LC-X50M/X50 MR3B Series

EXPAND SERIAL COMMAND

FUNCTIONAL SPECIFICATION

-CONTENT-

Outview

・ ・ This Functional Specification defines the Network Card and the communicaton functions for MR3P series. (1.3"XGA -4 Eiki Model:LC-X50M)

・ ・ A projecto firmware Ver.1x-ready

・ ・ Command sare to commnunicate to Newtork card, but most commands control a remote projector with PC installed RS232C. That's why commands are defined as expand serial commands.

Serial Interface Specification

・ ・ Communication Specificaiton

	Specification
Synchro System	Asynchronou
Transmission Speed	9600 / 19200
Data Length	8 bit
Parity	N/A
Stop Bit	1
Flow Control	N/A

Note1) transfer rate: initial setting value is 19200

Note2) transfer rate can be changed by service mode

・ ・ Connection

Must use a dedicated serial cable for a connection to a computer and a projector.

PC COM No.1 — Projector Control Port

	PC COM No.1		Projector Control Port
CD	1		1
RXD	2		2
TXD	3		3
DTR	4		4
SG	5		5
DSR	6		6
RTS	7		7
CTS	8		8
RING	9		

D-Sub 9 Pin   Mini 8 Pin
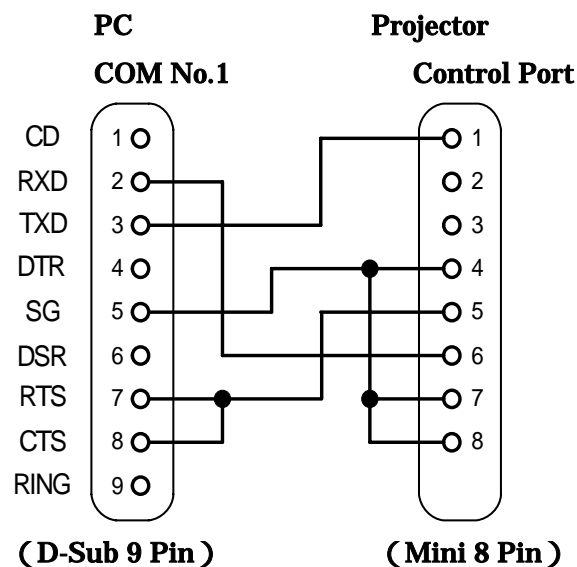
Note for RC/ommunications

． ． The expand command is defined one command/one line that starts"C" and ends carrage return (0x0D)

． ． When a projector receives carriage return (0x0D), it starts decoding.

   -Functional Execution

   (Ex.)"CF_BRIGHT_032"[CR]

   Note) _means a space

   -Status Read Command

   (Ex.) "CR_RIGHT"[CR]

． ． When it takes more than one second to receive one command, it does not execute the command.   Since the projector has received the first data "C", when it takes more than 1 second until the projector receives a carriage return (0x0D), it clears information of buffer.

． ． When a computer keeps sending some command, it must wait sending next command after 100ms when the computer receives the return command.
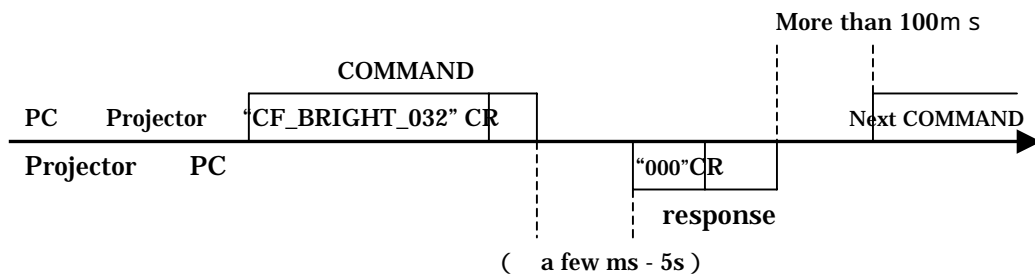
． ． ． When a computer sends next command before receiving a return command, the projector may not operate properly.

． ． ． Except no response after 5 seconds.

． ． It takes about 5 seconds for internal initialization after plugging in AC.   During this timel it cannot process command.   Do not inssue any commands.

Name Definition

． ． Data from a controller to a projector is represented as COMMAND, and data from a projector to a controller for the incoming command is represented as RESPONSE.

． ． [CR] : Carriage Return Code

   The command ends carriage return code.   Also response command ends carriage return, too.

． ．   : Space Code

   All space code is indicated by (_).

． ． %1 : Parameter in Command

   When there are some parameters, the parameters are defined as %2, %3…

． ． %%% : ErroRC/ode form a projector

   "000": Nomral Reception

   See " 7.ErroRC/ode Table " for error number.

Functional Execution Command Table

. . Image Series Command Table

Execute command	Item
CF_BRIGHT_%1[CR]	Set Brightness value
CF-CONT_%1[CR]	Set Contrast value
CF_COLOR_%1[CR]	Set Color value
CF-TINT_%1[CR]	Set Tint value
CF_SHARP_%1[CR]	Set_SHARPness value
CF_GAMMA_%1[CR]	Set-GAMMA value
CF_WBAL-R_%1[CR]	Set White Balance Red value
CF_WBAL-G_%1[CR]	Set White Balance Green value
CF_WBAL-B_%1[CR]	Set White Balance Blue value
CF_COLTEMP_%1[CR]	Set Color Temp. value
CF_NZRED_%1[CR]	Set oRC/ancel for Noise reduction
CF_PROGV_%1[CR]	Set oRC/ancel for Progressive
CF_IMAGE_%1[CR]	Set Image mode.
CF_IMAGEADJ_%1[CR]	Reset and stor for Image Adjustment.
CF_APCTRL_%1[CR]	Set digital keystone.
CF_COLMNSAV_%1[CR]	Store current color management setting status.
CF_COLMNLD_%1[CR]	Call color management setting status.

. . PC Control Command Table

Execute command	Item
CF_FSYNC_%1[CR]	Set Fine Sync value.
CF_TDOTS_%1[CR]	Set Total Dots value.
CF_CLAMP_%1[CR]	Set Clamp value.
CF_HPOS_%1[CR]	Set Horizontal Position value.
CF_VPOS_%1[CR]	Set Vertical Position value.
CF_DDOTS_%1[CR]	Set Display Dots value.
CF_DLINE_%1[CR]	Set Display Line value.
CF SETPCADJ[CR]	Execute the setting value on the image.
CF_ORGMODE_%1[CR]	Specify serial for PC mode.
CF_PCSTORE_%1[CR]	Stor e current PC Adj. Status to Mode 1, 2, 3, 4, or 5.

. . Input Control Series Command Table

Execute command	Item
CF_INPUT_%1[CR]	Select Input.
CF_SOURCE_%1[CR]	Select Input Sauce.
CF_INPUT1_%1[CR]	Select Input-1 and also set input to %1 at once.
CF_INPUT2_%1[CR]	Select Input-2 and set input to %1 at once.
CF_INPUT3_%1[CR]	Select Input-3 and set input to %1.
CF_INPUT4_%1[CR]	Select Input-4 and set input to %1.
CF_INPUT5_%1[CR]	Select Input-5and set input to Network.
CF_SYSTEM_%1[CR]	System System.

． ． Screen Series Command Table

Execute command	Item
CF_SCREEN_%1[CR]	Select Screen size.
CF_FLSCREN_%1[CR]	Set oRC/ancel for Full Screen.
CF_TRUE_%1[CR]	Set oRC/ancel for Screen True.
CF_DZCENT_%1[CR]	Cancel digital zoom.
CF_KEYSTONE_%1[CR]	Set Keystone
CF_KYSTONMODE_%1[CR]	Set Keystone store mode
CF_ANAMORPHIC_%1[CR]	ON/OFF control for Anamorphic
CF_VSCALE_%1[CR]	Set V Scale
CF_VPOS_%1[CR]	Set V Position
CF_HSCALE_%1[CR]	Set H Scale
CF_HPOS_%1[CR]	Set H Position

． ． Lamp Series Command Table

Execute command	Item
CF_LAMPH_%1[CR]	Reset lamp total running time.
CF_LAMPHMODE_%1[CR]	Seelct lamp mode.

． ． Sound Series Command Table

Execute command	Item
CF_VOLUME_%1[CR]	Rest lamp total running time.
CF_MUTE_%1[CR]	Control Sound Mute ON/OFF
CF_BLTINSP_%1[CR]	Set Built-in Speaker ON/OFF

． ． Setting Series Command Table

Execute command	Item
CF_BBACK_%1[CR]	Set Blue Back function.
CF_DISP_%1[CR]	Set Display function.
CF_LOGO_%1[CR]	Set Logo function.
CF_CEIL_%1[CR]	Set Ceiling function.
CF_REAR_%1[CR]	Set Rear Function.
CF_RC/ODE_%1[CR]	Select Remote Control Reception Code.
CF_LANG_%1[CR]	Select OSD language.
CF_ON-STA_%1[CR]	Set Power ON Start Function.
CF_P-MANE_%1[CR]	Set Power management function.
CF_P-MANETIME_%1[CR]	Set Power management time
CF_FANSPEED_%1[CR]	Select Fan Speed.
CF_KEYDIS_%1[CR]	RC// inhibit
CF_FDEFAULT_%1[CR]	Set Factory Default

Status Read Command Table

． ． **Image Series Status Read Command Table**

Stauts read command	Item
CR_BRIGHT[CR]	Get Brightness
CR-CONT[CR]	Get Contrast
CR_COLOR[CR]	Get Color
CR-TINT[CR]	Get Tint
CR_SHARP[CR]	Get_SHARPness
CR_GAMMA[CR]	Get-GAMMA
CR_WBAL-R[CR]	White Balance Red
CR_WBAL-G[CR]	White Balance Green
CR_WBAL-B[CR]	White Balance Blue
CR_COLTEMP[CR]	Get Color temperature setting value
CR_NZRED[CR]	Get Noise reduction setting value
CR_PROGV[CR]	Get Progressive setting value
CR_IMAGE[CR]	Get Image-GAMMA setting value
CR_IMGGMD[CR]	Get digital keystone setting status
CR_APCTRL[CR]	Get Bright Switching status

． ． **Status Read Command Table for PC**

Stauts read command	Item
CR_FSYNC[CR]	Get Fine Sync setting value
CR_TDOTS[CR]	Get Total Dots setting value
CR_CLAMP[CR]	Get Clamp setting value
CR_HPOS[CR]	Get Horizontal Position setting value
CR_VPOS[CR]	Get Vertical Positino setting value
CR_DDOTS[CR]	Get Display Dots setting value
CR_DLINE[CR]	Get Display Line setting value
CR_ORGMODE[CR]	Get signal for PC mode.
CR_PCSTORE[CR]	Get Free or Store is selected for PC Adj.; Mode 1-5.
CR_SETPCADJ[CR]	Get PC signal for current PC display status.

