EXPAND SERIAL COMMAND FUNCTIONAL SPECIFICATIONS

EIKI

LC-WGC500A LC-WGC500AL

Ver.1.0

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1. Overview

- This Functional Specification defines communication with PJ-Net organizer for LC-WGC500A / LC-WGC500AL.
- Supporting Firmware Ver. 1.x of the projector.
- Commands in this document are to communicate with PJ-Net organizer, but most commands are
 used to control a projector remotely from a computer with RS-232C. Therefore commands in this
 document are defined as Expand Serial Commands.

2. Serial Interface Specification

2.1 Transfer Specification

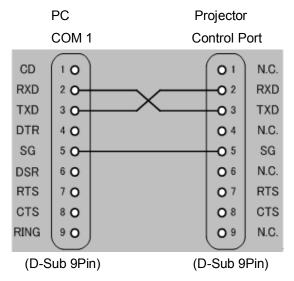
ltem	Specification
Synchronous System	Asynchronous
Transmission Speed	9600 / 19200
Data Length	8 bits
Parity	N/A
Stop Bit	1
Flow Control	N/A

Note1) Transmission Speed: initial setting value is 19200

Note2) Transmission Speed can be changed in Service mode.

2.2 Connection

Dedicated serial cables must be used for the connection between a computer and a projector.



3. Notes for communication

- Expand Serial Command is defined as a single command per line that starts with "C" and ends with carriage return (0x0D).
- · There are two types of commands; Functional Execution Commands and Status Read Command.
 - Example of Functional Execution Command: "CF_BRIGHT_032" [CR]
 - Example of Status Read Command: "CR_BRIGHT" [CR]

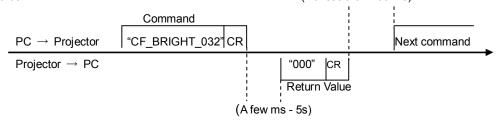
Note) "_" means a space

· When it takes more than a second to receive a single command, it is not executed.

When it takes more than a second to receive carriage return (0x0D) since the reception of the first data "C", it clears the information of the receive buffer.

When the command pipelining, allow the interval time of no less than 100 ms after receiving return value.

(No less than 100 ms)



Do not send another command before the reception of the return value; the operation by the command is not ensured.

However this is not the case when no response is returned after more than 5 seconds.

• It takes <u>about 5 seconds</u> for internal initialization after plugging in AC power. During this time, it cannot process commands. Do not issue any command.

4. Notation Convention

- Data from a controller to a projector is represented as COMMAND, and data from a projector to a controller in response to the incoming command is represented as RESPONSE.
- [CR]: Carriage Return Code

Carriage Return code is added to the end of the command.

Response is also followed by carriage return code.

· : Space Code

Space Code is represented as (_).

%1: Parameter included in Command

When there are more than one parameter, they are defined as %2, %3...

%%%: Error Code returned from a projector

Acceptable: "000".

Unacceptable: See [7. Error Code Table].

5. Functional Execution Command Table

5.1 Image Command Table

Execute command	Item
CF_BRIGHT_%1 [CR]	Set value of Brightness
CF_CONT_%1 [CR]	Set value of Contrast
CF_COLOR_%1 [CR]	Set value of Color
CF_TINT_%1 [CR]	Set value of Tint
CF_SHARP_%1 [CR]	Set value of Sharpness
CF_GAMMA_%1 [CR]	Set value of Gamma
CF_WBAL-R_%1 [CR]	Set Red value of White Balance
CF_WBAL-G_%1 [CR]	Set Green value of White Balance
CF_WBAL-B_%1 [CR]	Set Blue value of White Balance
CF_COLTEMP_%1 [CR]	Set level of Color Temperature
CF_NZRED_%1 [CR]	Set ON/OFF of Noise reduction
CF_PROGV_%1 [CR]	Set mode of Progressive scan
CF_IMAGE_%1 [CR]	Set Image mode
CF_IMAGEADJ_%1 [CR]	Set Store/Reset of values in Image Adjustment

5.2 PC Adjust Control Command Table

Execute command	Item
CF_FSYNC_%1 [CR]	Set value of Fine Sync
CF_TDOTS_%1 [CR]	Set value of Total Dots
CF_CLPPHASE_%1 [CR]	Set value of Clamp Phase
CF_H-POS_%1 [CR]	Set value of Horizontal Position
CF_V-POS_%1 [CR]	Set value of Vertical Position
CF_DDOTS_%1 [CR]	Set value of Display Dots
CF_DLINE_%1 [CR]	Set value of Display Line
CF_SETPCADJ_%1 [CR]	Apply values set in PC Adjust menu to screen image
CF_ORGMODE_%1 [CR]	Specify the original signal for PC mode
CF_PCSTORE_%1 [CR]	Store current setting values in PC Adjust menu to Mode %1
CF_PCMODEFREE_%1 [CR]	Delete the values registered in Mode %1 and return it to Free status.
	Free Status.

5.3 Input Control Command Table

Execute command	ltem
CF_INPUT_%1 [CR]	Select Input
CF_SOURCE_%1 [CR]	Select Source of selected Input
CF_INPUT1_%1 [CR]	Select Input1 and also set input source to %1
CF_INPUT2_%1 [CR]	Select Input2 and also set input source to %1
CF_INPUT3_%1 [CR]	Select Input3 and also set input source to %1
CF_INPUT4_%1 [CR]	Select Input4 and also set input source to %1
CF_SYSTEM_%1 [CR]	Select System of currently selected Input

5.4 Screen Control Command Table

Execute command	Item
CF_SCREEN_%1 [CR]	Select Screen size
CF_DZCENT _%1 [CR]	Cancel Digital Zoom mode
CF_CEIL_%1 [CR]	Set ON/OFF of Ceiling
CF_REAR_%1 [CR]	Set ON/OFF of Rear
CF_KEYSTONE _%1 [CR]	Set Keystone correction
CF_KYSTNMODE _%1 [CR]	Set Keystone store mode
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

5.5 Lamp Command Table

Execute command	Item
CF_LAMPMODE_%1 [CR]	Select Lamp control
CF_LAMPCONTROL_%1 [CR]	Select Lamp mode
CF_LAMPLIFECONTROL_%1[CR]	Select Lamp life control
CF_LAMPCHGTIM_%1[CR]	Select Timer for Lamp 1/2 of Lamp mode
CF_LAMPCHGSTA_%1[CR]	Set Start time of Timer
CF_LAMPINTERVAL_%1[CR]	Set Start time of Interval

5.6 Sound Command Table

Execute command	Item
CF_VOLUME_%1[CR]	Set Volume value
CF_MUTE_%1[CR]	Control ON/OFF of Sound Mute

5.7 Setting Command Table

Execute command	Item
CF_LANG_%1 [CR]	Select language for OSD
CF_LOGO_%1 [CR]	Set PIN code and mode for Logo
CF_PIP_%1[CR]	Set Picture in Picture
CF_PIPSIZE_%1[CR]	Set Screen size of Picture in Picture
CF_PIPPOSITION_%1[CR]	Set position of Picture in Picture
CF_BACKGND_%1[CR]	Select screen for no signal
CF_FILCONTROL	Execute operation of scroll of filter
CF_POINTER	Set Pointer function
CF_RCODE_%1 [CR]	Select Remote Control Code
CF_RCSENSOR_%1 [CR]	Select location of infrared remote receiver of remote control
CF_DISP_%1 [CR]	Set ON/OFF of On Screen Display
CF_STANDBYMODE_%1	Set Standby-Mode
CF_P-MANE_%1 [CR]	Set Power Management function
CF_P-MANETIME_%1 [CR]	Set time of Power Management
CF_ON-STA_%1 [CR]	Set ON/OFF of Power ON Start
CF_FANSPEED_%1 [CR]	Set level of Fan Speed
CF_SLANT_%1[CR]	Set slant of projector installed
CF_SHUTRCPROT_%1[CR]	Set valid / invalid of RC use on Shutter control function
CF_SHUTKEYPROT_%1[CR]	Set valid / invalid use of key on the top panel on Shutter control function
CF_SHUTH_%1[CR]	Set time of operating shutter management function
CF_HDMISETUP_%1[CR]	Set Image of HDMI setup
CF_HDMISOUND_%1[CR]	Set Sound of HDMI setup
CF_PJPINCODE_%1[CR]	Enter PJ PIN code to cancel PJ lock
CF_KEYDIS_%1 [CR]	Prohibit RC/KEY control
CF_TESTPAT_%1[CR]	Set Test pattern display function
CF_FILH_%1[CR]	Reset Filter used time
CF_FILTIMER_%1[CR]	Set time to display Filter cleaning / replacement warning on screen
CF_FILSCRL_%1[CR]	Reset Filter scroll counter
CF_FDEFAULT_%1 [CR]	Reset to Factory Default settings

5.8 Other Command Table

Execute command	Item
CF_KEYEMU_%1 [CR]	The same operation as RC/Control Key
CF_MENU_%1 [CR]	Set ON/OFF of Menu
CF_POWER_%1 [CR]	Set ON/OFF of Power
CF_FREEZE_%1 [CR]	Set ON/OFF of Freeze
CF_VMUTE_%1 [CR]	Set Video Mute

6. Status Read Command Table

6.1 Image Status Read Command Table

Status Read command	Item
CR_BRIGHT [CR]	Get value of Brightness
CR_CONT [CR]	Get value of Contrast
CR_COLOR [CR]	Get value of Color
CR_TINT [CR]	Get value of Tint
CR_SHARP [CR]	Get value of Sharpness
CR_GAMMA [CR]	Get value of Gamma
CR_WBAL-R [CR]	Get Red value of White Balance
CR_WBAL-G [CR]	Get Green value of White Balance
CR_WBAL-B [CR]	Get Blue value of White Balance
CR_COLTEMP [CR]	Get value of Color temperature
CR_NZRED [CR]	Get setting status of Noise reduction
CR_PROGV [CR]	Get setting status of Progressive scan
CR_IMAGE [CR]	Get Selected Image status
CR_IMGGMD [CR]	Get setting value of Image Gamma

6.2 PC Adjust Status Read Command Table

Status Read command	Item
CR_FSYNC [CR]	Get setting value of Fine Sync
CR_TDOTS [CR]	Get setting value of Total Dots
CR_CLPPHASE [CR]	Get setting value of Clamp phase
CR_H-POS [CR]	Get setting value of Horizontal Position
CR_V-POS [CR]	Get setting value of Vertical Position
CR_DDOTS [CR]	Get setting value of Display Dots
CR_DLINE [CR]	Get setting value of Display Line
CR_ORGMODE [CR]	Get the original signal for PC-Adjusted mode
CR_PCSTORE [CR]	Get status Free/ Stored for PC Adj. mode 1-10
CR_SETPCADJ [CR]	Get currently displayed PC signal in system

6.3 Video Status Read Command Table

Status Read command	Iter	n
CR_SERSYS [CR]	Get currently selected signal. result by Auto detection.	In Auto mode, it returns a

6.4 Input Status Read Command Table

Status Read command	Item
CR_INPUT [CR]	Get selected Input
CR_SOURCE [CR]	Get selected Source
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 in current Input mode
CR_SYSLIST [CR]	Get possible system list
CR_MODELIST [CR]	Get possible mode list
CR_HMSLOT [CR]	Get total number of Inputs
CR_NMSLOT1 [CR]	Get terminal information of Input1.
CR_NMSLOT2[CR]	Get terminal information of Input2.
CR_NMSLOT3[CR]	Get terminal information of Input3
CR_NMSLOT4[CR]	Get terminal information of Input4.
CR_IDSLOT1[CR]	Get ID information of Input1
CR_IDSLOT2[CR]	Get ID information of Input2
CR_IDSLOT3[CR]	Get ID information of Input3
CR_IDSLOT4[CR]	Get ID information of Input4

6.5 Screen Status Read Command Table

Status Read command	Item
CR_SCREEN [CR]	Get selected screen size
CR_CEIL [CR]	Get setting status of Ceiling
CR_REAR [CR]	Get setting status of Rear
CR_KYSTNMODE[CR]	Get selected Keystone store mode
CR_VSCALE[CR]	Get setting status of V Scale
CR_VPOS[CR]	Get setting status of V Position
CR_HSCALE[CR]	Get setting status of H Scale
CR_HPOS[CR]	Get setting status of H Position

6.6 Lamp Status Read Command Table

Status Read command	Item
CR_LAMPREPL [CR]	Get information of Lamp replacement time
CR_LAMPH [CR]	Get information of actual Lamp running time
CR_LAMPCORRESPH [CR]	Get lamp running time multiplied by a coefficient
CR_LAMPMODE [CR]	Get selected Lamp control
CR_PROJH [CR]	Get total running time of projector
CR_HMLAMP[CR]	Get the number of lamps
CR_LAMPCONTRL [CR]	Get setting status of Lamp mode
CR_LAMPLIFECONTRL [CR]	Get setting status of Lamp life control
CR_LAMPCHGTIM[CR]	Get setting status of Timer for Lamp1/2 of Lamp mode
CR_LAMPCHGSTA[CR]	Get setting status of Timer start for Lamp1/2 of Lamp mode
CR_LAMPINTERVAL [CR]	Get setting status of Lamp interval

