2015/3/6
Ver 1.00

RS-232 Protocol Function for EIP-UJT100

Pin Alignment

PC	
Pin	Description
1	DCD
2	RXD
3	TXD
4	DTR
5	GND
6	DSR
7	RTS
8	CTS
9	RI

Projector	
Pin	Description
1	NC
2	RXD
3	TXD
4	NC
5	GND
6	NC
7	RTS
8	CTS
9	NC

RS232C Setting

Baud Rate:	19200
Parity Check:	None
Data Bit:	8
Stop Bit:	1
Flow Control:	None

RS232C Command List for EIP-UJT100

Category	Item	Standard Format	Expand Format		Reply	Description
		Commands	Commands	Parameter (%1=)		
Main	1-1	CR1			1 ~ 7 (Refer the Description)	Check input mode (1:HDMI, 2:HDBaseT, 3:VGA , 4: YUV1, 5: RGBHV/YUV2, 6: SDI , 7:3D DVI)
		C36				HDMI
		C38				HDBaseT
		C05				VGA
		C33				YUV1
		C54				RGBHV/YUV2
		C55				SDI
		C52				3D DVI
	1-2		CR_COLORSPACE		1 ~ 5	Check color space
			CF_COLORSPACE_%1	1		Auto
				2		YCbCr (Rec. 601);
				3		YPbPr (Rec. 709);
				4		RGB-PC (0-255);
				5		RGB-Video (16-235);
	1-3		CR_FRAMELOCK		1 ~ 4	Check input lock setting
			CF_FRAMELOCK_%1	1		Auto
				2		48 Hz
				3		50 Hz
				4		60 Hz
	1-4		CR_AUTOPOWEROFF		0 ~ 1	Check auto power off mode setting
		C2B	CF_AUTOPOWEROFF_%1	0		off
		C2E		1		on
	1-5		CR_AUTOPOWERON		0 ~ 1	Check auto power on mode setting
		C29	CF_AUTOPOWERON_%1	0		off
		C28		1		on
	1-6		CR_BACKGND		1 ~ 4	Check no signal setting
			CF_BACKGND_%1	1		Logo
				2		Blue
				3		Black
				4		White
	1-7		CR_IMAGEADJ		0 ~ 2	Check auto image adjust setting
			CF_IMAGEADJ_%1	0		off
				1		Auto
				2		Always
Picture	2-1		CR_CONT		0 ~ 200	check contrast value
			CF_CONT_%1	0 ~ 200		set contrast value (input value) (0~200)
				UP		increase contrast value (+1) from current setting
				DN		decrease contrast value (-1) from current setting
	2-2		CR_BRIGHT		0 ~ 200	check bright value
			CF_BRIGHT_%1	0 ~ 200		set bright value (input value) (0~200)
				UP		increase bright value (+1) from current setting
				DN		decrease bright value (-1) from current setting
	2-3		CR_SHARP		0 ~ 200	check sharpness value
			CF_SHARP_%1	0 ~ 200		set sharpness value (input value) (0~200)
				UP		increase sharpness value (+1) from current setting
				DN		decrease sharpness value (-1) from current setting
	2-4		CR_NZRED		0 ~ 200	check noise reduction value
			CF_NZRED_%1	0 ~ 200		set noise reduction value (input value) (0~200)
				UP		increase noise reduction value (+1) from current setting
				DN		decrease noise reduction value (-1) from current setting
	2-5		CR_COLTEMP		1 ~ 5	Check color temp value
			CF_COLTEMP_%1	1		Native
				2		3200K
				3		5400K
				4		6500K
				5		9300K
	2-6-1		CR_OFFSET_R		0 ~ 200	check red offset value
			CF_OFFSET_R_%1	0 ~ 200		set red offset value (input value) (0~200)
				UP		increase red offset value (+1) from current setting
				DN		decrease red offset value (-1) from current setting
	2-6-2		CR_OFFSET_G		0 ~ 200	check green offset value