． ． **Status Read Command Table for Video**

Stauts read command	Item
CR_SERSYS[CR]	Get selected current signal. When in Auto mode, it returns a result by auto detect.

． ． **Status Read Command Table for Input**

Stauts read command	Item
CR_INPUT[CR]	Get selected input status
CR_SOURCE[CR]	Get selected input Source status
CR_SRCINP1[CR]	Get selected Source for Input 1
CR_SRCINP2[CR]	Get selected Source for Input 2
CR_SRCINP3[CR]	Get selected Source for Input 3
CR_SRCINP4[CR]	Get selected Source for Input 4
CR_SYSTEM[CR]	Get selected system status in input mode

. . Status Read Command Table for Screen

Stauts read command	Item
CR_FLSCREN[CR]	Get Full Screen mode
CR_SCREEN[CR]	Get selected screen size status
CR_KYSTNMODE[CR]	Get Keystone Store Mode setting status
CR_ANAMORPHIC[CR]	Get Anamorphic setting status
CR_VSCALE[CR]	Get V Scale setting status
CR_VPOS[CR]	Get V Position setting status
CR_HSCALE[CR]	Get H Scale setting status
CR_HPOS[CR]	Get H Position setting status

. . Status Read Command Table for Lamp

Stauts read command	Item
CR_LAMPREPL[CR]	Get information for lamp replacement time.
CR_LAMPHMODE[CR]	Get lamp mode status
CR_PROJH[CR]	Get built-in speaker setting value

. . Stuats Read Command Table for Sound

Stauts read command	Item
CR_VOLUME[CR]	Get Volume value
CR_MUTE[CR]	Get sound mute setting value
CR_BLTINSP[CR]	Bet built-in speaker setting value

. . Status Read Command Table for Setting

Stauts read command	Item
CR_BBACK[CR]	Get Blue Back setting value
CR_DISP[CR]	Get Display setting value
CR_LOGO[CR]	Get Log setting value
CR_RC/ODE[CR]	Get selected remote control code status
CR_LANG[CR] CR_ON-STA[CR]	Get ON Start setting status ON Start setting status
CR_P-MANE[CR] CR_P-MANE [CR]	Get Power management setting status Get setting time limits for Power management
CR_FANSPEED[CR]	Get selected FAN CONTROL SPEED
CR_KEYDIS[CR]	RC//KEY inhibit status

. . Other Status Read Comand Table

Stauts read command	Item
CR_SIGNAL[CR]	Get the status if there is signal or no signal
CR_VMUTE[CR]	Get No Show setting status
CR_FREEZE[CR]	Get Freeze Setting Status
CR_PTIMER[CR]	Get Timer operational status
CR_INFPFAIL[CR]	Get information if the AC is abnormal status or not.
CR_TEMPWARN[CR]	Get if sensors are exceeding critical temperature or not
CR_TEMPFAIL[CR]	Get the temperature when sensors approached criticaltemperature

Error code Table

ErroRC/ode	Content
?	-When receives data that cannot be decoded -Parameter determination error (digit number error, and incorrect letter included)
000	Normal Recetption not error
101	The function is not available in the selected mode.
102	Selected the value is out of range (Selected valuewill not be reflected)
103	Command mismatched to the Hardware. (Command for unpopulated option function)

Functional Execution Command

．．Format

  ．The following format's commands issued form a PC

    Pattern1:"CF_COMMAND"[CR]

    Pattern2:"CF_COMMAND_"%1 [CR]

        CF_:Header

        COMMAND:Letters

        %1:Parameter(Letters)

        _:Space To separate COMMAND and paramter

  ．When a projector decoded a received data and ready to receive the next Command, it will return acknowledgment.

    "000"[CR]: 0x06,0x0D When received Function Execute Command

    "nnn"[CR :Unable to execute any value except "000" value for anyspecific reason.

        <u>See the ErroRC/ode for its contents</u>

  ．When received an undecodable data

    Returns"?"[CR]

．．Transfer Example

  When setting projector toral command to 1344 by expand command

    PC ⟶ PJ :"CF_TDOTS_1344"[CR]

    PC ⟵ PJ :"000"[CR] ---------------- Reception OK

．．Image Series Command

8.3.1　CF_BRIGHT COMMAND

COMMAND	"CF_BRIGHT_%1"[CR]
%1	"000-063"------ Directly select the Bright Setting Value "UP"---------------- Bright setting value +1 "DN"---------------- Bright setting value -1
Details	Set the UnseRC/ontrol Bright Value The value set by theRC/ommand will not be saved to the projector. Therefore, when ALL OFF the projector, the value will return to the original setting. (For Stand-by mode, this value stays.) Only valid when it si in the usual Power ON State.
Response	Acceptable	"000"[CR]
	Unacceptable	"Errorcode"[CR]

8.3.2　CF-CONT COMMAND

COMMAND	"CF-CONT_%1"[CR]
%1	"000-063"------ Directly select foRC/ontrast setting value "UP"---------------- Contrast setting value "DN"---------------- Controalst setting value-1
Details	Set the user Control contrast value. The value set by this command will not be saved to the projector. Therefore, when ALL OFF the projector, the value will return to the original setting (For Stand-by mode, this value stays.) Only valid when it is in the usual Power On state.)
Response	Acceptable	"000"[CR]
	Unacceptable	"Errorcode"[CR]

8.3.3　CF_COLOR COMMAND

COMMAND	"CF_COLOR_%1"[CR]
%1	"000-063"------ Directly Color seeting value "UP"---------------- Color setting value+1 "DN"---------------- Color setting value-1
Details	Set the user Control Color value. The value set by this command will not be saved to the projector. Therefore, when ALL OFF the projector, the value will return to the originalsetting. (For Stand-by mode, this value stays.) Only valid when it is in the usual Power On state.
Response	Acceptable	"000"[CR]
	Unacceptable	"Errorcode"[CR]

8.3.4　CF-TINT COMMAND

COMMAND	"CF-TINT_%1"[CR]
%1	"000-063"------ Directly select for Tint setting value "UP"---------------- Current Setting value +1 "DN"---------------- Current Settting value-1
Details	Set the user Control tint value. The value set by this command will not be save to the projector. Therefore, when ALL OFF the projector, the value will return to the original setting. (For Stand-by mode, this value stays.) Only valid when it is int eh normal Power ON state.

Response	Acceptable	"000"[CR]
	Unacceptable	"Errorcode"[CR]

8.3.5 CF_SHARP COMMAND

COMMAND	"CF_SHARP_%1"[CR]
%1	"000-031"------ Directly select for Gammma setting value "UP"---------------- Current_SHARPness seeting value 1 "DN"---------------- Current_SHARPnesssetting value -1
Details	Set the user Control_SHARPness value. The value set by this Command will not be saved to the projector. Therefore, when ALL OFF the projector, the value will return to the original setting. (For Stand-by mode, this value stays.) Only valid when it is the usual Power ON state.
Response	Acceptable	"000"[CR]
	Unacceptable	"Errorcode"[CR]

8.3.6 CF_GAMMA COMMAND

COMMAND	"CF_GAMMA_%1"[CR]
%1	"000-015"------ Directly select for-GAMMA setting value "UP"-----------------GAMMA setting value 1 "DN"-----------------GAMMA setting value-1
Details	Set the User Control-GAMMA Value The value set by this Command will not be saved to the projector. Therefore, when ALL OFF the projector, the value will return to the original setting. (For Stand-by mode, this value stays) Only valid when it is in the usual Power On state.
Response	Acceptable	"000"[CR]
	Unacceptable	"Errorcode"[CR]

8.3.7 CF_WBAL-COMMAND

COMMAND	"CF_WBAL-%1_%2"[CR]
%1	"R" ------------- RED "G" ------------- GREEN "B" ------------- BLUE
%2	"000-063"-- Directly select color value by White Balance %1 determination "UP"------------ Color value for White Balance %1 determinationn +1 "DN"------------ Color value for White Balance %1 determination -1
Details	Set the user Control value by white balance %1 determination. The value set by this Command will not be saved to the projector. Therefore, when ALL OFF the projector, the value will return to the original setting. (For Stand-by mode, this value stays.) Only valid when it is in the usual Power On state.
Response	Acceptable	"000"[CR]
	Unacceptable	"Errorcode"[CR]

8.3.8 CF_COLTEMP COMMAND

COMMAND	"CF_COLTEMP_%1"[CR]
%1	"000"-"003"
Details	Set the Color Temp. When it is in usual Power ON state, this is valid. The value set by this Command will not be saved to the projector. Therefore, when ALL OFF the projector, the value will return to the original setting. (For Stand-by mode, this value stays.) Only valid when it is in the usual Power On state.
Response	Acceptable	"000"[CR]
	Unacceptable	"Errorcode"[CR]

8.3.9 CF_NZRED COMMAND

COMMAND	"CF_NZRED_%1"[CR]
%1	"ON"------Select Noise Reduction "OFF"----Cancel Noise Reduction
Details	Set/Cancel Noise Reduction. (When it is in usual Power ON state, this is valied.) The value set by this command wil not be saved to the projector. Therefore, when ALL OFF the projector, the value wil return to the original setting. (For Stand-by)
Response	Acceptable	"000"[CR]
	Unacceptable	"Errorcode"[CR]

