

BASIC SERIAL COMMAND
FUNCTIONAL SPECIFICATIONS

DXT10L

Ver.1.00

SANYO Electric Co., Ltd
DI Company
Projector Division

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3 Notes for Communication

- 3.1** The communication speed can be changed in Menu. It starts to decode when the projector receives the carriage return (0x0D).
- 3.2** There are two types of command; the one is the Functional Execution Commands that execute almost the same function as the keys on the projector body, and the another one is the Status Read Commands that get basic status of the projector.
- Example of the Functional Execution Command: "C05" [CR]
Example of the 0.Status Read Command: "CR0" [CR]
- 3.3** It clears the information of buffer in the following cases.
- 3.3.1** When the projector receives LF (0x0A) or EOF (0x1A).
- 3.3.2** When it takes more than one second to receive a single command.
(Until receiving the carriage return after the reception of the first data.)
- 3.4** Allow interval time as below after the reception of response, pipelining the control commands.
- 3.4.1** [VOLUME +/-] [ZOOM UP/DOWN] [FOCUS UP/DOWN]
[LENS SHIF UP/DOWN/LEFT/RIGHT] commands...100ms
- 3.4.2** The other commands...500ms
- 3.5** Allow at least 500ms of interval time after the response, pipelining the status commands.
- 3.6** Do not issue any command before receiving the response except the case that there is no response for 5 seconds.
- 3.7** It takes about 7 seconds for internal initialization after plugging in AC. During this time, it cannot process command. Do not issue any commands.
- 3.8** When the projector receives the commands for internal initialization or lightting the lamps in 7seconds after starting POWER ON in the status of STANDBY, it does not carry out any command except the Status Read commands, although it returns "Acceptable" response. The Status Read commands are carried out after 500ms from when the "Acceptable" response is returned.
- 3.9** About the action during Count Down and Cooling Down operation:
When the projector receives commands in the period of the Count Down operation after Power ON or Cooling Down operation after Power OFF, it does not carry out any command but the Status Read commands although it returns "Acceptable" response.
- 3.10** About the action during switching inputs:
It takes 5 seconds to switch inputs after receiving the command. During the period, the projector does not carry out any command except Status Read commands although it returns "Acceptable" response. It carries out the Status Read commands in 500ms after "Acceptable" response is returns, which is for receiving the commands to switch inputs.
- 3.11** The text length of the returned value for the Status Read command in successful operation depends on the command.
- 3.12** The characters for commands must be in upper case (A - Z). Lower-case characters are not available.

4 FUNCTIONAL Execution Command Table

Command	Item	Command	Item
C00	POWER ON	C3B	POINTER LEFT
C01	POWER OFF (Immediate POWER OFF)	C3C	POINTER UP
C05	Computer1	C3D	POINTER DOWN
C06	Computer2	C3F	ENTER
C07	Computer3	C40	Exit (This command works the same way as "EXIT" button of the projector and remote control.)
C08	Component	C43	FREEZE ON
C09	Volume +	C44	FREEZE OFF
C0A	Volume -	C46	ZOOM -
C0B	SOUND MUTE ON	C47	ZOOM +
C0C	SOUND MUTE OFF	C4A	FOUCS -
C0D	VIDEO MUTE ON	C4B	FOUCS +
C0E	VIDEO MUTE OFF	C5D	LENS SHIFT UP
C0F	Aspect 4:3	C5E	LENS SHIFT Down
C10	Aspect 16:9	C5F	LENS SHIFT LEFT
C11	Picture Preset High-Bright	C60	LENS SHIFT RIGHT
C12	Picture Preset Presentation	C89	AUTO ADJ.
C13	Picture Preset Video	C8E	KEYSTONE +
C14	Picture Preset Movie	C8F	KEYSTONE -
C15	Picture Preset Graphic	C90	Keystone
C16	Picture Preset sRGB	C91	Keystone
C1C	MENU ON	C92	EEPROM Initialization
C1D	MENU OFF		
C27	IMAGE(Toggle)		
C30	Magnify +		
C31	Magnify -		
C33	(Input)Video (Source)Video		
C34	(Input)Video (Source)S-Video		
C3A	POINTER RIGHT		

