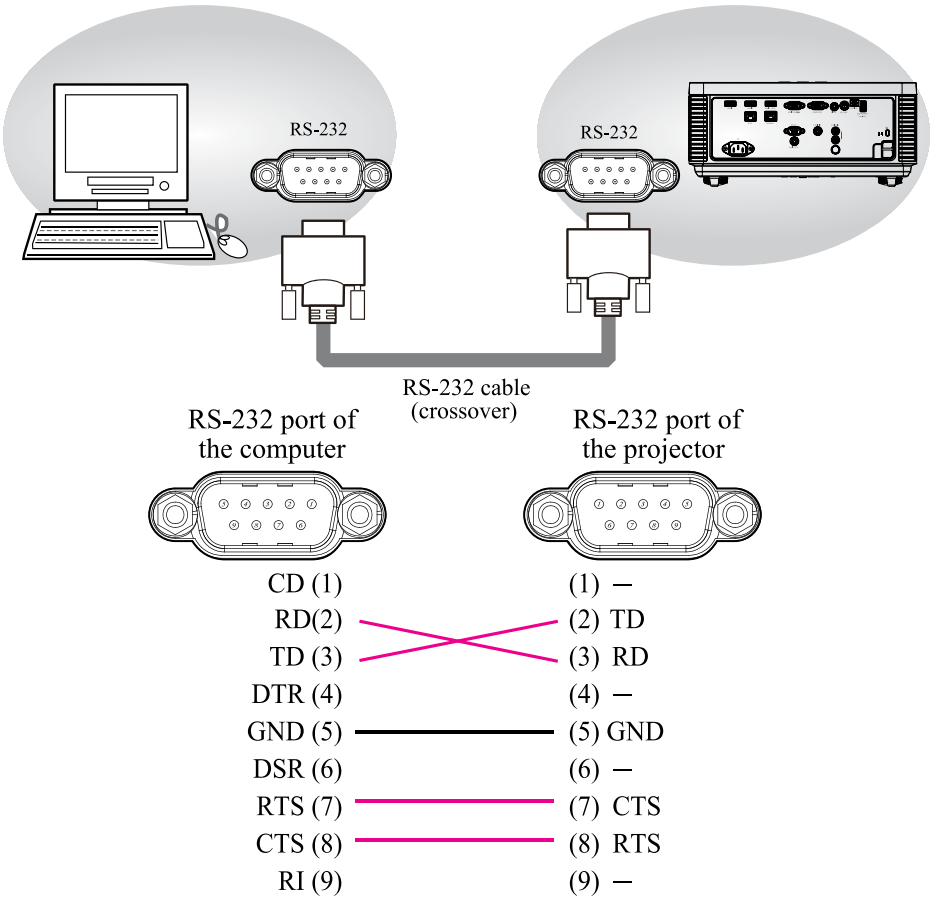
Communication settings

RS-232 communication

When the projector connects to the computer by RS-232 communication, the projector can be controlled with RS-232 commands from the computer. For details of RS-232 commands, refer to RS-232 Communication command table.

Connection

1. Turn off the projector and the computer.
2. Connect the projector's RS-232 port and the computer's RS-232 port with a RS-232 cable (crossover) . Use the cable that fulfills the specification shown in the figure
3. Turn the computer on, and after the computer has started up turn the projector on.



Note: In case of replacement and RS-232 cable (straight) has been installed, please add a packed RS-232 cable (cross) to make connection correctly.

Communication settings

1. Protocol

19200bps,8N1

2. Command format

("h" shows hexadecimal)

Byte Number	0	1	2	3	4	5	6	7	8	9	10	11	12
Command / Action	Header							Data					
	Header code		Packet	Data size		CRC flag		Action		Type		Setting code	
	L	H		L	H	L	H	L	H	L	H	L	H
<SET> Change setting to desired value [(cL)(cH)] by [(bL)(bH)].	BEh	EFh	03h	06h	00h	(aL)	(aH)	01h	00h	(bL)	(bH)	(cL)	(cH)
<GET> Read projector internal setup value [(bL)(bH)] .						(aL)	(aH)	02h	00h	(bL)	(bH)	00h	00h
<INCREMENT> Increment setup value [(bL)(bH)] by 1.						(aL)	(aH)	04h	00h	(bL)	(bH)	00h	00h
<DECREMENT> Decrement setup value [(bL)(bH)] by 1.						(aL)	(aH)	05h	00h	(bL)	(bH)	00h	00h
<EXECUTE> Run a command [(bL)(bH)] .						(aL)	(aH)	06h	00h	(bL)	(bH)	00h	00h

[Header code] [Packet] [Data size]

Set [BEh, EFh, 03h, 06h, 00h] to byte number 0~4.

[CRC flag]

For byte number 5, 6, refer to RS-232 Communication command table.

[Action]

Set functional code to byte number 7, 8.

<SET> = [01h, 00h], <GET> = [02h, 00h], <INCREMENT> =[04h, 00h]

<DECREMENT> = [05h, 00h], <EXECUTE> = [06h, 00h]

Refer to RS232 Communication command table

[Type] [Setting code]

For byte number 9~12 , , refer to RS-232 Communication command table.

3. Response code / Error code

("h" shows hexadecimal)

1. ACK reply: 06h

   When the projector receives the Set, Increment, Decrement or Execute , command correctly, the projector changes the setting data for the specified , item by [Type], and it returns the code.

2. NAK reply: 15h

   When the projector cannot understand the received command, the projector , returns the error code. In such a case, check the sending code and send the same command again.

3. Error reply: 1Ch + 0000h

   When the projector cannot execute the received command for any reasons, the projector returns the error code. In such a case, check the sending code and the setting status of the projector.

4. Data reply: 1Dh + xxxxh
   When the projector receives the GET command correctly, the projector returns the response code and 2 bytes of data.
   Note: For connecting the projector to your devices, please read the manual for each devices, and connect them correctly with suitable cables.
   Note: Operation cannot be guaranteed when the projector receives an undefined command or data.
   Note: Provide an interval of at least 40ms between the response code and any other code.
   Note: The projector outputs test data when the power supply is switched ON, and when the light is lit. Ignore this data.
   Note: Commands are not accepted during warm-up.
   Note: 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, the projector returns the error code to the computer.

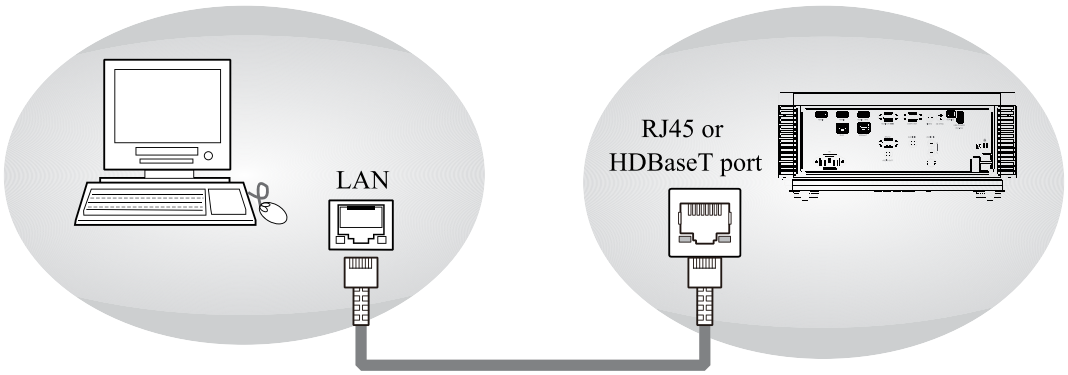
Command control via the network

When the projector connects network, the projector can be controlled with RS-232C commands from the computer with web browser.