8.3.10 CF_PROGV COMMAND

COMMAND	"CF_PROGV_%1"[CR]
%1	"L1"------ Select Progressive Mode L1 "L2"------ Select Progressive Mode L2 "OFF"----cancel Progressive
Details	Set/cancel for Progressive. (When it is in usual Power ON state, this si valid.) The value set by this Command will not be saved to the projector. Therefore, when ALL OFF the projector, the value will return to the original setting. (For Stand-by mode, this value stays.) Only valid when it is in the usual Power On state.
Response	Acceptable	"000"[CR]
	Unacceptable	"Errorcode"[CR]

8.3.11 CF_IMAGE COMMAND

COMMAND	"CF_IMAGE_%1"[CR]
%1	"STAND" ----- Standard Image adjustment is set to factory default setting value "REAL" ------ Real Fixed value to display a graphic image with natural tone. "CINEMA" ---- Cinema Fixed value to focus on the tone reproducton for movie. "CUSTOM1" -- Image1 the value is set and store by a user "CUSTOM2" -- Image2 the value is set and store by a user "CUSTOM3" -- Image3 the value is set and store by a user "CUSTOM4" -- Image4 the value is set and store by a user
Details	Select an Image Mode. When it is in usual Power ON state, this is valid. Parameter "CUSTOM1" is the same as selecting custom on OSD menu. Thevalue set by this Cpmmand is stored in EEEPROM. When ALL OFF

		the projector,k the value will return to the origitnal setting.
Response	Acceptable	"000"[CR]
	Unacceptable	"Errorcode"[CR]

8.3.12 CF_IMAGEADJ COMMAND

COMMAND	"CF_IMAGEADJ_%1"[CR]
%1	"RST"------Reset Image adjustment "STR1"----Store current image adjustment to Iamge 1 "STR2"----Store current image adjustment to Image 2 "STR3"----Store current adjustment to Image 3 "STR4"----Store current adjustment to Iamge 4
Details	Reset or Store for image adjustment. (When it is in usual Power ON state, this isvalid.) "STR1"-"STR4" is the same as "Image1"-"Image4" iwhen choosing"Store" on OSD menu. The setting value set in "Image1" to "Image4" is stored, so even if the projector is set to ALL OFF and is turned on again, the setting value will be able to be back.
Response	Acceptable	"000"[CR]
	Unacceptable	"Errorcode"[CR]

8.3.13 CF_APCTRL COMMAND

COMMAND	"CF_APCTRL_%1"[CR]
%1	"L1"DIGITAL Keystone with Level 1 "L2"DIGITAL Keystone with Level 2 "OFF"DIGITAL Keystone OFF
Details	Set Digital Keystone Only valid when it is in the usual Power On state
Response	Acceptable	"000"[CR]
	Unacceptable	"Errorcode"[CR]

8.3.14 CF_COLMNSAV COMMAND

COMMAND	"CF_COLMNSAV_%1"[CR]
%1	"000"-"009"---- Specify store area
Details	Store current color management setting to an area by %1 determination. Only valid when it is in the usual Power ON state.
Response	Acceptable	"000"[CR]
	Unacceptable	"Errorcode"[CR]

8.3.15 CF_COLMNLD COMMAND

COMMAND	"CF_COLMNLD_%1"[CR]
%1	"000"-"009"---- Specify store area
Details	Call color management setting status from an area by %1 specification Only valid when it is in the usual Power On state
Response	Acceptable	"000"[CR]
	Unacceptable	"Errorcode"[CR]

8.4　PC Control Series Command

8.4.1　CF_FSYNC COMMAND

COMMAND	"CF_FSYNC_%1"[CR]
%1	"0000-0031"---- Directly set Fine Sync setting value "UP"------------------ Fine Sync setting value　1 "DN"------------------ Fine Sync setting value-1
Details	Set Fine Sync for PC signal　Only valid when it is in the usual Power On state The value set by this Command will not be saved to the projector. Therefore, when ALL OFF the projector, the value will return to the original setting. 　Stand By mode stays. **Note:When %1 is directly specified, this command is not enough to execute for the screen.　To show up on the image, issue CF_SETPCADJ COMMAND.**
Response	Acceptable	"000"[CR]
	Unacceptable	"101"[CR] ---- When Input is Video Series

8.4.2　CF_TDOTS COMMAND

COMMAND	"CF_TDOTS_%1"[CR]
%1	"nnnn-9999"-- Directly set Total Dots value 　　　　　　　　　　　　"nnnn" is minimum value. 　　　　　　　　　　This is current Display Dots value　Horizontal position value "UP"---------------- Total Dots setting value　　1 "DN"---------------- Total Dots setting value-1
Details	Set Total Dots of PC signal.　Only valid when it is in the usual Power On state. The value set by this Command will not be saved to the projector. Therefore, when ALL OFF the projector, the value will return to the original setting.　(StanBy mode stays) **Note:When %1 is directly specified, this command is not enough to execute for the screen.　To show up on the image, issue CF_SETPCADJ COMMAND.**
Response	Acceptable	"000"[CR]
	Unacceptable	"101"[CR] ---- When Input is Video Series

8.4.3　CF_CLAMP COMMAND

COMMAND	"CF_CLAMP_%1"[CR]
%1	"0000-0127"---- Directly set Clamp setting value "UP"------------------ Clamp settint value　　1 "DN"------------------ ClampSetting avalue -1
Details	Set Clamp of PC signal.　Only valid when it is in the usual Power On state. The value set by this Command will not be saved to the projector.. 　Therefore, when ALL OFF the projector, the value will return to the original setting. 　stay in Stand By mode. **Note:When %1 is directly specified, this command is not enough to execute for the screen.　To show up on the image, issue CF_SETPCADJ COMMAND.**
Response	Acceptable	"000"[CR]
	Unacceptable	"101"[CR] ---- When Input is Video Series

8.4.4 CF_HPOS COMMAND

COMMAND	"CF_HPOS_%1"[CR]
%1	"0000-nnnn"-- Directly set Horizontal Position 　　　　　　　"nnnn" means maximum value. 　　　　　　　　This result of current Total dots value-Display dots. "UP"---------------- Horizontal Position value　　1 "DN"---------------- Horizontal Position value-1
Details	Set horizontal position of PC signal. Only valid when it is in the usual Power On state. This value set by this Command will not be save do the projector. Therefore, when ALL OFF the projector, the value will return to the original setting. (stays in Stand By mode) **Note:When %1 is directly specified, this command is not enough to execute for the screen.　To show up on the image, issue CF_SETPCADJ COMMAND.**
Response	Acceptable	"000"[CR]
	Unacceptable	"101"[CR] ---- When Input is Video Series

8.4.5 CF_VPOS COMMAND

COMMAND	"CF_VPOS_%1"[CR]
%1	"0000-nnnn"-- Directly set Vertical Position 　　　　　　　　"nnnn" means maximum value. 　　　　　　　　This value is from current Total Line value – display Line value. "UP"---------------- Vertical Position setting value +1. "DN"---------------- Vertical Position setting value-1
Details	Set vertical position of PC signal.　Only valid when it is in the usual Power On state.　　The value set by this Command will not be saved to the projector.　Therefore, when ALL OFF the projector, the value will return to the original setting.　(stays in Stand By mode) **Note:When %1 is directly specified, this command is not enough to execute for the screen.　To show up on the image, issue CF_SETPCADJ COMMAND**
Response	Acceptable	"000"[CR]
	Unacceptable	"101"[CR] ---- When Input is Video Series

8.4.6 CF_DDOTS COMMAND

COMMAND	"CF_DDOTS_%1"[CR]
%1	"0100-nnnn"-- Directly set Display Dots value. 　　　　　　　　"nnnn" means maximum value. 　　　　　　　　This value is from current Total Dots value-Horizontal position value "UP"---------------- Display Dots　　1 "DN"---------------- Display Dots -1
Details	Set Display Dots of PC signal The value set by this Command will not be saved to the projector. Therefore, when ALL OFF the projector, the value will return to the original setting. (stay in Stand By mode.) (stays in Stand By mode.) 　Only valid when it is in the usual Power On state. **Note:When %1 is directly specified, this command is not enough to execute for the screen.　To show up on the image, issue CF_SETPCADJ COMMAND.**
Response	Acceptable	"000"[CR]
	Unacceptable	"101"[CR] ---- When Input is Video Series

8.4.7 CF_DLINE COMMAND

COMMAND	"CF_DLINE_%1"[CR]
%1	"0100-nnnn"-- directly specify display Line value. "nnnn" means maximum. This value is from current Total Line value – Vertical Position value. "UP"---------------- Display Line 1 "DN"---------------- Display Line -1
Details	Set Display Line of PC signal Only valid when it is in the usual Power On state. The value set by this Command will not be saved to the projector. Therefore, when ALL OFF the projector, the value will return to the original setting. (stays in Stand By mode.) (stays in Stand By mode.) **Note:When %1 is directly specified, this command is not enough to execute for the screen. To show up on the image, issue CF_SETPCADJ COMMAND.**
Response	Acceptable	"000"[CR]
	Unacceptable	"101"[CR] ---- When Input is Video Series.

8.4.8 CF_SETPCADJ COMMAND

COMMAND	"CF_SETPCADJ" [CR]
%1	N/A "EXT6"-"EXT60"
Details	Execute the setting value in PC adjustment menu to show up on the screen. When %1 is directly set by PC CONTROL COMMAND as below and SCREEN CONTROL SERIES COMMAND, the command will not be executed. This command, "CF_SETPCADJ" is to execute the setting value. (Only valid when it is in the normal Power On state.) -CF_FSYNC -CF_TDOTS -CF_CLAMP -CF_HPOS -CF_VPOS -CF_DLINE -CF_DDOTS -CF_FLSCREN 1. When %1 "EXT6" - "EXT60" is set to %1, Content specified %1 by EXT No.6 (not XGA No.1) will be displayed.
Response	Acceptable	"000"[CR]
	Unacceptable	"101"[CR] ---- When Input is Video Series

8.4.9 CF_ORGMODE COMMAND

COMMAND	"CF_ORGMODE_%1"[CR]
%1	"XGA1","HDTV1080"...Etc
Details	After EXTn is set by PC Control Series Command and CF_SETPCADJ COMMAND such as CF_FSYNC / CF_TDOTS, this command select original signal.
Response	Acceptable	"000"[CR]
	Unacceptable	"101"[CR] ---- When Input is Video series.

