

MULTIMEDIA PROJECTOR 4K501ST

User Commands

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1. Overview

These specifications describe the methods of controlling Projector 4K501ST from PC or other controllers over an RS-232C or LAN connection.

■ Symbols

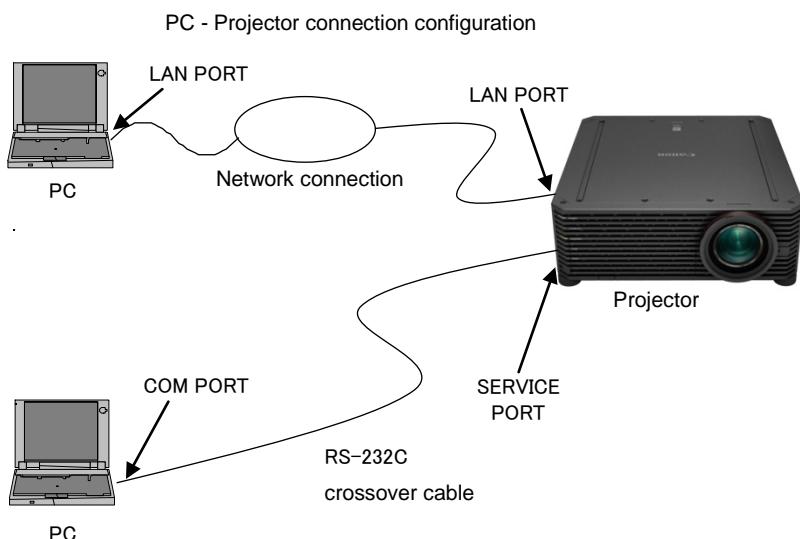
The following symbols are used in these specifications:

Symbol	Description
[]	Data in [] can be omitted.
|	Same as OR.

2. Communication Specifications

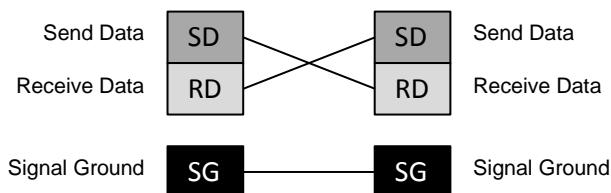
Communication Specifications

The projector can be controlled via RS-232C or LAN connection.



RS-232C connection	
Item	Specification
Connection system	PC and projector connected on a "1:1" basis
Connection signal line	3-line connection of SD, RD, and SG
Connection cable	9-pin RS-232C cable (crossover)

Wired LAN connection	
Item	Specification
Connection system	TCP/IP connection
Connection signal line	Straight when connecting via network
Connection cable	LAN cable
LAN	1000BASE-T 100BASE-TX 10BASE-T



* Signal lines other than the three SD, RD, and SG lines are not used in the projector.

* Loop back its own signals on the PC side as necessary.

* To use LAN, the network function on the projector must be turned on.

In addition, configure the network properly between the project and the PC.

Usable Character Codes

Use ASCII codes in the red and blue areas of the following table.

No distinction is made between double-byte characters and single-byte characters. All characters are interpreted as single-byte characters, so do not use double-byte or triple-byte characters.

Uppercase and lowercase alphabet letters are recognized as the same character.

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0	NUL		SP	0	@	P	'	p								
1		!	1	A	Q	a	q									
2		"	2	B	R	b	r									
3		#	3	C	S	c	s									
4		\$	4	D	T	d	t									
5		%	5	E	U	e	u									
6		&	6	F	V	f	v									
7		'	7	G	W	g	w									
8		(	8	H	X	h	x									
9		)	9	I	Y	i	y									
A		*	:	J	Z	j	z									
B		+	;	K	[	k	{									
C		,	<	L	\	l	|									
D	CR		-	=	M	]	m	}								
E		.	>	N	^	n	~									
F		/	?	O	_	o										

Item	Specifications
Delimiters	CR(0Dh) Characters usable as delimiters.
General characters	20h to 60h, 7Bh to 7Eh Characters usable in commands.
Invalid characters	Characters that are invalid. If used, it will be handled as a space (20h).
Unrecommended characters	Do not use as a general rule. Both upper case and lower case letters can be used in commands, but upper case should be used in most cases.