6.7 Sound Status Read Command Table

Status Read command	Item
CR_VOLUME[CR]	Get Volume value
CR MUTE[CR]	Get Sound Mute setting status

6.8 Setting Status Read Command Table

Status Read command	Item
CR_LANG [CR]	Get selected language
CR_LOGO [CR]	Get setting status of Logo
CR_LOGOLOCK[CR]	Get setting status of Logo Lock
CR_PIP[CR]	Get setting status of "Picture in Picture"
CR_PIPSIZE[CR]	Get setting status of Screen size of "Picture in Picture"
CR_PIPPOSITION[CR]	Get setting status of position of "Picture in Picture"
CR_BACKGND [CR]	Get setting status of Screen for no signal
CR_POINTER[CR]	Get setting status of Pointer
CR_RCODE [CR]	Get selected Remote Control code
CR_RCSENSOR [CR]	Get setting status of Remote Control Sensor(Enable/Disable)
CR_RTYPE [CR]	Get supported Remote Control type (IR/RF)
CR_DISP [CR]	Get setting status of Display
CR_STANDBYMODE[CR]	Get setting status of Standby-mode
CR_P-MANE [CR]	Get Power management setting status
CR_P-MANETIME [CR]	Get setting time for Power Management
CR_ON-STA [CR]	Get ON Start setting status
CR_FANSPEED [CR]	Get selected Fan Control Speed
CR_SLANT[CR]	Get setting status of Slant
CR_SHUTRCPROT[CR]	Get remote controller disability status of the shutter
CR_SHUTKEYPROT[CR]	Get Key controller disability state of the shutter
CR_SHUTH[CR]	Get time setting to begin the shutter management
CR_HDMISETUP [CR]	Get setting status of Image of "HDMI setup"
CR_HDMISOUND [CR]	Get setting status of Sound of "HDMI setup"
CR_SECURITY [CR]	Get setting status of Security
CR_PJLOCKNOW [CR]	Get setting status of current PJ Lock
CR_PJLOCKMENU [CR]	Get PJ Lock setting status on the menu
CR_KEYDIS [CR]	Get RC/KEY prohibited status
CR_TESTPAT[CR]	Get setting status of Test pattern
CR_FILH[CR]	Get Filter used time
CR_FILCOND[CR]	Get status of filter clog
CR_FILREPL[CR]	Get status of Filter cleaning / replacement time
CR_FILTIMER[CR]	Get time to display Filter cleaning / replacement warning on screen
CR_FILREMAIN[CR]	Get remaining number of usable Filter scroll

6.9 Other Status Read Command Table

Status Read command	Item
CR_STATUS [CR]	Get operating status of Projector
CR_SIGNAL [CR]	Get status of signal existence
CR_VMUTE [CR]	Get setting status of No show
CR_FREEZE [CR]	Get setting status of Freeze
CR_TEMPFAIL [CR]	Get temperature when sensors approach abnormal temperature
CR_TEMP [CR]	Get current temperature
CR_SHUTCOND [CR]	Get setting status of Shutter
CR_SERIALNO [CR]	Get value of Serial number

7. Error Code Table

	1 • • • • • • • • • • • • • • • • • • •
Error Code	Contents
?	-When the received data cannot be decoded -Parameter designation error (wrong digit number, including invalid value, etc.)
000	Normal reception (This is "Not" error)
102	Directly specified value or values are out of range. (Not reflected)
103	Command mismatched to Hardware (the command is for Optional function which is not implemented)
201	Incremented or decremented value or values are beyond upper or lower limits.
301	Not executable due to screen capturing in process. Prompting reissue of the command after a while.
402	Not executable due to PIN code in operation. Prompting reissue of the command after a while.
101	Error not applicable to above errors

8. Functional Execution Command

8.1 Format

1) PC issues commands in format as below:

Pattern1: "CF_ COMMAND" [CR]
Pattern2: "CF_ COMMAND _" %1 [CR]

CF_: Header

COMMAND: String

%1: Parameter (String)

_: Space (To separate COMMAND and Parameter)

2) The projector decodes the received command and when it is ready to receive the next command, it returns the response.

"000" [CR]: (0x06,0x0D) When receiving Functional Execution Command

"nnn" [CR]: Except "000", when it is unable to execute command for any specific reason.

See Error Code Table for details

3) When the received data cannot be decoded, the projector returns"?" [CR]

8.2 Transfer Example

When setting projector's total dots to 1344 by Expand Serial command

$$PC \rightarrow PJ$$
: "CF_TDOTS_1344" [CR]

PC ← PJ: "000" [CR] ----- Acceptable

8.3 Operation Requirements

Functional Execution Command is limited when the projector status is as below.
 However, Status Read Command is still effective under following conditions.

Projector Status	Available Functional Execution Command
Standby Mode	C00: Power ON CF POWER ON
Countdown in process	C00: Power ON CF POWER ON (Terminates Count Down)
Cooling Down in process	N/A
Cooling Down due to Abnormal Temperature	N/A
Abnormal Temperature	N/A
Power Failure (60 seconds after Power failure occurred)	N/A
Power-Save Cooling Down in process	N/A
Cooling Down in process due to Shutter management	N/A
Power Save in process	C00: Power ON C01: Power OFF CF POWER ON CF POWER OFF

Note) When projector receives another command in the above status, it returns error code which shows the status. And when projector receives Functional execution commands, OSD menu disappears except pop-up menu.

 When Standby mode of Setting menu is set to Eco and Projector status is Standby mode, Functional execution commands are invalid

8.4 Image Command

8.4.1 CF_ BRIGHT Command

Command	"CF_BRIGHT_%1" [CR]	
%1	"UP"	Directly specify setting value of Brightness Increment setting value of Brightness by 1 Decrement setting value of Brightness by 1
Details	Set user controlled value of Brightness (Available only in the normal Power ON status) The value set by this command will not be stored in the projector's memory. Therefore, when the power is turned to ALL OFF status, the value returns to the original setting. (It is stored in Suspend mode.)	
Response	Acceptable	"000" [CR]
. teeponoe	Unacceptable	"Error Code" [CR]

8.4.2 CF_CONT Command

Command	"CF_CONT_%1" [CR]	
%1	"UP"	Directly specify setting value of Contrast Increment setting value of Contrast by 1 Decrement setting value of Contrast by 1
Details	Set user controlled value of Contrast (Available only in the normal Power ON status) The value set by this command will not be stored in the projector. Therefore, when the power is turned to ALL OFF status, the value returns to the original setting. (It is stored in Suspend mode.)	
Response	Acceptable	"000" [CR]
Тооронос	Unacceptable	"Error Code" [CR]

8.4.3 CF_COLOR Command

Command	"CF_COLOR_%1" [CR]	
%1	"000-063" Directly specify setting value of Color "UP" Increment setting value of Color by 1 "DN" Decrement setting value of Color by 1	
Details	Set user controlled value of Colors (Available only in the normal Power ON status) The value set by this command will not be stored in the projector's memory. Therefore, when the power is turned to ALL OFF status, the value returns to the original setting. (It is stored in Suspend mode.)	
Response	Acceptable	"000" [CR]
recoporioc	Unacceptable	"Error Code" [CR]

8.4.4 CF_TINT Command

Command	"CF_TINT_%1" [CR]	
%1	"000-063" Directly specify setting value of Tint "UP" Increment setting value of Tint by 1 "DN" Decrement setting value of Tint by 1	
Details	Set Tint value (Available only in the normal Power ON status) The value set by this command will not be saved to the projector's memory. Therefore, when the power is turned to ALL OFF status, the value returns to the original setting. (It is stored in Suspend mode.)	
Response	Acceptable	"000" [CR]
Собронов	Unacceptable	"Error Code" [CR]

8.4.5 CF_SHARP Command

Command	"CF_SHARP_%1" [CR]	
%1	"000-015" Directly specify setting value of Sharpness "UP" Increment setting value of Sharpness by 1 "DN" Decrement setting value of Sharpness by 1	
Details	Set user controlled value of Sharpness (Available only in the normal Power ON status) The value set by this command will not be stored in the projector's memory. Therefore, when the power is turned to ALL OFF status, the value returns to the original setting. (It is stored in Suspend mode.)	
Response	Acceptable	"000" [CR]
Тоороноо	Unacceptable	"Error Code" [CR]

8.4.6 CF_GAMMA Command

Command	"CF_GAMMA_%1" [CR]	
%1	"000-015" Directly specify setting value of Gamma "UP" Increment setting value of Gamma by 1 "DN" Decrement setting value of Gamma by 1	
Details	Set user controlled value of Gamma (Available only in the normal Power ON status) The value set by this command will not be stored in the projector's memory. Therefore, when the power is turned to ALL OFF status, the value returns to the original setting. (It is stored in Suspend mode.)	
Response	Acceptable	"000" [CR]
recoporido	Unacceptable	"Error Code" [CR]

8.4.7 CF_WBAL- Command

Command	"CF_WBAL-%1_%2" [CR]	
%1	"R" RED "G" GREEN "B" BLUE	
%2	"000-063" Directly specify value of Color selected in %1 of White Balance. "UP"Increment setting value of Color specified in %1 of White Balance by 1. "DN" Decrement setting value of Color specified in %1 of White Balance by 1.	
Details	Set value of Color specified in %1 of White Balance (Available only in the normal Power ON status) The value set by this command will not be stored in the projector's memory. Therefore, when the power is turned to ALL OFF status, the value returns to the original setting. (It is stored in Suspend mode.)	
Response	Acceptable	"000" [CR]
. 100001100	Unacceptable	"Error Code" [CR]

8.4.8 CF_COLTEMP Command

Command	"CF_COLTEMP_%1" [CR]	
%1	"000" Xlow "001" Low "002" Mid "003" High	
Details	Set Color Temperature (Available only in the normal Power ON status) The value set by this command will not be stored in the projector's memory. Therefore, when the power is turned to ALL OFF status, the value returns to the original setting. (It is stored in Suspend mode.)	
Response	Acceptable	"000" [CR]
1.0000100	Unacceptable	"Error Code" [CR]

8.4.9 CF_NZRED Command

Command	"CF_NZRED_%1" [CR]	
%1	"OFF" Cancel Noise Reduction "L1" Set Noise Reduction L1 "L2" Set Noise Reduction L2 "UP" Toggle between ON and OFF. (OFF→L1→L2→OFF) "DN" Toggle between ON and OFF. (OFF→L2→L1→OFF)	
Details	Set Noise Reduction level (Available only in the normal Power ON status) The value set by this command will not be stored in the projector's memory Therefore, when the power is turned to ALL OFF status, the value returns to the original setting. (It returns to the original setting in Suspend mode as well.)	
Response	Acceptable	"000" [CR]
Теоропос	Unacceptable	"Error Code" [CR]

8.4.10 CF_PROGV Command

Command	"CF_PROGV_9	"CF_PROGV_%1" [CR]	
%1	"L1" "L2" "FILM" "UP"	Set Progressive scan to OFF Set Progressive scan to L1 (for movie image) Set Progressive scan to L2 (for still image) Set Progressive scan to Film Switch setting forward direction (OFF→L1→L2→FILM→OFF) Switch setting backward direction (OFF→FILM→L2→L1→OFF)	
Details	Set Progressive scan mode. (Available only in the normal Power ON status) The value set by this command will not be stored in the projector's memory. Therefore, when the power is turned to ALL OFF status, the value returns to the original setting. (It is stored in Suspend mode.)		
Response	Acceptable	"000" [CR]	
Теоропос	Unacceptable	"Error Code" [CR]	

8.4.11 CF_IMAGE Command

Command	"CF_IMAGE_%1" [CR]	
%1	"DYNAMIC"Dynamic (Fixed value to enable projection with a sharp, powerful picture tone) "STAND"Standard(Image adjust value is set to factory default for Still Image) "REAL Real (Fixed value to display graphic image with natural tone) "CINEMA" Cinema (Fixed value to focus on tone reproduction for movie) "CUSTOM1" Image1 (the value adjusted and stored by user) "CUSTOM2" Image2 (the value adjusted and stored by user) "CUSTOM3" Image3 (the value adjusted and stored by user) "CUSTOM4" Image4 (the value adjusted and stored by user)	
Details	Select Image Mode (Available only in the normal Power ON status) Parameter "CUSTOM1" to "CUSTOM4" corresponds to "Image1" to "Image4" displayed in projector OSD menu on selecting Image. The value set by this command is stored in EEPROM so that the setting can remain effective even after the power is turned to ALL OFF status.	
Response	Acceptable	"000" [CR]
ТСЭРОПЭС	Unacceptable	"Error Code" [CR]