8.4.10 CF_PCSTORE COMMAND

COMMAND	"CF_PCSTORE_%1"[CR]
%1	"MODE1"　--- Store current PC Adjust status to Mode 1 "MODE2"　...Store current PC Adjust status to Mode 2 "MODE3"　...Store current PC Adjust status to Mode 3 "MODE4"　...Store current PC Adjust status to Mode 4 "MODE5"　...Store current PC Adjust status to Mode 5
Details	Store current PC Adjust status (each parameter status such as Total dots) to Mode1-5. This command operates the same operation as storing to Mode1-Mode5 in PC Adjust Menu. 　Only valid when it is in the usual Power On state.
Response	Acceptable	"000"[CR]
	Unacceptable	"101"[CR] ---- When Input is Video Series

8.5 Input Control Series Command

8.5.1 CF_INPUT COMMAND

COMMAND	"CF_INPUT_%1"[CR]
%1	"1"------------ Select Input-1 "2"------------ Select Input-2 "3"------------ Select Input-3 "4"------------ Select Input-4　Network Viewer
Details	Select Input.　Only valid when it is in the usual Power On state. The operation is the same as the projector button or the remote control button "INPUT". Note 1) When Network Unit is not installed, and Input-4 is selected, the response will be "103". Note 1) When Input- is set to Monitor Out, and Input-1 is selected, the response will be "101".
Response	Acceptable	"000"[CR]
	Unacceptable	"%%%"[CR]

8.5.2 CF_SOURCE COMMAND

COMMAND	"CF_SOURCE_%1"[CR]	
%1	When Input is 1	"ANALOG"------ Select Analog Input "SCART"-------- Select Scart Input
	When Input is 2	"ANALOG"------ Select RGB "OUT"------------ Set Monitoer out
	When Input is 3	"VIDEO"-------- Select Compoiste Video Input "YPBPR"-------- Select Y/Pb/Pr
	When Input is 4	"VIDEO"-------- Select Composite Video "S-VIDEO"---- Select S-Video Input "YPBPR"-------- Select Y/Pb/Pr
Details	Select current selected Input sauce Only valid when it is in the usual Power On state. When selected Input does not meet the requirement for the specified %1, the response will be "101" and the command is not be executed. When specify "OUT", the input will automatically swetch to Input 1.	
Response	Acceptable	"000"[CR]
	Unacceptable	"%%%"[CR]

8.5.3 CF_INPUT1 COMMAND

COMMAND	"CF_INPUT1_%1"[CR]	
%1	"ANALOG"------ Select　Analog Input "SCART"-------- Select Scart Input	
Details	Select Input-1 and specified Source by %1 at the same time. 　　Only valid when it is in the usual Power On state.	
Response	Acceptable	"000"[CR]
	Unacceptable	"%%%"[CR]

8.5.4 CF_INPUT2 COMMAND

COMMAND	"CF_INPUT2_%1"[CR]	
%1	"ANALOG"-- Select RGB input "OUT"-------- Select Monitor	
Details	Select Input-2 and specified Source by %1 at once. 　　Only valid when it is in the usual Power On state.	
Response	Acceptable	"000"[CR]
	Unacceptable	"%%%"[CR]

8.5.5 CF_INPUT3 COMMAND

COMMAND	"CF_INPUT3_%1"[CR]	
%1	""VIDEO"-------- Select composite video input "YPBPR"-------- Select Y/Pb/Pr	
Details	Select Input-3 and specified Source by %1 at once. 　　Only valid when it is in the usual Power On state.	
Response	Acceptable	"000"[CR]
	Unacceptable	"%%%"[CR]

8.5.6 CF_INPUT4 COMMAND

COMMAND	"CF_INPUT4_%1"[CR]	
%1	"VIDEO"-------- Select Composite Video Input "S-VIDEO"---- Select S-Video input "YPBPR"-------- Select Y/Pb/Pr	
Details	Select Input-3 and specified Source by %1. 　　Only valid when it is in the usual Power On state.	
Response	Acceptable	"000"[CR]
	Unacceptable	"%%%"[CR]

8.5.7 CF_INPUT5 COMMAND

COMMAND	"CF_INPUT5_%1"[CR]	
	"NETWORK"------ Select DVI Input of Computer	
Details	Select Input-5 and also specified source by %1 　　Only valid when it is in the usual Power On state. Note)　When the Networrk Manager is not installed, this command will be invalied and return "103".	
Response	Acceptable	"000"[CR]
	Unacceptable	"%%%"[CR]

8.5.8 CF_SYSTEM COMMAND

COMMAND	"CF_SYSTEM_%1"[CR]	
%1	**Input is PC Series**	"MODE1"------ Select Mode 1 "MODE2"------ Select Mode 2 "MODE3"------ Select Mode 3 "MODE4"------ Select Mode 4 "MODE5"------ Select Mode 5
	Input is Video Series	"AUTO"-------- Select System"AUTO" "NTSC"-------- Select NTSC "NTSC443"-- Select NTSC4.43 "PAL"---------- Select PAL "SECAM"------ Select SECAM "PAL- "------ Select PAL-M "PAL- "------ Select PAL-N "1080 "------ Select 1080i "1035 "------ Select 1035i "720 "-------- Select 720p "575 "-------- Select 575p "480 "-------- Select 480p "575 "-------- Select 575i "480 "-------- Select 480i
Details	Select current Input system. Only valid when it is in the usual Power On state. When Input does not meet the requirement for specified %11, the response will be "101" and the command does not execute. Note 1) "NTSC" / "NTSC4.43" / "PAL" / "SECAM" / "PAL-M" / "PAL-N" is available only when Input is VIDEO or S-VIDEO. Note 2) "1080I" / "1035I" / "720p" / "575P" / "480P" / "575I" / "480I" is available only when Input is Y, Pb/Cb, PRC/r.	
Response	Acceptable	"000"[CR]
	Unacceptable	"Errorcode"[CR]

8.6 Screen Control Series Command

8.6.1 CF_SCREEN COMMAND

COMMAND	"CF_SCREEN_%1"[CR]	
%1	**Input is computer**	"WIDE" -------- Select 16:9 "NORMAL" ---- Select Normal "DZOOM UP"-- Zoom Out with Digital zoom "DZOOM DN"-- Zoom in with Digital zoom
	Input is Video Series	"NORMAL" ---- Select 4:3 "WIDE" -------- Select 16:9 screen
Details	Select screen size. Only valid when it is in the usual Power ON state. When Input does not meet the requirement for the specified %1, the response will be "101"[CR], and the command is not executed.. **Note "WIDE"/"NORMAL"is available when Input signal is 4:3. (This command is not available when 16:9 wide signal.)**	
Response	Acceptable	"000"[CR]
	Unacceptable	"Errorcode"[CR]

8.6.2 CF_FLSCREN COMMAND

COMMAND	"CF_FLSCREN_%1"[CR]	
%1	"ON"------ Select Full Screen "OFF"---- Cancel Full Screen	
Details	Input is computer	Set/cancel Full Screen.　　Only valid when it is in the usual Power On state. The value set by this Command will not be saved to the projector. Therefore, when ALL OFF the projector, the value will return to the original setting. (stay in Stand By mode.)(stays in Stand By mode.)
	Input is Video series	Invalid
Response	Acceptable	"000"[CR]
	Unacceptable	"Errorcode"[CR]

8.6.3 CF_TRUE COMMAND

COMMAND	"CF_TRUE_%1"[CR]
%1	"ON"------ Select True "OFF"---- Cancel True
Details	Set/Cancel True Only valid when it is in the usual Power On state and input is computer.
Response	Acceptable	"000"[CR]
	Unacceptable	"101"[CR] ---- When Input is Video Series

Response	Acceptable	"000"[CR]
	Unacceptable	"101"[CR] ---- When Input is Video Series

8.6.4 CF_DZCENT COMMAND

COMMAND	"CF_DZCENT_%1"[CR]	
%1	"CENT"-----Cancel Digital Zoom (CENT : "CENTER"	
Details	Cancel Digital Zoom Only valid when iti si n the usual Power ON state and Input is computer.	
Response	Acceptable	"000"[CR]
	Unacceptable	"101"[CR] ---- When Input is Video Series

8.6.5 CF_KEYSTONE COMMAND

COMMAND	"CF_KEYSTONE_%1"[CR]
%1	"UP"-------- Make the screen image length at the top edge shorter with a small range. "FUP" ----- Make the screen image length at the top edge shorter with a large range. "DN"　------ Make the screen image length at the bottom edge shorter with a small range. "FDN" ----- Make the screen image length at the bottom edge shorter with a large range. "LEFT"---- Make the screen image length at the left edge shorter with a small range. "FLFT"---- Make the screen image length at the left shorter with a large range. "RIGHT"-- Make the screen image length at the right edge shorter with a small range.