For details of RS-232C commands, refer to RS-232C Communication / Network command table.

Connection

1. Turn off the projector and the computer.
2. If you use wired LAN, connect the projector's RJ45 port to the computer's LAN or HDBaseT port with a LAN cable. Use the cable that fulfills the specification shown in figure.
3. Turn the computer on, and after the computer has started up turn the projector on.



• LAN cable (CAT-5e or greater)

or

• For HDBaseT connection
  - CAT-5e or greater
  - shielded type (connectors included)
  - straight cable
  - single cable

Communication port

The following two ports are assigned for the command control.

TCP #23

Communication settings

Command control settings

[TCP #23]

1. Command format
   Same as RS-232C communication, refer to RS-232C Communication command format.
2. Response code / Error code (“h” shows hexadecimal)
   Four of the response / error code used for TCP#23 are the same as RS-232C Communication (1)~(4).
   (1) ACK reply: 06h
   Refer to RS-232C communication.
   (2) NAK reply: 15h
   Refer to RS-232C communication.
   (3) Error reply: 1Ch + 0000h
   Refer to RS-232C communication.
   (4) Data reply: 1Dh + xxxxh
   Refer to RS-232C communication.

Note: Operation cannot be guaranteed when the projector receives an undefined command or data.

Note: Provide an interval of at least 40ms between the response code and any other code.

Note: Commands are not accepted during warm-up.

Communication command table

Function	Operation		Header Data (7 bytes)				Command Data (6 bytes)			Description
			Header Code	Packet	Data Size	CRC	Action	Type	Setting Code	
Picture Mode	Set	Presentation	BE EF	03	06 00	B3 CB	01 00	BA 30	51 00	
		High Bright	BE EF	03	06 00	23 CA	01 00	BA 30	50 00	
		Sports	BE EF	03	06 00	D3 F6	01 00	BA 30	03 00	
		Cinema	BE EF	03	06 00	B3 F7	01 00	BA 30	01 00	
		Photo	BE EF	03	06 00	73 F5	01 00	BA 30	05 00	
		Video	BE EF	03	06 00	43 CB	01 00	BA 30	52 00	
		Natural	BE EF	03	06 00	23 F6	01 00	BA 30	00 00	
		DICOM SIM.	BE EF	03	06 00	73 C6	01 00	BA 30	41 00	
		USER-1	BE EF	03	06 00	E3 FB	01 00	BA 30	10 00	
		USER-2	BE EF	03	06 00	73 FA	01 00	BA 30	11 00	
	Get		BE EF	03	06 00	10 F6	02 00	BA 30	00 00	
Brightness	Set	0 - 100	BE EF	03	06 00	[*1]	01 00	03 20	[*2]	[*1]: CRC (Low, High) [*2]: 00 00 (Min) - 64 00 (Max)
	Increment		BE EF	03	06 00	EF D2	04 00	03 20	00 00	
	Decrement		BE EF	03	06 00	3E D3	05 00	03 20	00 00	
	Get		BE EF	03	06 00	89 D2	02 00	03 20	00 00	
Contrast	Set	0 - 100	BE EF	03	06 00	[*1]	01 00	04 20	[*2]	[*1]: CRC (Low, High) [*2]: 00 00 (Min) - 64 00 (Max)
	Increment		BE EF	03	06 00	9B D3	04 00	04 20	00 00	
	Decrement		BE EF	03	06 00	4A D2	05 00	04 20	00 00	
	Get		BE EF	03	06 00	FD D3	02 00	04 20	00 00	
H Position	Set	0 - 10	BE EF	03	06 00	[*1]	01 00	01 21	[*2]	[*1]: CRC (Low, High) [*2]: 00 00 (Min) - 0A 00 (Max)
	Increment		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	
	Get		BE EF	03	06 00	F1 82	02 00	01 21	00 00	

Function	Operation		Header Data (7 bytes)				Command Data (6 bytes)			Description
			Header Code	Packet	Data Size	CRC	Action	Type	Setting Code	
V Position	Set	0 - 10	BE EF	03	06 00	[*1]	01 00	00 21	[*2]	[*1]: CRC (Low, High) [*2]: 00 00 (Min) - 0A 00 (Max)
	Increment		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	
	Get		BE EF	03	06 00	0D 83	02 00	00 21	00 00	
H Phase	Set	0 - 31	BE EF	03	06 00	[*1]	01 00	03 21	[*2]	[*1]: CRC (Low, High) [*2]: 00 00 (Min) - 1F 00 (Max)
	Increment		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	
	Get		BE EF	03	06 00	49 83	02 00	03 21	00 00	
H Size	Set	0 - 10	BE EF	03	06 00	[*1]	01 00	02 21	[*2]	[*1]: CRC (Low, High) [*2]: 00 00 (Min) - 0A 00 (Max)
	Increment		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	
	Get		BE EF	03	06 00	B5 82	02 00	02 21	00 00	
Auto Adjust	Execute		BE EF	03	06 00	91 D0	06 00	0A 20	00 00	
Brilliant Color	Set	0 - 10	BE EF	03	06 00	[*1]	01 00	9C 22	[*2]	[*1]: CRC (Low, High) [*2]: 00 00 (Min) - C8 00 (Max)
	Increment		BE EF	03	06 00	3B 5D	04 00	9C 22	00 00	
	Decrement		BE EF	03	06 00	EA 5C	05 00	9C 22	00 00	
	Get		BE EF	03	06 00	5D 5D	02 00	9C 22	00 00	
Sharpness	Set	0 - 31	BE EF	03	06 00	[*1]	01 00	01 22	[*2]	[*1]: CRC (Low, High) [*2]: 00 00 (Min) - 1F 00 (Max)
	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	
	Get		BE EF	03	06 00	F1 72	02 00	01 22	00 00	
Gamma	Set	1.8	BE EF	03	06 00	3B 86	01 00	A0 30	B4 00	
		2.0	BE EF	03	06 00	FB A6	01 00	A0 30	C8 00	
		2.2	BE EF	03	06 00	FB A9	01 00	A0 30	DC 00	
		2.4	BE EF	03	06 00	3B B5	01 00	A0 30	F0 00	
		B&W	BE EF	03	06 00	EB F1	01 00	A0 30	FD FF	
		Linear	BE EF	03	06 00	1B F1	01 00	A0 30	FE FF	
	Get		BE EF	03	06 00	08 F1	02 00	A0 30	00 00	
Color Temperature	Set	Low	BE EF	03	06 00	6B F4	01 00	B0 30	01 00	
		Mid-1	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	
	Get		BE EF	03	06 00	C8 F5	02 00	B0 30	00 00	
Video AGC	Set	Off	BE EF	03	06 00	92 5C	01 00	9D 22	00 00	
		On	BE EF	03	06 00	02 5D	01 00	9D 22	01 00	
	Get		BE EF	03	06 00	A1 5C	02 00	9D 22	00 00	
Color	Set	0 - 100	BE EF	03	06 00	[*1]	01 00	02 22	[*2]	[*1]: CRC (Low, High) [*2]: 00 00 (Min) - 64 00 (Max)
	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	
	Get		BE EF	03	06 00	B5 72	02 00	02 22	00 00	
Tint	Set	0 - 100	BE EF	03	06 00	[*1]	01 00	03 22	[*2]	[*1]: CRC (Low, High) [*2]: 00 00 (Min) - 64 00 (Max)
	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	
	Get		BE EF	03	06 00	49 73	02 00	03 22	00 00	