8.4.12 CF_IMAGEADJ Command

Command	"CF_IMAGEADJ_%1"[CR]	
%1	"RST" Reset adjusted value for the Image "STR1" Store current adjusted value to Image 1 "STR2" Store current adjusted value to Image 2 "STR3" Store current adjusted value to Image 3 "STR4" Store current adjusted value to Image 4	
Details	Reset or Store adjusted value for Image. (Available only in the normal Power ON status) "STR1"-"STR4" corresponds to "Image1"-"Image4" displayed in projector OSD menu on selecting "Store" for adjusted value of Image. The setting value set in "Image1" to "Image4" is stored and can be retrieved when turning on the projector again after the power is turned to ALL OFF status.	
Response	Acceptable	"000" [CR]
Соронов	Unacceptable	"Error Code" [CR]

8.5 PC Adjust Control Command

8.5.1 CF_FSYNC Command

Command	"CF_FSYNC_%1" [CR]	
%1	"UP"	
Details	Set value of Fine Sync in PC signal (Available only in the normal Power ON status) The value set by this command will not be stored in the projector's memory. Therefore, when the power is turned to ALL OFF status, the value returns to the original setting. (It is stored in Suspend mode.)	
Response	Acceptable	"000" [CR]
Посропос	Unacceptable	"101" [CR] When input is Video signal / No signal

8.5.2 CF_TDOTS Command

Command	"CF_TDOTS_%1" [CR]	
%1	"mmmm - nnnn" Directly specify setting value of Total Dots "mmmm" indicates minimum value, which is current (Display area H + Position H) value "nnnn" indicates maximum value, which is less than 140 MHz in Dot Clocks "UP" Increment setting value of Total Dots by 1 "DN" Decrement setting value of Total Dots by 1	
Details	Set value of Total Dots in PC signal (Available only in the normal Power ON status) The value set by this command will not be stored in the projector's memory. Therefore, when the power is turned to ALL OFF status, the value returns to the original setting. (It is stored in Suspend mode.)	
Response	Acceptable	"000" [CR]
recoporioc	Unacceptable	"101" [CR] When input is Video signal / No signal

8.5.3 CF_CLPPHASE Command

Command	"CF_CLPPHASE_%1"[CR]	
%1	"mmmm~nnnn" Directly select Clamp phase setting value "mmmm" shows minimum value, the fixed-value "0001". "nnnn" shows maximum value, it depends on input signal. "UP" Current Clamp setting value + 1 "DN" Current Clamp setting value – 1	
Details	Set Clamp value of PC signal (Available only in the normal Power ON status) The value set by this command will not be saved to the projector. Therefore, when ALL is OFF, the value returns to the original setting (The value is held in Suspend mode)	
Response	Acceptable	"000"[CR]
, tooponoo	Unacceptable	"101"[CR] When input is Video signal / No signal

8.5.4 CF_H-POS Command

Command	"CF_H-POS_%1" [CR]	
%1	"0000-nnnn" Directly specify setting value of Horizontal Position "nnnn" indicates maximum value, which is current value of (Total dots - Display area H) "UP" Increment setting value of Horizontal Position by 1 "DN" Decrement setting value of Horizontal Position by 1	
Details	Set value of Horizontal Position in PC signal (Available only in the normal Power ON status) The value set by this command will not be stored in the projector's memory. Therefore, when the power is turned to ALL OFF status, the value returns to the original setting.	
Response	Acceptable	"000" [CR]
1 (COPOLISC	Unacceptable	"101" [CR] When input is Video signal / No signal

8.5.5 CF_V-POS Command

Command	"CF_V-POS_%1" [CR]	
%1	"0000-nnnn" Directly specify setting value of Vertical Position "nnnn" indicates maximum value, which is current (Total Line – Display Area V) value "UP" Increment setting value of Vertical Position by 1 "DN" Decrement setting value of Vertical Position by 1	
Details	Set Vertical Position value (Available only in the normal Power ON status) The value set by this command will not be stored in the projector's memory. Therefore, when the power is turned to ALL OFF status, the value returns to the original setting.	
Response	Acceptable "000" [CR]	
response	Unacceptable	"101" [CR] When input is Video signal / No signal

8.5.6 CF_DDOTS Command

Command	"CF_DDOTS_%1" [CR]	
%1	"0100-nnnn" Directly specify setting value of Display Dots "nnnn" indicates maximum value, which is current value of (Total Dots - Position H). In this projector, the value should be "even number" and if "odd number" is specified, it adds 1 to make the value even number. "UP"	
Details	Set setting value of Display Dots in PC signal (Available only in the normal Power ON status) The value set by this command will not be stored in the projector's memory. Therefore, when the power is turned to ALL OFF status, the value returns to the original setting.	
Response	Acceptable	"000" [CR]
recoporioc	Unacceptable	"101" [CR] When input is Video signal / No signal

8.5.7 CF_DLINE Command

Command	"CF_DLINE_%1" [CR]	
%1	"0100-nnnn" Directly specify setting value of Display Line "nnnn" indicates maximum value, which is current value of (Total Line - Position V). "UP" Increment setting value of Display Line by 1 "DN" Decrement setting value of Display line by 1	
Details	Set setting value of Display Line in PC signal (Available only in the normal Power ON status) The value set by this command will not be stored in the projector's memory. Therefore, when the power is turned to ALL OFF status, the value returns to the original setting. (It is stored in Suspend mode.)	
Response	Acceptable	"000" [CR]
response	Unacceptable	"101" [CR] When input is Video signal / No signal

8.5.8 CF_SETPCADJ Command

Command	"CF_SETPCADJ_%1" [CR]			
%1	None "EXT11-60"			
Details	Specifying se immediately in these comma ON status) • CF_F • CF_C • CF_L • CF_L • CF_L • CF_L	DOTS CLAMPPAHSE H-POS Y-POS DOTS DLINE 11"~"EXT60" is specified in %1, "Ex Mode" (not like XGA1) is		
Response	Acceptable	"000" [CR]		
p	Unacceptable	"101" [CR] When input is Video signal / No signal		

8.5.9 CF_ORGMODE Command

Command	"CF_ORGMODE_%1" [CR]	
%1	"VGA1" "VGA2" "XGA1" "WXGA3" "1080160" "1080150" "1080150" "720P60" "720P50" "575P" "480P"	nal is PC Analog;
Details	After "EXT n" is set by PC control command such as CF_FSYNC/CF_TDOTS and CF_SETPCADJ command, specify the signal originated with by issuing this command. This command is used to specify projector internal settings such as whether or not to get PC signal through IP (Available only in the normal Power ON status) Note; To differentiate between 60Hz and 50Hz in 1080i and 720p, "60" or "50" is necessary to add to the parameter in this command.	
Response	Acceptable	"000" [CR]
	Unacceptable	"101" [CR] When Input is other than PC Analog

8.5.10 CF_PCSTORE Command

Command	"CF_PCSTORE_%1" [CR]	
%1	"1" Store current value of PC Adjust to Mode1 "2" Store current value of PC Adjust to Mode2 "3" Store current value of PC Adjust to Mode3 "4" Store current value of PC Adjust to Mode4 "5" Store current value of PC Adjust to Mode5 "6" Store current value of PC Adjust to Mode6 "7" Store current value of PC Adjust to Mode7 "8" Store current value of PC Adjust to Mode8 "9" Store current value of PC Adjust to Mode9 "10" Store current value of PC Adjust to Mode10	
Details	Store current value of PC Adjust (each parameter status such as Total dots) to Mode1-10. This command operates the same way as storing to Mode1-10 in PC Adjust Menu. (Available only in the normal Power ON status)	
Response	Acceptable	"000" [CR]
. teeponoo	Unacceptable	"101" [CR] When input is Video signal / No signal

8.5.11 CF_PCMODEFREE Command

Command	"CF_PCMODEFREE_%1" [CR]	
%1	"1" Set Mode1 to Free status "2" Set Mode2 to Free status "3" Set Mode3 to Free status "4" Set Mode4 to Free status "5" Set Mode5 to Free status "6" Set Mode6 to Free status "7" Set Mode7 to Free status "8" Set Mode8 to Free status "9" Set Mode9 to Free status "10" Set Mode10 to Free status	
Details	Delete the data registered in Custom Mode1–10 and returns it to Free status. This command operates the same way as storing to Mode1-10 in PC Adjust Menu. (Available only in the normal Power ON status)	
Response	Acceptable	"000" [CR]
, tooponoc	Unacceptable	"101" [CR] When input is Video signal / No signal

8.6 Input Control Command

8.6.1 CF_INPUT Command

Command	"CF_INPUT_%1" [CR]	
%1	"1"	
Details	Select Input (Available only in the normal Power ON status) This command switches only Input No, not Source. For instance, when Input 1 has been selected, receiving the command to select Input 1 does not invoke source-switching operation. That means it operates differently from "INPUT" button of Projector or Remote Control. *When selecting Input4 on a projector with PJ-Net unattached, it comes to "103". *When selecting Input4 on a projector with PJ-Net attached and power OFF, It comes to "101".	
Response	Acceptable	"000" [CR]
Тесропос	Unacceptable	"Error Code" [CR]

8.6.2 CF_SOURCE Command

Command	"CF_SOURCE_%1" [CR]	
	Input 1	"HDMI" Select HDMI Input "ANALOG" Select Analog Input "SCART" Select Scart Input "UP" Select in Analog -> Scart -> HDMI -> Analog order "DN" Select in Analog -> HDMI -> Scart -> Analog order
%1	Input 2	"VIDEO"
	Input 3	"VIDEO"Select Composite Video input "S-VIDEO" Select S-Video input "UP" Select in Video -> S-Video ->Video order "DN" Select in S-Video -> Video -> S-Video order
	Input 4	"NETWORK", "UP", "DN" *Input can not be selected, but above parameter is processed as Acceptable.
Details	Select Source of currently selected Input (Available only in the normal Power ON status) When selected input does not include specified %1, error code "101" is returned and it is not executed. When Input No is 4 and PJ-Net power is OFF, error code "101" is returned.	
Response	Acceptable	"000" [CR]
recoporise	Unacceptable	"Error Code" [CR]

8.6.3 CF_INPUT 1 Command

Command	"CF_INPUT1_%1" [CR]	
%1	"HDMI" Select HDMI Input "ANALOG" Select PC Analog Input "SCART" Select SCART Input	
Details	Select Input 1 as well as Source specified in %1 (Available only in the normal Power ON status)	
Response	Acceptable	"000" [CR]
Теоропос	Unacceptable	"Error Code" [CR]

8.6.4 CF_INPUT 2 Command

Command	"CF_INPUT2_%1" [CR]	
%1	"VIDEO" Select Composite Video Input "YPBPR" Select Y,Pb/Cb,Pr/Cr Input "YCBCR" Select Y,Pb/Cb,Pr/Cr Input "ANALOG" Select RGB Input	
Details	Select Input 2 as well as Source specified in %1. (Available only in the normal Power ON status)	
Response	Acceptable	"000" [CR]
Теоропос	Unacceptable	"Error Code" [CR]

8.6.5 CF_INPUT 3 Command

Command	"CF_INPUT3_%1" [CR]	
%1	"VIDEO" Select Composite Video Input "S-VIDEO" Select S-Video Input	
Details	Select Input 3 as well as Source specified in %1. (Available only in the normal Power ON status)	
Response	Acceptable	"000" [CR]
Тооролю	Unacceptable	"Error Code" [CR]

8.6.6 CF_INPUT 4 Command

Command	"CF_INPUT4_%1" [CR]	
%1	"NETWORK" Select input from PJ-Net	
Details	Select Input 4 as well as Source specified in %1. (Available only in the normal Power ON status) *With PJ-Net unattached, this command is invalid and error code "103" is returned. *With PJ-Net attached and the power OFF, error code "101" is returned.	
Response	Acceptable	"000" [CR]
Теоропос	Unacceptable	"Error Code" [CR]

8.6.7 CF_SYSTEM Command

Command	"CF_SYSTEM_%"	1" [CR]
		"VGA1" Select VGA1 "VGA2" Select VGA2
		: "XGA1" Select XGA1 :
	Input is PC Analog	: "WXGA3"
		* EXT1-10 is not set.
%1	Input is HDMI	"D-XGA1"
	Input is Y,Pb/Cb,Pr/Cr	"AUTO"
	Input is Video / S-Video	"AUTO"
Details	Select System of currently selected Input (Available only in the normal Power ON status) When selected input does not include specified %1, error code "101" [CR] is returned and it is not executed. When Input No is 4, error code "101" [CR] is returned and it is not executed.	
Doggana	Acceptable	"000" [CR]
Response	Unacceptable	"Error Code" [CR]

8.7 Screen Control Command

8.7.1 CF_SCREEN Command

Command	"CF_SCREEN_%1" [CR]		
%1	Input is Compu	"NORMAL"	
701	Input is Video	"NORMAL"	
Details	Select screen size (Available only in the normal Power ON status) When selected input does not include specified %1, error code "101" [CR] is returned and it is not executed. Receiving "DZOOM_UP" or "DZOOM_DN" command immediately executes the function.		
Response	Acceptable	"000" [CR]	
	Unacceptable	"Error Code" [CR]	

8.7.2 CF_DZCENT Command

		-		
	Command	"CF_DZCENT_%1"[CR] "CENT" Cancel Digital Zoom (CENT : "CENTER")		
	%1			
	Details	Cancel Digital Zoom (Available only in the normal Power ON status and Input for Computer is selected)		
	Response	Acceptable	"000"[CR]	
		Unacceptable	"101"[CR] when Input for Video is selected	