	"FRGT"---- Make the screen image length at the right edge shorter with a large range. "RST"------ Keystone off
Details	Change Keystone range.　Only valid when it is in the usual Power On state. When the range is over the maximum, a projector accepts the Command, but it does not execute.
Response	Acceptable　"000"[CR]
	Unacceptable　"Errorcode"[CR]

8.6.6　CF_KYSTNMODE COMMAND

COMMAND	"CF_KYSTONMODE_%1"[CR]
%1	"STR"------ Set Keystone store mode to Store "RST" ----- Set Keystone store mode to Reset
Details	Set Keystone store mode　Only valid when it is in the usual Power On state
Response	Acceptable　"000"[CR]
	Unacceptable　"Errorcode"[CR]

8.6.7　CF_ ANAMORPHIC COMMAND

COMMAND	"CF_KEYSTONE_%1"[CR]
%1	"ON"---- Set Anamorphic to ON "OFF"-- Set Anamorphic to OFF
Details	Set Anamorphic ON/OFF　Only valid when it is in the usual Power On state. When Anamorphic set to ON, the screen will be 4:3 even if it is HDTV. When Anamorphic set to OFF, HDTV will be 16:9.
Response	Acceptable　"000"[CR]
	Unacceptable　"Errorcode"[CR]

8.6.8　CF_VSCALE COMMAND

COMMAND	"CF_VSCALE_%1"[CR]
%1	"032"--- +32 "031"--- +31 　　: "002"--- +2 "001"--- +1 "000"--- ± 0 "-01"--- -1 "-02"--- -2 　　: "-31"--- -31 "-32"--- -32
Details	Set V Scale　Only valid when it is in the usual Power On state.
Response	Acceptable　"000"[CR]
	Unacceptable　"101"[CR] ---- When ther is No Signal or Anamorphic　is ON "102"[CR] ---- When %1is over the range

8.6.9　CF_VPOS COMMAND

COMMAND	"CF_VPOS_%1"[CR]
%1	"015"--- +15 "014"--- +14 　　　: "002"--- +2 "001"--- +1 "000"---　± 0 "-01"--- -1 "-02"--- -2 　　　: "-14"--- -14 "-15"--- -15
Details	Set V Position. (Only valid when it is in the usual Power On state.)
Response	Acceptable	"000"[CR]
	Unacceptable	"101"[CR] ---- When ther is No Signal or Anamorphic　is ON "102"[CR] ---- When %1is over the range

8.6.10　CF_HSCALE COMMAND

COMMAND	"CF_HSCALE_%1"[CR]
%1	The same as CF_VSCALE COMMAND
Details	Set H Scale.(Only valid when it is in the usual Power On state.)
Response	Acceptable	"000"[CR]
	Unacceptable	"101"[CR] ---- When ther is No Signal or Anamorphic　is ON "102"[CR] ---- When %1is over the range

8.6.11　CF_HPOS COMMAND

COMMAND	"CF_HPOS_%1"[CR]
%1	The same as CF_VPOS COMMAND
Details	Set H Position (Only valid when it is in the usual Power On state.)
Response	Acceptable	"000"[CR]
	Unacceptable	"Errorcode"[CR]

8.7　Lamp Series Command

8.7.1　CF_LAMPH COMMAND

COMMAND	"CF_LAMPH_%1"[CR]
%1	"RST"
Details	Reset total lamp running time. (Only valid when it is in the usual Power On state.)
Response	Acceptable	"000"[CR]
	Unacceptable	"Errorcode"[CR]

8.7.2　CF_LAMPHMODE COMMAND

COMMAND	"CF_LAMPHMODE_%1"[CR]
%1	"NORMAL"-- Set lamp to normal mode "ECO"-------- Set lamp to silent mode. "AUTO"------ Set lamp to auto mode

Details	Select lamp mode. (Only valid when it is in the usual Power On state.) The value set is stored in EEPROM. When ALL OFF the projector, the value will return to the original setting.	
Response	Acceptable	"000"[CR]
	Unacceptable	"Errorcode"[CR]

8.8 Sound Series Command

8.8.1   CF_VOLUME COMMAND

COMMAND	"CF_VOLUME_%1"[CR]	
%1	"000-063"------ Directly set Volume value "UP"--------------- Volume setting value 1. "DN"--------------- Volume settigng value -1.	
Details	Control Volume setting value. (Only valid when it is in the usual Power On state.) The same operation as a remote control's turning up/down the volume. Also, the command directly sets the volume value. When setting volume value like remote control unit" operation, Sound Mute ON will be canceled. The setting value will be stored in a projector.	
Response	Acceptable	"000"[CR]
	Unacceptable	"Errorcode"[CR]

8.8.2   CF_MUTE COMMAND

COMMAND	"CF_MUTE_%1"[CR]	
%1	"ON"------ set Sound Mute to ON "OFF"---- set Sound Mute to OFF	
Details	Control Sound Mute ON/OFF.(Only valid when it is in the usual Power On state.)	
Response	Acceptable	"000"[CR]
	Unacceptable	"Errorcode"[CR]

8.8.3   CF_BLTINSP COMMAND

COMMAND	"CF_BLTINSP_%1"[CR]	
%1	"ON"------ Select Built-in Speaker "OFF"---- Cancel Boiling Speaker	
Details	Set/Cancel Built-in Speaker. (Only valid when it is in the usual Power On state.)	
Response	Acceptable	"000"[CR]
	Unacceptable	"Errorcode"[CR]

8.9   Setting Series Command

8.9.1   CF_BBACK COMMAND

COMMAND	"CF_BBACK_%1"[CR]	
%1	"ON"------ Select Blue Back "OFF"---- Cancel Blue Back	
Details	Set/cancel Blue Back. (Only valid when it is in the usual Power On state.) The value set is stored in EEPROM. When ALL OFF the projector, the value will return to the original setting.	

Response	Acceptable	"000"[CR]
	Unacceptable	"Errorcode"[CR]

8.9.2 CF_DISP COMMAND

COMMAND	"CF_DISP_%1"[CR]
%1	"ON"------ Select Display "OFF"----Cancel Display
Details	Set/Cancel Display. (Only valid when it is in the usual Power On state.) The value set is stored in EEPROM. When ALL OFF the projector, the value will return to the original setting.
Response	Acceptable	"000"[CR]
	Unacceptable	"Errorcode"[CR]

8.9.3 CF_LOGO COMMAND

COMMAND	"CF_LOGO_%1"[CR]
%1	"ON"------ Select Logo "OFF"---- Cancel Logo
Details	Set/Cancel Logo. (Only valid when it is in the usual Power On state.) The value set is stored in EEPROM. When ALL OFF the projector, the value will return to the original setting.
Response	Acceptable	"000"[CR]
	Unacceptable	"Errorcode"[CR]

8.9.4 CF_CEIL COMMAND

COMMAND	"CF_CEIL_%1"[CR]
%1	"ON"------ Select Ceiling "OFF"---- Cancel Ceiling
Details	Set/Cancel Ceiling (Only valid when it is in the usual Power On state.) The value set is stored in EEPROM. When ALL OFF the projector, the value will return to the original setting.
Response	Acceptable	"000"[CR]
	Unacceptable	"Errorcode"[CR]

8.9.5 CF_REARC/OMMAND

COMMAND	"CF_REAR_%1"[CR]
%1	"ON"------ Select Rear "OFF"---- Cancel Rear
Details	Set/Cancel Rear (Only valid when it is in the usual Power On state.) When Rear is ON, it will be a mirror-reversed image. The value set is stored in EEPROM. When ALL OFF the projector, the value will return to the original setting.
Response	Acceptable	"000"[CR]
	Unacceptable	"Errorcode"[CR]

8.9.6 CF_RC/ODE COMMAND

COMMAND	"CF_RCCODE_%1"[CR]
%1	"001"------Select Code 1 "002"------Select Code 2 "003"------Select Code 3 "004"------Select Code 4 "005"------Select Code 5 "006"------Select Code 6 "007"------Select Code 7 "008"------Select Code 8
Details	Select a remote control code.(Only valid when it is in the usual Power On state.) The value set is stored in EEPROM. When ALL OFF the projector, the value will return to the original setting.
Response	Acceptable	"000"[CR]
	Unacceptable	"Errorcode"[CR]

8.9.7 CF_LANG COMMAND

COMMAND	"CF_LANG_%1"[CR]
%1	"ENG"---- Select English "DEU"---- Select German "FRA"---- Select French "ITA"---- Select Italy "ESP"---- Select Spanish "POR"---- Select Portuguese "NED"---- Select Dutch "SVE"---- Select Swedish "JPN"---- Select Japanese "CHI"---- Select Chinese "KOR"---- Select Korean "RUS"---- Select Russian
Details	Set OSD language. (Only valid when it is in the usual Power On state.) The value set is stored in EEPROM. When ALL OFF the projector, the value will return to the original setting.
Response	Acceptable	"000"[CR]
	Unacceptable	"Errorcode"[CR]

8.9.8 CF_ON-STA COMMAND

COMMAND	"CF_ON-STA_%1"[CR]
%1	"ON"------ Select Power On Start "OFF"---- Cancel Power On Start
Details	Set/Cancel Power ON Start. (Only valid when it is in the usual Power On state.) The value set is stored in EEPROM. When ALL OFF the projector, the value will return to the original setting.
Response	Acceptable	"000"[CR]
	Unacceptable	"Errorcode"[CR]

8.9.9 CF_P-MANE COMMAND

COMMAND	"CF_P-MANE_%1"[CR]	
%1	"OFF"------------ Set Power management to "READY"-------- Set Power management to Ready "SHUTDOWN"-- Set Power management to Shut Down	
Details	Set/Cancel Power management.(Only valid when it is in the usual Power On state.) The value set is stored in EEPROM. When ALL OFF the projector, the value will return to the original setting.	
Response	Acceptable	"000"[CR]
	Unacceptable	"Errorcode"[CR]

8.9.10 CF_P-MANETIME COMMAND

COMMAND	"CF_P-MANETIME_%1"[CR]	
%1	"01"-"30"-- Directly set the time by the minute "UP"------------ Set the time 1 minute longer "DN"------------ Set the time 1 minute shorter	
Details	Set Power management time. (Only valid when it is in the usual Power On state.) The value set is stored in EEPROM. When ALL OFF the projector, the value will return to the original setting.	
Response	Acceptable	"000"[CR]
	Unacceptable	"Errorcode"[CR]

8.9.11 CF_FANSPEED COMMAND

COMMAND	"CF_FANSPEED_%1"[CR]	
%1	"MAX"------Select maximum speed "NOR"------Select normal speed	
Details	Change Fan Control speed. Only valid when it is in the usual Power On state.) The value set is stored in EEPROM. When ALL OFF the projector, the value will return to the original setting.	
Response	Acceptable	"000"[CR]
	Unacceptable	"Errorcode"[CR]

8.9.12 CF_KEYDIS COMMAND

COMMAND	"CF_KEYDIS_%1"[CR]	
%1	N/A" --- RC/ and KEY are available "RC/" ...Bar the use of RC/ "KEY" ...Bar the use of KEY	
Details	Set bar the use of RC//KEY. (Only valid when it is in the usual Power On state.)	
Response	Acceptable	"000"[CR]
	Unacceptable	"Errorcode"[CR]

8.9.13 CF_FDEFAULT COMMAND

COMMAND	"CF_FDEFAUTO_%1"[CR]	
%1	"RST"	
Details	Set Factory Default. (Only valid when it is in the usual Power On state.)	
Response	Acceptable	"000"[CR]
	Unacceptable	"Errorcode"[CR]

9   Status Read Command

9.1 Format

. PC issues Commands as below

"CR_COMMAND"[CR]

COMMAND:Character Line

. When projector receives the appropriate Command, it returns a character line as the required data.