5 Status Read Command Table

Command	Item
CR0	Status Read
CR1	Input Mode Read
CR3	Lamp Time Read
CR4	Setting Read
CR6	Temp. Read
CR7	Lamp Mode Read
CR9	PC Type Read
CRA	Status 2 Read

6 Functional Execution Command

6.1 Format

PC issues a command in the format below:

“C” Command [CR]

Command: 2 characters (Refer to the Functional Execution Command Table.)

The projector decodes the received data and returns the result after getting ready to receive another command.

[ACK] [CR]:(0x06, 0x0D)When the projector has received Functional Execution Commands.

“?” [CR]: When the received data cannot be decoded.

6.2 Functions which need command pipelining

Functions which need command pipelining follow the same rule as the one for the Remote Control Reception, as indicated below;

Sender system issues any command every 100ms.

Receiving the applicable command, the function is executed consecutively for 120ms from the moment.

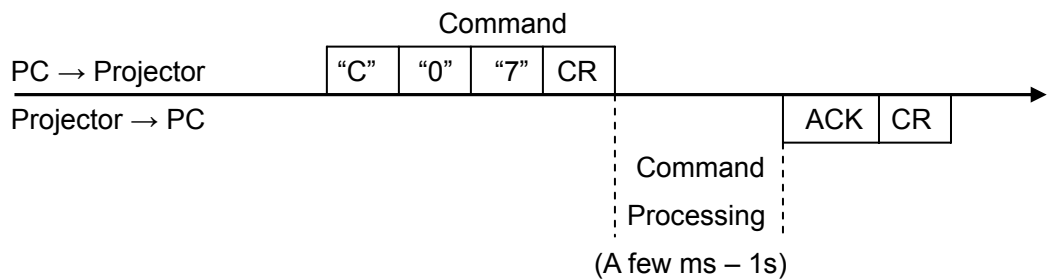
Receiving the same command in succession within 120ms, the function is executed consecutively for another 120ms from the moment.

When there is no incoming command within 120ms, the consecutive execution is stopped.

When the projector receives another command within 120ms, the consecutive execution is stopped.

6.3 Example Transferred

The projector changes the input to INPUT3 with Basic Command.



6.4 Operation Requirements

The Functional Execution Commands are limited, when the projector is in the status below.

(The Status Read Commands are available in following status.)

Projector Status	Available Functional Execution Commands
In Standby mode	C00: POWER ON
Count Down in process	C00: POWER ON (Countdown is terminated)
Cooling Down in process	NONE (No Execution)
Cooling Down in process due to abnormal temperature	NONE (No Execution)
In Abnormal Temperature	NONE (No Execution)
On switching modes	NONE (No Execution)
Power Saving Cooling Down in process	NONE (No Execution)
In Power Saving status	C00: POWER ON C01: POWER OFF

Note) In the above status, the projector returns **[ACK]** **[CR]** even if it projector receives other commands.

6.5 POWER ON Command

COMMAND	"C00" [CR]	
Detail	Set Power On. (Same as the "Power On" key on the projector body / remote controller.) No operation is started when the projector has been turned on already. The "Count Down" is terminated when this command is sent during it in process.	
Response	Acceptable	[ACK] [CR]
	Unacceptable	"?" [CR]

6.6 POWER OFF Command (Immediate POWER OFF)

COMMAND	"C01" [CR]	
Detail	Set Power Off. (Standby) When Power is turned OFF with ON-OFF button of the projector and remote control, "Power OFF" is displayed. In contrast, this command executes immediately Power OFF without display OSD.	
Response	Acceptable	[ACK] [CR]
	Unacceptable	"?" [CR]

6.7 Computer 1 Command

COMMAND	"C05" [CR]	
Detail	Select "Computer 1" The projector shows the OSD "Computer 1" at receiving the command.	
Response	Acceptable	[ACK] [CR]
	Unacceptable	"?" [CR]