8.7.3 CF_CEIL Command

Command	"CF_CEIL_%1" [CR]	
%1	"ON" Set Ceiling to ON. "OFF" Set Ceiling to OFF. Set/Cancel Ceiling mode.(Available only in the normal Power ON status) The status set by this command is stored in EEPROM and setting remains effective even after the power is turned to ALL OFF status.	
Details		
Response	Acceptable "000" [CR]	
Тооронос	Unacceptable	"Error Code" [CR]

8.7.4 CF_REAR Command

Command	"CF_REAR_%1" [CR]	
%1	"ON" Set Rear to ON. "OFF" Set Rear to OFF. Set/Cancel Rear mode (Available only in the normal Power ON status) When Rear is ON, projected image is left/right reversed. The status set by this command is stored in EEPROM and setting remains effective even after the power is turned to ALL OFF status.	
Details		
Response Acceptable "000" [CR]		"000" [CR]
, tooponoo	Unacceptable	"Error Code" [CR]

8.7.5 CF_KEYSTONE Command

Command	"CF_KEYSTONE_%1"[CR]	
%1	"UP" Correct Keystone distortion to reduce upper part of image "FUP" Correct Keystone distortion to reduce upper part largely "DN" Correct Keystone distortion to reduce lower part of image "FDN" Correct Keystone distortion to reduce lower part largely "LEFT" Correct Keystone distortion to reduce left part of image "FLFT" Correct Keystone distortion to reduce left part largely "RIGHT" Correct Keystone distortion to reduce right part of image "FRGT" Correct Keystone distortion to reduce right part largely "RST" Reset Keystone to default status	
Details	Change Keystone distortion correction (Available only in the normal Power ON status) When reached the limit of the correction level, projector accepts the command but does not execute it. Receiving this command immediately invokes the operation. When trying to set the value beyond available range, error code "201" is returned and the operation is not executed. Example 1: When the correction level of the upper part has reached its upper limit and then the command "UP" is received. Example 2: When the upper part correction allows only another step, and then the command "FUP" is received.	
Response	Acceptable	"000"[CR]
response	Unacceptable	"Error Code" [CR]

8.7.6 CF_KYSTNMODE Command

Command	"CF_KYSTNMODE_%1"[CR]	
%1	"STR" Set Keystone store mode to Store "RST" Set Keystone store mode to Reset	
Details	Set Keystone store mode (Available only in the normal Power ON status)	
Response	Acceptable	"000"[CR]
	Unacceptable	"Error Code"[CR]

8.7.7 CF_VSCALE Command

Command	"CF_VSCALE_%1" [CR]	
%1	"032"	+31 +2 ±0 1 2
Details	Set Vscale (Available only in the normal Power ON status) * When selected screen mode is not "Custom", error code "101" [CR] is returned and it is not executed. * Error Code "101" [CR] is returned for no signal.	
Response	Acceptable	"000" [CR]
. 100001100	Unacceptable	"Error Code" [CR]

8.7.8 CF_VPOS Command

Command	"CF_VPOS_%"	i" [CR]
%1	"015"	+14 +2 ±0
Details	Set V Position (Available only in the normal Power ON status) * When selected screen mode is not "Custom", error code "101" [CR] is returned and it is not executed. * Error Code "101" [CR] is returned for no signal.	
Response	Acceptable	"000" [CR]
. 100001100	Unacceptable	"Error Code" [CR]

8.7.9 CF_HSCALE Command

Command	"CF_HSCALE_%1" [CR]	
%1	"032"	+31 +2 ±0 1 2
Details	Set Hscale (Available only in the normal Power ON status) * When selected screen mode is not "Custom", error code "101" [CR] is returned and it is not executed. * Error Code "101" [CR] is returned for no signal.	
Response	Acceptable	"000" [CR]
. 133901100	Unacceptable	"Error Code" [CR]

8.7.10 CF_HPOS Command

Command	"CF_HPOS_%"	i" [CR]
%1	"015"	+14 +2 +1 ±0 1 2
Details	Set H Position (Available only in the normal Power ON status) * When selected screen mode is not "Custom", error code "101" [CR] is returned and it is not executed. * Error Code "101" [CR] is returned for no signal.	
Response	Acceptable	"000" [CR]
. 100001100	Unacceptable	"Error Code" [CR]

8.8 Lamp Command

8.8.1 CF_LAMPMODE Command

Command	"CF_LAMPMODE_%1" [CR]	
%1	"AUTO1"	
Details	Select Lamp control (Available only in the normal Power ON status) The value set by this command is stored in EEPROM and the setting remains effective after the power is turned to ALL OFF status.	
Response	Acceptable	"000" [CR]
recoporise	Unacceptable	"Error Code" [CR]

8.8.2 CF_LAMPCONTRL Command

Command	"CF_LAMPCONTROL_%1" [CR]	
%1	"LAMP1" "LAMP2" "CHANGE"	Set lamp mode to Lamp2
Details	Select Lamp mode. (Valid only when in the normal Power ON status.) The value set by this command is stored in EEPROM and the setting remains effective after the power is turned to ALL OFF status.	
Response	Acceptable	"000" [CR]
1.00001100	Unacceptable	"Error Code" [CR]

8.8.3 CF_LAMPLIFECONTRL Command

Command	"CF_LAMPLIFECONTROL_%1" [CR]	
%1	"MODE1" "MODE2"	a at the property of the same
Details	Select Lamp life control (Valid only when in the normal Power ON status.) The value set by this command is stored in EEPROM and the setting remains effective after the power is turned to ALL OFF status.	
Response	Acceptable	"000" [CR]
1 (CCPONICC	Unacceptable	"Error Code" [CR]

8.8.4 CF_LAMPCHGTIM Command

Command	"CF_LAMPCHGTIM_%1" [CR]	
%1	"ON" Set Timer to On "OFF" Set Timer to Off	
Details	Select Timer for Lamp1/2 of Lamp mode. (Valid only when in the normal Power ON status.) *When Lamp mode is not set to Lamp1/2, error code "101" is returned.	
Response	Acceptable	"000" [CR]
Тооролоо	Unacceptable	"Error Code" [CR]

8.8.5 CF_LAMPCHGSTA Command

Command	"CF_LAMPCHGSTA_%1" [CR]	
%1	"00"-"24"	Set Start time of Timer
Details	Set Start time of Timer for Lamp1/2 of Lamp mode. (Valid only when in the normal Power ON status.) *When Lamp mode is not set to Lamp1/2, error code "101" is returned.	
Response	Acceptable	"000" [CR]
Тобронос	Unacceptable	"Error Code" [CR]

8.8.6 CF_LAMPINTERVAL Command

Command	"CF_LAMPINTERVAL_%1" [CR]	
%1	"01"-"24" Set Start time of Interval	
Details	Select Lamp interval. (Valid only when in the normal Power ON status.) *When Lamp mode is not set to Lamp1/2, error code "101" is returned.	
Response	Acceptable	"000" [CR]
Response	Unacceptable	"Error Code" [CR]

8.9 Sound Command

8.9.1 CF_VOLUME Command

Command	"CF_VOLUME_%1"[CR]		
%1	"000-063" Directly select Volume setting value "UP" Current Volume setting value +1 "DN" Current Volume setting value -1		
Details	Control level of volume. (Available only in the normal Power ON status) Set Volume Up/Down the same way as remote control and also directly select Volume setting value. When setting Volume value, the Sound Mute ON status is canceled just like RC operation. The value set by this command is stored in Projector.		
Response	Acceptable	"000"[CR]	
	Unacceptable	"Error Code"[CR]	

8.9.2 CF_MUTE Command

Command	"CF_MUTE_%1"[CR]		
%1	"ON" Set Sound Mute ON "OFF" Set Sound Mute OFF		
Details	Control Sound Mute ON/OFF (Available only in the normal Power ON status)		
Response	Acceptable	"000"[CR]	
	Unacceptable	"Error Code"[CR]	

8.10 Setting Command

8.10.1 CF_LANG Command

Command	"CF_LANG_%1" [CR]	
%1	"ENG" Select ENGLISH "DEU" Select German "FRA" Select French "ITA" Select Italian "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 language for OSD (Available only in the normal Power ON status) The language set by this command is stored in EEPROM and setting remains effective even after the power is turned to ALL OFF status.	
Response	Acceptable	"000" [CR]
	Unacceptable	"Error Code" [CR]

8.10.2 CF_LOGO Command

Command	"CF_LOGO_%1_%2" [CR]	
%1	"0000 – 9999"	Directly set Logo PIN code
%2	"DFLT" "USER"S	Cancel Logo displaySelect Logo of Factory DefaultSelect User elect functions to choose forward (OFF→DFLT→USER→OFF→) lect functions to choose backward(OFF→USER→DFLT→OFF→)
Details	"DN"Select functions to choose backward(OFF→USER→DFLT→OFF→) Set Logo mode.(Available only in the normal Power ON status) The status set by this command is stored in EEPROM and setting remains effective even after the power is turned to ALL OFF status. Set Logo PIN code in %1. When Logo Lock is enabled: PIN code is matched	
Response	Acceptable	"000" [CR]
ТСОРОПОС	Unacceptable	"Error Code" [CR]

8.10.3 CF_PIP Command

Command	"CF_PIP_%1" [CR]	
%1	"PINP" "PBYP"Se	Select OffSelect P in P modeSelect P by P mode elect functions to choose forward (OFF→P in P→P by P→OFF→) tinnctions to choose backward(P by P→P in P→OFF→P by P→)
Details	Set status of Picture in Picture.(Available only in the normal Power ON status) The status set by this command is stored in EEPROM and setting remains effective even after the power is turned to ALL OFF status.	
Response	Acceptable	"000" [CR]
Теоропос	Unacceptable	"Error Code" [CR]

8.10.4 CF_PIPSIZE Command

Command	"CF_PIPSIZE_%1" [CR]	
%1	"MIDDLE" "LARGE" "UP"Selec	
Details	Set screen size of Picture in Picture. (Available only in the normal Power ON status) *When P in P is not selected, error code "101" is returned.	
Response	Acceptable	"000" [CR]
1 (COPOTION	Unacceptable	"Error Code" [CR]

8.10.5 CF_PIPPOSITION Command

Command	"CF_PIPPOSITION_%1" [CR]		
%1	"BTMRIGHT"		
Details	Set position of Picture in Picture. (Available only in the normal Power ON status) *When P in P is not selected, error code "101" is returned.		
Response	Acceptable	"000" [CR]	
Поэропае	Unacceptable	"Error Code" [CR]	

8.10.6 CF_BACKGND Command

Command	"CF_BACKGND_%1" [CR]	
%1	"BLUE" Select Blue Back "USER" Select User "BLACK" Select Black Back "UP" Switch forward (Blue Back→User→Black Back→Blue Back) "DN" Switch backward (Blue Back→Black Back→User→Blue Back)	
Details	Set Screen status for no signal.(Available only in the normal Power ON status) The status set by this command is stored in EEPROM and the setting remains even after the power is turned to ALL OFF status. *When %1="USER" is received, error code "101" is returned, in the case of Capture non-practice.	
Response	Acceptable	"000" [CR]
Посропос	Unacceptable	"Error Code" [CR]

8.10.7 CF_FILCTL Command

Command	"CF_FILCTL_%1" [CR]	
%1	"ROLL" Execute operation of scroll of filter	
Details	Execute operation of scroll of filter	
Dooponoo	Acceptable	Acceptable
Response	Unacceptable	Unacceptable

8.10.8 CF_POINTER Command

Command	"CF_POINTER_%1_%2"[CR]	
%1	"ARROW" "FINGER"	Select Spotlight Select Arrow Select Finger Select Laser mark
%2	"MAX" Spotlight Large "MID" Spotlight Medium "MIN Spotlight Small	
Details	Select Pointer display. (Available only in the normal Power ON status) Note1) %2 is valid only when "SPOTLIGHT" is specified in %1. When "ARROW"/"FINGER"/"LASER" is specified in %1, the command should be "CF_POINTER_%1" [CR]. Note2) When "SPOTLIGHT" is specified in %1, %2 cannot be omitted.	
Response	Acceptable	"000"[CR]
1 (CCPOIICC	Unacceptable	"Error Code" [CR]

8.10.9 CF_RCODE Command

Command	"CF_RCODE_%1" [CR]	
%1	"001" ——————————————————————————————————	
Details	Select Code of Remote Control (Available only in the normal Power ON status) The status set by this command is stored in EEPROM and setting remains effective even after the power is turned to ALL OFF status.	
Response	Acceptable	"000" [CR]
. 133901100	Unacceptable	"Error Code" [CR]