Communication System (Serial)

Item	Specification
Communication mode	RS-232-C Start-stop synchronization half-duplex communication
Transmission speed	19.2 Kbps
Character length	8 bits/character
Stop bit	2 bits
Parity	None
Command format	Variable-length records with terminals as delimiters
Maximum transmission length	Maximum of 256 characters (bytes) including delimiters.
Delimiters	CR (0Dh) can be used as a delimiter. Delimiter in the response is CR.
Command code	ASCII codes (20h to 7Eh) Codes other than ASCII codes (20h to 7Eh), delimiter code (0Dh), or NUL (00h) are handled as spaces (20h).
Communication procedure	No procedure
Flow control	None
Error control	None
Break signal	Not supported
Timeout	Tc Between characters: 1 second Tr Between command/response interval: 15 seconds

* For timeout, see chapter 3, "Communication Flow" on page 8.

Communication System (LAN)

Item	Specification
Communication mode	TCP/IP connection. Port: 33336
Remarks	If a command is not received for 30 seconds, the socket will be closed.

Command Format

Format

Commands are sent from PC to the projector in the following format:

<command text><delimiter> or
<command text>=(value)<delimiter>

<command text>	Character strings consisting of 1 or more alphanumeric letters
<value>	Character strings consisting of 1 or more alphanumeric letters
<delimiter>	CR(0Dh)

For <command strings> and <value>, see explanation about each command.

Example) When checking the power status (POWER)
PC → PJ

G	E	T	=	P	O	W	E	R	CR
47h	45h	54h	3Dh	50h	4Fh	57h	45h	52h	0Dh

Response Format

Commands are sent from the projector to PC in the following format:

<Response character string> <Delimiter>

There are multiple response types, each having different <response string> format.

<Response character string>	Character strings consisting of 1 or more alphanumeric letters First 2 digits are always 1 lowercase alphabet letter and a ":" (colon). The first character indicates the response type. <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="background-color: #cccccc;">Response type</th><th style="background-color: #cccccc;">Meaning</th><th style="background-color: #cccccc;">Example</th></tr> </thead> <tbody> <tr> <td>i</td><td>Normal response</td><td>i:OK</td></tr> <tr> <td>g</td><td>Reference command response</td><td>g:BRI=0</td></tr> <tr> <td>e</td><td>Error response</td><td>e:0002 INVALID_COMMAND</td></tr> </tbody> </table> <delimiter>		Response type	Meaning	Example	i	Normal response	i:OK	g	Reference command response	g:BRI=0	e	Error response	e:0002 INVALID_COMMAND	CR(0Dh)
Response type	Meaning	Example													
i	Normal response	i:OK													
g	Reference command response	g:BRI=0													
e	Error response	e:0002 INVALID_COMMAND													

Format varies according to the type, as follows:

■ Normal response

A response when command is processed normally.

The projector receives the next command only after receiving this response.

Format)

i:OK<delimiter>

Example)

PC → PJ

P	O	W	E	R	=	O	N	CR
50h	4Fh	57h	45h	52h	3Dh	4Fh	4Eh	0Dh

PC ← PJ

i	:	O	K	CR
69h	3Ah	4Fh	4Bh	0Dh

■ Reference command response

A response when reference is made properly for a reference command.

Format)

g:<command string>=<value><delimiter>

Example)

PC → PJ

G	E	T	=	P	O	W	E	R	CR
47h	45h	54h	3Dh	50h	4Fh	57h	45h	52h	0Dh

PC ← PJ

g	:	P	O	W	E	R	=	O	N	CR
67h	3Ah	50H	4Fh	57h	45h	52h	3Dh	4Fh	4Eh	0Dh

■ Error response

A response when an error occurred.

Format)

e:<error ID><space><error info string><delimiter>

<error ID>	4 alphanumeric letters
<space>	Space character (20h)
<error info string>	Character strings consisting of 1 or more alphanumeric letters

* Refer to "Error List"

Example)

PC → PJ

A	U	T	O	P	C	CR
41h	55h	54h	4Fh	50h	43h	0Dh

PC ← PJ

e	:	2	0	1	F		I	N	V	A	L	I	D	_
65h	3Ah	32h	30h	31h	46h	20h	49h	4Eh	56h	41h	4Ch	49h	44h	5Fh
S	I	G	N	A	L	CR								
53h	49h	47h	4Eh	41h	4Ch	0Dh								

■ Normal response (BUSY)

This response is sent when a command cannot be received during processing.

Format)

i:BUSY<delimiter>

Example)

PC → PJ

A	U	T	O	P	C	CR
41h	55h	54h	4Fh	50h	43h	0Dh

PC ← PJ

i	:	B	U	S	Y	CR
69h	3Ah	42h	55h	53h	59h	0Dh

Other Items

█ Command recognition

The receiver (projector) retains incoming characters within a specific Tc, and recognizes the data as "received command" when delimiter is received.

