

EK-351WST, EK-352UST, ES-LED45WST, ES-LED46UST RS232 Command List

1. Connection	
1.1 Port Setting	
Method	Asynchronous communication
Bits per seconds	19200
Data bits	8
Parity	none
Stop bits	1
Flow control	none
1.2 Wiring	
Connect the computer and projector with RS232 cross cable	
2. Communication	
2.1 The Projector command is defined one command/one line that starts "C" and ends carriage return CR .	
2.2 There are two types of command, functional execution commands and status read commands	
2.3 Response for status read command after accepting has different characters.	
Example:	
A. Functional execution command:	
Power ON command is sent to the projector with "C00" CR, the projector returns a *ACK CR or NAK CR code	
<p>PC --> Projector "C" "0" "0" CR</p> <pre> sequenceDiagram participant PC participant Projector Note over PC: PC --> Projector "C" "0" "0" CR Note over Projector: processing command Projector --> PC: ACK (or NAK) CR </pre>	
B. Status read command:	
Power Status command is sent to the projector with "CR0" CR, the projector returns a power status plus CR or NAK CR code	
<p>PC --> Projector "C" "R" "0" CR</p> <pre> sequenceDiagram participant PC participant Projector Note over PC: PC --> Projector "C" "R" "0" CR Note over Projector: processing command Projector --> PC: "0" "0" "0" (or NAK) CR </pre>	
3. Command List	
Command (HEX+CR)	Function
C00(43 30 30 0D)	POWER ON
C01(43 30 31 0D)	POWER OFF(Power OFF immediately)
C02(43 30 32 0D)	POWER OFF
C05(43 30 35 0D)	VGA IN 1
C07(43 30 37 0D)	Video
C34(43 33 34 0D)	S-Video
C51(43 35 31 0D)	HDBaseT
C33(43 33 33 0D)	Component
C36(43 33 36 0D)	HDMI 1
C38(43 33 38 1D)	HDMI 2(MHL)
C15(43 31 35 0D)	NETWORK
C16(43 31 36 0D)	MEMORY VIEWER
C17(43 31 37 0D)	USB DISPLAY
C8E(43 38 45 0D)	Keystone ↑
C8F(43 38 46 0D)	Keystone ↓

C90(43 39 30 0D)	Keystone →
C91(43 39 31 0D)	Keystone ←
C98(43 39 38 0D)	Keystone Corner
C99(43 39 39 0D)	Keystone Barrel / Pin *not available for EK-350U
C1C(43 31 43 0D)	Menu on
C1D(43 31 44 0D)	Menu off
C43(43 34 33 0D)	Still on
C44(43 34 34 00)	Still off
C0D(43 30 44 00)	Blank on
C0E(43 30 45 0D)	Blank off
C8A(43 38 41 0D)	Timer
C8B(43 38 42 0D)	Timer (Exit)
C0B(43 30 42 0D)	Mute on
C0C(43 30 43 0D)	Mute off
C30(43 33 30 0D)	Digital zoom +
C31(43 33 31 0D)	Digital zoom -
C09(43 30 39 0D)	Volume +
C0A(43 30 41 0D)	Volume -
C19(43 31 39 0D)	Dynamic
C11(43 31 31 0D)	Normal(Image select)
C39(43 33 39 0D)	Colorboard
C0F(43 30 46 0D)	Screen Normal size
C10(43 31 30 0D)	Screen Wide size
C13(43 31 33 0D)	Image Cinema
C14(43 31 34 0D)	User Image
C18(43 31 38 00)	Blackboard
C1E(43 31 45 0D)	DISPLAY CLEAR
C20(43 32 30 0D)	BRIGHTNESS +
C21(43 32 31 0D)	BRIGHTNESS -
C27(43 32 37 0D)	IMAGE (Toggle)
C28(43 32 38 0D)	Direct on Enable
C29(43 32 39 0D)	Direct on Disable
C2A(43 32 41 0D)	Power Management Ready
C2B(43 32 42 0D)	Power Management OFF
C2E(43 32 45 0D)	Power Management Shut down
C3A(43 33 41 0D)	POINTER RIGHT
C3B(43 33 42 0D)	POINTER LEFT
C3C(43 33 43 0D)	POINTER UP
C3D(43 33 44 0D)	POINTER DOWN
C3F(43 33 46 0D)	ENTER
C89(43 38 39 0D)	Auto PC ADJ.
CR3(43 52 33 0D)	Light source Timer Read

CR0(43 52 30 0D)	Get the projector's operation status:
	"00":Power on
	"80":standby
	"40":Countdown in process
	"20":Cooling Down in process
	"10":Power Failure
	"28-0":Sensor 1 cooling down in process due to Temperature Anomaly "28-1":Sensor 2 cooling down in process due to Temperature Anomaly "28-2":Driver Green 1 cooling down in process due to Temperature Anomaly "28-3":Driver Green 2 cooling down in process due to Temperature Anomaly "28-4":Driver Blue cooling down in process due to Temperature Anomaly
	"88-0":Sensor 1 coming back after Temperature Anomaly "88-1":Sensor 2 coming back after Temperature Anomaly "88-2":Driver Green 1 coming back after Temperature Anomaly "88-3":Driver Green 2 coming back after Temperature Anomaly "88-4":Driver Blue coming back after Temperature Anomaly
	"24":Power Management cooling
	"04":suspend status (Power management Ready)
	"21":Cooling Down in process after lamp off
	"81":Standby after Cooling Down process due to lamp off
	CR1(43 52 31 0D)
VGA 1	
VGA 2	
HDMI 1	
HDMI 2(MHL)	
HDBaseT	
Component	
Video	
S-Video	
Memory Viewer	
Network	
USB display	
CR4(43 52 34 00)	Get screen setting status:
	"11":Normal screen setting
	"10":Rear & Ceiling ON
	"01": Rear ON
	"00":Ceiling ON
	"20": Auto Ceiling and Rear OFF
	"21": Auto Ceiling and Rear ON
CR6(43 52 36 0D)	Get the temperature data inside the projector:
	"%1_%2_%3_%4_%5":
	%1=Temperature of Sensor 1
	%2=Temperature of Sensor 2
	%3=Temperature of Driver Green 1
	%4=Temperature of Driver Green 2
	%5=Temperature of Driver Blue
	Temperature data is shown as "00.0"
CR7(43 52 37 0D)	Get the lamp mode status:
	"00" Light is out
	"01" Light is on

CR ALLPFAIL	Detect detail of the power failure
	000 MAIN, ALL OK
	000 FAN1-5, ALL OK
	000 HDMI, 3.3V OK
	000 PANEL, 3.3V OK