6.8 Computer 2 Command

COMMAND	"C06" [CR]	
Detail	Select "Computer 2" The projector shows the OSD "Computer 2" at receiving the command.	
Response	Acceptable	[ACK] [CR]
	Unacceptable	"?" [CR]

6.9 Computer 3 Command

COMMAND	"C07" [CR]	
Detail	Select "Computer 3" The projector shows the OSD "Computer 3" at receiving the command.	
Response	Acceptable	[ACK] [CR]
	Unacceptable	"?" [CR]

6.10 Component Command

COMMAND	"C08" [CR]	
Detail	Select "Component" The projector shows the OSD "Component" at receiving the command.	
Response	Acceptable	[ACK] [CR]
	Unacceptable	"?" [CR]

6.11 Volume + Command

COMMAND	"C09" [CR]	
Detail	This command set Volume up. This command same way as "VOLUME +" button of the projector and remote control. The projector shows the OSD "Volume" at receiving the command.	
Response	Acceptable	[ACK] [CR]
	Unacceptable	"?" [CR]

6.12 Volume - Command

COMMAND	"C0A" [CR]	
Detail	This command set Volume down. This command same way as "VOLUME -" button of the projector and remote control. The projector shows the OSD "Volume" at receiving the command.	
Response	Acceptable	[ACK] [CR]
	Unacceptable	"?" [CR]

6.13 Sound Mute ON Command

COMMAND	"C0B" [CR]	
Detail	This command set "Audio Mute" ON. It mutes the sound but does not turn off the projecting image, unlike the case of pressing the key "NO SHOW" on the remote control. It set "Sound Mute" ON immediately after the command is transmitted. That is to say, it is the same behavior as the one it takes when the "Sound Mute" is set ON on the Web Menu. The projector does not show any OSD at receiving it. This command works only for "Sound-Mute ON" and never for "Sound-Mute OFF" even with command pipelining.	
Response	Acceptable	[ACK] [CR]
	Unacceptable	"?" [CR]

6.14 Sound Mute OFF Command

COMMAND	"C0C" [CR]	
Detail	This command set "Audio Mute" OFF. It sets the "Sound Mute" OFF, but does not set "Video Mute" OFF, unlike the case of pressing the key "NO SHOW" on the remote control. It set "Sound Mute" OFF immediately after the command is transmitted. That is to say, it is the same behavior as the one it takes when the "Sound Mute" is set OFF on the Web Menu. The projector does not show any OSD at receiving the command. This command works only for "Sound-Mute OFF" and never for "Sound-Mute ON" even with command pipelining.	
Response	Acceptable	[ACK] [CR]
	Unacceptable	"?" [CR]

6.15 Picture Mute ON Command

COMMAND	"C0D" [CR]	
Detail	<p>This command set PIC-MUTE ON. It turns off the projecting image but does not mute the sound, unlike the case of pressing the key "NO SHOW" on the remote control. It set "Video Mute" ON immediately after the command is transmitted. That is to say, it is the same behavior as the one it takes when the "Picture Mute" is set ON on the Web Menu. The projector does not show any OSD at receiving it. This command works only for "Picture-Mute ON" and never for "Picture-Mute OFF" even with command pipelining.</p>	
Response	Acceptable	[ACK] [CR]
	Unacceptable	"?" [CR]

6.16 Picture Mute OFF Command

COMMAND	"C0E" [CR]	
Detail	<p>This command set Video Mute OFF. It sets the "Video Mute" OFF, but does not set "Sound Mute" OFF, unlike the case of pressing the key "NO SHOW" on the remote control. It set "Video Mute" OFF immediately after the command is transmitted. That is to say, it is the same behavior as the one it takes when the "Picture Mute" is set OFF on the Web Menu. The projector does not show any OSD at receiving the command. This command works only for "Picture-Mute OFF" and never for "Picture-Mute ON" even with command pipelining.</p>	
Response	Acceptable	[ACK] [CR]
	Unacceptable	"?" [CR]