If the character interval received exceeds the Tc or if a delimiter is not received within 256 characters, all data already received is lost, and the mode is reset to standby to receive commands again.

█ Parameter value

Definition of <Parameter value> is as follows:

<value>	<value 1>, <value 2>...,<value n>
<value n>	<Numerical value> | <ID> | “<Character string>”
<numerical value>	[<sign>]<decimal numeric string > The decimal string consists of minimum 1 letter and maximum 5 letters. Valid value range is -32768 to 32767.
<ID>	1 or more ASCII characters (20h to 60h, 7Bh to 7Eh)
<character string>	0 or more ASCII characters (20h to 60h, 7Bh to 7Eh)

3. Communication Flow

Command Transmission (PC side)

Commands should be sent from PC in a way that each character is sent within the specified Tc (inter-character timeout).

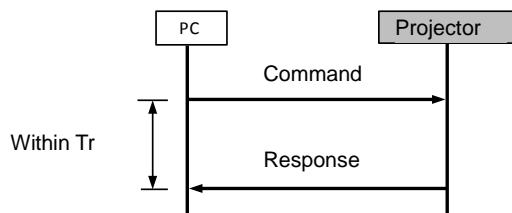
Command Reception (projector side)

The projector retains incoming characters within a specific Tc, and recognizes the data as "received command" when delimiter is received.

If the character interval received exceeds the Tc or if a delimiter is not received within 256 characters, all data already received is lost, and the mode is reset to standby to receive commands again.

Command/Response

A response is always returned within Tr(*) for a command sent from the PC.



(*) The timeout interval between command and response (Tr) is 15 seconds.

Response Reception Timeout

If a response is not received within the Tr (timeout interval between command and response) while standing by a waiting response after sending a command from the PC, it is deemed to have exceeded the "response reception timeout." Please resend the command.

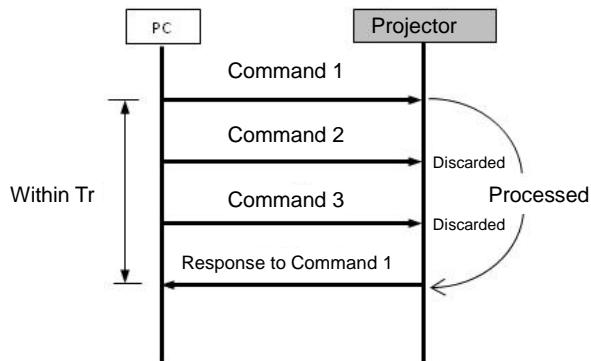
Other Items

To execute commands via LAN, the LAN function must be enabled in advance.

When the projector is in standby mode, only a portion of the commands can be executed.

The PC side cannot send the next user command before a response for the first command is returned. If two or more user commands are received, user commands from 2nd one are discarded. If 2 or more user commands are received, only the 1st command is processed, and a response is returned when finished.

For commands sent via LAN, if multiple commands are embedded in a single packet, the projector processes the first command and discards the rest.



