

Chapter 5

RS232

Command

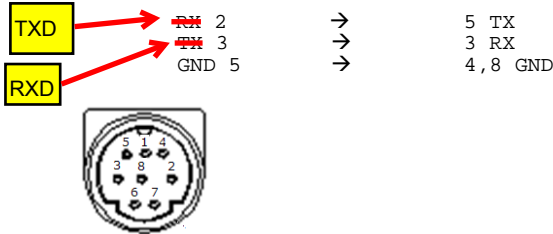
EDI Projector RS-232 Communication Format (EIKI only)

1. Communication Protocol

Standard Baud rate: 9600 bps or 19200 bps (Selectable)
 Data length: 8 bits
 Parity: None
 Stop bit: 1 bit
 Flow Control: None

2. RS-232 Cable Define for Projectors

(PC side with D-sub 9pin female) (Projector side with Mini-Din 8 pin plug)



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 “ C00” CR, the projector returns a *ACK CR or NAK CR code

PC → Projector “C” “0” “0” CR

Projector → PC processing command ACK (or NAK) CR

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

PC → Projector “C” “R” “0” CR

Projector → PC processing command “0” “0” “0” (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	
C04(43 30 34 0D)	COMPUTER2	
C03(43 30 33 0D)	YPBPR	
C05(43 30 35 0D)	COMPUTER1	EIKI enable
C06(43 30 36 0D)	S-VIDEO	EIKI enable
C07(43 30 37 0D)	VIDEO	EIKI enable
C08(43 30 38 0D)	COMPONENT	
C09(43 30 39 0D)	VOLUME +	
C0A(43 30 41 0D)	VOLUME -	
C0D(43 30 44 0D)	V-Mute On	EIKI only
C0E(43 30 45 0D)	V-Mute Off	EIKI only
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	
C43(43 34 33 0D)	FREEZE	
C80(43 38 30 0D)	ZOOM+	
C81(43 38 31 0D)	ZOOM-	
C89(43 38 39 0D)	AUTO	EIKI only
C90(43 39 30 0D)	ESC	
C91(43 39 31 0D)	SOURCE	
C92(43 39 32 0D)	AUTO	
C93(43 39 33 0D)	CONTRAST+	

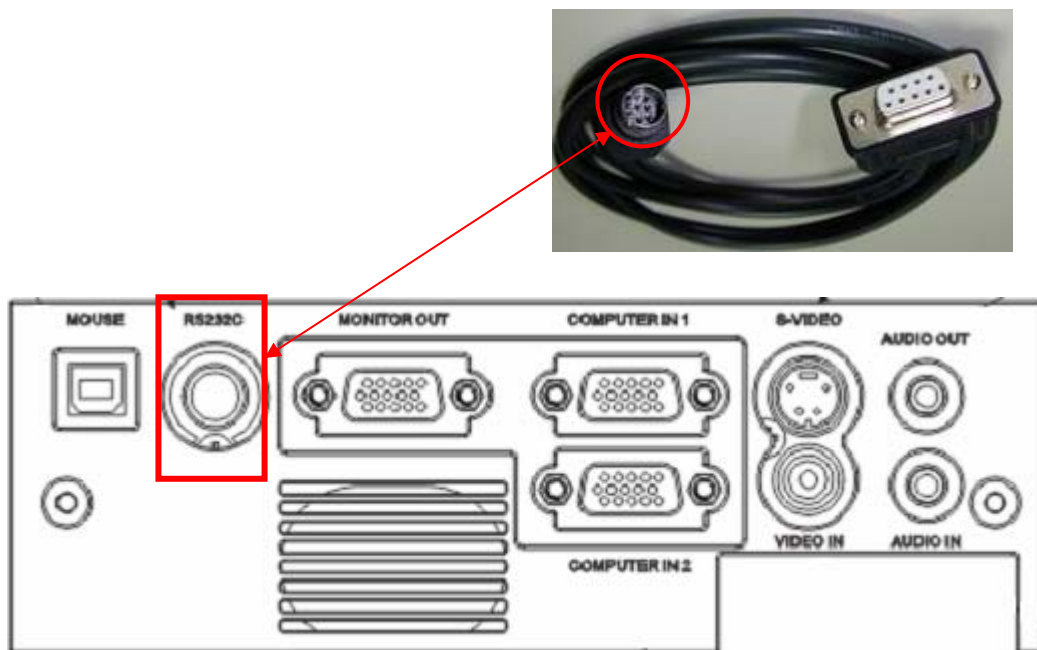
C94(43 39 34 0D)	CONTRAST-	
C95(43 39 35 0D)	BRIGHTNESS+	
C96(43 39 36 0D)	BRIGHTNESS-	
C97(43 39 37 0D)	BLANK	
C98(43 39 38 0D)	KEYSTONE+	
C99(43 39 39 0D)	KEYSTONE-	
CR0(43 52 30 0D) #	POWER-STATUS	<u>STATUS feedback</u> "000" - projector is on "800" - projector is standby "200" - projector is cooling down
CR1(43 52 31 0D)	SOURCE-STATUS	<u>STATUS feedback</u> "001" - COMPUTER1 "003" - COMPUTER2 "010" - VIDEO "020" - S-VIDEO "004" - YPbPr
CR2(43 52 32 0D) #	LAMP TIMER-STATUS	<u>STATUS feedback</u> "X,XXX,XXX Mins"- Lamp usage timer in minutes