Communication settings

Function	Operation	Header Data (7 bytes)				Command Data (6 bytes)			Description
		Header Code	Packet	Data Size	CRC	Action	Type	Setting Code	
White Balance - Red Gain	Set 0 - 200	BE EF	03	06 00	[*1]	01 00	B1 30	[*2]	[*1]: CRC (Low, High) [*2]: 00 00 (Min) - C8 00 (Max)
	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	
	Get	BE EF	03	06 00	34 F4	02 00	B1 30	00 00	
White Balance - Green Gain	Set 0 - 200	BE EF	03	06 00	[*1]	01 00	B2 30	[*2]	[*1]: CRC (Low, High) [*2]: 00 00 (Min) - C8 00 (Max)
	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	
	Get	BE EF	03	06 00	70 F4	02 00	B2 30	00 00	
White Balance - Blue Gain	Set 0 - 200	BE EF	03	06 00	[*1]	01 00	B3 30	[*2]	[*1]: CRC (Low, High) [*2]: 00 00 (Min) - C8 00 (Max)
	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	
	Get	BE EF	03	06 00	8C F5	02 00	B3 30	00 00	
White Balance - Red Offset	Set 0 - 200	BE EF	03	06 00	[*1]	01 00	B5 30	[*2]	[*1]: CRC (Low, High) [*2]: 00 00 (Min) - C8 00 (Max)
	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	
	Get	BE EF	03	06 00	04 F5	02 00	B5 30	00 00	
White Balance - Green Offset	Set 0 - 200	BE EF	03	06 00	[*1]	01 00	B6 30	[*2]	[*1]: CRC (Low, High) [*2]: 00 00 (Min) - C8 00 (Max)
	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	
	Get	BE EF	03	06 00	40 F5	02 00	B6 30	00 00	
White Balance - Blue Offset	Set 0 - 200	BE EF	03	06 00	[*1]	01 00	B7 30	[*2]	[*1]: CRC (Low, High) [*2]: 00 00 (Min) - C8 00 (Max)
	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	
	Get	BE EF	03	06 00	BC F4	02 00	B7 30	00 00	
Color Manager - Red Hue	Set 0 - 100	BE EF	03	06 00	[*1]	01 00	00 27	[*2]	[*1]: CRC (Low, High) [*2]: 00 00 (Min) - 64 00 (Max)
	Increment	BE EF	03	06 00	6A 63	04 00	00 27	00 00	
	Decrement	BE EF	03	06 00	BB 62	05 00	00 27	00 00	
	Get	BE EF	03	06 00	0C 63	02 00	00 27	00 00	
Color Manager - Red Saturation	Set 0 - 100	BE EF	03	06 00	[*1]	01 00	10 27	[*2]	[*1]: CRC (Low, High) [*2]: 00 00 (Min) - 64 00 (Max)
	Increment	BE EF	03	06 00	AA 67	04 00	10 27	00 00	
	Decrement	BE EF	03	06 00	7B 66	05 00	10 27	00 00	
	Get	BE EF	03	06 00	CC 67	02 00	10 27	00 00	
Color Manager - Red Gain	Set 0 - 100	BE EF	03	06 00	[*1]	01 00	20 27	[*2]	[*1]: CRC (Low, High) [*2]: 00 00 (Min) - C8 00 (Max)
	Increment	BE EF	03	06 00	AA 68	04 00	20 27	00 00	
	Decrement	BE EF	03	06 00	7B 69	05 00	20 27	00 00	
	Get	BE EF	03	06 00	CC 68	02 00	20 27	00 00	
Color Manager - Green Hue	Set 0 - 100	BE EF	03	06 00	[*1]	01 00	02 27	[*2]	[*1]: CRC (Low, High) [*2]: 00 00 (Min) - 64 00 (Max)
	Increment	BE EF	03	06 00	D2 62	04 00	02 27	00 00	
	Decrement	BE EF	03	06 00	03 63	05 00	02 27	00 00	
	Get	BE EF	03	06 00	B4 62	02 00	02 27	00 00	
Color Manager - Green Saturation	Set 0 - 100	BE EF	03	06 00	[*1]	01 00	12 27	[*2]	[*1]: CRC (Low, High) [*2]: 00 00 (Min) - 64 00 (Max)
	Increment	BE EF	03	06 00	12 66	04 00	12 27	00 00	
	Decrement	BE EF	03	06 00	C3 67	05 00	12 27	00 00	
	Get	BE EF	03	06 00	74 66	02 00	12 27	00 00	