			CF_OFFSET_G_%1	0 ~ 200		set green offset value (input value) (0~200)
				UP		increase green offset value (+1) from current setting
				DN		decrease green offset value (-1) from current setting
	2-6-3		CR_OFFSET_B		0 ~ 200	check blue offset value
			CF_OFFSET_B_%1	0 ~ 200		set blue offset value (input value) (0~200)
				UP		increase blue offset value (+1) from current setting
				DN		decrease blue offset value (-1) from current setting
	2-7-1		CR_GAIN_R		0 ~ 200	check red gain value
			CF_GAIN_R_%1	0 ~ 200		set red gain value (input value) (0~200)
				UP		increase red gain value (+1) from current setting
				DN		decrease red gain value (-1) from current setting
	2-7-2		CR_GAIN_G		0 ~ 200	check green gain value
			CF_GAIN_G_%1	0 ~ 200		set green gain value (input value) (0~200)
				UP		increase green gain value (+1) from current setting
				DN		decrease green gain value (-1) from current setting
	2-7-3		CR_GAIN_G		0 ~ 200	check blue gain value
			CF_GAIN_G_%1	0 ~ 200		set blue gain value (input value) (0~200)
				UP		increase blue gain value (+1) from current setting
				DN		decrease blue gain value (-1) from current setting
	2-8		CR_ASPECT		1 ~ 9	Check aspect setting
		C10	CF_ASPECT_%1	1		5:4
				2		4:3
				3		16:10
				4		16:9
				5		1.88
				6		2.35
				7		letter box
		C0F		8		native
				9		Unscaled
	2-9-1		CR_TDOTS		0 ~ 200	check h.total value
			CF_TDOTS_%1	0 ~ 200		set h.total value (input value) (0~200)
				UP		increase h.total value (+1) from current setting
				DN		decrease h.total value (-1) from current setting
	2-9-2		CR_HPOS		0 ~ 200	check h.start value
			CF_HPOS_%1	0 ~ 200		set h.start value (input value) (0~200)
				UP		increase h.start value (+1) from current setting
				DN		decrease h.start value (-1) from current setting
	2-9-3		CR_PHASE		0 ~ 200	check h.phase value
			CF_PHASE_%1	0 ~ 200		set h.phase value (input value) (0~200)
				UP		increase h.phase value (+1) from current setting
				DN		decrease h.phase value (-1) from current setting
	2-9-4		CR_VPOS		0 ~ 200	check v.start value
			CF_VPOS_%1	0 ~ 200		set v.start value (input value) (0~200)
				UP		increase v.start value (+1) from current setting
				DN		decrease v.start value (-1) from current setting
	2-10	C89				Auto Image Execute

Layout	3-1		CR_OVERSCAN		0 ~ 2	Check Overscan value
			CF_OVERSCAN_%1	0		off
				1		Crop
				2		Zoom
	3-2		CR_PIPSUBINP		1 ~ 6	Check input mode (1:HDMI, 2:HDBaseT, 3:VGA , 4: YUV1, 5: RGBHV/YUV2, 6: SDI)
			CF_PIPSUBINP_%1	1		HDMI
				2		HDBaseT
				3		VGA
				4		YUV1
				5		RGBHV/YUV2
				6		SDI
	3-3		CR_PIPPOSITION		1 ~ 5	Check the pip position
			CF_PIPPOSITION_%1	1		Top left
				2		Top right
				3		Bottom left
				4		Bottom right
				5		Split- L-R
	3-4		CR_PIPMODE		0 ~ 1	Check pip status
			CF_PIPMODE_%1	0		off
				1		on
Lamps	4-1		CR_AUTOLAMPCONTROL		1 ~ 3	Check lamp mode setting
