

EIKI LC-XDP3500 RS-232 Communication Format

1. Communication Protocol

Standard Baud rate: 9600 bps or 19200 bps (Selectable on some models)
 Data length: 6 bits
 Parity: None
 Stop bit: 1 bit
 Flow Control: None

2. RS-232 Cable Define for Seattle series Projectors

(PC side with D-sub 9pin female) (Projector side with D-sub 9pin female)

RX2	2 RX
TX 3	3 TX
GND 5	5 GND

3. Communication

3.1 The Projector command is defined one command/one line that starts" C" and ends carriage return CR.

3.2 There are two types of command, functional execution commands and status read commands

3.3 Response for status read command after accepting has different characters.

Example:

- A. Functional execution command: Power ON command is sent to the projector with "COO" CR, the projector returns an "ACK CR or NAK CR code

PC -) Projector "C" "O" "O" CR

Projector -) PC processing command ACK (or NAK) CR

- B. Status read command: Power Status command is sent to the projector with "CRO" CR, the projector returns a power status plus CR or NAK CR code

PC -) Projector "C" "R" "O" CR

Projector -) PC processing command "O" "O" "O" (or NAK) CR

4. Command List

Command (HEX+CR)	Function	Remarks
C00(43 30 30 0D)#	POWER ON	Used at standby mode only
C01(43 30 31 0D)	POWER OFF	
C02(43 30 32 0D)	COMPUTER1	
C03(43 30 33 0D)	COMPUTER2	
C04(43 30 34 0D)	YPBPR	
C05(43 30 35 0D)	DVI	
C06(43 30 36 0D)	VIDEO	
C07(43 30 37 0D)	S- VIDEO	
C08(43 30 38 0D)	COMPONENT	
C09(43 30 39 0D)	VOLUME+	
C0A(43 30 41 0D)	VOLUME-	
C1D(43 31 44 0D)	MENU	
C30(43 33 30 0D)	UP	
C31(43 33 31 0D)	DOWN	
C32(43 33 32 0D)	LEFT	
C33(43 33 33 0D)	RIGHT	
C34(43 33 34 0D)	MUTE	
C0B(43 30 42 0D)	MUTE ON	
C0C(43 30 43 0D)	MUTE OFF	
C43(43 34 33 0D)	FREEZE	

C44(43 34 34 0D)	FREEZE ON	
C45(43 34 35 0D)	FREEZE OFF	
C80(43 38 30 0D)	ZOOM+	
C81(43 38 31 0D)	ZOOM-	
C90(43 39 30 0D)	ESC	
C91(43 39 31 0D)	SOURCE	
C92(43 39 32 0D)	AUTO	
C93(43 39 33 0D)	CONTRAST+	
C94(43 39 34 0D)	CONTRAST-	
C95(43 39 35 0D)	BRIGHTNESS+	
C96(43 39 36 0D)	BRIGHTNESS-	
C97(43 39 37 0D)	BLANK	
C9A(43 39 41 0D)	BLANK ON	
C9B(43 39 42 0D)	BLANK OFF	
C98(43 39 38 0D)	KEYSTONE+	
C99(43 39 39 0D)	KEYSTONE-	
CR0(43 52 30 0D) #	POWER-STATUS	STATUS feedback "000" – projector is on "800" – projector is standby "200" – projector is cooling down "500" – projector is warming up
CRT(43 52 31 0D) #	SOURCE-STATUS	STATUS feedback "001" – COMPUTER1 "002" – DVI "003" – COMPUTER2 "010" – VIDEO "020" – S-VIDEO "004" – YPbPr
CR2(43 52 32 0D) #	LAMP TIMER-STATUS	STATUS feedback "X,XXX,XXX Mins" - Lamp usage Timer in minutes
CR3(43 52 33 0D) #	FILTER TIMER-STATUS	STATUS feedback "X,XXX,XXX Mins" - Filter usage Timer in minutes
CR9(43 52 39 0D) #	SYSTEM ERROR CODE	A: Lamp temperature switch fail B: Lamp cover switch fail C: lamp/Ballast fail D: Fan: Exhaust fan fail E: Fan: Lamp blower fail F: Fan: Image blower fail G: Inlet temp sensor fail H: Image Temp sensor fail I: Lamp Temp sensor fail J: Over temp: Inlet Temp sensor K: Over temp : Image Temp sensor* L: Over temp: Lamp Temp sensor M: Blank feature time out N: No Signal time out

*ACK (acknowledge) is 0x06 in hexadecimal

*NAK (negative acknowledge) is 0x15 in hexadecimal

*CR (carriage return) is 0x0D in hexadecimal

AT standby mode, only these commands can be accepted. (All the above commands are available at normal operation mode except the command.)

*The temperature of Image temp sensor – Inlet temp sensor is greater than 18 degrees Celsius