Function	Operation	Header Data (7 bytes)				Command Data (6 bytes)			Description
		Header Code	Packet	Data Size	CRC	Action	Type	Setting Code	
Color Manager - Green Gain	Set 0 - 100	BE EF	03	06 00	[*1]	01 00	22 27	[*2]	[*1]: CRC (Low, High) [*2]: 00 00 (Min) - 64 00 (Max)
	Increment	BE EF	03	06 00	12 69	04 00	22 27	00 00	
	Decrement	BE EF	03	06 00	C3 68	05 00	22 27	00 00	
	Get	BE EF	03	06 00	74 69	02 00	22 27	00 00	
Color Manager - Blue Hue	Set 0 - 100	BE EF	03	06 00	[*1]	01 00	04 27	[*2]	[*1]: CRC (Low, High) [*2]: 00 00 (Min) - 64 00 (Max)
	Increment	BE EF	03	06 00	5A 62	04 00	04 27	00 00	
	Decrement	BE EF	03	06 00	8B 63	05 00	04 27	00 00	
	Get	BE EF	03	06 00	3C 62	02 00	04 27	00 00	
Color Manager - Blue Saturation	Set 0 - 100	BE EF	03	06 00	[*1]	01 00	14 27	[*2]	[*1]: CRC (Low, High) [*2]: 00 00 (Min) - 64 00 (Max)
	Increment	BE EF	03	06 00	9A 66	04 00	14 27	00 00	
	Decrement	BE EF	03	06 00	4B 67	05 00	14 27	00 00	
	Get	BE EF	03	06 00	FC 66	02 00	14 27	00 00	
Color Manager - Blue Gain	Set 0 - 100	BE EF	03	06 00	[*1]	01 00	24 27	[*2]	[*1]: CRC (Low, High) [*2]: 00 00 (Min) - C8 00 (Max)
	Increment	BE EF	03	06 00	9A 69	04 00	24 27	00 00	
	Decrement	BE EF	03	06 00	4B 68	05 00	24 27	00 00	
	Get	BE EF	03	06 00	FC 69	02 00	24 27	00 00	
Color Manager - Cyan Hue	Set 0 - 100	BE EF	03	06 00	[*1]	01 00	03 27	[*2]	[*1]: CRC (Low, High) [*2]: 00 00 (Min) - C8 00 (Max)
	Increment	BE EF	03	06 00	2E 63	04 00	03 27	00 00	
	Decrement	BE EF	03	06 00	FF 62	05 00	03 27	00 00	
	Get	BE EF	03	06 00	48 63	02 00	03 27	00 00	
Color Manager - Cyan Saturation	Set 0 - 100	BE EF	03	06 00	[*1]	01 00	13 27	[*2]	[*1]: CRC (Low, High) [*2]: 00 00 (Min) - 64 00 (Max)
	Increment	BE EF	03	06 00	EE 67	04 00	13 27	00 00	
	Decrement	BE EF	03	06 00	3F 66	05 00	13 27	00 00	
	Get	BE EF	03	06 00	88 67	02 00	13 27	00 00	
Color Manager - Cyan Gain	Set 0 - 100	BE EF	03	06 00	[*1]	01 00	23 27	[*2]	[*1]: CRC (Low, High) [*2]: 00 00 (Min) - 64 00 (Max)
	Increment	BE EF	03	06 00	EE 68	04 00	23 27	00 00	
	Decrement	BE EF	03	06 00	3F 69	05 00	23 27	00 00	
	Get	BE EF	03	06 00	88 68	02 00	23 27	00 00	
Color Manager - Magenta Hue	Set 0 - 100	BE EF	03	06 00	[*1]	01 00	05 27	[*2]	[*1]: CRC (Low, High) [*2]: 00 00 (Min) - 64 00 (Max)
	Increment	BE EF	03	06 00	A6 63	04 00	05 27	00 00	
	Decrement	BE EF	03	06 00	77 62	05 00	05 27	00 00	
	Get	BE EF	03	06 00	C0 63	02 00	05 27	00 00	
Color Manager - Magenta Saturation	Set 0 - 100	BE EF	03	06 00	[*1]	01 00	15 27	[*2]	[*1]: CRC (Low, High) [*2]: 00 00 (Min) - 64 00 (Max)
	Increment	BE EF	03	06 00	66 67	04 00	15 27	00 00	
	Decrement	BE EF	03	06 00	B7 66	05 00	15 27	00 00	
	Get	BE EF	03	06 00	00 67	02 00	15 27	00 00	
Color Manager - Magenta Gain	Set 0 - 100	BE EF	03	06 00	[*1]	01 00	25 27	[*2]	[*1]: CRC (Low, High) [*2]: 00 00 (Min) - 64 00 (Max)
	Increment	BE EF	03	06 00	66 68	04 00	25 27	00 00	
	Decrement	BE EF	03	06 00	B7 69	05 00	25 27	00 00	
	Get	BE EF	03	06 00	00 68	02 00	25 27	00 00	
Color Manager - Yellow Hue	Set 0 - 100	BE EF	03	06 00	[*1]	01 00	01 27	[*2]	[*1]: CRC (Low, High) [*2]: 00 00 (Min) - 64 00 (Max)
	Increment	BE EF	03	06 00	96 62	04 00	01 27	00 00	
	Decrement	BE EF	03	06 00	47 63	05 00	01 27	00 00	
	Get	BE EF	03	06 00	F0 62	02 00	01 27	00 00	

Communication settings

Function	Operation		Header Data (7 bytes)				Command Data (6 bytes)			Description
			Header Code	Packet	Data Size	CRC	Action	Type	Setting Code	
Color Manager - Yellow Saturation	Set	0 - 100	BE EF	03	06 00	[*1]	01 00	11 27	[*2]	[*1]: CRC (Low, High) [*2]: 00 00 (Min) - 64 00 (Max)
	Increment		BE EF	03	06 00	56 66	04 00	11 27	00 00	
	Decrement		BE EF	03	06 00	87 67	05 00	11 27	00 00	
	Get		BE EF	03	06 00	30 66	02 00	11 27	00 00	
Color Manager - Yellow Gain	Set	0 - 100	BE EF	03	06 00	[*1]	01 00	21 27	[*2]	[*1]: CRC (Low, High) [*2]: 00 00 (Min) - 64 00 (Max)
	Increment		BE EF	03	06 00	56 69	04 00	21 27	00 00	
	Decrement		BE EF	03	06 00	87 68	05 00	21 27	00 00	
	Get		BE EF	03	06 00	30 69	02 00	21 27	00 00	
Color Manager - White Gain R	Set	0 - 100	BE EF	03	06 00	[*1]	01 00	28 27	[*2]	[*1]: CRC (Low, High) [*2]: 00 00 (Min) - 64 00 (Max)
	Increment		BE EF	03	06 00	CA 6A	04 00	28 27	00 00	
	Decrement		BE EF	03	06 00	1B 6B	05 00	28 27	00 00	
	Get		BE EF	03	06 00	AC 6A	02 00	28 27	00 00	
Color Manager - White Gain G	Set	0 - 100	BE EF	03	06 00	[*1]	01 00	2A 27	[*2]	[*1]: CRC (Low, High) [*2]: 00 00 (Min) - 64 00 (Max)
	Increment		BE EF	03	06 00	72 6B	04 00	2A 27	00 00	
	Decrement		BE EF	03	06 00	A3 6A	05 00	2A 27	00 00	
	Get		BE EF	03	06 00	14 6B	02 00	2A 27	00 00	
Color Manager - White Gain B	Set	0 - 100	BE EF	03	06 00	[*1]	01 00	2C 27	[*2]	[*1]: CRC (Low, High) [*2]: 00 00 (Min) - 64 00 (Max)
	Increment		BE EF	03	06 00	FA 6B	04 00	2C 27	00 00	
	Decrement		BE EF	03	06 00	2B 6A	05 00	2C 27	00 00	
	Get		BE EF	03	06 00	9C 6B	02 00	2C 27	00 00	
Input Source	Set	HDMI 1	BE EF	03	06 00	0E D2	01 00	00 20	03 00	
		HDMI 2	BE EF	03	06 00	6E D6	01 00	00 20	0D 00	
		HDMI 3 / MHL	BE EF	03	06 00	9E D6	01 00	00 20	0E 00	
		Computer in 1	BE EF	03	06 00	FE D2	01 00	00 20	00 00	
		Video	BE EF	03	06 00	6E D3	01 00	00 20	01 00	
		HDBaseT	BE EF	03	06 00	AE DE	01 00	00 20	11 00	
	Get		BE EF	03	06 00	CD D2	02 00	00 20	00 00	
Installation	Set	Front Tabletop	BE EF	03	06 00	C7 D2	01 00	01 30	00 00	
		Rear Tabletop	BE EF	03	06 00	57 D3	01 00	01 30	01 00	
		Front Ceiling	BE EF	03	06 00	37 D2	01 00	01 30	03 00	
		Rear Ceiling	BE EF	03	06 00	A7 D3	01 00	01 30	02 00	
	Get		BE EF	03	06 00	F4 D2	02 00	01 30	00 00	
Aspect	Set	16:10	BE EF	03	06 00	3E D6	01 00	08 20	0A 00	
		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	
		Letter Box	BE EF	03	6 00	3E D3	01 00	08 20	06 00	
		Native	BE EF	03	6 00	5E D7	01 00	08 20	08 00	
		2.35:1	BE EF	03	6 00	0E D4	01 00	08 20	0D 00	
	Get		BE EF	03	06 00	AD D0	02 00	08 20	00 00	
H Keystone	Set	0 - 100	BE EF	03	06 00	[*1]	01 00	0B 20	[*2]	[*1]: CRC (Low, High) [*2]: 00 00 (Min) - 64 00 (Max)
	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	
	Get		BE EF	03	06 00	E9 D0	02 00	0B 20	00 00	