			CF_AUTOLAMPSONTROL_%1	1		Eco
				2		Normal
				3		Custom Power Level
	4-2		CR_LAMPMODE		1~2	Check projecting lamp setting
			CF_LAMPMODE_%1	1		single
				2		dual
	4-3		CR_ALTITUDE		0 ~ 1	(High Altitude) check altitude setting
			CF_ALTITUDE_%1	0		off
				1		on
	4-4		CR_LAMPPOWER		0 ~ 35	Check lamp power setting (0~35)
			CR_LAMPPOWER_%1	0 ~ 35		Value is "0~35"(78.3 % ~100 %)
	4-5	CR7			00 (L1=OFF ,L2=OFF) 10 (L1=ON ,L2=OFF) 01 (L1=OFF,L2=ON) 11 (L1=ON,L2=ON)	Check lamp 1 status (Value is "0=off", "1=on")
	4-6					Check lamp 2 status (Value is "0=off", "1=on")
	4-7	CR3			%1 %2 (exp:L1=50H ,L2=30H => "50 30")	Get lamp1 hours
	4-8					Get lamp2 hours
	5-1	CR4	CR_PJPOSITION		1 ~ 4	Check projection mode
			CF_PJPOSITION_%1	1		Front / Desktop
				2		Rear / Desktop
				3		Rear / Ceiling
				4		Front / Ceiling
	5-2-1	C46				Lens Zoom in
		C47				Lens Zoom out
	5-2-2	C4A				Lens Focus Far
		C4B				Lens Focus Near
	5-3	C5D				Vertical Lens Shift Up
		C5E				Vertical Lens Shift Down
	5-4	C60				Horizontal Lens Shift Right
		C5F				Horizontal Lens Shift Left
	5-5	C61				Lens shift to center
	5-6		CR_DYNACONT		0 ~ 1	check dynamic contrast value
			CF_DYNACONT_%1	0		off
				1		on
	5-7		CR_GAMMA		1 ~ 6	Check gamma mode
			CF_GAMMA_%1	1		1.8
				2		2
				3		2.2(Default)
				4		2.35
				5		2.5
				6		Dicom Sim
	5-8		CR_TESTPAT		0 ~ 14	Check pattern (0 -> off, other pattern is moved command number +1)
			CF_TESTPAT_%1	0		Off
				1		Color Bar
				2		Cross Hatch
				3		Burst
				4		Red
				5		Green
				6		Blue
				7		White
				8		Black
				9		Red (TI)
				10		Green (TI)
				11		Blue (TI)
				12		HRamp (TI)
				13		Reserve
				14		Reserve
	5-9		CR_COLORGAMUT		1~4	Check Color Gamut
			CF_COLORGAMUT_%1	1		Native
				2		EBU
				3		SMPTE
				4		Custom
	5-9-1		CF_CUSTOMCG_R_X_%1	0 ~ 700		Custom Color Gamut Rx
			CF_CUSTOMCG_R_Y_%1	0 ~ 700		Custom Color Gamut Ry
			CF_CUSTOMCG_G_X_%1	0 ~ 700		Custom Color Gamut Gx
			CF_CUSTOMCG_G_Y_%1	0 ~ 700		Custom Color Gamut Gy
			CF_CUSTOMCG_B_X_%1	0 ~ 700		Custom Color Gamut Bx
			CF_CUSTOMCG_B_Y_%1	0 ~ 700		Custom Color Gamut By
			CF_CUSTOMCG_C_X_%1	0 ~ 700		Custom Color Gamut Cx
			CF_CUSTOMCG_C_Y_%1	0 ~ 700		Custom Color Gamut Cy
			CF_CUSTOMCG_M_X_%1	0 ~ 700		Custom Color Gamut Mx
			CF_CUSTOMCG_M_Y_%1	0 ~ 700		Custom Color Gamut My
			CF_CUSTOMCG_Y_X_%1	0 ~ 700		Custom Color Gamut Yx
			CF_CUSTOMCG_Y_Y_%1	0 ~ 700		Custom Color Gamut Yy
			CF_CUSTOMCG_W_X_%1	0 ~ 700		Custom Color Gamut Wx
			CF_CUSTOMCG_W_Y_%1	0 ~ 700		Custom Color Gamut Wy
			CF_CUSTOMCG_RESET			Custom Color Garmut reset to default
	5-10-1-1		CR_KYSTN_H		-350 ~ 350	check H keystone value
			CF_KYSTN_H_%1	-350 ~ 350		set H keystone value (input value) (-350~350)
		C90		UP		increase H keystone value (+1) from current setting