8.10.10 CF_RCSENSOR Command

Command	"CF_RCSENSOR_%1" [CR]	
%1	"FRONTTOP" "BACKTOP" "FRONTBACK" "FRONT" "TOP" "BACK"	Select all receiver of projector Select both front and top receiver of projector Select both back and top receiver of projector Select both front and back receiver of projector Select only front receiver of projector Select only top receiver of projector Select only back receiver of projector Switch forward (ALL → FRONTTOP→BACKTOP→FRONTBACK→ALL) Switch backward (BACK →TOP→FRONT→FRONTBACK→BACKTOP→FRONTTOP→ALL→BACK)
Details	Select location of infrared remote receiver of remote control (Available only in the normal Power ON status) The status set by this command is stored in EEPROM and setting remains effective even after the power is turned to ALL OFF status.	
Response	Acceptable	"000" [CR]
Посропос	Unacceptable	"Error Code" [CR]

8.10.11 CF_DISP Command

Command	"CF_DISP_%1" [CR]	
%1	"CNTDWNOFF "OFF" "UP"	Set Display to ON " Set Display to Count down Off Set Display to OFF Switch forward (On \rightarrow Count down Off \rightarrow Off \rightarrow On \rightarrow) Switch backward (On \rightarrow Off \rightarrow Count down Off \rightarrow On \rightarrow)
Details	Set/Cancel Display. (Valid only when in the normal Power ON status.) The value set by this command is stored in EEPROM and the setting remains effective after the power is turned to ALL OFF status.	
Response	Acceptable	"000" [CR]
ccponoo	Unacceptable	"Error Code" [CR]

8.10.12 CF_STANDBYMODE Command

Command	"CF_STANDBYMODE_%1"[CR]	
%1	"ECO" Less standby electricity "NORMAL" Normal standby electricity	
Details	Switch Standby Mode setting. This command is available in normal Power ON status.	
Response	Acceptable	"000"[CR]
recoporise	Unacceptable	"Error Code"[CR]

8.10.13 CF_P-MANE Command

Command	"CF_P-MANE_%1" [CR]	
%1	"OFF"	
Details	Set/Cancel Power Management (Available only in the normal Power ON status) The status set by this command is stored in EEPROM and setting remains effective even after the power is turned to ALL OFF status.	
Response	Acceptable "000" [CR]	
receponde	Unacceptable	"Error Code" [CR]

8.10.14 CF_P-MANETIME Command

Command	"CF_P-MANETIME_%1" [CR]	
%1	"01" - "30" Directly specify setting time by the minute "UP" Increment value by 1 (Switched in $01 \rightarrow 02 \rightarrow \rightarrow 30 \rightarrow 01$ order) "DN" Decrement value by 1(Switched in $30 \rightarrow 29 \rightarrow \rightarrow 01 \rightarrow 30$ order)	
Details	Set time of Power Management time (Available only in the normal Power ON status) The status set by this command is stored in EEPROM and setting remains effective even after the power is turned to ALL OFF status.	
Response	Acceptable "000" [CR]	
1 (Copolido	Unacceptable	"Error Code" [CR]

8.10.15 CF_ON-STA Command

Command	"CF_ON-STA_%1" [CR]	
%1	"ON" Set Power On Start to ON. "OFF" Set Power On Start to OFF. "UP" Toggle between ON and OFF.(On→Off→On →) "DN" Toggle between ON and OFF.(On→Off→On →) *"UP" and "DN" are exactly same operation.	
Details	Set/Cancel Power ON Start (Available only in the normal Power ON status) The status set by this command is stored in EEPROM and setting value remains effective even after the power is turned to ALL OFF status.	
Response	Acceptable	"000" [CR]
recoporise	Unacceptable	"Error Code" [CR]

8.10.16 CF_FANSPEED Command

Command	"CF_FANSPEED_%1" [CR]	
%1	"MAX" Select maximum fan speed "NOR" Select normal fan speed	
Details	Switch Fan Control Speed mode.(Available only in the normal Power ON status) The status set by this command is stored in EEPROM and setting remains effective even after the power is turned to ALL OFF status.	
Response	Acceptable "000" [CR]	
response	Unacceptable	"Error Code" [CR]

8.10.17 CF_SLANT Command

Command	"CF_HIGHLAND_%1"[CR]	
%1	"CFF" Install a projector at L3 degree angle in front projection, or at L4 degree angle in ceiling projection "L1" Slant a projector at L1 degree angle "L2" Slant a projector at L2 degree angle "L3" Install a projector at L3 degree angle in Ceiling projection "L4" Install a projector at L4 degree angle in front projection "UP" Switch forward (Off -> L1 -> L2 -> L3 -> L4 -> Off) "DN" Switch backward (Off -> L4 -> L3 -> L2 -> L1 -> Off)	
Details	Switch slant of the projector installed. (Available only in the normal Power ON status) The status set by this command is stored in EEPROM and its setting is effective after ALL is OFF.	
Response	Acceptable	"000"[CR]
recponde	Unacceptable	"Error Code"[CR]

8.10.18 CF_SHUTRCPROT Command

Command	"CF_SHUTRCPROT_%1" [CR]	
%1	"ON" Disable RC key from controlling Shutter (Protection On) "OFF" Enable RC key to control Shutter (Protection Off)	
Details	Set valid / invalid of RC use on Shutter control function (Valid only when in the normal Power ON status)	
Response	Acceptable	"000" [CR]
Теоропос	Unacceptable	"Error Code" [CR]

8.10.19 CF_SHUTKEYPROT Command

Command	"CF_SHUTKEYPROT_%1" [CR]	
%1	"ON" Disable key on the top panel from controlling Shutter (Protection On) "OFF" Enable key on the top panel to control Shutter (Protection Off)	
Details	Set valid / invalid use of key on the top panel on Shutter control function. (Valid only when in the normal Power ON status)	
Response	Acceptable	"000" [CR]
Тобронос	Unacceptable	"Error Code" [CR]

8.10.20 CF_SHUTH Command

Command	"CF_SHUTH_%1" [CR]	
%1	"005"-"180"Specify setting time directly "UP" Add 1 minute "DN"Decrease 1 minute	
Details	Set time of operating shutter management function. (Valid only when in the normal Power ON status) The status set by this command is stored in EEPROM and setting remains effective even after the power is turned to ALL OFF status.	
Response	Acceptable	"000" [CR]
esponeo	Unacceptable	"Error Code" [CR]

8.10.21 CF_HDMI SETUP Command

Command	"CF_HDMISETUP_%1"[CR]	
%1		Select Normal Select Enhanced
Details	Set status of HDMI setup - Image. (Valid only when in the normal Power ON status) The status set by this command is stored in EEPROM and setting remains effective even after the power is turned to ALL OFF status.	
Response	Acceptable	"000" [CR]
reopenee	Unacceptable	"Error Code" [CR]

8.10.22 CF_HDMI SOUND Command

Command	"CF_HDMISETUP_%1"[CR]	
%1		Set PCM Input(Digital sound)Set external sound input
Details	Set status of HDMI setup – Sound. (Valid only when in the normal Power ON status) The status set by this command is stored in EEPROM and setting remains effective even after the power is turned to ALL OFF status.	
Response	Acceptable	"000" [CR]
Теоропос	Unacceptable	"Error Code" [CR]

8.10.23 CF_PJPINCODE Command

Command	"CF_PJPINCODE_%1" [CR]	
%1	"0000 – 9999" -	Directly specify PJ PIN code
Details	(Available only PIN code can r *When PIN code is n PIN code is n PIN code is b When PIN code is when PIN code is when PIN code is code after Pow	to cancel PIN code lock in the normal Power ON status) not be changed. (Only PIN code lock is canceled.) le Lock is enabled: matched
Response	Acceptable	"000" [CR]
Тосропос	Unacceptable	"Error Code" [CR]

8.10.24 CF_KEYDIS Command

Command	"CF_KEYDIS_%1" [CR]	
%1	"NONE" RC & Projector keys are valid (All are valid) "RCALL" All RC keys are invalid "RCPART" Specific RC keys are invalid "KEYALL" All projector keys are invalid "KEYPART" Specific projector keys are invalid	
Details	Set a ban on the use of RC keys/ projector keys (Available only in the normal Power ON status)	
Response	Acceptable	"000" [CR]
. teaponed	Unacceptable	"Error Code" [CR]

8.10.25 CF_TESTPAT Command

Command	"CF_TESTPAT_%1" [CR]		
%1	"GRAD1" "GRAD2" "GRAD4" "WHITE" "BALCK" "CROSS" "OFF"	Display Color bar Display 16step(white→black) Display 16step(white←black) Display 16step(white↓black) Display 16step(white↑black) Display 16step(white↑black) Display all white Display all black Display Cross Do not show test pattern display Switch backward	
Details	Execute test pattern display.(Available only in the normal Power ON status)		
Response	Acceptable	"000" [CR]	
recoporio	Unacceptable	"Error Code" [CR]	

8.10.26 CF_FILH Command

Command	"CF_FILH_%1" [CR]	
%1	"RST" Reset Filter used time	
Details	Reset used time for filter of projector	
Response	Acceptable	"000" [CR]
Посропос	Unacceptable	"Error Code" [CR]

8.10.27 CF_FILTIMER Command

Command	"CF_FILTIMER_%1" [CR]	
%1	"0400" Set 400 hours "0700" Set 700 hours "1000" Set 1000 hours "OFF" Set Off(Do not warning display)	
Details	Set time to display Filter cleaning / replacement warning on screen	
Response	Acceptable	"000" [CR]
Теоропос	Unacceptable	"Error Code" [CR]

8.10.28 CF_FILSCRL Command

Command	"CF_FILSCRL_%1" [CR]	
%1	"RST" Reset Filter scroll counter	
Details	Reset Filter scroll counter	
Doctoreo	Acceptable	Acceptable
Response	Unacceptable	"Error Code" [CR]

8.10.29 CF_ FDEFAULT Command

Command	"CF_FDEFAULT_%1" [CR]	
%1	"RST"	
Details	Reset to Factory Default setting (Available only in the normal Power ON status)	
Response	Acceptable	"000" [CR]
Теоропос	Unacceptable	"Error Code" [CR]

8.11 Other Commands

8.11.1 CF_KEYEMU Command

Command	"CF_KEYEMU_%1" [CR]	
%1	"LEFT" "UP" "DN" "SELECT"	Move Pointer rightward in On-Screen Display Menu Move Pointer leftward in On-Screen Display Menu Move Pointer to upward On-Screen Display Menu Move Pointer to downward in On-Screen Display Menu The same operation as "SELECT" button of RC Execute Auto PC Adj. operation
Details	The same operation as Control Key. Auto PC Adj. operation is not stopped before getting back a return value during this Auto PC Adj. operation even if this command is received again.	
Response	Acceptable	"000" [CR]
Теоропос	Unacceptable	"Error Code" [CR]

8.11.2 CF_MENU Command

Command	"CF_MENU_%1" [CR]	
%1	"ON" Display On-Screen Display Menu "OFF" Hide On-Screen Display Menu	
Details	Set On-Screen Display mode. (Available only in the normal Power ON status)	
Response	Acceptable	"000" [CR]
Теоропос	Unacceptable	"Error Code" [CR]

8.11.3 CF_POWER Command

Command	"CF_POWER_%1" [CR]	
%1	"ON" Power ON "OFF" Power OFF * Issuing another command during countdown process forced countdown operation to be terminated. * Error Code is returned in some projector statuses, which indicates the command is impossible to be executed. (See [8.3] for details) * Returning the response "000" [CR] (acceptable) does not always mean that the status has already changed to Power ON. Example: When the temperature approaches abnormal status after returning "000" [CR] to the command CF_POWER ON. Therefore, to get the projector status requires using Status Read command.	
Details	Set Power to ON/OFF	
Response	Acceptable	"000" [CR]
Посропос	Unacceptable	"Error Code" [CR]

8.11.4 CF_FREEZE Command

Command	"CF_FREEZE_%1" [CR]	
%1	"OFF" "UP" "DN"	
Details	Set / Cancel Freeze function. (Available only in the normal Power ON status) Receiving FREEZE_ON command when the projector is Freeze enabled, Freeze status is kept.	
Response	Acceptable "000" [CR]	
Теоропос	Unacceptable	"Error Code" [CR]

8.11.5 CF_VMUTE Command

Command	"CF_VMUTE_%1" [CR]	
%1	"ON" Set Video Mute to ON (Shutter Close). "OFF" Set Video Mute to OFF (Shutter Open).	
Details	ON / OFF Video Mute function. (Available only in the normal Power ON status)	
Response	Acceptable	"000" [CR]
recoponice	Unacceptable	"Error Code" [CR]

9. Status Read Command

9.1 Format

1) PC issues commands in format as below:

Command: String

2) When projector receives the appropriate command, it returns the required data as a string.

%1: Required Data (String)

3) When the received data cannot be decoded, the projector returns "?" [CR]

9.2 Transfer Example

Get total dots of projector by Expand Serial Commands

PC
$$\rightarrow$$
 PJ: "CR_TDOTS" [CR]
PC \leftarrow PJ: "000_1344" [CR]

9.3 Operation Condition

- 1) Basically it should be always operated.
- When Standby mode of Setting menu is set to Eco and Projector status is Standby mode, Status Read Commands are invalid.