Function	Operation		Header Data (7 bytes)				Command Data (6 bytes)			Description
			Header Code	Packet	Data Size	CRC	Action	Type	Setting Code	
V Keystone	Set	0 - 120	BE EF	03	06 00	[*1]	01 00	07 20	[*2]	[*1]: CRC (Low, High) [*2]: 00 00 (Min) - 78 00 (Max)
	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	
	Get		BE EF	03	06 00	B9 D3	02 00	07 20	00 00	
Digital Zoom	Set	90 - 110	BE EF	03	06 00	[*1]	01 00	94 22	[*2]	[*1]: CRC (Low, High) [*2]: 5A 00 (Min) - 6E 00 (Max)
	Increment		BE EF	03	06 00	5B 5F	04 00	94 22	00 00	
	Decrement		BE EF	03	06 00	8A 5E	05 00	94 22	00 00	
	Get		BE EF	03	06 00	3D 5F	02 00	94 22	00 00	
Volume	Set	0 - 20	BE EF	03	06 00	[*1]	02 00	01 20	[*2]	[*1]: CRC (Low, High) [*2]: 00 00 (Min) - 14 00 (Max)
	Increment		BE EF	03	06 00	57 D3	04 00	01 20	00 00	
	Decrement		BE EF	03	06 00	86 D2	05 00	01 20	00 00	
	Get		BE EF	03	06 00	31 D3	02 00	01 20	00 00	
Mute	Set	OFF	BE EF	03	06 00	46 D3	01 00	02 20	00 00	
		ON	BE EF	03	06 00	D6 D2	01 00	02 20	01 00	
	Get		BE EF	03	06 00	75 D3	02 00	02 20	00 00	
Language	Set	English	BE EF	03	06 00	F7 D3	01 00	05 30	00 00	
		French	BE EF	03	06 00	67 D2	01 00	05 30	01 00	
		German	BE EF	03	06 00	97 D2	01 00	05 30	02 00	
		Spanish	BE EF	03	06 00	07 D3	01 00	05 30	03 00	
		Portuese	BE EF	03	06 00	C7 D1	01 00	05 30	07 00	
		Simplified Chinese	BE EF	03	06 00	A7 D5	01 00	05 30	09 00	
		Traditional Chinese	BE EF	03	06 00	37 DE	01 00	05 30	10 00	
		Italian	BE EF	03	06 00	37 D1	01 00	05 30	04 00	
		Norwegian	BE EF	03	06 00	A7 D0	01 00	05 30	05 00	
		Swedish	BE EF	03	06 00	C7 D4	01 00	05 30	0B 00	
		Dutch	BE EF	03	06 00	57 D0	01 00	05 30	06 00	
		Russian	BE EF	03	06 00	F7 D6	01 00	05 30	0C 00	
		Polish	BE EF	03	06 00	97 D7	01 00	05 30	0E 00	
		Finnish	BE EF	03	06 00	67 D7	01 00	05 30	0D 00	
		Greek	BE EF	03	06 00	07 DC	01 00	05 30	17 00	
		Korean	BE EF	03	06 00	57 D5	01 00	05 30	0A 00	
		Hungarian	BE EF	03	06 00	C7 DE	01 00	05 30	13 00	
		Czech	BE EF	03	06 00	57 DF	01 00	05 30	12 00	
		Arabic	BE EF	03	06 00	37 DB	01 00	05 30	1C 00	
		Turkish	BE EF	03	06 00	07 D6	01 00	05 30	0F 00	
		Vietnamese	BE EF	03	06 00	37 CA	01 00	05 30	20 00	
		Japanese	BE EF	03	06 00	37 D4	01 00	05 30	08 00	
		Thai	BE EF	03	06 00	07 D9	01 00	05 30	1B 00	
		Farsi	BE EF	03	06 00	A7 DA	01 00	05 30	1D 00	
		Hebrew	BE EF	03	06 00	A7 CB	01 00	05 30	21 00	
		Danish	BE EF	03	06 00	A7 DF	01 00	05 30	11 00	
		French Canadian	BE EF	03	06 00	57 CB	01 00	05 30	22 00	
	Get		BE EF	03	06 00	C4 D3	02 00	05 30	00 00	

Communication settings

Function	Operation		Header Data (7 bytes)				Command Data (6 bytes)			Description
			Header Code	Packet	Data Size	CRC	Action	Type	Setting Code	
Security Lock	Set	Off	BE EF	03	06 00	FA 37	01 00	10 36	00 00	
		On	BE EF	03	06 00	6A 36	01 00	10 36	01 00	
Security Lock Status	Get		BE EF	03	06 00	C9 37	02 00	10 36	00 00	0: Off, 1:On
No Signal	Set	Logo	BE EF	03	06 00	CB E3	01 00	04 30	40 00	
		Black	BE EF	03	06 00	AB D1	01 00	04 30	06 00	
		Blue	BE EF	03	06 00	FB D2	01 00	04 30	03 00	
	Get		BE EF	03	06 00	38 D2	02 00	04 30	00 00	
C.C. Display	Set	Off	BE EF	03	06 00	FA 62	01 00	00 37	00 00	
		On	BE EF	03	06 00	6A 63	01 00	00 37	01 00	
	Get		BE EF	03	06 00	C9 62	02 00	00 37	00 00	
Key Lock - CONTROL PANEL	Set	Off	BE EF	03	06 00	03 96	01 00	11 24	00 00	keypad only, not include remote controller
		On	BE EF	03	06 00	93 97	01 00	11 24	01 00	
	Get		BE EF	03	06 00	30 96	02 00	11 24	00 00	
3D - DLP Link	Set	Off	BE EF	03	06 00	52 58	01 00	8D 22	00 00	
		On	BE EF	03	06 00	C2 59	01 00	8D 22	01 00	
		IR	BE EF	03	06 00	32 59	01 00	8D 22	02 00	
	Get		BE EF	03	06 00	61 58	02 00	8D 22	00 00	
3D Sync Invert	Set	Off	BE EF	03	06 00	CE 5B	01 00	84 22	00 00	
		On	BE EF	03	06 00	5E 5A	01 00	84 22	01 00	
	Get		BE EF	03	06 00	FD 5B	02 00	84 22	00 00	
3D Format	Set	Frame Seqential	BE EF	03	06 00	1A 5A	01 00	8B 22	04 00	
		Top and Bottom	BE EF	03	06 00	2A 58	01 00	8B 22	03 00	
		Side by Side	BE EF	03	06 00	BA 59	01 00	8B 22	02 00	
		Frame Packing	BE EF	03	06 00	8A 5B	01 00	8B 22	05 00	
	Get		BE EF	03	06 00	E9 58	02 00	8B 22	00 00	
Pattern	Set	Off	BE EF	03	06 00	FB FA	01 00	80 30	00 00	
		RGB Ramp	BE EF	03	06 00	5B E2	01 00	80 30	22 00	
		Color Bar	BE EF	03	06 00	AB F6	01 00	80 30	11 00	
		Step Bar	BE EF	03	06 00	CB F2	01 00	80 30	1F 00	
		Checkerboard	BE EF	03	06 00	AB F3	01 00	80 30	1D 00	
		Hatch	BE EF	03	06 00	5B F6	01 00	80 30	12 00	
		Horizontal Lines	BE EF	03	06 00	CB E3	01 00	80 30	23 00	
		Vertical Lines	BE EF	03	06 00	FB E1	01 00	80 30	24 00	
		Diagonal lines	BE EF	03	06 00	3B E3	01 00	80 30	20 00	
		Horizontal Ramp	BE EF	03	06 00	0B FA	01 00	80 30	03 00	
		Vertical Ramp	BE EF	03	06 00	AB E2	01 00	80 30	21 00	
		White	BE EF	03	06 00	0B F5	01 00	80 30	17 00	
		Red	BE EF	03	06 00	FB F5	01 00	80 30	14 00	
		Green	BE EF	03	06 00	6B F4	01 00	80 30	15 00	
		Blue	BE EF	03	06 00	9B F4	01 00	80 30	16 00	
		Black	BE EF	03	06 00	FB F0	01 00	80 30	18 00	
	Get		BE EF	03	06 00	C8 FA	02 00	80 30	00 00	