*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 "POWER ON" command.

- Connection :

1. Use RS-232C-to-PS2 cable (part number: 13660016)
2. Connect with RS232C port of projector



- If RS232 command doesn't work:

Please check

- The baud rate setting is 9600 or 19200
- Is the port you select correct? For example "com 1" or "com 2"
- Make sure you key in command, for example command "power on ":

Correct : **C00CR** (ASCII) or **43 30 30 0D** (HEX)

incorrect : **C00** (ASCII) or **43 30 30** (HEX)

RS232 Command

EDI Projector RS232 Communication Format

1. Communication Protocol

Standard Baud rate: 9600 bps or 19200 bps
 Data length: 8 bits
 Parity: None
 Stop bit: 1 bit
 Flow Control: None

2. RS232 Cable Define for EX31xx / EX-27xx Serial Projectors

(PC side) (Projector side with D sub – pin)

RX 2 → 2 TX
 TX 3 → 3 RX
 GND 5 → 5 GND

3. RS232 Cable Define for EX-17xx / Uxx Serial Projectors

(PC side) (Projector side with Mini-Din 8 pin Plug)

RX 2 → 5 TX
 TX 3 → 3 RX
 GND 5 → 4, 8 GND



4. Command Format (TYPE1:EX-17xx and Uxx serial, TYPE2:EX-31xx and EX27xx)

TYPE1 CODE:

Example: Power.ON command is sent to the projector with a CR, the projector returns a "15" or "68" code

Command (ASCII)

PC	C	0	0	CR													
Projector					Processing Command	1	5										

TYPE2 CODE:

Command (ASCII)

PC	P	W	R	O	N												
Projector						Processing Command	6	8									

RS232 Command

RS232 command

5. Command List

TYPE1 Command (HEX+CR) EX-27xx / EX-17xx / Uxx	TYPE2 Command EX-31xx / EX-27xx	Function	Remarks
C00(43 30 30 0D)	PWRON	POWER ON	
C01(43 30 31 0D)	PWROFF	POWER OFF	
C02(43 30 32 0D)	INRGB1	COMPUTER1	
C04(43 30 34 0D)	INRGB2	COMPUTER2	
C03(43 30 33 0D)	INYPBPR	YPBPR	
C05(43 30 35 0D)	INDVI	DVI	EIKI disable
C05(43 30 35 0D)		COMPUTER1	EIKI enable
C06(43 30 36 0D)	INVIDEO	VIDEO	EIKI disable
C06(43 30 36 0D)		S-VIDEO	EIKI enable
C07(43 30 37 0D)	INVIDEO	S-VIDEO	EIKI disable
C07(43 30 37 0D)		VIDEO	EIKI enable
C08(43 30 38 0D)	INVCBCR	COMPONENT	
C09(43 30 39 0D)	FUVOL+	VOLUME +	
C0A(43 30 40 0D)	FUVOL-	VOLUME -	
C0D(43 30 43 0D)		V-Mute On	EIKI only
C0E(43 30 44 0D)		V-Mute Off	EIKI only
C1D(43 31 44 0D)	FUMENU	MENU	
C30(43 33 30 0D)	FUUP	UP	
C31(43 33 31 0D)	FUDOWN	DOWN	
C32(43 33 32 0D)	FULEFT	LEFT	
C33(43 33 33 0D)	FURIGHT	RIGHT	
C34(43 33 34 0D)		MUTE	
C43(43 34 33 0D)		FREEZE	
C80(43 38 30 0D)		ZOOM+	
C81(43 38 31 0D)		ZOOM-	
C89(43 38 39 0D)		AUTO	EIKI only
C90(43 39 33 0D)		ESC	
C91(43 39 31 0D)		SOURCE	
C92(43 39 32 0D)	FUAUTO	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)	FUBLANK	BLANK	
C98(43 39 38 0D)		KEYSTONE+	
C99(43 39 39 0D)		KEYSTONE-	