9.4 Image Status Read Command

9.4.1 CR_BRIGHT Command

Command	"CR_BRIGHT" [CR]	
Details	Get user controlled value of Brightness	
	Acceptable	"000_%1" [CR]
Response	%1	"000 – 063"
	Unacceptable	"Error code" [CR]

9.4.2 CR_CONT Command

Command	"CR_CONT" [CR]	
Details	Get user controlled value of Contrast	
Response	Acceptable	"000_%1" [CR]
	%1	"000 – 063"
	Unacceptable	"Error code" [CR]

9.4.3 CR_COLOR Command

Command	"CR_COLOR" [CR]	
Details	Get user controlled value of Color	
	Acceptable	"000_%1" [CR]
Response	%1	"000 – 063"
	Unacceptable	"Error code" [CR]

9.4.4 CR_TINT Command

Command	"CR_TINT" [CR]	
Details	Get user controlled value of Tint	
	Acceptable	"000_%1" [CR]
Doononoo	%1	"000 – 063"
Response	Unacceptable	"Error Code" [CR] When command is not available in the given condition (such as being selected input). "?" [CR] When unknown command is received

9.4.5 CR_SHARP Command

Command	"CR_SHARP" [CR]	
Details	Get user controlled value of Sharpness	
	Acceptable	"000_%1" [CR]
Response	%1	"000 – 015"
	Unacceptable	"Error code" [CR]

9.4.6 CR_GAMMA Command

Command	"CR_GAMMA" [CR]	
Details	Get user controlled value of Gamma	
	Acceptable	"000_%1" [CR]
Response	%1	"000 – 015"
	Unacceptable	"Error code" [CR]

9.4.7 CR_WBAL-R Command

Command	"CR WBAL-R" [CR]	
00111110110	011_11211	[,1]
Details	Get user controlled Red value of White Balance	
Response	Acceptable	"000_%1" [CR]
	%1	"000 – 063"
	Unacceptable	"Error code" [CR]

9.4.8 CR_WBAL-G Command

Command	"CR_WBAL-G" [CR]	
Details	Get user controlled Green value of White Balance	
	Acceptable	"000_%1" [CR]
Response	%1	"000 – 063"
	Unacceptable	"Error code" [CR]

9.4.9 CR_WBAL-B Command

Command	"CR_WBAL-B" [CR]	
Details	Get user controlled Blue value of White Balance	
	Acceptable	"000_%1" [CR]
Response	%1	"000 – 063"
	Unacceptable	"Error code" [CR]

9.4.10 CR_COLTEMP Command

Command	"CR_COLTEMP" [CR]	
Details	Get Color Temperature setting status	
	Acceptable	"000_%1" [CR]
Response	%1	"000" Xlow "001" Low "002" Mid "003" High "BLANK" Processing adjusting White Balance (Neither of Xlow / Low / Mid / High)
	Unacceptable	"Error code" [CR]

9.4.11 CR_NZRED Command

Command	"CR_NZRED" [CR]	
Details	Get Noise Reduction setting status	
	Acceptable	"000_%1" [CR]
Response	%1	"OFF" Noise Reduction OFF "L1" Noise Reduction L1 "L2" Noise Reduction L2
	Unacceptable	"Error code" [CR]

9.4.12 CR_PROGV Command

Command	"CR_PROGV" [CR]	
Details	Get Progressive scan setting status	
	Acceptable	"000_%1" [CR]
Response	%1	"OFF" Progressive scan OFF "L1" Progressive Mode L1 (for moving image) "L2" Progressive Mode L2 (for still image) "FILM" Progressive Model FILM
	Unacceptable	"Error code" [CR]

9.4.13 CR_IMAGE Command

Command	"CR_IMAGE" [CR]	
Details	Get image setting status	
	Acceptable	"000_%1" [CR]
Response	%1	"DYNAMIC" Dynamic "STAND" Standard "REAL" Real "CINEMA" Cinema "CUSTOM1"~"CUSTOM4" Image1~4
	Unacceptable	"Error Code" [CR] When the command is invalid due to condition such as Input source "?" [CR] When unclear command is received

EIKI LC-WGC500A/LC-WGC500AL Expand Serial Command Functional Specifications

9.4.14 CR_IMGGMD Command

Command	"CR_IMGGMD" [CR]	
Details	Get setting status of Dynamic/Standard/Real/Cinema in Image Gamma	
	Acceptable	"000_%1" [CR]
Response	%1	"DYN" Dynamic "STD" Standard "REL" Real "CNM" Cinema
	Unacceptable	"Error code" [CR]

9.5 PC Adjust Status Read Command

9.5.1 CR_FSYNC Command

Command	"CR_FSYNC" [CR]	
Details	Get value of Fine Sync	
Response	Acceptable	"000_%1" [CR]
	%1	"0000 – 0031"
	Unacceptable	"Error Code" [CR] When command is not available in the given condition (such as being selected input) "?" [CR] When unknown command is received

9.5.2 CR_TDOTS Command

Command	"CR_TDOTS" [CR]	
Details	Get value of Total Dots	
	Acceptable	"000_%1" [CR]
Response	%1	"mmmm" – "nnnn" (mmmm = Display area H + Position H) (nnnn = Maximum value less than 140 MHz of Dot Clock)
	Unacceptable	"Error Code" [CR] When command is not available in the given condition (such as being selected input "?" [CR] When unknown command is received

9.5.3 CR_CLPPHASE Command

Command	"CR_CLPPHASE" [CR]	
Details	Get value of Clamp Phase value	
Response	Acceptable	"000_%1" [CR]
	%1	"0001"~"nnnn" ("nnnn" depends on input signal)
	Unacceptable	"Error Code" [CR]

9.5.4 CR_H-POS Command

Command	"CR_H-POS" [CR]	
Details	Get value of Horizontal Position	
	Acceptable	"000_%1" [CR]
Response	%1	"0000 – nnnn" (nnnn = Total Dots – Display area H)
	Unacceptable	"Error Code" [CR] When command is not available in the given condition (such as being selected input "?" [CR] When unknown command is received

9.5.5 CR_V-POS Command

Command	"CR_V-POS" [CR]	
Details	Get value of Vertical Position	
Response	Acceptable	"000_%1" [CR]
	%1	"0000 – nnnn" (nnnn = Total Line – Display area V)
	Unacceptable	"Error Code" [CR] When command is not available in the given condition (such as being selected input "?" [CR] When unknown command is received

9.5.6 CR_DDOTS Command

Command	"CR_DDOTS" [CR]	
Details	Get value of Display Dots	
	Acceptable	"000_%1" [CR]
Response	%1	"0100 – nnnn" (nnnn = Total Dots – Position H)
	Unacceptable	"Error Code" [CR] When command is not available in the given condition (such as being selected input "?" [CR] When unknown command is received

9.5.7 CR_DLINE Command

Command	"CR_DLINE" [CR]	
Details	Get value of Display Line	
	Acceptable	"000_%1" [CR]
Response	%1	"0100 – nnnn" (nnnn = Total Line – Position V)
	Unacceptable	"Error Code" [CR] When command is not available in the given condition (such as being selected input) "?" [CR] When unknown command is received

9.5.8 CR_ORGMODE Command

Command	"CR_ORGMODE" [CR]	
Details	Get the original signal of current selected Mode that is set in PC Adj. When MODE1- 10 or EXT11-60 is not selected, get the current signal.	
	Acceptable	"000_%1" [CR]
Response	%1	When input signal is PC Analog; "VGA1"
	Unacceptable	"Error code" [CR]

9.5.9 CR_PCSTORE Command

Command	"CR_PCSTORE" [CR]	
Details	Get Free or Stored status of MODE1 -10 in PC Adjust. Data consists of 10 bytes and each byte represents MODE1-10. (F:Free, S:Stored)	
	Acceptable	"000_%1" [CR]
Response	%1	"FFFFFFFF" ALL Free "SFFFFFFFF" Mode1 is Stored, others are Free : "FFFFFFFS" Mode10 is Stored, others are Free "SSSSSSSSS" ALL Stored
	Unacceptable	"Error code" [CR]

9.5.10 CR_SETPCADJ Command

Command	"CR_SETPCADJ" [CR]	
Details	Get PC signal for current system	
	Acceptable	"000_%1" [CR]
Response	%1	When input signal is PC Analog; "VGA1"
	Unacceptable	"Error code" [CR]

9.6 Video Status Read Command

9.6.1 CR_SERSYS Command

		
Command	"CR_SERSYS" [CR]	
Details	Get selected current signal. Auto detected signal is returned in Auto mode Only available when Input is Y,Pb/Cb,Pr/Cr, S-Video or Video. (This is not the case for PC-Analog/PC-Digital/AV HDCP signals)	
	Acceptable	"000_%1" [CR]
Response	%1	"1080I60"
	Unacceptable	"101" [CR] When input signal is PC-Analog, PC-Digital or PC signals in AV HDCP "?" [CR] When unknown command is received

9.7 Input Read Command

9.7.1 CR_INPUT Command

Command	"CR_INPUT" [CR]	
Details	Get selected INPUT No.	
Acceptable "000_%1" [CR]		"000_%1" [CR]
Response	%1	"1 – 4"
	Unacceptable	"Error code" [CR]

9.7.2 CR_SOURCE Command

Command	"CR_SOURCE" [CR]		
Details	Get selected se	Get selected source	
	Acceptable "000_%1" [CR]		
Response	%1	"HDMI" HDMI is selected "ANALOG" RGB (PC Analog) is selected "SCART" RGB (Scart) is selected "VIDEO" Video is selected "S-VIDEO" S-Video is selected "YPBPR" Y,Pb/Cb,Pr/Cr is selected "NETWORK" Network is selected	
	Unacceptable	"Error Code" [CR] When command is not available in the given condition (such as being selected input) "?" [CR] When unknown command is received	

9.7.3 CR_SRCINP1 Command

Command	"CR_SRCINP1" [CR]		
Details	Get Source of INPUT1		
Acceptable "000_%1" [CR]		"000_%1" [CR]	
Response	%1	"ANALOG" in PC Analog mode "SCART" in Scart mode "HDMI" in HDMI mode	
	Unacceptable	"Error code" [CR]	

9.7.4 CR_SRCINP2 Command

	-		
Command	"CR_SRCINP2" [CR]		
Details	Get Source of INPUT2		
	Acceptable	"000_%1" [CR]	
Response	%1	"VIDEO" in Video mode "YPBPR" in Y,Pb/Cb,Pr/Cr mode "ANALOG" in RGB mode	
	Unacceptable	"Error code" [CR]	

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9.7.5 CR_SRCINP3 Command

Command	"CR_SRCINP3" [CR]	
Details	Get Source of INPUT3	
	Acceptable	"000_%1" [CR]
Response	%1	"VIDEO" in Video mode "S-VIDEO" in S-Video mode
	Unacceptable	"Error code" [CR]

9.7.6 CR_SRCINP4 Command

Command	"CR_SRCINP4" [CR]		
Details	Get Source of INPUT4		
	Acceptable "000_%1" [CR]		
Dooponoo	%1	"NETWORK" With PJ-Net attached and the power ON	
Response	Unacceptable	"101" [CR] With PJ-Net attached and the power OFF "103" [CR] With PJ-Net unattached "?" [CR] When unknown command is received.	

9.7.7 CR_SYSTEM Command

Command	"CR_SYSTEM" [CR]		
Details	Get selected System		
	Α	cceptable	"000_%1" [CR]
		Input is PC Analog	"VGA1" ————————————————————————————————————
Response	%1	Input is HDMI	"D-XGA1" indicates D-XGA1 is selected : "D-WXGA3" indicates D-WXGA3 is selected "D-1080l" indicates D-1080i is selected "D-1035l" indicates D-1035i is selected "D-720P" indicates D-720p is selected "D-7575P" indicates D-575p is selected "D-480P" indicates D-480p is selected "D-1080PSF/25" indicates D-1080psf/25 is selected "D-1080PSF/30" indicates D-1080psf/30 is selected *Error Code "101" [CR] is returned for no signal
		Input is Y,Pb/Cb,Pr/Cr	"AUTO" indicates Auto is selected "1080I" indicates 1080i is selected "1035I" indicates 1035i is selected "720P" indicates 720p is selected "575P" indicates 575p is selected "480P" indicates 480p is selected "575I" indicates 575i is selected "480I" indicates 480i is selected "480I" indicates 480i is selected " Selected System is returned, whether or not signal is coming.
		Input is Video or S-video	"AUTO" indicates Auto is selected "NTSC" indicates NTSC is selected "NTSC443" indicates NTSC4.43 is selected "PAL" indicates PAL is selected "SECAM" indicates SECAM is selected "PAL-M" indicates PAL-M is selected "PAL-N" indicates PAL-N is selected "Selected System is returned, whether or not signal is coming.
	Un	acceptable	"Error Code" [CR]

9.7.8 CR_SYSLIST Command

Command	"CR_SYSLIST" [CR]		
Details	Get possible systems for System list		
	Acceptable	"000_%1_%2%x" [CR]	
Response	%1	When Input is PC Analog: "XGA"	
	Unacceptable	"Error Code" [CR]	