6.17 Aspect Ratio 4:3 Command

COMMAND	"C0F" [CR]	
Detail	<p>Set screen size to Normal (4:3). This command executes immediately set "Aspect" Normal. The projector shows the OSD "4:3" on the screen at receiving the command.</p>	
Response	Acceptable	[ACK] [CR]
	Unacceptable	"?" [CR]

6.18 Aspect Ratio 16:9 Command

COMMAND	"C10" [CR]	
Detail	<p>Set screen size to Wide (16:9). This command executes immediately set Aspect Wide. The projector shows the OSD "16:9" on the screen at receiving the command.</p>	
Response	Acceptable	[ACK] [CR]
	Unacceptable	"?" [CR]

6.19 Picture Preset High-Bright Command

COMMAND	"C11" [CR]	
Detail	Set Picture Preset to High-Bright. This command executes immediately set Picture High-Bright. The projector shows the OSD "High-Bright" on the screen at receiving the command.	
Response	Acceptable	[ACK] [CR]
	Unacceptable	"?" [CR]

6.20 Picture Preset Presentation Command

COMMAND	"C12" [CR]	
Detail	Set Picture Preset to Presentation. This command executes immediately set Picture Presentation. The projector shows the OSD "Presentation" on the screen at receiving the command.	
Response	Acceptable	[ACK] [CR]
	Unacceptable	"?" [CR]

6.21 Picture Preset Video Command

COMMAND	"C13" [CR]	
Detail	Set Picture Preset to Video. This command executes immediately set Picture Video. The projector shows the OSD "Video" on the screen at receiving the command.	
Response	Acceptable	[ACK] [CR]
	Unacceptable	"?" [CR]

6.22 Picture Preset Movie Command

COMMAND	"C14" [CR]	
Detail	Set Picture Preset to Movie. This command executes immediately set Picture Movie. The projector shows the OSD "Movie" on the screen at receiving the command.	
Response	Acceptable	[ACK] [CR]
	Unacceptable	"?" [CR]

6.23 Picture Preset Graphic Command

COMMAND	"C15" [CR]	
Detail	Set Picture Preset to Graphic. This command executes immediately set Picture Graphic. The projector shows the OSD "Graphic" on the screen at receiving the command.	
Response	Acceptable	[ACK] [CR]
	Unacceptable	"?" [CR]

6.24 Picture Preset sRGB Command

COMMAND	"C16" [CR]	
Detail	Set Picture Preset to sRGB. This command executes immediately set Picture sRGB. The projector shows the OSD "sRGB" on the screen at receiving the command.	
Response	Acceptable	[ACK] [CR]
	Unacceptable	"?" [CR]

6.25 Menu On Command

COMMAND	"C1C" [CR]	
Detail	Menu On Screen Display.	
Response	Acceptable	[ACK] [CR]
	Unacceptable	"?" [CR]

6.26 Menu Off Command

COMMAND	"C1D" [CR]	
Detail	Clear Menu of ALL On Screen Display. This command Clear ALL On Screen Display without condition.	
Response	Acceptable	[ACK] [CR]
	Unacceptable	"?" [CR]

6.27 IMAGE Command

COMMAND	"C27" [CR]	
Detail	Switch Image setting Select the items as indicated bellow with a toggle. High-Bright Presentation Video Movie Graphic sRGB It is the same behavior as the one it takes when the "IMAGE" key on the remote control is pressed. But, the projector does not show any OSD at receiving the command.	
Response	Acceptable	[ACK] [CR]
	Unacceptable	"?" [CR]

6.28 Magnify + Command

COMMAND	"C30" [CR]	
Detail	Enter Digital Zoom mode and expand image size. This command works in the same way as the key "D.ZOOM" on the remote control. The projector does not show any OSD at receiving the command.	
Response	Acceptable	[ACK] [CR]
	Unacceptable	"?" [CR]