		C91		DN		decrease H keystone value (-1) from current setting
	5-10-1-2		CR_KTSYN_V		-350 ~ 350	check V keystone value
			CF_KYSTN_V_%1	-200 ~ 200		set V keystone value (input value) (-200~200)
		C8E		UP		increase V keystone value (+1) from current setting
		C8F		DN		decrease V keystone value (-1) from current setting
	5-10-2		CR_WARP_RT		-20 ~ 20	check rotation value
			CF_WARP_RT_%1	-20 ~ 20		set rotation value (input value) (-20~20)
				UP		increase rotation value (+1) from current setting
				DN		decrease rotation value (-1) from current setting
	5-10-3		CR_WARP_PB		-100 ~ 100	check Pincushion/Barrel value
			CF_WARP_PB_%1	-100 ~ 100		set Pincushion/Barrel value (input value) (-100~100)
				UP		increase Pincushion/Barrel value (+1) from current setting
				DN		decrease Pincushion/Barrel value (-1) from current setting

Advanced	5-10-4		CR_WARP_TLC_X		-192 ~ 192	check top left corner x value
			CF_WARP_TLC_X_%1	-192 ~ 192		set top left corner x value (input value) (-192~192)
				UP		increase top left corner x value (+1) from current setting
				DN		decrease top left corner x value (-1) from current setting
			CR_WARP_TLC_Y		-120 ~ 120	check top left corner y value
			CF_WARP_TLC_Y_%1	-120 ~ 120		set top left corner y value (input value) (-120~120)
				UP		increase top left corner y value (+1) from current setting
				DN		decrease top left corner y value (-1) from current setting
	5-10-5		CR_WARP_TRC_X		-192 ~ 192	check top right corner x value
			CF_WARP_TRC_X_%1	-192 ~ 192		set top right corner x value (input value) (-192~192)
				UP		increase top right corner x value (+1) from current setting
				DN		decrease top right corner x value (-1) from current setting
			CR_WARP_TRC_Y		-120 ~ 120	check top right corner y value
			CF_WARP_TRC_Y_%1	-120 ~ 120		set top right corner y value (input value) (-120~120)
				UP		increase top right corner y value (+1) from current setting
				DN		decrease top right corner y value (-1) from current setting
	5-10-6		CR_WARP_BLC_X		-192 ~ 192	check bottom left corner x value
			CF_WARP_BLC_X_%1	-192 ~ 192		set bottom left corner x value (input value) (-192~192)
				UP		increase bottom left corner x value (+1) from current setting
				DN		decrease bottom left corner x value (-1) from current setting
			CR_WARP_BLC_Y		-120 ~ 120	check bottom left corner y value
			CF_WARP_BLC_Y_%1	-120 ~ 120		set bottom left corner y value (input value) (-120~120)
				UP		increase bottom left corner y value (+1) from current setting
				DN		decrease bottom left corner y value (-1) from current setting
	5-10-7		CR_WARP_BRC_X		-192 ~ 192	check bottom right corner x value
			CF_WARP_BRC_X_%1	-192 ~ 192		set bottom right corner x value (input value) (-192~192)
				UP		increase bottom right corner x value (+1) from current setting