Function	Operation		Header Data (7 bytes)				Command Data (6 bytes)			Description
			Header Code	Packet	Data Size	CRC	Action	Type	Setting Code	
Horz Shift	Set	0 - 100	BE EF	03	06 00	[*1]	01 00	10 30	[*2]	"[*1]: CRC (Low, High) [*2]: 00 00 (Min) - 64 00 (Max) "
	Increment		BE EF	03	06 00	AE D7	04 00	10 30	00 00	
	Decrement		BE EF	03	06 00	7F D6	05 00	10 30	00 00	
	Get		BE EF	03	06 00	C8 D7	02 00	10 30	00 00	
Vert Shift	Set	0 - 100	BE EF	03	06 00	[*1]	01 00	11 30	[*2]	"[*1]: CRC (Low, High) [*2]: 00 00 (Min) - 64 00 (Max) "
	Increment		BE EF	03	06 00	52 D6	04 00	11 30	00 00	
	Decrement		BE EF	03	06 00	83 D7	05 00	11 30	00 00	
	Get		BE EF	03	06 00	34 D6	02 00	11 30	00 00	
"Warping - Top Left Corner - x"	Set	0 - 60	BE EF	03	06 00	[*1]	01 00	21 21	[*2]	"[*1]: CRC (Low, High) [*2]: 00 00 (Min) - 3C 00 (Max) "
	Increment		BE EF	03	06 00	57 89	04 00	21 21	00 00	
	Decrement		BE EF	03	06 00	86 88	05 00	21 21	00 00	
	Get		BE EF	03	06 00	31 89	02 00	21 21	00 00	
"Warping - Top Left Corner - y"	Set	0 - 60	BE EF	03	06 00	[*1]	01 00	22 21	[*2]	"[*1]: CRC (Low, High) [*2]: 00 00 (Min) - 3C 00 (Max) "
	Increment		BE EF	03	06 00	13 89	04 00	22 21	00 00	
	Decrement		BE EF	03	06 00	C2 88	05 00	22 21	00 00	
	Get		BE EF	03	06 00	75 89	02 00	22 21	00 00	
"Warping - Top Right Corner - x"	Set	0 - 60	BE EF	03	06 00	[*1]	01 00	23 21	[*2]	"[*1]: CRC (Low, High) [*2]: 00 00 (Min) - 3C 00 (Max) "
	Increment		BE EF	03	06 00	EF 88	04 00	23 21	00 00	
	Decrement		BE EF	03	06 00	3E 89	05 00	23 21	00 00	
	Get		BE EF	03	06 00	89 88	02 00	23 21	00 00	
"Warping - Top Right Corner - y"	Set	0 - 60	BE EF	03	06 00	[*1]	01 00	24 21	[*2]	"[*1]: CRC (Low, High) [*2]: 00 00 (Min) - 3C 00 (Max) "
	Increment		BE EF	03	06 00	9B 89	04 00	24 21	00 00	
	Decrement		BE EF	03	06 00	4A 88	05 00	24 21	00 00	
	Get		BE EF	03	06 00	FD 89	02 00	24 21	00 00	
"Warping - Bottom Left Corner - x"	Set	0 - 60	BE EF	03	06 00	[*1]	01 00	25 21	[*2]	"[*1]: CRC (Low, High) [*2]: 00 00 (Min) - 3C 00 (Max) "
	Increment		BE EF	03	06 00	67 88	04 00	25 21	00 00	
	Decrement		BE EF	03	06 00	B6 89	05 00	25 21	00 00	
	Get		BE EF	03	06 00	01 88	02 00	25 21	00 00	
"Warping - Bottom Left Corner - y"	Set	0 - 60	BE EF	03	06 00	[*1]	01 00	26 21	[*2]	"[*1]: CRC (Low, High) [*2]: 00 00 (Min) - 3C 00 (Max) "
	Increment		BE EF	03	06 00	23 88	04 00	26 21	00 00	
	Decrement		BE EF	03	06 00	F2 89	05 00	26 21	00 00	
	Get		BE EF	03	06 00	45 88	02 00	26 21	00 00	
"Warping - Bottom Right Corner - x"	Set	0 - 60	BE EF	03	06 00	[*1]	01 00	27 21	[*2]	"[*1]: CRC (Low, High) [*2]: 00 00 (Min) - 3C 00 (Max) "
	Increment		BE EF	03	06 00	DF 89	04 00	27 21	00 00	
	Decrement		BE EF	03	06 00	0E 88	05 00	27 21	00 00	
	Get		BE EF	03	06 00	B9 89	02 00	27 21	00 00	
"Warping - Bottom Right Corner - y"	Set	0 - 60	BE EF	03	06 00	[*1]	01 00	28 21	[*2]	"[*1]: CRC (Low, High) [*2]: 00 00 (Min) - 3C 00 (Max) "
	Increment		BE EF	03	06 00	CB 8A	04 00	28 21	00 00	
	Decrement		BE EF	03	06 00	1A 8B	05 00	28 21	00 00	
	Get		BE EF	03	06 00	AD 8A	02 00	28 21	00 00	
Warping - Reset	Execute		BE EF	03	06 00	F1 99	06 00	72 21	00 00	
Auto Search	Set	Off	BE EF	03	06 00	B6 D6	01 00	16 20	00 00	
		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	