6.29 Magnify – Command

COMMAND	"C31" [CR]	
Detail	Enter Digital Zoom mode and compress image size This command works in the same way as the key "D.ZOOM" on the remote control. The projector does not show any OSD at receiving the command.	
Response	Acceptable	[ACK] [CR]
	Unacceptable	"?" [CR]

6.30 Video - Video Command

COMMAND	"C33" [CR]	
Detail	Select Input 5 Video. The projector shows the OSD "Video" at receiving the command.	
Response	Acceptable	[ACK] [CR]
	Unacceptable	"?" [CR]

6.31 Video – S-Video Command

COMMAND	"C34" [CR]	
Detail	Select Input 6 S-Video. The projector shows the OSD "S-Video" at receiving the command.	
Response	Acceptable	[ACK] [CR]
	Unacceptable	"?" [CR]

6.32 POINTER RIGHT Command

COMMAND	"C3A" [CR]	
Detail	Move Pointer of OSD Menu to right. This command works the different way as "▶" button of the projector and remote control. Not for Volume +. It moves the pointer to the right side on the screen when this command is transmitted during the operation of "D. zoom+". The projector does not show any OSD in this case.	
Response	Acceptable	[ACK] [CR]
	Unacceptable	"?" [CR]

6.33 POINTER LEFT Command

COMMAND	"C3B" [CR]	
Detail	Move Pointer of OSD Menu to left. This command works the different way as "◀" button of the projector and remote control. Not for Volume -. It moves the Pointer to the left side on the screen when this command is transmitted during the operation of "D. zoom+". The projector does not show any OSD in this case.	
Response	Acceptable	[ACK] [CR]
	Unacceptable	"?" [CR]

6.34 POINTER UP Command

COMMAND	"C3C" [CR]	
Detail	Move up Pointer of OSD Menu. This command same way as "▲" button of the projector and remote control. It moves up the Pointer on the screen when this command is transmitted during the operation of "D. zoom+". The projector does not show any OSD in this case.	
Response	Acceptable	[ACK] [CR]
	Unacceptable	"?" [CR]

6.35 POINTER DOWN Command

COMMAND	"C3D" [CR]	
Detail	Move down Pointer of OSD Menu. This command works in the same way as the key "▼" works, which is a key on the projector body / the remote control. It moves down the Pointer on the screen when this command is transmitted during the operation of "D. zoom+". The projector does not show any OSD in this case.	
Response	Acceptable	[ACK] [CR]
	Unacceptable	"?" [CR]

6.36 ENTER Command

COMMAND	"C3F" [CR]	
Detail	This command works in the same way as the key "SELECT" works, which is a key on the projector body / the remote control. The projector does not show any OSD when it accepts this command during it shows no OSD.	
Response	Acceptable	[ACK] [CR]
	Unacceptable	"?" [CR]

6.37 Exit Command

COMMAND	"C40" [CR]	
Detail	This command works in the same way as the key "CANCEL" works, which is a key on the projector body / the remote control. The projector does not show any OSD at receiving it.	
Response	Acceptable	[ACK] [CR]
	Unacceptable	"?" [CR]

6.38 FREEZE ON Command

COMMAND	"C43" [CR]	
Detail	Freeze on-screen picture This command works the same way as "FREEZE" button of the remote control, but it works only for turning on, not for turning off Freeze. The projector does not show any OSD at receiving it.	
Response	Acceptable	[ACK] [CR]
	Unacceptable	"?" [CR]

6.39 FREEZE OFF Command

COMMAND	"C44" [CR]	
Detail	Cancel Freeze function This command works the same way as "FREEZE" button of the remote control, but it works only for turning off, not for turning on Freeze. The projector does not show any OSD at receiving it.	
Response	Acceptable	[ACK] [CR]
	Unacceptable	"?" [CR]

6.40 ZOOM – COMMAND

COMMAND	"C46" [CR]	
Detail	Make screen image smaller This command works the same as "▼" button of the projector and remote control. The projector shows the OSD for adjustment of the "Zoom" at receiving the first command, and it behaviors actually after receiving the second command.	
Response	Acceptable	[ACK] [CR]
	Unacceptable	"?" [CR]