4. Command List

Item	Command	Setting	Reference	Description	Power mode restriction						
					LAN			RS-232C			
					SL0	SL1	SL3	PMON	ST	PMON	
1	<u>GAXADJ</u>	Yes	Yes	6-axis color adjustment	-	-	-	-	Yes	-	- Yes
2	<u>GAXR</u>	Yes	Yes	6-axis color adjustment R hue/saturation/brightness	-	-	-	-	Yes	-	- Yes
3	<u>GAXG</u>	Yes	Yes	6-axis color adjustment G hue/saturation/brightness	-	-	-	-	Yes	-	- Yes
4	<u>GAXB</u>	Yes	Yes	6-axis color adjustment B hue/saturation/brightness	-	-	-	-	Yes	-	- Yes
5	<u>GAXC</u>	Yes	Yes	6-axis color adjustment C hue/saturation/brightness	-	-	-	-	Yes	-	- Yes
6	<u>GAXM</u>	Yes	Yes	6-axis color adjustment M hue/saturation/brightness	-	-	-	-	Yes	-	- Yes
7	<u>GAXY</u>	Yes	Yes	6-axis color adjustment Y hue/saturation/brightness	-	-	-	-	Yes	-	- Yes
8	<u>AMBADJ</u>	Yes	Yes	Ambient light correction adjustment ON/OFF	-	-	-	-	Yes	-	- Yes
9	<u>AMBLEVEL</u>	Yes	Yes	Ambient light level settings	-	-	-	-	Yes	-	- Yes
10	<u>AMBTYPE</u>	Yes	Yes	Ambient light type settings	-	-	-	-	Yes	-	- Yes
11	<u>ASELD1</u>	Yes	Yes	DVI-1 Audio input terminal selection	-	-	-	-	Yes	-	- Yes
12	<u>ASELD2</u>	Yes	Yes	DVI-2 Audio input terminal selection	-	-	-	-	Yes	-	- Yes
13	<u>ASELD3</u>	Yes	Yes	DVI-3 Audio input terminal selection	-	-	-	-	Yes	-	- Yes
14	<u>ASELD4</u>	Yes	Yes	DVI-4 Audio input terminal selection	-	-	-	-	Yes	-	- Yes
15	<u>ASELDX2</u>	Yes	Yes	DVI 1x2 Audio input terminal selection	-	-	-	-	Yes	-	- Yes
16	<u>ASELDX4</u>	Yes	Yes	DVI 2x2 / 1x4 Audio input terminal selection						Yes	Yes
17	<u>ASELH1</u>	Yes	Yes	HDMI-1 audio input terminal selection	-	-	-	-	Yes	-	- Yes
18	<u>ASELH2</u>	Yes	Yes	HDMI-2 audio input terminal selection	-	-	-	-	Yes	-	- Yes
19	<u>ASELHX2</u>	Yes	Yes	HDMIx2 audio input terminal selection							
20	<u>ASPECT</u>	Yes	Yes	Aspect ratio	-	-	-	-	Yes	-	- Yes
21	<u>AVOL</u>	Yes	Yes	Audio volume adjustment	-	-	-	-	Yes	-	- Yes
22	<u>BLANK</u>	Yes	Yes	Screen blank	-	-	-	-	Yes	-	- Yes
23	<u>BRI</u>	Yes	Yes	Brightness setting	-	-	-	-	Yes	-	- Yes
24	<u>COLOR TEMP</u>	Yes	Yes	Color temperature setting	-	-	-	-	Yes	-	- Yes
25	<u>COMVER</u>	-	Yes	User command version inquiry	-	Yes	Yes	Yes	Yes	Yes	Yes
26	<u>CONT</u>	Yes	Yes	Contrast setting	-	-	-	-	Yes	-	- Yes
27	<u>DGAMMA</u>	Yes	Yes	Dynamic gamma	-	-	-	-	Yes	-	- Yes
28	<u>ERR</u>	-	Yes	Error information inquiry	-	Yes	Yes	Yes	Yes	Yes	Yes
29	<u>FINE GAMMA R</u>	Yes	Yes	Fine gamma (R)	-	-	-	-	Yes	-	- Yes
30	<u>FINE GAMMA G</u>	Yes	Yes	Fine gamma (G)	-	-	-	-	Yes	-	- Yes
31	<u>FINE GAMMA B</u>	Yes	Yes	Fine gamma (B)	-	-	-	-	Yes	-	- Yes
32	<u>FLTWRN</u>	Yes	Yes	Air filter cleaning warning	-	-	-	-	Yes	-	- Yes
33	<u>FREEZE</u>	Yes	Yes	Screen freeze	-	-	-	-	Yes	-	- Yes
34	<u>GAMMA</u>	Yes	Yes	Gamma adjustment	-	-	-	-	Yes	-	- Yes
35	<u>HTMPINF</u>	Yes	Yes	High temperature caution display	-	-	-	-	Yes	-	- Yes
36	<u>HUE</u>	Yes	Yes	Hue setting	-	-	-	-	Yes	-	- Yes
37	<u>IMAGE</u>	Yes	Yes	Image mode setting	-	-	-	-	Yes	-	- Yes
38	<u>IMAGEFLIP</u>	Yes	Yes	Flip display	-	-	-	-	Yes	-	- Yes
39	<u>INPUT</u>	Yes	Yes	Input signal selection	-	-	-	-	Yes	-	- Yes
40	<u>IRIS</u>	Yes	Yes	Iris setting	-	-	-	-	Yes	-	- Yes