"000_"%1 [CR]

%1:Required Data (character line)

. When receiving data cannot be decode, the projector returns**"?"[CR**

9.2 Transfer Example

Get total dots of projector by expand Commands

PC ——▶ PJ :"CR TDOTS"[CR]

PC ◀—— PJ :"000 1344"[CR]

9.3 Operation Condition

Should be always operated

9.4 Status Read Command for Image

9.4.1   CR_BRIGHTCOMMAND

COMMAND	"CR_BRIGHT"[CR]	
Details	Get Contrast of user Control	
Response	Acceptable	"000_%1"[CR]
	%1	"000"-"063"
	Unacceptable	"?"[CR]

9.4.2   CR-CONT COMMAND

COMMAND	" R-CONT"[CR]	
Details	Get Contrast of user Control	
Response	Acceptable	"000_%1"[CR]
	%1	"000"-"063"
	Unacceptable	"?"[CR]

9.4.3   CR_COLORC/OMMAND

COMMAND	"CR_COLOR"[CR]	
Details	Get Color value of user Control	
Response	Acceptable	"000_%1"[CR]
	%1	"000"-"063"
	Unacceptable	"?"[CR]

9.4.4   CR-TINT COMMAND

COMMAND	" R-TINT"[CR]	
Details	Get Tint value of user Control	
Response	Acceptable	"000_%1"[CR]
	%1	"000"-"063"
	Unacceptable	"Errorcode"[CR] --- invalid "?"[CR] ------------ When receives uncleaRC/ommand

9.4.5   CR_SHARP COMMAND

COMMAND	"CR_SHARP"[CR]	
Details	Get_SHARPNESS value of user Control	
Response	Acceptable	"000_%1"[CR]
	%1	"000"-"031"
	Unacceptable	"?"[CR]

9.4.6   CR_GAMMA COMMAND

COMMAND	"CR_GAMMA"[CR]	
Details	Get-GAMMA value of user Control	
Response	Acceptable	"000_%1"[CR]
	%1	"000"-"015"
	Unacceptable	"?"[CR]

9.4.7   CR_WBAL-RCCFOMMAND

COMMAND	"CR_WBAL-R"[CR]	
Details	Get White Balance Red value of user Control	
Response	Acceptable	"000_%1"[CR]
	%1	"000"-"063"
	Unacceptable	"?"[CR]

9.4.8   CR_WBAL-G COMMAND

COMMAND	"CR_WBAL-G"[CR]	
Details	Get White Balance Green of user Control	
Response	Acceptable	"000_%1"[CR]
	%1	"000"-"063"
	Unacceptable	"?"[CR]

9.4.9　CR_WBAL-B COMMAND

COMMAND	"CR_WBAL-B"[CR]	
Details	Get White Balance Blue of user Control	
Response	Acceptable	"000_%1"[CR]
	%1	"000"-"063"
	Unacceptable	"?"[CR]

9.4.10　CR_COLTEMP COMMAND

COMMAND	"CR_COLTEMP"[CR]	
Details	Get Color Temp setting status	
Response	Acceptable	"000_%1"[CR]
	%1	"000"-"003" "BLANK"---- OSD menu is blank 　　　　　　　　　　　　Not XLOW/LOW/MID/HIGH
	Unacceptable	"?"[CR]

9.4.11　R_NZRED COMMAND

COMMAND	"CR_NZRED"[CR]	
Details	Get Color temp setting status	
Response	Acceptable	"000_%1"[CR]
	%1	"ON"----- Noise Reduction setting "OFF"--- Cancel Noise Reduction
	Unacceptable	"?"[CR]

9.4.12　CR_PROGV COMMAND

COMMAND	"CR_PROGV"[CR]	
Details	Get Progressive setting status	
Response	Acceptable	"000_%1"[CR]
	%1	"L1"----- Progressive Mode L1 setting "L2"----- Progressive Mode L2settiing "OFF"--- Progressive cancellation
	Unacceptable	"?"[CR]

9.4.13　CR_IMAGE COMMAND

COMMAND	"CR_IMAGE"[CR]	
Details	Get image setting status	
Response	Acceptable	"000_%1"[CR]
	%1	"STAND"------------------------- Standard "REAL"　-------------------------- Real "CINEMA"----------------------- Cinema "CUSTOM1"-"CUSTOM4"-- Image1-4

	Unacceptable	"Errorcode"[CR] ---- Invalid "?"[CR] ------------- When the projector recived uncleaRC/ommand

9.4.14 CR_IMGGMD COMMAND

COMMAND	"CR_IMGGMD"[CR]	
Details	Get Standard/High Contrast/Cinema for image-GAMMA setting.	
Response	Acceptable	"000_%1"[CR]
	%1	"STD" Standard "REL" Real "CNM" Cinema
	Unacceptable	"?"[CR]

9.4.15 CR_APCTRL COMMAND

COMMAND	"CR_APCTRL"[CR]	
Details	Get digital keystone setting status	
Response	Acceptable	"000_%1"[CR]
	%1	"L1"DIGITAL Keystone in operation with Level1 "L2"DIGITAL Keystone in operation with Level2 "OFF"DIGITAL Keystone is OFF
	Unacceptable	"?"[CR]

9.5 STATUS READ COMMAND FOR PC

9.5.1   CR_FSYNC COMMAND

COMMAND	"CR_FSYNC"[CR]	
Details	Get Fine Sync value	
Response	Acceptable	"000_%1"[CR]
	%1	"0000"-"0031"
	Unacceptable	"Errorcode"[CR] ------ Invalid "?"[CR] --------------- When receives uncleaRC/ommand

9.5.2   CR_TDOTS COMMAND

COMMAND	"CR_TDOTS"[CR]	
Details	Get Total Dots value	
Response	Acceptable	"000_%1"[CR]
	%1	"nnnn"-"9999" nnnn = Display Dots + Horizontal Position
	Unacceptable	"Errorcode"[CR] --- Invalid "?"[CR] ------------- When receives uncleaRC/ommand

9.5.3 CR_CLAMP COMMAND

COMMAND	"CR_CLAMP"[CR]	
Details	Get Clamp value	
Response	Acceptable	"000_%1"[CR]
	%1	"0000"-"0127"
	Unacceptable	"Errorcode"[CR] --- Invalid "?"[CR] ------------ When receives uncleaRC/ommand

9.5.4 CR_HPOS COMMAND

COMMAND	"CR_HPOS"[CR]	
Details	Get Horizontal Position value	
Response	Acceptable	"000_%1"[CR]
	%1	"0000"-"nnnn" nnnn = Total Dots - Display Dots
	Unacceptable	"Errorcode"[CR] --- Invalid "?"[CR] ------------ When receives uncleaRC/ommand

9.5.5 CR_VPOS COMMAND

COMMAND	"CR_VPOS"[CR]	
Details	Get Vertical Position value	
Response	Acceptable	"000_%1"[CR]
	%1	"0000"-"nnnn" nnnn = Total Line - Display Line
	Unacceptable	"Errorcode"[CR] --- Invalid "?"[CR] ------------ When receives uncleaRC/ommand

9.5.6 CR_DDOTS COMMAND

COMMAND	"CR_DDOTS"[CR]	
Details	Get Display Dots value	
Response	Acceptable	"000_%1"[CR]
	%1	"0100"-"nnnn" nnnn = Total Dots – Horizontal Position value
	Unacceptable	"Errorcode"[CR] --- Invalid "?"[CR] ------------ When receives uncleaRC/ommand

9.5.7 CR_DLINE COMMAND

COMMAND	"CR_DLINE"[CR]	
Details	Get Display Line value	
Response	Acceptable	"000_%1"[CR]
	%1	"0100"-"nnnn" nnnn = Total Line – Vertical Position value
	Unacceptable	"Errorcode"[CR] --- Invalid "?"[CR] ------------ When receives uncleaRC/ommand

9.5.8 CR_ORGMODE COMMAND

COMMAND	"CR_ORGMODE"[CR]	
Details	Get current selected signal for Mode that is set by PC Adjust. When MODE1-MODE5 or EXT6-EXT60 is not selected, get a current signal.	
Response	Acceptable	"000_%1"[CR]
	%1	"XGA1" "HDTV1080"...Etc
	Unacceptable	"?"[CR]

9.5.9 CR_PCSTORE COMMAND

COMMAND	"CR_PCSTORE"[CR]	
Details	Get the status if MODE1-MODE5 is Free or Stored for PC Adjust. Each data MODE1-MODE5 will be shown in 5 bytes. 　F:Free, S:Stored	
Response	Acceptable	"000_%1"[CR]
	Required Data	"FFFFF"--- All Free "SFFFF"--- Only MODE1 is Stored, and others are Free 　　　: "FFFFS"--- Only MODE5 is Stored, and others are Free "SSSSS"--- All Stored
	Unacceptable	"?"[CR]

9.5.10 CR_SETPCADJ COMMAND

COMMAND	"CR_SETPCADJ"[CR]	
Details	Get PC signal foRC/urrent system	
Response	Acceptable	"000_%1"[CR]
	%1	"XGA1" "HDTV1080" "MODE1" "EXT6"-"EXT60" ...Etc.
	Unacceptable	"?"[CR]

9.6 Status Read Command for Video

9.6.1 CR_SERSYS COMMAND

COMMAND	"CR_SERSYS"[CR]	
Details	Select selected signal. When Auto mode, it returns by auto-detect. Only available when Input is video. (Unavailable when Input is computer.)	
Response	Acceptable	"000_%1"[CR]
	%1	"1080I60"-- 1080i 60Hz "1080I50"-- 1080i 50Hz "1035I"------ 1035i "720P"-------- 720p "575P"-------- 575p "480P"-------- 480p "575I"-------- 575i include composite signal such as PAL "480I"-------- 480i include composite signal such as NTSC "NO　SIGNAL"--- When No Signal