6.41 ZOOM + Command

COMMAND	"C47" [CR]	
Detail	Make screen image larger. This command works the same way as "▲" button of the projector and remote control. The projector shows the OSD for adjustment of the "Zoom" at receiving the first command, and it behaviors actually after receiving the second command.	
Response	Acceptable	[ACK] [CR]
	Unacceptable	"?" [CR]

6.42 FOCUS – Command

COMMAND	"C4A" [CR]	
Detail	Adjust focus of screen image (sharp and clear) with a short-focal-length (The lens direction is forward) This command works the same way as "▼" button of the projector and remote control. The projector shows the OSD for adjustment of the "Focus" at receiving the first command, and it behaviors actually after receiving the second command.	
Response	Acceptable	[ACK] [CR]
	Unacceptable	"?" [CR]

6.43 FOCUS + Command

COMMAND	"C4B" [CR]	
Detail	Adjust focus of screen image (sharp and clear) with a long-focal-length () (The lens direction is backward) This command works the same way as "▲" button of the projector and remote control. The projector shows the OSD for adjustment of the "Focus" at receiving the first command, and it behaviors actually after receiving the second command.	
Response	Acceptable	[ACK] [CR]
	Unacceptable	"?" [CR]

6.44 LENS SHIFT UP Command

COMMAND	"C5D" [CR]	
Detail	Move screen image upward This command same way as "LENS SHIFT" button of the projector. The projector shows the OSD for adjustment of the "Lens Shift" at receiving the first command, and it behaviors actually after receiving the second command.	
Response	Acceptable	[ACK] [CR]
	Unacceptable	"?" [CR]

6.45 LENS SHIFT DOWN Command

COMMAND	"C5E" [CR]	
Detail	Move screen image downward. This command same way as "LENS SHIFT" button of the projector. The projector shows the OSD for adjustment of the "Lens Shift" at receiving the first command, and it behaviors actually after receiving the second command.	
Response	Acceptable	[ACK] [CR]
	Unacceptable	"?" [CR]

6.46 LENS SHIFT LEFT Command

COMMAND	"C5F" [CR]	
Detail	Move screen image to the left. This command same way as "LENS SHIFT left" button of the projector. The projector shows the OSD for adjustment of the "Lens Shift" at receiving the first command, and it behaviors actually after receiving the second command.	
Response	Acceptable	[ACK] [CR]
	Unacceptable	"?" [CR]

6.47 LENS SHIFT RIGHT Command

COMMAND	"C60" [CR]	
Detail	Move screen image to the right. This command same way as "LENS SHIFT right" button of the projector. The projector shows the OSD for adjustment of the "Lens Shift" at receiving the first command, and it behaviors actually after receiving the second command.	
Response	Acceptable	[ACK] [CR]
	Unacceptable	"?" [CR]

6.48 AUTO ADJ. Command

COMMAND	"C89" [CR]	
Detail	AUTO ADJ. Command This command works in the same way as the key "AUTO PC" works, which is a key on the projector body / remote control. The projector does not show any OSD at receiving the command.	
Response	Acceptable	[ACK] [CR]
	Unacceptable	"?" [CR]

6.49 KEYSTONE + Command

COMMAND	"C8E" [CR]	
Detail	<p>Correct keystone distortion by reducing upper part of image. The projector reflects the screen immediately unlike the case of pressing the key "KEYSTONE" on the remote control. The projector behaves in the same way as it does when the Vertical Position of Key stone is set to the upper side. The projector shows the OSD for adjustment of "Keystone" and it is moved for operation by a user.</p>	
Response	Acceptable	[ACK] [CR]
	Unacceptable	"?" [CR]