				DN		decrease bottom right corner x value (-1) from current setting
			CR_WARP_BRC_Y		-120 ~ 120	check bottom right corner y value
			CF_WARP_BRC_Y_%1	-120 ~ 120		set bottom right corner y value (input value) (-120~120)
				UP		increase bottom right corner y value (+1) from current setting
				DN		decrease bottom right corner y value (-1) from current setting
	5-10-9		CF_WARP_RESET			Execute reset warping
	5-11-1		CR_BLANK_TOP		0 ~ 360	check top blanking value
			CF_BLANK_TOP_%1	0 ~ 360		set top blanking value (input value) (0~360)
				UP		increase top blanking value (+1) from current setting
				DN		decrease top blanking value (-1) from current setting
	5-11-2		CR_BLANK_BOTTOM		0 ~ 360	check bottom blanking value
			CF_BLANK_BOTTOM_%1	0 ~ 360		set bottom blanking value (input value) (0~360)
				UP		increase bottom blanking value (+1) from current setting
				DN		decrease bottom blanking value (-1) from current setting
	5-11-3		CR_BLANK_LEFT		0 ~ 360	check left blanking value
			CF_BLANK_LEFT_%1	0 ~ 360		set left blanking value (input value) (0~534)
				UP		increase left blanking value (+1) from current setting
				DN		decrease left blanking value (-1) from current setting
	5-11-4		CR_BLANK_RIGHT		0 ~ 360	check right blanking value
			CF_BLANK_RIGHT_%1	0 ~ 360		set right blanking value (input value)
				UP		increase right blanking value (+1) from current setting
				DN		decrease right blanking value (-1) from current setting
	5-11-5		CF_BLANK_RESET			Execute reset blanking
	5-12-1		CR_EDGEBLENDING		0 ~ 1	Check edge blending status
			CF_EDGEBLENDING_%1	0		off
				1		on
	5-12-2-1		CR_BLEND_TOP		0, 200 ~ 500	check blend width top value
			CF_BLEND_TOP_%1	0, 200 ~ 500		set blend width top value (input value) (0, 200~500)
				UP		increase blend width top value (+1) from current setting
				DN		decrease blend width top value (-1) from current setting
	5-12-2-2		CR_BLEND_BOTTOM		0, 200 ~ 500	check blend witdth bottom value
			CF_BLEND_BOTTOM_%1	0, 200 ~ 500		set blend witdth bottom value (input value) (0, 200~500)
				UP		increase blend witdth bottom value (+1) from current setting
				DN		decrease blend witdth bottom value (-1) from current setting
	5-12-2-3		CR_BLEND_LEFT		0, 200 ~ 800	check blend witdth left value
			CF_BLEND_LEFT_%1	0, 200 ~ 800		set blend witdth left value (input value) (0, 200~800)
				UP		increase blend witdth left value (+1) from current setting
				DN		decrease blend witdth left value (-1) from current setting
	5-12-2-4		CR_BLEND_RIGHT		0, 200 ~ 800	check blend width right value
			CF_BLEND_RIGHT_%1	0, 200 ~ 800		set blend width right value (input value) (0, 200~800)
				UP		increase blend width right value (+1) from current setting
				DN		decrease blend width right value (-1) from current setting
	5-12-3-1		CR_BLENDBLK_TOP		0,8,16,24,32	check black level uplift top value