Communication settings

Function	Operation		Header Data (7 bytes)				Command Data (6 bytes)			Description
			Header Code	Packet	Data Size	CRC	Action	Type	Setting Code	
Auto Power Off	Set	0-180	BE EF	03	06 00	[*1]	01 00	10 31	[*2]	[*1]: CRC (Low, High) [*2]: 00 00 (Min) - B4 00 (Max) 1 step = 5 min
	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	
	Get		BE EF	03	06 00	08 86	02 00	10 31	00 00	
Direct Power On	Set	Off	BE EF	03	06 00	3B 89	01 00	20 31	00 00	
		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	
Power Mode	Set	Normal	BE EF	03	06 00	3B 23	01 00	00 33	00 00	
		Eco-1	BE EF	03	06 00	AB 22	01 00	00 33	01 00	
		Eco-2	BE EF	03	06 00	5B 22	01 00	00 33	02 00	
		Dimming	BE EF	03	06 00	CB 23	01 00	00 33	03 00	
		Extreme Dimming	BE EF	03	06 00	FB 21	01 00	00 33	04 00	
		Custom	BE EF	03	06 00	3B 37	01 00	00 33	30 00	
	Get		BE EF	03	06 00	08 23	02 00	00 33	00 00	
Factory Reset	Execute		BE EF	03	06 00	98 8D	06 00	30 71	00 00	
Input	Get		BE EF	03	06 00	CD D2	02 00	00 20	00 00	
V Active	Get		BE EF	03	06 00	7A 86	02 00	12 11	00 00	Vertical resolution
H Active	Get		BE EF	03	06 00	7A 89	02 00	22 11	00 00	Horizontal resolution
Vert. Frequency	Get		BE EF	03	06 00	8A 83	02 00	06 11	00 00	Vertical frequency, fV[Hz]*100
Light Hours - High	Get		BE EF	03	06 00	2A FD	02 00	9E 10	00 00	
Light Hours - Low	Get		BE EF	03	06 00	C2 FF	02 00	90 10	00 00	
Software Version Index	Set	0 -63	BE EF	03	06 00	[*1]	01 00	1C 10	[*2]	[*1]: CRC (Low, High) [*2]: 00 00 (Min) - 3F 00 (Max)
	Get		BE EF	03	06 00	52 D5	02 00	1C 10	00 00	
Software Version 1	Get		BE EF	03	06 00	AE D4	02 00	1D 10	00 00	
Remote ID	Get		BE EF	03	06 00	AC 30	02 00	08 26	00 00	
Serial Number Index	Set	0 - 25	BE EF	03	06 00	[*1]	01 00	18 10	[*2]	[*1]: CRC (Low. High) [*2]: 00 00 (Min) - 19 00 (Max)
	Get		BE EF	03	06 00	C0 57	02 00	18 10	00 00	
Serial Number Character	Get		BE EF	03	06 00	9E D5	02 00	19 10	00 00	
Memu Position	Set	center	BE EF	03	06 00	97 D7	01 00	1D 30	04 00	
		Down	BE EF	03	06 00	97 D8	01 00	1D 30	10 00	
		Up	BE EF	03	06 00	07 D9	01 00	1D 30	11 00	
		Left	BE EF	03	06 00	F7 D9	01 00	1D 30	12 00	
		Right	BE EF	03	06 00	67 D8	01 00	1D 30	13 00	
	Get		BE EF	03	06 00	64 D5	02 00	1D 30	00 00	
Translucent Menu	Set	0%	BE EF	03	06 00	E6 5A	01 00	9A 22	00 00	
		25%	BE EF	03	06 00	76 56	01 00	9A 22	19 00	
		50%	BE EF	03	06 00	86 48	01 00	9A 22	32 00	
		75%	BE EF	03	06 00	16 6B	01 00	9A 22	4B 00	
		100%	BE EF	03	06 00	26 77	01 00	9A 22	64 00	
	Get		BE EF	03	06 00	D5 5D	02 00	9A 22	00 00	

Function	Operation		Header Data (7 bytes)				Command Data (6 bytes)			Description
			Header Code	Packet	Data Size	CRC	Action	Type	Setting Code	
Standby Power	Set	Saving	BE EF	03	06 00	46 D3	01 00	01 60	01 00	(RJ45 Power Off)
		Normal	BE EF	03	06 00	D6 D2	01 00	01 60	00 00	(RJ45 Power On)
	Get		BE EF	03	06 00	E5 D2	02 00	01 60	00 00	
High Altitude	Set	Normal	BE EF	03	06 00	E3 12	01 00	00 4C	00 00	
		High	BE EF	03	06 00	73 13	01 00	00 4C	01 00	
	Get		BE EF	03	06 00	D0 12	02 00	00 4C	00 00	
Light Hours Normal - High	Get		BE EF	03	06 00	31 54	02 00	B1 22	00 00	
Light Hours Normal - Low	Get		BE EF	03	06 00	CD 55	02 00	B0 22	00 00	
Light Hours Eco - High	Get		BE EF	03	06 00	89 55	02 00	B3 22	00 00	
Light Hours Eco - Low	Get		BE EF	03	06 00	75 54	02 00	B2 22	00 00	
Light Hours Eco Plus - High	Get		BE EF	03	06 00	01 55	02 00	B5 22	00 00	
Light Hours Eco Plus - Low	Get		BE EF	03	06 00	FD 54	02 00	B4 22	00 00	
Light Hours Dimming - High	Get		BE EF	03	06 00	B9 54	02 00	B7 22	00 00	
Light Hours Dimming - Low	Get		BE EF	03	06 00	45 55	02 00	B6 22	00 00	
Light Hours Extream Dimming - High	Get		BE EF	03	06 00	51 56	02 00	B9 22	00 00	
Light Hours Extream Dimming - Low	Get		BE EF	03	06 00	AD 57	02 00	B8 22	00 00	
Light Hours Custom - High	Get		BE EF	03	06 00	E9 57	02 00	BB 22	00 00	system create new item
Light Hours Custom - Low	Get		BE EF	03	06 00	15 56	02 00	BA 22	00 00	system create new item
Remote ID	Set	All	BE EF	03	06 00	9F 30	01 00	08 26	00 00	
		1	BE EF	03	06 00	0F 31	01 00	08 26	01 00	
		2	BE EF	03	06 00	FF 31	01 00	08 26	02 00	
		3	BE EF	03	06 00	6F 30	01 00	08 26	03 00	
		4	BE EF	03	06 00	5F 32	01 00	08 26	04 00	
		5	BE EF	03	06 00	CF 33	01 00	08 26	05 00	
		6	BE EF	03	06 00	3F 33	01 00	08 26	06 00	
		7	BE EF	03	06 00	AF 32	01 00	08 26	07 00	
	Get		BE EF	03	06 00	AC 30	02 00	08 26	00 00	