9.7.9 CR_MODELIST Command

Command	"CR_MODELIST" [CR]	
Details	Get possible me	odes for Mode list
	Acceptable	"000_%1_%2%x" [CR]
Response	%1	Error Code "101" is returned except for PC-Analog and for no signal with PC-Analog Possible modes in Mode1-10 are returned when PC-Analog signal is coming. "MODE1" "MODE2" "MODE3" : "MODE8" "MODE8" "MODE9" "MODE10"
	Unacceptable	"Error Code" [CR]

9.7.10 CR_HMSLOT Command

Command	"CR_HMSLOT" [CR]	
Details	Get the total number of Input.	
	Acceptable	"000_%1" [CR]
Response	%1	"004" When PJ-Net is attached. "003" When PJ-Net is not attached.
	Unacceptable	"Error Code" [CR]

9.7.11 CR_NMSLOT1 Command

Command	"CR_NMSLOT1" [CR]		
Details	Get terminal information of Input1		
	Acceptable	"000_%1" [CR]	
Response	%1	"RGB"	
	Unacceptable	"Error Code" [CR]	

9.7.12 CR_NMSLOT2 Command

Command	"CR_NMSLOT2" [CR]		
Details	Get terminal information of Input2		
	Acceptable	"000_%1" [CR]	
Response	%1	"5BNC"	
	Unacceptable	"Error Code" [CR]	

9.7.13 CR_NMSLOT3 Command

Command	"CR_NMSLOT3" [CR]		
Details	Get terminal information of Input3		
	Acceptable	"000_%1" [CR]	
Response	%1	"VIDEO"	
	Unacceptable	"Error Code" [CR]	

9.7.14 CR_NMSLOT4 Command

Command	"CR_NMSLOT4" [CR]		
Details	Get terminal int	Get terminal information of Input4	
	Acceptable	"000_%1" [CR]	
Response	%1	"NETWORK" When PJ-Net is attached. *With PJ-Net unattached, this command is invalid and error code "103" is returned. *With PJ-Net attached and the power OFF, error code "101" is returned. *In models not supporting PJ-Net, error code "103" is returned.	
	Unacceptable	"Error Code" [CR]	

9.7.15 CR_IDSLOT1 Command

Command	"CR_IDSLOT1" [CR]	
Details	Get ID information of Input1. This command is to determine sources possible to input.	
	Acceptable	"000_%1" [CR]
Response	%1	"33" On-board (D-Sub + HDMI) Available source: ANALOG, SCART, HDMI
	Unacceptable	"Error Code" [CR]

9.7.16 CR_IDSLOT2 Command

Command	"CR_IDSLOT2" [CR]	
Details	Get ID information of Input2. This command is to determine sources possible to input.	
	Acceptable "000_%1" [CR]	
Response	%1	"41" On-board (5BNC) Available source: ANALOG, VIDEO, YPBPR
	Unacceptable	"Error Code" [CR]

9.7.17 CR_IDSLOT3 Command

Command	"CR_IDSLOT3" [CR]	
Details	Get ID information of Input3. This command is to determine sources possible to input.	
	Acceptable	"000_%1" [CR]
Response	%1	"53" On-board (3BNC and S-VIDEO) Available source: VIDEO, S-VIDEO
	Unacceptable	"Error Code" [CR]

9.7.18 CR_IDSLOT4 Command

_		
Command	"CR_IDSLOT4" [CR]	
Details	Get ID information of Input4. This command is to determine sources possible to input.	
	Acceptable	"000_%1" [CR]
Response	%1	"13" PJ-Net (Viewer capable) Available source: Network *With PJ-Net unattached, this command is invalid and error code "103" is returned. *With PJ-Net attached and the power OFF, error code "101" is returned. *In models not supporting PJ-Net, error code "103" is returned.
	Unacceptable	"Error Code" [CR]

9.8 Screen Status Read Command

9.8.1 CR_SCREEN Command

Command	"CR_SCREEN" [CR]	
Details	Get selected screen image size	
	Acceptable	"000_%1" [CR]
Response	%1	"NORMAL" Normal mode "ZOOM" Zoom mode "NATURAL" Natural wide mode "WIDE" Wide mode "FULL" Full mode "TRUE" True mode "CUSTOM" Custom mode
	Unacceptable	"Error Code" [CR] When command is not available in the given condition (such as being selected input). "?" [CR] When unknown command is received

9.8.2 CR_CEIL Command

Command	"CR_CEIL" [CR]	
Details	Get setting status of Ceiling	
	Acceptable	"000_%1" [CR]
Response	%1	"ON" Ceiling projection is enabled "OFF" Ceiling projection is disabled
	Unacceptable	"Error Code" [CR]

9.8.3 CR_REAR Command

Command	"CR_REAR" [CR]	
Details	Get setting status of Rear function	
Response	Acceptable	"000_%1" [CR]
	%1	"ON" Rear projection is enabled "OFF" Rear projection is disabled
	Unacceptable	"Error Code" [CR]

9.8.4 CR_ KYSTNMODE Command

Command	"CR_KYSTNMODE" [CR]	
Details	Get setting status of Keystone Store Mode	
	Acceptable	"000_%1" [CR]
Response	%1	"STR" Store mode is "Store" "RST" Store mode is "Reset"
	Unacceptable	"Error Code" [CR]

9.8.5 CR_VSCALE Command

Command	"CR_VSCALE" [CR]	
Details	Get setting status of V scale	
	Acceptable	"000_%1" [CR]
Response	%1	"-32"—"032"
	Unacceptable	"Error Code" [CR]

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9.8.6 CR_VPOS Command

Command	"CR_VPOS" [CR]	
Details	Get setting status of V Position	
Acceptable "000_%1" [CR]		"000_%1" [CR]
Response	%1	"-15"—"015"
	Unacceptable	"Error Code" [CR]

9.8.7 CR_HSCALE Command

Command	"CR_HSCALE" [CR]	
Details	Get setting status of H scale	
Acceptable "000_%1" [CR]		"000_%1" [CR]
Response	%1	"-32" <i>—</i> "032"
	Unacceptable	"Error Code" [CR]

9.8.8 CR_HPOS Command

Command	"CR_HPOS" [CR] Get setting status of H Position	
Details		
	Acceptable	"000_%1" [CR]
Response	%1	"-15"—"015"
	Unacceptable	"Error Code" [CR]

9.9 Lamp Status Read Command

9.9.1 CR_LAMPREPL Command

Command	"CR_LAMPREPL" [CR]	
Details	Get information	of Lamp Replacement time
	Acceptable	"000_%1" [CR]
Response	%1	"2Y" indicates over lamp replacement time "2N" indicates under lamp replacement time "2" means the number of lamps (2 lamp is used — "2") "Y"/"N" means if it is time to replace lamp or not. Example: "2Y" 2 lamps is used and it is over lamp replacement time
	Unacceptable	"Error Code" [CR]

9.9.2 CR_LAMPH Command

Command	"CR_LAMPH" [CR]	
Details	Get Lamp running time (in hours) * return actual lamp running time	
	Acceptable	"000_%1_%2" [CR]
Response	%1_%2	Lamp 1 data comes first, and then one space, after that lamp 2 data is followed. %1 = lamp No.1 %2 = lamp No.2 eg; "00410_00410" [CR]
	Unacceptable	"Error Code" [CR]

9.9.3 CR_LAMPCORRESPH Command

Command	"CR_LAMPCORRESPH" [CR]	
Details	Get Lamp running time (in hours) *return lamp running time multiplied by a coefficient (not actual running time)	
	Acceptable	"000_%1_%2" [CR]
Response	%1_%2	Lamp 1 data comes first, and then one space, after that lamp 2 data is followed.
·		"00000 – 99999" •••• %1= Lamp No.1 "00000 – 99999" •••• %2= Lamp No.2
	Unacceptable	"Error Code" [CR]

9.9.4 CR_LAMPMODE Command

Command	"CR_LAMPMODE" [CR]		
Details	Get setting stat	Get setting status of Lamp control	
	Acceptable	"000_%1" [CR]	
Response	%1	"AUTO1" Lamp control is Auto1 "AUTO2" Lamp control is Auto2 "HIGH" Lamp control is High "NORMAL" Lamp control is Normal "ECO1" Lamp control is Eco1 "ECO2" Lamp control is Eco2	
	Unacceptable	"Error Code" [CR]	

9.9.5 CR_LAMPSTS Command

Command	"CR_LAMPSTS" [CR]	
Details	Get the informa	ation of Lamp lighting status
	Acceptable	"000_%1" [CR]
Response	%1	"2**" The first character indicates 2 lamps are used in this model. The following characters indicate each lamp status in lamp number order as showed below. "I"
	Unacceptable	"Error Code" [CR]

9.9.6 CR_PROJH Command

Command	"CR_PROJH" [CR]	
Details	Get total running time of Projector (in hours)	
	Acceptable	"000_%1" [CR]
Response	%1	"0000000 – 0099999"
	Unacceptable	"?" [CR]

9.9.7 CR_HMLAMP Command

Command	"CR_HMLAMP" [CR]	
Details	Get total lamp number	
	Acceptable	"000_%1" [CR]
Response	%1	"002"
	Unacceptable	"Error Code" [CR]

9.9.8 CR_LAMPCONTRL Command

Command	"CR_LAMPCONTRL" [CR]	
Details	Get setting status of Lamp mode	
	Acceptable	"000_%1" [CR]
Response	%1	"LAMP1" Lamp mode is Lamp1 "LAMP2" Lamp mode is Lamp2 "CHANGE" Lamp control is Lamp1/2
	Unacceptable	"Error Code" [CR]

9.9.9 CR_LAMPLIFECONTRL Command

Command	"CR_LAMPLIFECONTRL" [CR] Get setting status of Lamp life control	
Details		
	Acceptable	"000_%1" [CR]
Response	%1	"MODE1" Lamp life control is Mode1 "MODE2" Lamp life control is Mode2
	Unacceptable	"Error Code" [CR]

9.9.10 CR_LAMPCHGTIM Command

Command	"CR_LAMPCHGTIM" [CR] Get setting status of Timer for Lamp1/2 of Lamp mode	
Details		
	Acceptable	"000_%1" [CR]
Response	%1	"ON" ON is selected "OFF" OFF is selected
	Unacceptable	"Error Code" [CR]

9.9.11 CR_LAMPCHGSTA Command

	Command	"CR_LAMPCHGSTA" [CR]	
ĺ	Details	Get setting stat	us of Timer Start for Lamp1/2 of Lamp mode
		Acceptable	"000_%1" [CR]
	Response	%1	"00"-"24" 0-24 hours
		Unacceptable	"Error Code" [CR]

9.9.12 CR_LAMPINTERVAL Command

Command	"CR_LAMPINTERVAL" [CR]	
Details	Get setting status of Lamp interval	
Acceptable "000_%1" [CR]		"000_%1" [CR]
Response	%1	"01"-"24" Start time of Interval is selected
	Unacceptable	"Error Code" [CR]

9.10 Sound Status Read Command

9.10.1 CR_VOLUME Command

Command	"CR_VOLUME"[CR]	
Details	Get Volume value of user control	
	Acceptable	"000_%1"[CR]
Response	%1	"000"~"063"
	Unacceptable	"Error Code" [CR]

9.10.2 CR_MUTE Command

Command	"CR_MUTE"[CR]	
Details	Get sound mute setting status	
	Acceptable "000_%1"[CR]	
Response	%1	"ON" Set Sound Mute ON "OFF" Cancel Sound Mute
	Unacceptable	"Error Code" [CR]

9.11 Setting Status Read Command

9.11.1 CR_LANG Command

Command	"CR_LANG" [CR]	
Details	Get selected la	nguage
	Acceptable	"000_%1" [CR]
Response	%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 "SVE" — Japanese is selected "JPN" — Japanese is selected "CHI" — Chinese is selected "KOR" — Korean is selected "RUS" — Russian is selected
	Unacceptable	"Error Code" [CR]

9.11.2 CR_LOGO Command

Command	"CR_LOGO" [CR]	
Details	Get setting status of Logo	
Acceptable "000_%1" ["000_%1" [CR]
Response	%1	"USER" User is enabled "OFF" Logo is disabled
	Unacceptable	"Error Code" [CR]

9.11.3 CR_LOGOLOCK Command

Command	"CR_LOGOLOCK" [CR]	
Details	Get setting status of Logo Lock function	
Response	Acceptable	"000_%1" [CR]
	%1	"ON" Logo Lock is ON "OFF" Logo Lock is OFF
	Unacceptable	"Error Code" [CR]

9.11.4 CR_PIP Command

Command	"CR_PIP" [CR]	
Details	Get setting status of Picture in Picture	
	Acceptable	"000_%1" [CR]
Response	%1	"PINP" P in P is selected "PBYP" P by P is selected
	Unacceptable	"Error Code" [CR]

9.11.5 CR_PIPSIZE Command

Command	"CR_PIPSIZE" [CR]	
Details	Get screen size of Picture in Picture	
	Acceptable	"000_%1" [CR]
Response	%1	"SMALL" Small is selected "MIDDLE" Middle is selected "LARGE" Large is selected
	Unacceptable	"Error Code" [CR]