Item	Command	Setting	Reference	Description	Power mode restriction						
					LAN				RS-232C		
					SL0	SL1	SL3	PM	ON	ST	PM
41	<u>KREP</u>	Yes	Yes	Key repeat	-	-	-	-	Yes	-	-
42	<u>LAMP</u>	Yes	Yes	Lamp mode	-	-	-	-	Yes	-	-
43	<u>LAMPCOUNTER</u>	-	Yes	Lamp counter inquiry	-	Yes	Yes	Yes	Yes	Yes	Yes
44	<u>LMPWRN</u>	Yes	Yes	Lamp replacement warning display	-	-	-	-	Yes	-	-
45	<u>LPOSLD</u>	Yes	-	Lens-position load					Yes		Yes
46	<u>MAIN</u>	Yes	-	Unit control panel emulation	-	Yes	Yes	Yes	Yes	Yes	Yes
47	<u>MEMF</u>	Yes	Yes	Memory color adjustment (flesh)	-	-	-	-	Yes	-	-
48	<u>MEMG</u>	Yes	Yes	Memory color adjustment (green)	-	-	-	-	Yes	-	-
49	<u>MEMS</u>	Yes	Yes	Memory color adjustment (sky)	-	-	-	-	Yes	-	-
50	<u>MUTE</u>	Yes	Yes	Audio mute	-	-	-	-	Yes	-	-
51	<u>NR</u>	Yes	Yes	Random noise reduction	-	-	-	-	Yes	-	-
52	<u>NRMPG</u>	Yes	Yes	MPEG noise reduction	-	-	-	-	Yes	-	-
53	<u>POWER</u>	Yes	Yes	Power supply control	-	Yes	Yes	Yes	Yes	Yes	Yes
54	<u>PRODCODE</u>	-	Yes	Product name inquiry	-	Yes	Yes	Yes	Yes	Yes	Yes
55	<u>RC</u>	Yes	-	Remote control operation emulate	-	Yes	Yes	Yes	Yes	Yes	Yes
56	<u>RGBGAIN</u>	Yes	Yes	RGB gain adjustment	-	-	-	-	Yes	-	-
57	<u>RGBOFFSET</u>	Yes	Yes	RGB offset adjustment	-	-	-	-	Yes	-	-
58	<u>ROMVER</u>	-	Yes	Firmware version inquiry	-	Yes	Yes	Yes	Yes	Yes	Yes
59	<u>SAT</u>	Yes	Yes	Color saturation setting	-	-	-	-	Yes	-	-
60	<u>SAVEIMGPREF</u>	Yes	Yes	User memory creation/storage/deletion	-	-	-	-	Yes	-	-
61	<u>SHARP</u>	Yes	Yes	Sharpness setting	-	-	-	-	Yes	-	-
62	<u>SIGMSG</u>	Yes	Yes	Input status display					Yes	-	-
63	<u>SIGNAL_INFO</u>	-	Yes	Displayed signal information inquiry	-	-	-	-	Yes	-	-
64	<u>SIGNALSTATUS</u>	-	Yes	Signal detection inquiry	-	-	-	-	Yes	-	-
65	<u>TEMP</u>	-	Yes	Temperature sensor value inquiry	-	-	Yes	Yes	Yes	Yes	Yes
66	<u>TPTN</u>	Yes	Yes	Test pattern	-	-	-	-	Yes	-	-

Note: About "Power mode restriction"

Commands are executable only when the projector is in the mode indicated by "Yes." Meaning of each mode is as follows:

Power mode restriction/LAN: Indicates whether the command coming through LAN is executable.

SL0: Standby mode, and the network function is turned off. When the network function is turned off, the command is not executable if coming from LAN, in which case, this should never be "Yes".

SL1: Standby mode, and the network standby setting is set to "Eco."

SL3: Standby mode, and the network standby setting is set to "Normal."

PM: Power management "lamp off" standby

ON: Normal projection status

Power/RS-232C: Indicates whether the command coming through RS-232C is executable.

ST: Standby mode (includes SL0, SL1 and SL3 altogether, regardless of the network setting).

5. Guide to Command Description

This section explains how commands are described.
The command descriptions have the format shown below.

EXAMPLE

Summary of the function

Format

Setting	Command	A command format when a command is sent to the projector to make a setting for the function. "-" is shown when there is no setting command. Example) 6AXADJ=<6-axis adjustment parameter:
	Response	A response format for the setting command. "-" is shown when there is no setting command. Example) i:OK
Reference	Command	A command format when a command is sent to the projector to refer to the current setting, status and others for the function. "-" is shown when there is no reference command. Example) GET=6AXADJ
	Response	A response format for a reference command. "-" is shown when there is no reference command. Example) g:6AXADJ=<6-axis adjustment parameter:

Note: See "Error list" for any response other than the above.

When parameters exist for the command, a list of parameter is inserted in this position.