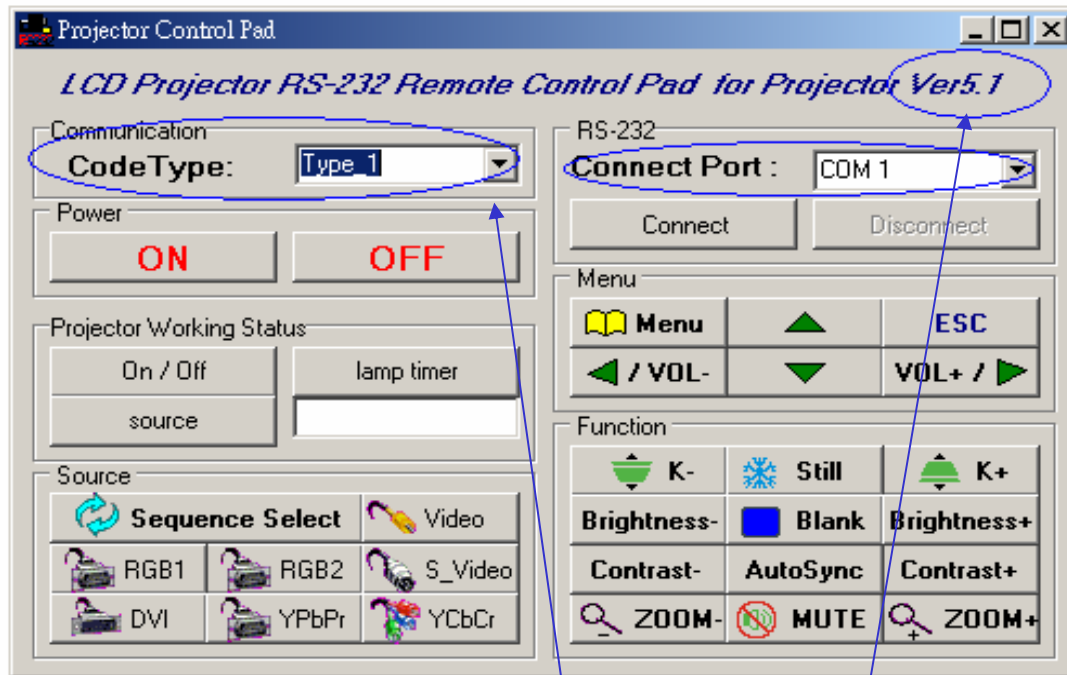
RS232 Command

RS232 command

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 warm up↵
CR1(43 52 31 0D)↵	↵	SOURCE-STATUS↵	STATUS feedback ↵ "001" - COMPUTER1↵ "002" - DVI↵ "003" - COMPUTER2↵ "010" - VIDEO↵ "020" - S-VIDEO↵ "040" - COMPONENT↵ "004" - YPbPr↵
CR2(43 53 32 0D)↵	↵	TIMER-STATUS↵	STATUS feedback ↵ " <u>xxxHrs xxxMins</u> " - Lamp time hours (for EX-17 and <u>Uxx</u> only)↵ "HHHH" - Lamp time hours (for EX-27 <u>xx</u> only)↵

RS232 command

- RS232 Remote_control Pad (software part number: 51760001)



- What if RS232 Remote_control Pad doesn't work?

Please check

- I - Make sure the version is 5.1 or greater than 5.1.
- II - Make sure the code type is Type_1
- III - The baud rate setting is 9600 or 19200
- IV - Is the connect port you select correct? For example "com 1" or "com 2"