			CF_BLENDBLK_TOP_%1	0,8,16,24,32		set black level uplift top value (input value) (0, 8, 16, 24, 32)
				UP		increase black level uplift top value (+1) from current setting
				DN		decrease black level uplift top value (-1) from current setting
	5-12-3-2		CR_BLENDBLK_BOTTOM		0,8,16,24,32	check black level uplift bottom value
			CF_BLENDBLK_BOTTOM_%1	0,8,16,24,32		set black level uplift bottom value (input value) (0, 8, 16, 24, 32)
				UP		increase black level uplift bottom value (+1) from current setting
				DN		decrease black level uplift bottom value (-1) from current setting
	5-12-3-3		CR_BLENDBLK_LEFT		0,4,8,16,20,24,28,32	check black level uplift left value
			CF_BLENDBLK_LEFT_%1	0,4,8,16,20,24,28,32		set black level uplift left value (input value) (0, 4, 8, 16, 20, 24, 28, 32)
				UP		increase black level uplift left value (+1) from current setting
				DN		decrease black level uplift left value (-1) from current setting
	5-12-3-4		CR_BLENDBLK_RIGHT		0,4,8,16,20,24,28,32	check black level uplift right value
			CF_BLENDBLK_RIGHT_%1	0,4,8,16,20,24,28,32		set black level uplift right value (input value) (0, 4, 8, 16, 20, 24, 28, 32)
				UP		increase black level uplift right value (+1) from current setting
				DN		decrease black level uplift right value (-1) from current setting
	5-12-4-1		CR_BLENDBLKC		0 ~ 32	check blend ajust all value
			CF_BLENDBLKC_%1	0 ~ 32		set blend ajust all value (input value) (0~32)
				UP		increase blend ajust all value (+1) from current setting
				DN		decrease blend ajust all value (-1) from current setting
	5-12-4-2		CR_BLENDBLKC_R		0 ~ 32	check blend ajust red value
			CF_BLENDBLKC_R_%1	0 ~ 32		set blend ajust red value (input value) (0~32)
				UP		increase blend ajust red value (+1) from current setting
				DN		decrease blend ajust red value (-1) from current setting
	5-12-4-3		CR_BLENDBLKC_G		0 ~ 32	check blend ajust green value
			CF_BLENDBLKC_G_%1	0 ~ 32		set blend ajust green value (input value) (0~32)
				UP		increase blend ajust green value (+1) from current setting
				DN		decrease blend ajust green value (-1) from current setting
	5-12-4-4		CR_BLENDBLKC_B		0 ~ 32	check blend ajust blue value
			CF_BLENDBLKC_B_%1	0 ~ 32		set blend ajust blue value (input value) (0~32)
				UP		increase blend ajust blue value (+1) from current setting
				DN		decrease blend ajust blue value (-1) from current setting
	5-12-4-5		CF_EDGEBLENDING_RESET			Execute reset edge blending
	5-12-4-5a		CF_W2_RESET			Execute W2 recover
	5-12-4-6		CR_BLENDTESTPAT		0 ~ 1	Check edge blending align pattern setting
			CF_BLENDTESTPAT_%1	0		off
				1		on
	6-1		CR_ECONETWORK			Check standby ECO mode setting
			CF_ECONETWORK_%1	0		off
				1		on
	6-2-1		CR_IPADDRESS		xxx.xxx.xxx.xxx	Check IP address