6.50 KEYSTONE – Command

COMMAND	"C8F" [CR]	
Detail	<p>Correct keystone distortion by reducing lower part of image. The projector reflects the screen immediately unlike the case of pressing the key "KEYSTONE" on the remote control. The projector behaves in the same way as it does when the Vertical Position of Key stone is set to the lower side. The projector shows the OSD for adjustment of "Keystone" and it is moved for operation by a user.</p>	
Response	Acceptable	[ACK] [CR]
	Unacceptable	"?" [CR]

6.51 KEYSTONE Right - Command

COMMAND	"C90" [CR]	
Detail	<p>Correct keystone distortion by reducing right part of image. The projector reflects the screen immediately unlike the case of pressing the key "KEYSTONE" on the remote control. The projector behaves in the same way as it does when the Horizontal Position of Key stone is set to the right. The projector shows the OSD for adjustment of "Keystone" and it is moved for operation by a user.</p>	
Response	Acceptable	[ACK] [CR]
	Unacceptable	"?" [CR]

6.52 KEYSTONE Left – Command

COMMAND	"C91" [CR]	
Detail	<p>Correct keystone distortion by reducing left part of image. The projector reflects the screen immediately unlike the case of pressing the key "KEYSTONE" on the remote control. The projector behaves in the same way as it does when the Horizontal Position of Key stone is set to the left. The projector shows the OSD for adjustment of "Keystone" and it is moved for operation by a user.</p>	
Response	Acceptable	[ACK] [CR]
	Unacceptable	"?" [CR]

7 Status Read Command

7.1 Format

- 1) PC issues a command in the format below:

“CR” **Command** [CR]

Command: Single character (Refer to Status Read Command Table)

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

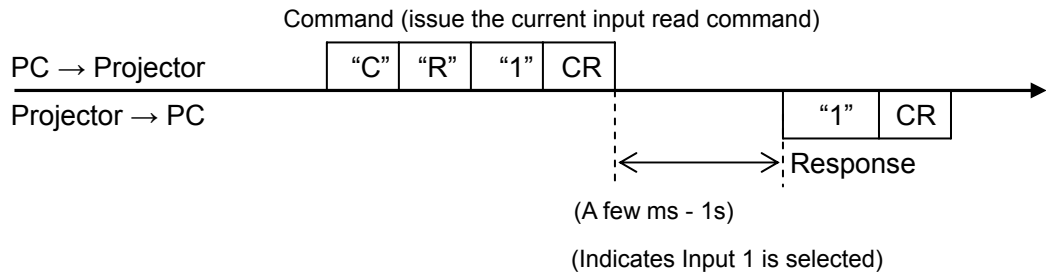
Required Data [CR]

Required Data: String (Refer to Status Read Command Table)

- 3) When the received data cannot be decoded, the projector returns “?” [CR].

7.2 Transfer Example

Get the selected input for the projector by Basic Commands.



7.3 OSD

The projector does not show any OSD when it receives a status read command.

7.4 Status Read Command

COMMAND	"CR0" [CR]	
Detail	Get the projector status	
Response	Acceptable	"%1" [CR]
	%1	"00" = Power ON "80" = Standby "40" = Countdown in process "20" = Cooling Down in process "10" = Power Failure "28" = Cooling Down due to Abnormal Temperature in process "21" = Cooling Down in process after Off due to lamp failure "81" = Standby after Cooling Down due to lamp failure
	Unacceptable	"?" [CR]

【Details for Response】

- **"00" [CR]**
 Status: Power ON
 Normal image is on screen.
- **"80" [CR]**
 Status: Standby
 When the status is Standby, Status Read Commands are always accepted, but Functional Execution Commands are not accepted except POWER ON Command.
- **"40" [CR]**
 Status: Countdown in process
 When "Display" in Setting menu is set to ON, execution of Power ON operation brings into Countdown status.
 When "Display" in Setting menu is set to OFF, the status jumps to Power ON without Countdown operation.
- **"20" [CR]**
 Status: Cooling Down in process
 Execution of POWER OFF Command ("C01" [CR]) in power on status brings into Cooling Down status.
 This status automatically moves to Standby when the lamp is turned off and the fan spin finishes after about 90 seconds (the time of spinning fan depends on models).
 During this time, Functional Execution Commands are not accepted.

