	00 36	18 00
	Get		BE EF	03	06 00	09 33	02 00	00 36	00 00

Names	Operation Type	Header				Command Data			
						Action	Type	Setting Code	
MY BUTTON-2	Set	RGB1	BE EF	03	06 00	C6 32	01 00	01 36	00 00
		RGB2	BE EF	03	06 00	06 30	01 00	01 36	04 00
		M1-D	BE EF	03	06 00	36 32	01 00	01 36	03 00
		COMPONENT	BE EF	03	06 00	96 31	01 00	01 36	05 00
		S-VIDEO	BE EF	03	06 00	A6 33	01 00	01 36	02 00
		VIDEO	BE EF	03	06 00	56 33	01 00	01 36	01 00
		MIU	BE EF	03	06 00	66 31	01 00	01 36	06 00
		INFORMATION	BE EF	03	06 00	06 3F	01 00	01 36	10 00
		AUTO KEYSTONE EXECUTE	BE EF	03	06 00	96 3E	01 00	01 36	11 00
		MY MEMORY	BE EF	03	06 00	66 3E	01 00	01 36	12 00
		PICTURE MODE	BE EF	03	06 00	F6 3F	01 00	01 36	13 00
		FILTER RESET	BE EF	03	06 00	C6 3D	01 00	01 36	14 00
		ACTIVE IRIS	BE EF	03	06 00	56 3C	01 00	01 36	15 00
		e-SHOT	BE EF	03	06 00	A6 3C	01 00	01 36	16 00
		VOLUME +	BE EF	03	06 00	36 3D	01 00	01 36	17 00
	VOLUME -	BE EF	03	06 00	C6 38	01 00	01 36	18 00	
MAGNIFY	Get	BE EF	03	06 00	F5 32	02 00	01 36	00 00	
	Get	BE EF	03	06 00	7C D2	02 00	07 30	00 00	
	Increment	BE EF	03	06 00	1A D2	04 00	07 30	00 00	
	Decrement	BE EF	03	06 00	CB D3	05 00	07 30	00 00	
FREEZE	Set	NORMAL	BE EF	03	06 00	83 D2	01 00	02 30	00 00
		FREEZE	BE EF	03	06 00	13 D3	01 00	02 30	01 00
	Get	BE EF	03	06 00	B0 D2	02 00	02 30	00 00	