Example)

<6-axis adjustment parameter:ID>

Parameter	Meaning
ON	Valid
OFF	Invalid

■ Environment

This defines the environments that support the command (power supply state, input signal state). The command is executable when the projector is in the mode indicated by "Yes" in the table of corresponding command description page.

Power mode restriction								Input							
LAN*1				RS-232C*7											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
*2	*3	*4	*5	*6	*8	*5	*6	*9	*9	*9	*9	*9	*9	*9	*9

*1 Power mode restriction/LAN

Indicates whether the command coming through LAN is executable.

*2 SL0

Standby mode, and the network function is turned off.

In real terms, this should never be "Yes".

*3 SL1

Standby mode, and the network standby setting is set to "Eco."

*4 SL3

Standby mode, and the network standby setting is set to "Normal."

*5 PM

Power management "lamp off" standby

*6 ON

Normal projection status

*7 Power mode restriction/RS-232C

Indicates whether the command coming through RS-232C is executable.

*8 ST

Standby mode (includes SL0, SL1 and SL3 altogether, regardless of the network setting).

*9 Input

Valid when the projector is in the input signal mode indicated by "Yes". Invalid when the projector is in the input signal mode indicated by "No".

■ Remarks

The descriptions on command functions, conditions, and important points are provided.

■ Example

The examples of use of the command are provided.

6. Command Details

6AXADJ

6-axis color adjustment

Format

Setting	Command	6AXADJ=<6-axis adjustment parameter: ID>
	Response	i:OK
Reference	Command	GET=6AXADJ
	Response	g:6AXADJ=<6-axis adjustment parameter: ID>

Note: See "Error list" for any response other than the above.

<6-axis adjustment parameter:ID>

Parameter	Meaning
ON	Adjusted
OFF	Turned off

Environment

Power mode restriction										Input							
LAN					RS-232C												
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None		
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		

Remarks

- (1) Use "6AXR - Y" command when this is set to "ON" and the corrected 6-axis values need to be changed.
- (2) This sets the currently selected input signal and image mode.

Example

(Control)

```
> 6AXADJ=ON
< i:OK
```

(Reference)

```
> GET=6AXADJ
< g:6AXADJ=ON
```

Note: '>' indicates a command; '<' indicates a response.

6AXR

6-axis adjustment (red), hue/saturation/brightness

Format

Setting	Command	6AXR=<R hue:Number>,<R saturation:Number>,<R brightness:Number>
	Response	i:OK
Reference	Command	GET=6AXR
	Response	g:6AXR=<R hue:Number>,<R saturation:Number>,<R brightness:Number>

Note: See "Error list" for any response other than the above.

<R hue:Number> is within -20 to 20.

<R saturation:Number> is within -20 to 20.

<R brightness:Number> is within -20 to 20.

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Remarks

- (1) When 6-axis adjustment is turned on, these settings are shown over the displayed image. However, the settings can be changed regardless of whether 6-axis adjustment is turned on or not.
- (2) This sets the currently selected input signal and image mode.

Example

(Setting)

>6AXR=-8,5,3

< i:OK

(Reference)

> GET=6AXR

< g:6AXR=-8,5,3

Note: '>' indicates a command; '<' indicates a response.

6AXG

6-axis adjustment (green), hue/saturation/brightness

Format

Setting	Command	6AXG=<G hue:Number>,<G saturation:Number>,<G brightness:Number>
	Response	i:OK
Reference	Command	GET=6AXG
	Response	g:6AXG=<G hue:Number>,<G saturation:Number>,<G brightness:Number>

Note: See "Error list" for any response other than the above.

<G hue:Number> is within -20 to 20.

<G saturation:Number> is within -20 to 20.

<G brightness:Number> is within -20 to 20.

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Remarks

- (1) When 6-axis adjustment is turned on, these settings are shown over the displayed image. However, the settings can be changed regardless of whether 6-axis adjustment is turned on or not.
- (2) This sets the currently selected input signal and image mode.

Example

(Setting)

>6AXG=-8,5,3

< i:OK

(Reference)

> GET=6AXG

< g:6AXG=-8,5,3

Note: '>' indicates a command; '<' indicates a response.

6AXB

6-axis adjustment (blue), hue/saturation/brightness

Format

Setting	Command	6AXB=<B hue:Number>,<B saturation:Number>,<B brightness:Number>
	Response	i:OK
Reference	Command	GET=6AXB
	Response	g:6AXB=<B hue:Number>,<B saturation:Number>,<B brightness:Number>

Note: See "Error list" for any response other than the above.

<B hue:Number> is within -20 to 20.

<B saturation:Number> is within -20 to 20.