Communication settings

Function	Operation		Header Data (7 bytes)				Command Data (6 bytes)			Description
			Header Code	Packet	Data Size	CRC	Action	Type	Setting Code	
Network Status	Get		BE EF	03	06 00	B5 5F	02 00	92 22	00 00	Diconnect; 0 Connect; 1
DHCP	Get		BE EF	03	06 00	0F 06	02 00	10 29	00 00	Off; 0 On; 1
IP Address 1st	Get		BE EF	03	06 00	F3 07	02 00	11 29	00 00	
IP Address 2st	Get		BE EF	03	06 00	B7 07	02 00	12 29	00 00	
IP Address 3rd	Get		BE EF	03	06 00	4B 06	02 00	13 29	00 00	
IP Address 4th	Get		BE EF	03	06 00	3F 07	02 00	14 29	00 00	
Subnet Mask 1st	Get		BE EF	03	06 00	C3 06	02 00	15 29	00 00	
Subnet Mask 2st	Get		BE EF	03	06 00	87 06	02 00	16 29	00 00	
Subnet Mask 3rd	Get		BE EF	03	06 00	7B 07	02 00	17 29	00 00	
Subnet Mask 4th	Get		BE EF	03	06 00	6F 04	02 00	18 29	00 00	
Gateway 1st	Get		BE EF	03	06 00	93 05	02 00	19 29	00 00	
Gateway 2st	Get		BE EF	03	06 00	D7 05	02 00	1A 29	00 00	
Gateway 3rd	Get		BE EF	03	06 00	2B 04	02 00	1B 29	00 00	
Gateway 4th	Get		BE EF	03	06 00	5F 05	02 00	1C 29	00 00	
DNS 1st	Get		BE EF	03	06 00	F3 08	02 00	21 29	00 00	
DNS 2st	Get		BE EF	03	06 00	B7 08	02 00	22 29	00 00	
DNS 3rd	Get		BE EF	03	06 00	4B 09	02 00	23 29	00 00	
DNS 4th	Get		BE EF	03	06 00	3F 08	02 00	24 29	00 00	

HDBaseT - TX Box (RS232C, IR)	Set	Off	BE EF	03	06 00	2A 5D	01 00	9F 22	00 00	
		On	BE EF	03	06 00	BA 5C	01 00	9F 22	01 00	
	Get		BE EF	03	06 00	19 5D	02 00	9F 22	00 00	
Front IR	Set	Off	BE EF	03	06 00	FF 32	01 00	00 26	00 00	
		On	BE EF	03	06 00	6F 33	01 00	00 26	01 00	
	Get		BE EF	03	06 00	CC 32	02 00	00 26	00 00	
Rear IR	Set	Off	BE EF	03	06 00	03 33	01 00	01 26	00 00	
		On	BE EF	03	06 00	93 32	01 00	01 26	01 00	
	Get		BE EF	03	06 00	30 33	02 00	01 26	00 00	
Sleep Timer	Set	0-600	BE EF	03	06 00	[*1]	01 00	9E 22	[*2]	[*1]: CRC (Low, High) [*2]: 00 00 (Min) - 58 02 (Max) 1 step = 5 min
	Increment		BE EF	03	06 00	83 5C	04 00	9E 22	00 00	
	Decrement		BE EF	03	06 00	52 5D	05 00	9E 22	00 00	
	Get		BE EF	03	06 00	E5 5C	02 00	9E 22	00 00	
SOURCE SKIP HDMI 1	Set	SKIP	BE EF	03	06 00	2A 79	01 00	23 22	01 00	
		NORMAL	BE EF	03	06 00	BA 78	01 00	23 22	00 00	
	Get		BE EF	03	06 00	89 78	02 00	23 22	00 00	
SOURCE SKIP HDMI 2	Set	SKIP	BE EF	03	06 00	C2 7B	01 00	2D 22	01 00	
		NORMAL	BE EF	03	06 00	52 7A	01 00	2D 22	00 00	
	Get		BE EF	03	06 00	61 7A	02 00	2D 22	00 00	

Function	Operation		Header Data (7 bytes)				Command Data (6 bytes)			Description
			Header Code	Packet	Data Size	CRC	Action	Type	Setting Code	
SOURCE SKIP HDMI 3 / MHL	Set	SKIP	BE EF	03	06 00	86 7B	01 00	2E 22	01 00	
		NORMAL	BE EF	03	06 00	16 7A	01 00	2E 22	00 00	
	Get		BE EF	03	06 00	25 7A	02 00	2E 22	00 00	
SOURCE SKIP COMPUTER IN	Set	SKIP	BE EF	03	06 00	6E 79	01 00	20 22	01 00	
		NORMAL	BE EF	03	06 00	FE 78	01 00	20 22	00 00	
	Get		BE EF	03	06 00	CD 78	02 00	20 22	00 00	
SOURCE SKIP VIDEO	Set	SKIP	BE EF	03	06 00	92 78	01 00	21 22	01 00	
		NORMAL	BE EF	03	06 00	02 79	01 00	21 22	00 00	
	Get		BE EF	03	06 00	31 79	02 00	21 22	00 00	
SOURCE SKIP HDBaseT	Set	SKIP	BE EF	03	06 00	26 EB	01 00	D6 20	01 00	
		NORMAL	BE EF	03	06 00	B6 EA	01 00	D6 20	00 00	
	Get		BE EF	03	06 00	85 EA	02 00	D6 20	00 00	
Power Level	Set	25 - 100	BE EF	03	06 00	[*1]	01 00	07 33	[*2]	"[*1]: CRC (Low, High) [*2]: 19 00 (Min) - 64 00 (Max) "
	Increment		BE EF	03	06 00	1A 22	04 00	07 33	00 00	
	Decrement		BE EF	03	06 00	CB 23	05 00	07 33	00 00	
	Get		BE EF	03	06 00	7C 22	02 00	07 33	00 00	

Power	Set	Off	BE EF	03	06 00	2A D3	01 00	00 60	00 00	0: Off (Standby) 1: On (Imaging) 2: Cooling 4: Warning
		On	BE EF	03	06 00	BA D2	01 00	00 60	01 00	
	Get		BE EF	03	06 00	19 D3	02 00	00 60	00 00	
Error Status	Get		BE EF	03	06 00	D9 D8	02 00	20 60	00 00	0: Normal 1: Cover error 2: Fan error 3: Lazer error 4: Temp Error 7: Other Error 8: Filter Warning 128: Other Error
Freeze	Set	Off	BE EF	03	06 00	83 D2	01 00	02 30	00 00	
		On	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	
AV Mute	Set	Off	BE EF	03	06 00	FE F0	01 00	A0 20	00 00	same function as Blank
		On	BE EF	03	06 00	6E F1	01 00	A0 20	01 00	
	Get		BE EF	03	06 00	CD F0	02 00	A0 20	00 00	
Blank	Set	Off	BE EF	03	06 00	FB D8	01 00	20 30	00 00	same function as AV Mute
		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	
MHL Mode	Set	Projector Mode	BE EF	03	06 00	C2 50	01 00	A1 22	00 00	
		MHL Mode	BE EF	03	06 00	52 51	01 00	A1 22	01 00	
	Get		BE EF	03	06 00	F1 50	02 00	A1 22	00 00	
Detail Error Code	Get		BE EF	03	06 00	0D 5E	02 00	90 22	00 00	Detail Error Code