- **“10” [CR]**

Status: Power Failure

When the power supply voltage inside the projector reaches abnormal level, the status automatically moves to Power OFF.

The projector returns “10” [CR], which indicates the status moves to Power OFF due to power failure. Fan also stops.

This status continues for the same period (90 seconds approx.) of the Cooling Down operation when Power OFF executed, and then moved to Standby.

- **“28” [CR]**

Status: Cooling Down due to Abnormal Temperature in process

When the internal temperature rises abnormally, it automatically starts Cooling Down process. Response value for this status is “28” [CR].

Even if the temperature comes down during this process, the given Cooling Down process is executed and it moves to Standby mode.

- **–“21” [CR]**

Status: Cooling Down in process after turned off due to lamp failure

When a projector is turned off because of lamp failure, it automatically starts Cooling Down operation, in which the projector returns “21” [CR].

- **“81” [CR]**

Status: Standby after Cooling Down due to lamp failure

This value is returned when Cooling Down operation due to lamp failure has been completed and the status has been moved to Standby. The status is kept until the next operation starts.

7.8 Temp Read Command

COMMAND	"CR6" [CR]	
Detail	Get the temperature information inside projector With more than one temperature sensors installed in the projector, it is possible to get all temperatures at once.	
Response	Acceptable	"%1_%2" [CR]
	%1 %2	<p>%1 = temperature at Sensor 1 %2 = temperature at Sensor 2</p> <p>Temperature data is expressed as "00.0". When the temperature goes under 0, the first character is "-" like "-05.5" [CR]. When no temperature data returns due to hardware problems the first character is "E" like "E00.0" [CR]. In Standby or during a few seconds after Power ON operation, the process for abnormal temperature is not executed, where the temperature data is "_ _ _ _". With more than one temperature sensors installed, the projector returns the values in series. "_ 31.5_ 35.2" [CR] Each sensor data follows in sequence with one space between each of them.</p>
	Unacceptable	"?" [CR]

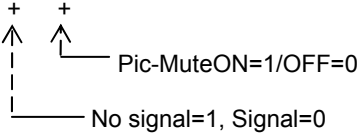
7.9 Lamp Mode Read Command

COMMAND	"CR7" [CR]	
Detail	Get current Lamp Mode in the multiple-lamp projector. When there is any fail lamp, also can get the information about.	
Response	Acceptable	"%1" [CR]
	%1	<p>e.g.: "0F"[CR] The first digit indicates Lamp Mode. 0 = 2-lamp Mode 1 = 1-lamp Mode (Lamp No.1 used) 2 = 1-lamp Mode (Lamp No.2 used)</p> <p>The second digit indicates if the lamp is ON or OFF. Data is shown as "0-9" and "A-F", which is described in 4-bit data. Assign each bit for each lamp data. e.g.: 0 = ALL is OFF 1 = No.1 is ON, the other is OFF 2 = No.2 is ON, the other is OFF 3 = ALL is ON</p>
	Unacceptable	"?" [CR]

7.10 PC Type Read Command

COMMAND	"CR9" [CR]	
Detail	Get the currently displayed PC Type	
Response	Acceptable	"%1" [CR]
	%1	<p>"Stand_by" ----- Standby "AV_Mode" ----- AV Mode Current Table such as "UXGA1" ----- PC Mode "Go_PC_adj." ----- Auto "No_signal" ----- No signal</p>
	Unacceptable	"?" [CR]

7.11 Status 2 Read Command

COMMAND	"CRA" [CR]	
Detail	Get the operating status of Pic-Mute.	
Response	Acceptable	"%1" [CR]
	% 1	<p>Indicate operating status of Pic-Mute.</p>  <p>e.g.:</p> <p>Normal Operation: "00"</p> <p>PIC-MUTE ON: "01"</p> <p>No signal: "80"</p> <p>When it is in Standby mode or Cooling Down process, it returns "FF" even if the status is above.</p>
	Unacceptable	"?" [CR]