<B brightness:Number> is within -20 to 20.

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Remarks

- (1) When 6-axis adjustment is turned on, these settings are shown over the displayed image. However, the settings can be changed regardless of whether 6-axis adjustment is turned on or not.
- (2) This sets the currently selected input signal and image mode.

Example

(Setting)

>6AXB=-8,5,3

< i:OK

(Reference)

> GET=6AXB

< g:6AXB=-8,5,3

Note: '>' indicates a command; '<' indicates a response.

6AXC

6-axis adjustment (cyan), hue/saturation/brightness

Format

Setting	Command	6AXC=<C hue:Number>,<C saturation:Number>,<C brightness:Number>
	Response	i:OK
Reference	Command	GET=6AXC
	Response	g:6AXC=<C hue:Number>,<C saturation:Number>,<C brightness:Number>

Note: See "Error list" for any response other than the above.

<C hue:Number> is within -20 to 20.

<C saturation:Number> is within -20 to 20.

<C brightness:Number> is within -20 to 20.

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Remarks

- (1) When 6-axis adjustment is turned on, these settings are shown over the displayed image. However, the settings can be changed regardless of whether 6-axis adjustment is turned on or not.
- (2) This sets the currently selected input signal and image mode.

Example

(Setting)

>6AXC=-8,5,3

<i:OK

(Reference)

>GET=6AXC

<g:6AXC=-8,5,3

Note: '>' indicates a command; '<' indicates a response.

6AXM

6-axis adjustment (magenta), hue/saturation/brightness

Format

Setting	Command	6AXM=<M hue:Number>,<M saturation:Number>,<M brightness:Number>
	Response	i:OK
Reference	Command	GET=6AXM
	Response	g:6AXM=<M hue:Number>,<M saturation:Number>,<M brightness:Number>

Note: See "Error list" for any response other than the above.

<M hue:Number> is within -20 to 20.

<M saturation:Number> is within -20 to 20.

<M brightness:Number> is within -20 to 20.

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Remarks

- (1) When 6-axis adjustment is turned on, these settings are shown over the displayed image. However, the settings can be changed regardless of whether 6-axis adjustment is turned on or not.
- (2) This sets the currently selected input signal and image mode.

Example

(Setting)

>6AXM=-8,5,3

< i:OK

(Reference)

> GET=6AXM

< g:6AXM=-8,5,3

Note: '>' indicates a command; '<' indicates a response.

6AXY

6-axis adjustment (yellow), hue/saturation/brightness

Format

Setting	Command	6AXY=<Y hue:Number>,<Y saturation:Number>,<Y brightness:Number>
	Response	i:OK
Reference	Command	GET=6AXY
	Response	g:6AXY=<Y hue:Number>,<Y saturation:Number>,<Y brightness:Number>

Note: See "Error list" for any response other than the above.

<Y hue:Number> is within -20 to 20.

<Y saturation:Number> is within -20 to 20.

<Y brightness:Number> is within -20 to 20.

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Remarks

- (1) When 6-axis adjustment is turned on, these settings are shown over the displayed image. However, the settings can be changed regardless of whether 6-axis adjustment is turned on or not.
- (2) This sets the currently selected input signal and image mode.

Example

(Setting)

>6AXY=-8,5,3

< i:OK

(Reference)

> GET=6AXY

< g:6AXY=-8,5,3

Note: '>' indicates a command; '<' indicates a response.

AMBADJ

Ambient light correction adjustment

Format

Setting	Command	AMBADJ=<Ambient light correction adjustment parameter:ID>
	Response	i:OK
Reference	Command	GET=AMBADJ
	Response	g:AMBADJ=<Ambient light correction adjustment parameter:ID>

Note: See "Error list" for any response other than the above.

< Ambient light correction adjustment parameter:ID >

Parameter	Meaning
ON	Adjusted
OFF	Turned off

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Remarks

- (1) Ambient light level and "Ambient light type" settings take effect on the displayed image when "Ambient light correction" is activated.
To adjust the "Ambient light level" or "Ambient light type", use "AMBLEVEL" or "AMBTYPE" command, respectively.
- (2) This sets the currently selected input signal and image mode.

Example

(Control)

```
> AMBADJ=ON
< i:OK
```

(Reference)

```
> GET=AMBADJ
< g:AMBADJ=ON
```

Note: '>' indicates a command; '<' indicates a response.

AMBLEVEL

Ambient light level settings

Format

Setting	Command	AMBLEVEL=<Ambient light level settings parameter:ID>
	Response	i:OK
Reference	Command	GET=AMBLEVEL
	Response	g: AMBLEVEL=<Ambient light level settings parameter:ID>

Note: See "Error list" for any response other than the above.