			CF_IPADDRESS_%1	xxx.xxx.xxx.xxx		Set IP address 12digits are depended on user environment. Therefore, x=0~9, but each 3digits are over 255, return ERR
	6-2-2		CR_SUBNET		xxx.xxx.xxx.xxx	Check subnet mask
			CF_SUBNET_%1	xxx.xxx.xxx.xxx		Set subnet mask 12digits are depended on user environment. Therefore, x=0~9, but each 3digits are over 255, return ERR
	6-2-3		CR_GATEWAY		xxx.xxx.xxx.xxx	Check gateway address
			CF_GATEWAY	xxx.xxx.xxx.xxx		Set gateway address 12digits are depended on user environment. Therefore, x=0~9, but each 3digits are over 255, return ERR

	6-2-4		CR_DHCP		0 ~ 1	Check DHCP setting
			CF_DHCP_%1	0		Off
				1		On
	6-3		CR_MENUPOSITION		1 ~ 5	Check the menu position
			CF_MENUPOSITION_%1	1		Top Left
				2		Top Right
				3		Botton Left
				4		Botton Right
				5		Center
	6-4		CR_LOGO		0 ~ 1	Check startup Logo On/Off setting
			CF_LOGO_%1	0		Off
				1		On
	6-5		CR_CHIME		0 ~ 1	Check start up chime On/Off setting
			CF_CHIME	0		Off
				1		On
	6-6		CR_BTN1		1 ~ 7	Check Button1 define (1:HDMI, 2:HDBaseT, 3:VGA , 4: YUV1, 5: RGBHV/YUV2, 6: SDI , 7:3D DVI)
			CF_BTN1_%1	1		HDMI
				2		HDBaseT
				3		VGA
				4		YUV1
				5		RGBHV/YUV2
				6		SDI
				7		3D DVI
	6-7		CR_BTN2		1 ~ 7	Check Button2 define (1:HDMI, 2:HDBaseT, 3:VGA , 4: YUV1, 5: RGBHV/YUV2, 6: SDI , 7:3D DVI)
			CF_BTN2_%1	1		HDMI
				2		HDBaseT
				3		VGA
				4		YUV1
				5		RGBHV/YUV2
				6		SDI
				7		3D DVI
	6-8		CR_BTN3		1 ~ 7	Check Button3 define (1:HDMI, 2:HDBaseT, 3:VGA , 4: YUV1, 5: RGBHV/YUV2, 6: SDI , 7:3D DVI)
			CF_BTN3_%1	1		HDMI
				2		HDBaseT
				3		VGA
				4		YUV1
				5		RGBHV/YUV2
				6		SDI
				7		3D DVI
	6-9		CR_BTN4		1 ~ 7	Check Button4 define (1:HDMI, 2:HDBaseT, 3:VGA , 4: YUV1, 5: RGBHV/YUV2, 6: SDI , 7:3D DVI)
			CF_BTN4_%1	1		HDMI
				2		HDBaseT
				3		VGA
				4		YUV1
				5		RGBHV/YUV2
				6		SDI
				7		3D DVI
	6-10		CR_BTN5		1 ~ 7	Check Button5 define (1:HDMI, 2:HDBaseT, 3:VGA , 4: YUV1, 5: RGBHV/YUV2, 6: SDI , 7:3D DVI)
			CF_BTN5_%1	1		HDMI
				2		HDBaseT
				3		VGA
				4		YUV1
				5		RGBHV/YUV2
				6		SDI
				7		3D DVI
	6-11		CR_TRIG1		1 ~ 10	Check trigger1 setting
			CF_TRIG1_%1	1		5:4
				2		4:3
				3		16:10
				4		16:9
				5		1.88
				6		2.35
				7		Letter box
				8		Native
				9		Unscaled
				10		Auto
	6-12		CR_TRIG2		1 ~ 10	Check trigger2 setting
			CF_TRIG2_%1	1		5:4
				2		4:3
				3		16:10
				4		16:9
				5		1.88
				6		2.35
				7		Letter box
				8		Native
				9		Unscaled
				10		Auto
	6-13		CR AUTOSRC		0 ~ 1	Check Auto Search setting
			CF AUTOSRC_%1	0		Off
				1		On
	6-14		CR_LANG		ENG, FRA,...	Check language setting
			CF_LANG_%1	ENG		English
				FRA		French
				ESP		Spanish
				DEU		German
				POR		Portuese
				SCH		Chinese Simpified
				TCH		Chinese Traditional
				JPN		Japanese
				KOR		Korean
Service	7-1		CR_MODELNAME			Get model name
	7-2		CR_SERIALNO			Get serial no.