	Unacceptable	"101"[CR]　-- When Input is PC series "?"[CR]

9.7 STATUS READ COMMAND FOR INPUT

9.7.1　CR_INPUT COMMAND

COMMAND	"CR_INPUT"[CR]	
Details	Get selected INPUT No.	
Response	Acceptable	"000_%1"[CR]
	%1	"1"-"5"
	Unacceptable	"?"[CR]

9.7.2　CR_SOURCE COMMAND

COMMAND	"CR_SOURCE"[CR]	
Details	Get selected Source	
Response	Acceptable	"000_%1"[CR]
	%1	"DIGITAL"-- DVI inputs is selected "ANALOG"ANALOG RGB is selected. "SCART"SCART is selected. "HDCP"HDCP is selected. "VIDEO"VIDEO input is selected. "S-VIDEO"S-VIDEO is selected. "YPBPR"YPBPR input is selected.
	Unacceptable	"Errorcode"[CR]　--- Invalid "?"[CR]　------------- When receives uncleaRC/ommand

9.7.3　CR_SRCINP1 COMMAND

COMMAND	"CR_SRCINP1"[CR]	
Details	Get INPUT 1 Source	
Response	Acceptable	"000_%1"[CR]
	Required Data	"ANALOG"ANALOG RGBmode status "SCART"SCART mode status
	Unacceptable	"?"[CR]

9.7.4　CR_SRCINP2 COMMAND

COMMAND	"CR_SRCINP2"[CR]	
Details	Get INPUT 2 Source	
Response	Acceptable	"000_%1"[CR]
	%1	"ANALOG"ANALOG RGBmode status "OUT" Monitor OUT mode
	Unacceptable	"?"[CR]

9.7.5 CR_SRCINP3 COMMAND

COMMAND	"CR_SRCINP3"[CR]	
Details	Get INPUT 3 Source.	
Response	Acceptable	"000_%1"[CR]
	%1	"VIDEO"VIDEO mode status "YPBPR"YPBPR mode status
	Unacceptable	"?"[CR]

9.7.6 CR_SRCINP4 COMMAND

COMMAND	"CR_SRCINP4"[CR]	
Details	Get INPUT 4 Source	
Response	Acceptable	"000_%1"[CR]
	%1	"VIDEO"Video mode "S-VIDEO" S-Video mode "YPBPR"　Y/Pb/Pr mode
	Unacceptable	"?"[CR]

9.7.7 CR_SRCINP5 COMMAND

COMMAND	"CR_SRCINP5"[CR]	
Details	Get INPUT 5 Source	
Response	Acceptable	"000_%1"[CR]
	%1	"NOCARD"---- NO Network option "NETWORK"NETWORK Viewer mode status
	Unacceptable	"?"[CR]

9.7.8 CR_SYSTEM COMMAND

COMMAND	"CR_SYSTEM"[CR]		
Details	Get selected System		
Response	Acceptable		"000_%1"[CR]
	%1	When Input is PC Series	"MODE1" "MODE2" "MODE3" "MODE4" "MODE5"
		When Input is video series	"AUTO" ------- Auto is selected. "NTSC"NTSC is selected. "NTSC443"NTSC4.43 is selected. "PAL"PAL is selected. "SECAM"SECAM is selected. "PAL-　"PAL-M is selected. "PAL-　"PAL-N is selected. "1080I"------ 1080i is selected. "1035I" ----- 1035i is selected. "720P" ------- 720p is selected. "575P" ------- 575p is selected. "480P" ------- 480p is selected. "575I" ------- 575i is selected. "480I" ------- 480i is selected.
	Unacceptable		"101"[CR]　-- When Input is PC Series 　"?"[CR]　------------ when receives uncleaRC/OMMAND

9.8 STATUS READ COMMAND FOR SCREEN

9.8.1 CR_FLSCREN COMMAND

COMMAND	"CR_FLSCREN"[CR]	
Details	Get the screen size status that Full Screen is selected or not.	
Response	Acceptable	"000_%1"[CR]
	Required Data	"ON" Full Screen is set. "OFF" Full Screen is not set.
	Unacceptable	"Errorcode"[CR] --- Invalid "?"[CR] ------------ When receives uncleaRC/ommand

9.8.2 CR_SCREEN COMMAND

COMMAND	"CR_SCREEN"[CR]	
Details	Get selected screen size.	
Response	Acceptable	"000_%1"[CR]
	%1	"NORMAL"-- 4:3 screen is selected "WIDE"------ 16:9 screen is selected
	Unacceptable	"Errorcode"[CR] --- Invalid "?"[CR] ------------ When receives uncleaRC/ommand

9.8.3 CR_ KYSTNMODE COMMAND

COMMAND	"CR_ "[CR]	
Details	Get Keystone Store Mode setting status	
Response	Acceptable	"000_%1"[CR]
	%1	"STR"-- "Store Mode" is Store "RST"-- "Store Mode" is Reset
	Unacceptable	"?"[CR] ------------ COMMAND

9.8.4 CR_ANAMORPHIC COMMAND

COMMAND	"CR_ "[CR]	
Details	Get Anamorphic setting status	
Response	Acceptable	"000_%1"[CR]
	%1	"ON"---- Anamorphic is ON "OFF"-- Anamorphic is OFF
	Unacceptable	"Errorcode"[CR] --- Invalid "?"[CR] ------------ When receives uncleaRC/ommand

9.8.5 CR_VSCALE COMMAND

COMMAND	"CR_VSCALE"[CR]	
Details	Get V Scale setting status	
Response	Acceptable	"000_%1"[CR]
	%1	"-32"-"032"
	Unacceptable	"?"[CR]

9.8.6 CR_VPOS COMMAND

COMMAND	"CR_VPOS"[CR]	
Details	Get V Position setting status	
Response	Acceptable	"000_%1"[CR]
	%1	"-15"-"015"
	Unacceptable	"?"[CR]

9.8.7 CR_HSCALE COMMAND

COMMAND	"CR_HSCALE"[CR]	
Details	Get H Scale setting status	
Response	Acceptable	"000_%1"[CR]
	%1	"-32"-"032"
	Unacceptable	"?"[CR]

9.8.8 CR_HPOS COMMAND

COMMAND	"CR_HPOS"[CR]	
Details	Get H Position setting status	
Response	Acceptable	"000_%1"[CR]
	%1	"-15"-"015"
	Unacceptable	"?"[CR]

9.9 STATUS READ COMAND FOR LAMP

9.9.1 CR_LAMPREPL COMMAND

COMMAND	"CR_LAMPREPL"[CR]	
Details	Get lamp replacement time information	
Response	Acceptable	"000_%1"[CR]
	%1	"1Y"-- over the lamp replacement time "1N"-- have not reached the lamp replacement time First letter, 1, shows the number of lamp. When the projector has 2 lamps, the number is "2". Next letter,Y or N, shows if the projector reaches the lamp replacement time or not. Ex. "1Y"--------- The projector has 1 lamp and it reached the lamp replacement time. "2YN"------- The projector has two lams. No.1 lamp has reached the lamp replacement time. No.2 lamp has not reached the lamp replacement time. "4 "--- The projector has 4 lamps. No.1 lamp andNo.4 lamp have not reached the lamp replacement time, and No.2 and No.3 reached the lamp replacement time.
	Unacceptable	"?"[CR]

9.9.2　CR_LAMPHMODE COMMAND

COMMAND	"CR_LAMPHMODE"[CR]	
Details	Get lamp replacement time information	
Response	Acceptable	"000_%1"[CR]
	%1	"NORMAL"Lamp mode is normal "ECO"Lamp mode is silent "AUTO"Lamp mode is auto
	Unacceptable	"?"[CR]

9.9.3　CR_PROJH COMMAND

COMMAND	"CR_PROJH"[CR]	
Details	Get total projector running time. (hours=h)	
Response	Acceptable	"000_%1"[CR]
	%1	"0000000"-"9999999"
	Unacceptable	?"[CR]

9.10　Sound Series Status Read Command

9.10.1　CR_VOLUME COMMAND

COMMAND	"CR_VOLUME"[CR]	
Details	Get user Control Volume	
Response	Acceptable	"000_%1"[CR]
	%1	"000"-"063"
	Unacceptable	"?"[CR]

9.10.2　CR_MUTE COMMAND

COMMAND	"CR_MUTE"[CR]	
Details	Get sound mute setting value	
Response	Acceptable	"000_%1"[CR]
	%1	"ON"---- Sound mute is ON "OFF"-- Sound mute is OFF
	Unacceptable	"?"[CR]

9.10.3　CR_BLTINSP COMMAND

COMMAND	"CR_BLTINSP"[CR]	
Details	Get Built-in Speaker setting status	
Response	Acceptable	"000_%1"[CR]
	%1	"ON"----- Select Built-in speaker "OFF"--- Cancel Built-in speaker
	Unacceptable	"?"[CR]

9.11 Status Read Command for Setting

9.11.1 CR_BBACK COMMAND

COMMAND	"CR_BBACK"[CR]	
Details	Get Blue Back setting value	
Response	Acceptable	"000_%1"[CR]
	%1	"ON"----- Set Blue Back "OFF"--- Cancel Blue Back
	Unacceptable	"?"[CR]

9.11.2 CR_DISP COMMAND

COMMAND	"CR_DISP"[CR]	
Details	Get Display setting status	
Response	Acceptable	"000_%1"[CR]
	%1	"ON"----- Set Display "OFF"--- Cancel Display
	Unacceptable	"?"[CR]

9.11.3 CR_LOGO COMMAND

COMMAND	"CR_LOGO"[CR]	
Details	Get Logo setting status	
Response	Acceptable	"000_%1"[CR]
	%1	"ON"----- Set Logo "OFF"--- Cancel Logo
	Unacceptable	"?"[CR]

9.11.4 CR_RCCODE COMMAND

COMMAND	"CR_RCCODE"[CR]	
Details	Get the selected code in Remote Control mode	
Response	Acceptable	"000_%1"[CR]
	%1	"001"= Code 1 is selected "002" Code 2 is selected "003" Code 3 is selected "004" Code 4 is selected "005" Code 5 is selected "006" Code 6 is selected "007" Code 7 is selected "008" Code 8 is selected
	Unacceptable	"?"[CR]