9.11.6 CR_PIPPOSITION Command

Command	"CR_PIPPOSITION" [CR]	
Details	Get position of Picture in Picture	
	Acceptable	"000_%1" [CR]
Response	%1	"BTMRIGHT" Bottom Right is selected "BTMLEFT" Bottom Left is selected "TOPRIGHT" Top Right is selected "TOPLEFT" Top Left is selected
	Unacceptable	"Error Code" [CR]

9.11.7 CR_BACKGND Command

Command	"CR_BACKGND" [CR]	
Details	Get setting status of Screen for no signal	
	Acceptable	"000_%1" [CR]
Response	%1	"BLUE" Blue Back is selected "USER" User is selected "BLACK" Black Back is selected
	Unacceptable	"Error Code" [CR]

9.11.8 CR_POINTER Command

Command	"CR_POINTER"[CR]	
Details	Get setting status of Pointer	
	Acceptable	"000_%1_%2"[CR]
Response	%1	"SPOTLIGHT" Spotlight mode "ARROW" Arrow mode "FINGER" Finger mode "LASER" Laser mark mode
	%2	When %1 is "SPOTLIGHT": "MAX" Spotlight Large "MID" Spotlight Medium "MIN" Spotlight Small
	Unacceptable	"Error Code" [CR]

9.11.9 CR_RCODE Command

Command	"CR_RCODE" [CR]	
Details	Get selected Remote Control Code	
	Acceptable	"000_%1" [CR]
Response	%1	"001"
	Unacceptable	"Error Code" [CR]

9.11.10 CR_RCSENSOR Command

Command	"CR_RCSENSOR"[CR]		
Details	Get selected location of infrared remote receiver of remote control		
	Acceptable	Acceptable "000_%1" [CR]	
Response	%1	"ALL" Front and back and top parts are valid "FRONTTOP" Both front and top parts are valid "BACKTOP" Both back and top parts are valid "FRONTBACK" Both front and back parts are valid "FRONT" Only front part is valid "TOP" Only top part is valid "BACK" Only back part is valid	
	Unacceptable	"Error Code" [CR]	

9.11.11 CR_RTYPE Command

	-		
Command	"CR_RTYPE" [CR]		
Details	Get status of supported Remote Control (IR/RF).		
	Acceptable	"000_%1" [CR]	
Response	%1	"IR" IR "RF" RF (cannot be returned as this model supports only IR remote control)	
	Unacceptable	"Error Code" [CR]	

9.11.12 CR_DISP Command

Command	"CR_DISP" [CR]	
Details	Get setting status of Display	
	Acceptable "000_%1" [CR]	
Response	%1	"ON" Display is ON "CNTDWNOFF" Count down is OFF "OFF" Display is OFF
	Unacceptable	"Error Code" [CR]

9.11.13 CR_STANDBYMODE Command

Command	"CR_STANDBYMODE" [CR]	
Details	Get setting status of Standby mode	
	Acceptable "000_%1" [CR]	
Response	%1	"ECO" Eco mode is selected "NORMAL" Network mode is selected
	Unacceptable	"Error Code" [CR]

9.11.14 CR_P-MANE Command

Command	"CR_P-MANE" [CR]		
Details	Get setting status of Power management		
	Acceptable	Acceptable "000_%1" [CR]	
Response	%1	"OFF" Power Management is disabled "READY" Power Management is set to Ready "SHUTDOWN" Power Management is set to Shut Down mode	
	Unacceptable	"Error Code" [CR]	

9.11.15 CR_P-MANETIME Command

Command	"CR_P-MAETIME" [CR]	
Details	Get setting time for starting Power Management function	
	Acceptable	"000_%1" [CR]
Response	%1	"001 – 030" 1 to 30 minutes
	Unacceptable	"Error Code" [CR]

9.11.16 CR_ON-STA Command

Command	"CR_ON-STA" [CR]	
Details	Get setting status of Power ON Start	
	Acceptable	"000_%1" [CR]
Response	%1	"ON" Power ON Start is ON "OFF" Power ON Start is OFF
	Unacceptable	"Error Code" [CR]

9.11.17 CR_FANSPEED Command

Command	"CR_FANSPEED" [CR]	
Details	Get selected Fan Control Speed mode.	
	Acceptable "000_%1" [CR]	
Response	%1	"MAX" Max mode is selected "NOR" Normal mode is selected
	Unacceptable	"Error Code" [CR]

9.11.18 CR_SLANT Command

Command	"CR_SLANT"[CR]	
Details	Get setting status of Slant setting	
	Acceptable	"000_%1"[CR]
Response	%1	"OFF" Slant is Off "L1" L1 mode is selected "L2" L2 mode is selected "L3" L3 mode is selected "L4" L4 mode is selected
	Unacceptable	"Error Code" [CR]

9.11.19 CR_SHUTRCPROT Command

Command	"CR_SHUTRCPROT" [CR]	
Details	Get status if Shutter can be controlled by R/C	
	Acceptable "000_%1" [CR]	
Response	%1	"ON" Shutter is not controllable by R/C "OFF" Shutter is controllable by R/C
	Unacceptable	"Error Code" [CR]

9.11.20 CR_SHUTKEYPROT Command

Command	"CR_SHUTKE"	YPROT" [CR]
Details	Get status if Shutter can be controlled by key on the top panel	
	Acceptable "000_%1" [CR]	
Response	%1	"ON" Shutter is not controllable by key on the top panel "OFF" Shutter is controllable by key on the top panel
	Unacceptable	"Error Code" [CR]

9.11.21 CR_SHUTH Command

Command	"CR_SHUTH" [CR]		
Details	Get time setting to start the shutter management		
	Acceptable	Acceptable "000_%1" [CR]	
Response	%1	"005" 5 minutes "006" 6 minutes : "179" 179 minutes "180" 180 minutes	
	Unacceptable	"Error Code" [CR]	

9.11.22 CR_HDMISETUP Command

Command	"CR_HDMISETUP" [CR]	
Details	Get setting status of HDMI setup – Image.	
	Acceptable "000_%1" [CR]	
Response	%1	"NORMAL" Normal is selected "ENHANCED" Enhanced is selected
	Unacceptable	"Error Code" [CR]

9.11.23 CR_HDMISOUND Command

Command	"CR_HDMISOUND" [CR]	
Details	Get setting status of HDMI setup – Sound.	
	Acceptable "000_%1" [CR]	
Response	%1	"HDMI" PCM input(Digital sound) is selected "EXTERNAL" External sound input is selected
	Unacceptable	"Error Code" [CR]

9.11.24 CR_SECURITY Command

Command	"CR_SECURITY" [CR]	
Details	Get ON/OFF setting status of Security on menu.	
	Acceptable "000_%1" [CR]	
Response	%1	"ON" PJ Lock is set to On1/ On2 on the menu "OFF" PJ Lock is set to OFF on the menu
	Unacceptable	"Error Code" [CR]

9.11.25 CR_PJLOCKNOW Command

Command	"CR_PJLOCKNOW" [CR]	
Details	Get actual setting status of PIN code lock	
	Acceptable	"000_%1" [CR]
Response	%1	"LOCK" PJ is locked PIN code lock is set to ON1/ON2 on the menu and PJ PIN code is not entered, therefore PJ is actually locked. "FREE" PJ is unlocked (either A or B) A) PJ lock is set to OFF on the menu B) PJ lock is set to ON1/ON2 on the menu, but PIN code Lock mode is canceled because PJ PIN code is entered.
	Unacceptable	"Error Code" [CR]

9.11.26 CR_PJLOCKMENU Command

Command	"CR_PJLOCKMENU" [CR]	
Details	Get ON/OFF setting status of PIN code lock on menu	
	Acceptable "000_%1" [CR]	
Response	%1	"ON1" PIN code lock ON 1 is set on the menu "ON2" PIN code lock ON 2 is set on the menu "OFF" PIN code lock OFF is set on the menu
	Unacceptable	"Error Code" [CR]

9.11.27 CR_KEYDIS Command

Command	"CR_KEYDIS" [CR]		
Details	Get RC/Contro	Get RC/Control key prohibit status (valid or invalid)	
	Acceptable	"000_%1" [CR]	
Response	%1	"NONE"	
	Unacceptable	"Error Code" [CR]	

9.11.28 CR_TESTPAT Command

Command	"CR_TESTPAT" [CR]	
Details	Get setting stat	us of Test pattern
	Acceptable	"000_%1" [CR]
Response	%1	"COLOR"
	Unacceptable	"Error Code" [CR]

9.11.29 CR_FILH Command

Command	"CR_FILH" [CR]	
Details	Get Filter used time	
	Acceptable	"000_%1" [CR]
Response	%1	"00000 - 99999"
	Unacceptable	"Error Code" [CR]

9.11.30 CR_FILCOND Command

Command	"CR_FILCOND" [CR]	
Details	Get status of filter clog	
	Acceptable	"000_%1" [CR]
Response	%1	"CLOG" = Filter is clogged "WARN" = Filter is nearly clogged(Warning status) "CLEAN" = Filter is not clogged
	Unacceptable	"Error Code" [CR]

9.11.31 CR_FILREPL Command

Command	"CR_FILREPL" [CR]	
Details	Get status of Filter cleaning / replacement time	
Response	Acceptable	"000_%1" [CR]
	%1	"1Y"Filter Exchange time is over value of Filter Message. "1N"Filter Exchange time is not over value of Filter Message.
	Unacceptable	"Error Code" [CR]

9.11.32 CR_FILTIMER Command

Command	"CR_FILTIMER" [CR]	
Details	Get Filter used time	
Acceptable		"000_%1" [CR]
Response	%1	"400" 400 hours "700" 700 hours "1000" 1000 hours "OFF" Warning OSD is not displayed
	Unacceptable	"Error Code" [CR]

9.11.33 CR_FILREMAIN Command

Command	"CR FILREMAIN" [CR]	
Details	Get remaining number of usable Filter scroll	
Response	Acceptable	"000_%1" [CR]
	%1	"09" = Remaining number of usable Filter scroll : 9 times : "00" = Remaining number of usable Filter scroll : 0 time
	Unacceptable	"Error Code" [CR]

9.12 Other Status Read Commands

9.12.1 CR_STATUS Command

COMMAND	"CR_STATUS" [CR]	
Detail	Get operating status of Projector Same as "CR0" in basic command except error code follows it.	
	Acceptable	"000_%1" [CR]
Response	%1	"00" = Power ON "80" = Standby "40" = Countdown in process "20" = Cooling Down in process "10" = Power Failure "28" = Cooling Down in process due to abnormal temperature "88" = Standby after Cooling Down due to abnormal temperature "24" = Power Save/Cooling Down in process "04" = Power Save "21" = Cooling Down in process after turned Off due to lamp failure "81" = Standby after Cooling Down due to lamp failure "2C" = Cooling Down in process after Power Off due to Shutter management "8C" = Standby after Cooling Down due to Shutter management
	Unacceptable	"Error Code" [CR]

9.12.2 CR_SIGNAL Command

Command	"CR_SIGNAL" [CR]	
Details	Get status whether there is any signal or not.	
	Acceptable	"000_%1" [CR]
Response	%1	"ON" There is signal "OFF" There is no signal
	Unacceptable	"Error Code" [CR]

9.12.3 CR_VMUTE Command

Command	"CR_VMUTE" [CR]	
Details	Get setting status of Shutter.	
Response	Acceptable	"000_%1" [CR]
	%1	"ON" Video mute is ON(Shutter close) "OFF" Video mute is OFF(Shutter open)
	Unacceptable	"Error Code" [CR]

9.12.4 CR_FREEZE Command

Command	"CR_FREEZE" [CR]	
Details	Get setting status of Freeze.	
Response	Acceptable	"000_%1" [CR]
	%1	"ON" Freeze is ON "OFF" Freeze is OFF
	Unacceptable	"Error Code" [CR]

9.12.5 CR_TEMPFAIL Command

Command	"CR_TEMPFAIL" [CR]	
Details	Get the temperature inside a projector when abnormal temperature status occurs. It is possible to get the temperatures all at once when several sensors installed.	
	Acceptable	"000_%1_%2_%3" [CR]
Response	%1,%2,%3	%1
	Unacceptable	"Error Code" [CR]

9.12.6 CR_TEMP Command

Command	"CR_TEMP" [CR]	
Details	Get the current temperature information inside a projector. It is possible to get the temperatures all at once when several sensors installed.	
	Acceptable	"000_%1_%2_%3" [CR]
Response	%1, %2, %3	%1
	Unacceptable	"Error Code" [CR]

9.12.7 CR_SHUTCOND Command

Command	"CR_SHUTCOND" [CR]	
Details	Get setting status of Shutter	
Response	Acceptable	"000_%1" [CR]
	%1	"SAFE" Shutter operation is normal. "FAIL" Shutter operation is abnormal.
	Unacceptable	"Error Code" [CR]

9.12.8 CR_SERIALNO Command

Command	"CR_SERIALNO" [CR]	
Details	Get value of the serial number.	
	Acceptable	"000_%1" [CR]
Response	%1	Eight digits of alphanumeric characters
	Unacceptable	"Error Code" [CR]