	7-3		CR_SWVER			Get software version
	7-4-1	CR1			1 ~ 7 (Refer the Description)	Get current active source
	7-4-2		CR_PIPSUBINP		1 ~ 6	Get current PIP source
	7-5		CR_PIXELCLK			Get pixel clock
	7-6		CR_SYSTEM			Get signal format
	7-7-1		CR_REFRESH		%1 %2(H V)	Get H frequency
	7-7-2					Get V frequency
	7-8	CR3			%1 %2 (exp:L1=50H ,L2=30H => "50 30")	Get lamp1 hours
	7-9					Get lamp2 hours
	7-10		CF_LAMP1HOUR_RESET			Reset lamp1 hours to zero
	7-11		CF_LAMP2HOUR_RESET			Reset lamp2 hours to zero
	7-12		CR_PJTIME			Get projector run time

	7-13		CR_BLUEONLY		0 ~ 1	Check blue only setting
			CF_BLUEONLY_%1	0		Off
				1		On
	7-14		CF_FACTORY_RESET			Execute factory reset

	A-1	C00				power on
	A-2	C01				power off
	A-3	C0E				Picture mute off(Pause)
		C0D				Picture mute on(Pause)
	A-4	CR0				0 = standby 1 = warm up 2 = imaging 3 = cooling 4 = warning
Others	A-5		CR ALLPFAIL			0 = ErrMsgOverTempInlet 1 = ErrMsgOverTempDMD 2 = ErrMsgOverTempLamp1 3 = ErrMsgOverTempLamp2 4 = ErrMsgOverTempBallast1 5 = ErrMsgOverTempBallast2 6 = ErrMsgFanInitError 7 = ErrMsgFan0RotateError 8 = ErrMsgFan1RotateError 9 = ErrMsgFan2RotateError 10 = ErrMsgFan3RotateError 11 = ErrMsgFan4RotateError 12 = ErrMsgFan5RotateError 13 = ErrMsgFan6RotateError 14 = ErrMsgFan7RotateError 15 = ErrMsgDMDInitFail 16 = ErrMsgLampInitFail 17 = ErrMsgLampLitFail 18 = ErrMsgBallastUartError 19 = ErrMsgExGpioFail 20 = ErrMsgInterLockOpen 21 = ErrMsgGF9450NoResponse 22 = ErrMsgSystemI2cFail 23 = ErrMsgSoftwareI2cFail 24 = ErrMsgEepromFail 25 = ErrMsgEdidFail 26 = ErrMsgEepVersionFail 27 = ErrMsgRstGennum 28 = ErrMsgFan8RotateError 29 = ErrMsgFan9RotateError 30 = ErrMsgFan10RotateError 31 = ErrMsgFan11RotateError 32 = ErrMsgLamp2LitFail 33 = ErrMsgBallast2UartError 34 = ErrMsgGtInletTp 35 = ErrMsgGtDmdTp 36 = ErrMsgInletTempSensorFail 37 = ErrMsgDMDTempSensorFail 38 = ErrMsgGeoSystemFail 39 = ErrMsgreversed 40 = ErrMsgFan12RotateError 41 = ErrMsgFan13RotateError 42 = ErrMsgFan14RotateError 43 = ErrMsgFan15RotateError 44 = ErrMsgFan16RotateError 45 = ErrMsgFan17RotateError 46 = ErrMsgFan18RotateError 47 = ErrMsgFan19RotateError 48 = ErrMsgFan20RotateError 49 = ErrMsgFan21RotateError 50 = ErrMsgFan22RotateError 51 = ErrMsgFan23RotateError 52 = ErrMsgFanR1RotateError
	A-6	CR6			%1 %2 (%1 = Sensor1 TEMP %2 = Sensor1 TEMP)	sensor1 TEMP
						sensor2 TEMP

"ky" commands	B-1	C00				Power On
	B-2	C01				Power Off
	B-3		CF_KYSRC1			Source button 1
	B-4		CF_KYSRC2			Source button 2
	B-5		CF_KYSRC3			Source button 3
	B-6		CF_KYSRC4			Source button 4
	B-7		CF_KYSRC5			Source button 5
	B-8	C3C				Cursor up
	B-9	C3D				Cursor down
	B-10	C3A				Cursor left
	B-11	C3B				Cursor right
	B-12	C3F				Enter
	B-13	C1C				Menu
	B-14		CF_KYASPECT			Aspect (toggle)
	B-15		CF_KYSHUTTER			Shutter (Pause)
	B-16		CF_KYTEXT			Text
	B-17	C89				Autosync
	B-18		CF_KYCONT			Contrast
	B-19		CF_KYBRIGHT			Bright
	B-20		CF_KYSHARP			Sharpness
	B-21		CF_KYPHASE			Phase
	B-22		CF_KYPIP			PIP
	B-23		CF_KYPIPSWAP			PIPswap