9.11.5 CR_LANG COMMAND

COMMAND	"CR_LANG"[CR]	
Details	Get selected language	
Response	Acceptable	"000_%1"[CR]
	%1	"ENG"---- English is selected "DEU"---- German is selected "FRA"---- French is selected "ITA"---- Italian is selected "ESP"---- Spanish is selected "POR"---- Portuguese is selected "NED"---- Dutch is selected "SVE"---- Swedish is selected "JPN"---- Japanese is selected "CHI"---- Korean is selected "KOR"---- Chinese is selected "RUS"---- Russian is selected
	Unacceptable	"?"[CR]

9.11.6 CR_ON-STA COMMAND

COMMAND	"CR_ON-STA"[CR]	
Details	Get Power ON Start setting status	
Response	Acceptable	"000_%1"[CR]
	%1	"ON" Set Power ON Start "OFF" Cancel Power ON Start
	Unacceptable	"?"[CR]

9.11.7 CR_P-MANE COMMAND

COMMAND	"CR_P-MANE"[CR]	
Details	Get the time to start Power management	
Response	Acceptable	"000_%1"[CR]
	%1	"OFF"------------ Power management is Canceled "READY"-------- Power management is Ready "SHUTDOWN"-- Power management is set to Shut Down mode mode
	Unacceptable	"?"[CR]

9.11.8 CR_P-MANETIME COMMAND

COMMAND	"CR_P-MAETIME"[CR]	
Details	Get the time to start Power management	
Response	Acceptable	"000_%1"[CR]
	%1	"001"-"030"-- 1mininute to 30 minutes
	Unacceptable	"?"[CR]

9.11.9 CR_FANSPEED COMMAND

COMMAND	"CR_FANSPEED"[CR]	
Details	Get Fan Control Speed	
Response	Acceptable	"000_%1"[CR]
	%1	"MAX"--- Fan Control Speed is Max. "NOR"--- Fan Control Speed is Normal
	Unacceptable	"?"[CR]

9.11.10 CR_KEYDIS COMMAND

COMMAND	"CR_KEYDIS"[CR]	
Details	Get RC//KEY status	
Response	Acceptable	"000_%1"[CR]
	%1	"N/A " Both RC & KEY are available. "RC" RC is locked " EY" KEY is locked
	Unacceptable	"?"[CR]

9.12 Other Status Read Command

9.12.1 CR_SIGNALCOMMAND

COMMAND	"CR_SIGNAL"[CR]	
Details	Get information if there is signal or not	
Response	Acceptable	"000_%1"[CR]
	%1	"ON" There is signal "OFF" No signal
	Unacceptable	?"[CR]

9.12.2 CR_VMUTECOMMAND

COMMAND	"CR_VMUTE"[CR]	
Details	Get No Show setting status	
Response	Acceptable	"000_%1"[CR]
	%1	"ON"----- Set No Show "OFF"--- Cancel No Show
	Unacceptable	"?"[CR]

9.12.3 CR_FREEZECOMMAND

COMMAND	"CR_FREEZE"[CR]	
Details	Get Freeze setting status	
Response	Acceptable	"000_%1"[CR]
	%1	"ON"----- Freeze is set "OFF"--- Freeze is canceld
	Unacceptable	"?"[CR]

9.12.4 CR_PTIMERC/OMMAND

COMMAND	"CR_PTIMER"[CR]	
Details	Get Presentation Timer status	
Response	Acceptable	"000_%1"[CR]
	%1	"ON"------- Presentation timer is active "STOP"--- Presentation timer is pause "OFF"----- Presentation timer is inactive
	Unacceptable	"?"[CR]

9.12.5 CR_INFPFAIL COMMAND

COMMAND	"CR_INFPFAIL"[CR]	
Details	Get the power failure status. See the code for failure details Data is shown in 32bits HEX. NormalW1/ Abnormal=0 When some failure occurs at the same time, each bit will be produced.	
Response	Acceptable	"000_%1"[CR]

	%1	"********"--- Show in 8 figures
		            the character will be 0-9,A,B,C,D,E,or F.
		            See the table below for the details.

	Unacceptable	"?"[CR]

The Power Failure Code
Table

No.	Main Unit	Detected Place	Lamp Failure Code	Hexadecimal	Error Code binary digit							
					High 4 bits	Low 4 bits	High 4 bits	Low 4 bits	High 4 bits	Low 4 bits	High 4 bits	Low 4 bits
1	15VP_PF	D4815			1111	1111	1111	1110	1111	1111	1111	1111
2	15V_PF	D4817			1111	1111	1111	1101	1111	1111	1111	1111
3	9V_PF	D4814		FB	1111	1111	1111	1011	1111	1111	1111	1111
4	PANEL_PF	D2592		F7	1111	1111	1111	0111	1111	1111	1111	1111
5	5V_PF	D4819		EF	1111	1111	1110	1111	1111	1111	1111	1111
6	5VD_PF	D4818		DF	1111	1111	1101	1111	1111	1111	1111	1111
7	3.3V_PF	D4816		BF	1111	1111	1011	1111	1111	1111	1111	1111
8	N/A			7F	1111	1111	0111	1111	1111	1111	1111	1111
9	5V_TB1274_1	D3102	FE	FF	1111	1110	1111	1111	1111	1111	1111	1111
10	5V_TB1274_2	D3101	FD		1111	1101	1111	1111	1111	1111	1111	1111
11	3.3V_DVI_PF	D8064	FB		1111	1011	1111	1111	1111	1111	1111	1111
12	3.3V_Y/C_PF	D1101	F7		1111	0111	1111	1111	1111	1111	1111	1111
13	2.5V_Y/C_PF	D1104	EF		1110	1111	1111	1111	1111	1111	1111	1111
14	3.3V_ADPC1_PF	D234	DF		1101	1111	1111	1111	1111	1111	1111	1111
15	3.3V_ADAV1_PF	D2351	BF		1011	1111	1111	1111	1111	1111	1111	1111
16	3.3V_ADPC2_PF	D235	7F		0111	1111	1111	1111	1111	1111	1111	1111
17	3.3V_ADPC3_PF	D236			1111	1111	1111	1111	1111	1110	1111	1111
18	3.3V_ADAV2_PF	D2352			1111	1111	1111	1111	1111	1101	1111	1111
19	3.3V_ADAV3_PF	D2353			1111	1111	1111	1111	1111	1011	1111	1111
20	C3.3V_PF	D4809			1111	1111	1111	1111	1111	0111	1111	1111
21	9000	D391,D39			1111	1111	1111	1111	1110	1111	1111	1111
22	2.5V1_PF	D1451			1111	1111	1111	1111	1101	1111	1111	1111
23	2.5V_IP_PF	D8033			1111	1111	1111	1111	1011	1111	1111	1111
24	1.8V_PF	D1431			1111	1111	1111	1111	0111	1111	1111	1111

No.	Audio Unit	Detected Place		Hexadecimal	High 4 bits	Low 4 bits	High 4 bits	Low 4 bits	High 4 bits	Low 4 bits	High 4 bits	Low 4 bits
25	MDAV_PF	Audio Unit		FE	1111	1111	1111	1111	1111	1111	1111	1110

No.	POW, Main	Detected Place		Hexadecimal	High 4 bits	Low 4 bits	High 4 bits	Low 4 bits	High 4 bits	Low 4 bits	High 4 bits	Low 4 bits
26	FAN_PF	ALL FAN		FD	1111	1111	1111	1111	1111	1111	1111	1101

No.	AV Unit	Detected Place		Hexadecimal	High 4 bits	Low 4 bits	High 4 bits	Low 4 bits	High 4 bits	Low 4 bits	High 4 bits	Low 4 bits
27	P_FAIL_5	D7302		FB	1111	1111	1111	1111	1111	1111	1111	1011
28	P_FAIL_9	D4102		F7	1111	1111	1111	1111	1111	1111	1111	0111
29	N/A			EF	1111	1111	1111	1111	1111	1111	1110	1111
30	N/A			DF	1111	1111	1111	1111	1111	1111	1101	1111
31	N/A			BF	1111	1111	1111	1111	1111	1111	1011	1111
32	N/A			7F	1111	1111	1111	1111	1111	1111	0111	1111

9.12.6 CR_TEMPWARNCOMMAND

COMMAND	"CR_TEMPWARN"[CR]
Details	Get if the sensors are exceeding or approaching critical temperature. When some sensors are installed inside the projector, get each sensor's temperature.

Response	Acceptable	"000_%1_%2_%3"[CR]

	%1
	%2
	%3
		%1…temperature sensor 1
		%2…temperature sensor 2
		%3…temperature sensor 3
		
		  "W"--- Exceeding critical temperature Warning
		  "S"--- Sensor temperature is safe.
		  "N"--- Not relate to the temperature
		Ex. When "S_W_S"[CR] means that sensor 1 is saftety temperature, sensor 2 is exceeding critical temperature, and sensor 3 is safety temperature.
		
		Note Depends on projector models, when the temperature difference between sensor 1 and sensor 2 is over the specified temperature, the sensor may show "W". In this case, sensor 3 shows that the temperature difference is "W", "S", or "N".

	Unacceptable	"?"[CR]

9.12.7 CR_TEMPFAILCOMMAND

COMMAND	"CR_TEMPFAIL"[CR]
Details	Get the temperature inside a projector. When some temperature sensors are installed in the projector, it is possible to know the temperature all at once.

Response	Acceptable	"000_%1_%2_%3"[CR]
	%1 %2 %3	%1 Temperature, sensor 1 %2 Temperature, sensor 2 %3 Temperature, sensor 3 (Ex.) "_31.5　"[CR] _means a space. When the temperature sinks to -, the first character "-"like "-05.5F"[CR]. Last character indicates the sensor's status. 　　Exceeding critical temperature　　"F" 　　Sensor temperature is safe　　　"S" 　　Not relate to the temperature　　"N" "_31.5F"indicates 31.5 degrees and safety temperature. When the temperature is safe, the data will be " 00.0S". Every time the projector is reset, " 00.0S"is set. In short, previous data is deleted.
	Unacceptable	"?"[CR]