

EDI TR.35 Series Projector RS-232 Command Specifications

1. Overviews

User can use RS-232 command to control projector remotely. This document defines the RS-232 protocol of projector and command formats .

2. Serial Interface Specifications

2.1. Communication Protocol

Standard Baud Rate	19200 bps
Data Length	8 bits
Parity	None
Stop bit	1 bit
Flow Control	None

2.2. RS-232 Cable Define

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

RX 2 ----- 3 TX
TX 3 ----- 2 RX
GND 5 ----- 5 GND

3. Notes for RS-232 communication

- 3.1. Every command starts with '~' and ends with **[CR]** (carriage return, which is 0x0D in hexadecimal). Every response ends with **[CR][LF]** (Line Feed, which is 0x0A in hexadecimal).
- 3.2. If an input command contains [Value] field, there should be a space between command code and [Value]. For example, *~colormode 0[CR]* means setting colormode to Bright mode (0).
- 3.3. If user inputs a string which does not start with '~', the projector will not response anything.
- 3.4. If user inputs some string which is not in the command list, user should input [CR] first before input next new command. *Note: Backspace key is useless in our RS-232 protocol.*

4. Command Example

- 4.1. User inputs *~poweroff[CR]* → Projector will be powered off and response *poweroff[CR][LF]* to PC.
- 4.2. User inputs *~brightness 50[CR]* → Projector will set brightness to 50 and response *brightness 50[CR][LF]* to PC.
- 4.3. User inputs *~raspectratio[CR]* → Projector will response current setting of Aspect Ratio to PC. For example : *raspectratio=2[CR][LF]*

5. Command List

Input Command Code / Example	[Value] Filed Code	Description	Projector Response Code / Example
~poweron[CR]		N/A	poweron[CR][LF]
~poweroff[CR]		N/A	poweroff[CR][LF]
~rsync[CR]		N/A	rsync[CR][LF]
~mute[CR]		N/A	mute[CR][LF]
~muteoff[CR]		N/A	muteoff[CR][LF]
~rmute[CR]	0	Off	mute=[Value][CR][LF] e.g. mute=0[CR][LF]
	1	On	
~freeze[CR]		N/A	freeze[CR][LF]
~freezeoff[CR]		N/A	freezeoff[CR][LF]
~blank[CR]		N/A	blank[CR][LF]
~blankoff[CR]		N/A	blankoff[CR][LF]
~rblank[CR]	0	Off	rblank=[Value][CR][LF] e.g. rblank=0[CR][LF]
	1	On	
~colormode [Value][CR] e.g. ~colormode 2[CR]	0	Bright mode	colormode=[Value][CR][LF] e.g. colormode=2[CR][LF]
	1	PC mode	
	2	Movie mode	
	3	Game mode	
	4	User mode	
~rcolormode[CR]	0	Bright mode	rcolormode=[Value][CR][LF] e.g. rcolormode=2[CR][LF]
	1	PC mode	
	2	Movie mode	
	3	Game mode	
	4	User mode	
~aspectratio [Value][CR] e.g. ~aspectratio 3[CR]	1	Auto	aspectratio [Value][CR][LF] e.g. aspectratio 3[CR][LF]
	2	4:3	
	3	16:9	
	4	16:10	
~raspectratio[CR]	1	Auto	raspectratio=[Value][CR][LF] e.g. raspectratio=3[CR][LF]
	2	4:3	
	3	16:9	
	4	16:10	
~hdmi[CR]		N/A	hdmi[CR][LF]

~vgaa[CR]	N/A		vgaa[CR][LF]
~vgab[CR]	N/A		vgab[CR][LF]
~svideo[CR]	N/A		svideo[CR][LF]
~composite[CR]	N/A		composite[CR][LF]
~rsource[CR]	0	VGA-1	rsource=[Value][CR][LF] e.g. rsource=2[CR][LF]
	1	VGA-2	
	2	COMPOSITE	
	3	S-video	
	4	HDMI	
~rkeystone[CR]	-15~15		rkeystone=[Value][CR][LF] e.g. rkeystone=-10[CR][LF]
~factoryreset[CR]	N/A		factoryreset[CR][LF]
~rlamphour[CR]	N/A		rlamphour=[Value][CR][LF] e.g. rlamphour=46[CR][LF]
~firmwarev[CR]	XXX		rfirmware=[Value][CR][LF] e.g. rfirmware=A13[CR][LF]
~ceiling [Value][CR] e.g. ~ceiling 1[CR]	0	Front	ceiling [Value][CR][LF] e.g. ceiling 1[CR][LF]
	1	Front Ceiling	
	2	Rear	
	3	Rear Ceiling	
~rceiling[CR]	0	Front	rceiling=[Value][CR][LF] e.g. rceiling=1[CR][LF]
	1	Front Ceiling	
	2	Rear	
	3	Rear Ceiling	
~brightness [Value][CR] e.g. ~brightness 46[CR]	0~100		brightness [Value][CR][LF] e.g. brightness 46[CR][LF]
~rbrightness[CR]	0~100		rbrightness=[Value][CR][LF] e.g. rbrightness=46[CR][LF]
~contrast [Value][CR] e.g. ~contrast 58[CR]	0~100		contrast [Value][CR][LF] e.g. contrast 58[CR][LF]
~rcontrast[CR]	0~100		rcontrast=[Value][CR][LF] e.g. rcontrast=58[CR][LF]
~clanguage [Value][CR] e.g. ~clanguage 10[CR]	1	English	clanguage [Value][CR][LF] e.g. clanguage 10[CR][LF]
	2	German	
	3	French	
	4	Italian	
	5	Spanish	

	6	Polish	
	7	Swedish	
	8	Dutch	
	9	Iberian Portuguese	
	10	Japanese	
	11	T_Chinese	
	12	S_Chinese	
	13	Korean	
	14	Russian	
	15	Arabic	
	16	Dansk	
	17	Turkish	
~rclanguage[CR]	1	English	rclanguage=[Value][CR][LF]
	2	German	
	3	French	e.g. rclanguage=10[CR][LF]
	4	Italian	
	5	Spanish	
	6	Polish	
	7	Swedish	
	8	Dutch	
	9	Iberian Portuguese	
	10	Japanese	
	11	T_Chinese	
	12	S_Chinese	
	13	Korean	
	14	Russian	
	15	Arabic	
	16	Dansk	
	17	Turkish	
~volume [Value][CR] e.g. ~volume 20[CR]		0~32	volume [Value][CR][LF] e.g. volume 20[CR][LF]
~rvolume[CR]		0~32	rvolume=[Value][CR][LF] e.g. rvolume=20[CR][LF]
~mvolume [Value][CR] e.g. ~mvolume 5[CR]		0~32	mvolume [Value][CR][LF] e.g. mvolume 5[CR][LF]
~rmvolume[CR]		0~32	rmvolume=[Value][CR][LF] e.g. rmvolume=5[CR][LF]

~autopoweroff [Value][CR] e.g. ~autopoweroff 60[CR]	0~120		autopoweroff [Value][CR][LF] e.g. autopoweroff 60[CR][LF]
~rautopoweroff[CR]	0~120		rautopoweroff=[Value][CR][LF] e.g. rautopoweroff=60[CR][LF]
~rophours[CR]	N/A		rophours=[Value][CR][LF] e.g. rophours=200[CR][LF]
~rsystem[CR]	0	Standby	rsystem=[Value][CR][LF] e.g. rsystem=3[CR][LF]
	1	Warm Up	
	2	Lamp On	
	3	Cooling	

.The unit of command ‘~rlamphours’ and ‘~rophours’ is hours