< Ambient light level settings parameter:ID >

Parameter	Meaning
WEAK	Ambient light level is set to weak.
STRONG	Ambient light level is set to strong.

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Remarks

- (1) This sets the currently selected input signal and image mode.

Example

(Setting)

```
>AMBLEVEL=WEAK
<i:OK
```

(Reference)

```
> GET=AMBLEVEL
< g:AMBLEVEL=WEAK
```

Note: '>' indicates a command; '<' indicates a response.

AMBTYPE

Ambient light type settings

Format

Setting	Command	AMBTYPE=<Ambient light type settings parameter:ID>
	Response	i:OK
Reference	Command	GET=AMBTYPE
	Response	g: AMBTYPE=<Ambient light type settings parameter:ID>

Note: See "Error list" for any response other than the above.

< Ambient light type settings parameter:ID >

Parameter	Meaning
TG	Tungsten lamp
FL	Fluorescent lamp

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Remarks

- (1) This sets the currently selected input signal and image mode.

Example

(Setting)

```
>AMBTYPE=FL
<i:OK
```

(Reference)

```
> GET=AMBTYPE
< g:AMBTYPE=FL
```

Note: '>' indicates a command; '<' indicates a response.

ASELD1

DVI-1 audio terminal selection

Format

Setting	Command	ASELD1=<Digital PC audio terminal selection parameter:ID>
	Response	i:OK
Reference	Command	GET=ASELD1
	Response	g: ASELD1=<Digital PC audio terminal selection parameter:ID>

Note: See "Error list" for any response other than the above.

<Digital PC audio terminal selection parameter:ID>

Parameter	Meaning
1	Audio In 1
OFF	Turned off

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Example

(Setting)

>ASELD1=1

< i:OK

(Reference)

> GET=ASELD1

< g:ASELD1=1

Note: '>' indicates a command; '<' indicates a response.

ASELD2

DVI-2 audio terminal selection

Format

Setting	Command	ASELD2=<Digital PC audio terminal selection parameter:ID>
	Response	i:OK
Reference	Command	GET=ASELD2
	Response	g:ASELD2=<Digital PC audio terminal selection parameter:ID>

Note: See "Error list" for any response other than the above.

<Digital PC audio terminal selection parameter:ID>

Parameter	Meaning
1	Audio In 1
OFF	Turned off

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Example

(Setting)

>ASELD2=1

< i:OK

(Reference)

> GET=ASELD2

< g:ASELD2=1

Note: '>' indicates a command; '<' indicates a response.

ASELD3

DVI-3 Audio input terminal selection

Format

Setting	Command	ASELD3=<Digital PC audio terminal selection parameter:ID>
	Response	i:OK
Reference	Command	GET=ASELD3
	Response	g: ASELD3=<Digital PC audio terminal selection parameter:ID>

Note: See "Error list" for any response other than the above.

< Digital PC audio terminal selection parameter:ID>

Parameter	Meaning
1	Audio In 1
OFF	Turned off

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Example

(Setting)

>ASELD3=1

< i:OK

(Reference)

> GET=ASELD3

< g:ASELD3=1

Note: '>' indicates a command; '<' indicates a response.

ASELD4

DVI-4 Audio input terminal selection

Format

Setting	Command	ASELD4=<Digital PC audio terminal selection parameter:ID>
	Response	i:OK
Reference	Command	GET=ASELD4
	Response	g:ASELD4=<Digital PC audio terminal selection parameter:ID>

Note: See "Error list" for any response other than the above.

< Digital PC audio terminal selection parameter:ID>

Parameter	Meaning
1	Audio In 1
OFF	Turned off

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Example

(Setting)

>ASELD4=1

< i:OK

(Reference)

> GET=ASELD4

< g:ASELD4=1

Note: '>' indicates a command; '<' indicates a response.

ASELDX2

DVI 1x2 Audio input terminal selection

Format

Setting	Command	ASELDX2=<Digital PC audio terminal selection parameter:ID>
	Response	i:OK
Reference	Command	GET=ASELDX2
	Response	g:ASELDX2=<Digital PC audio terminal selection parameter:ID>

Note: See "Error list" for any response other than the above.

< Digital PC audio terminal selection parameter:ID>

Parameter	Meaning
1	Audio In 1
OFF	Turned off

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Example

(Setting)

>ASELDX2=1

< i:OK

(Reference)

> GET=ASELDX2

< g:ASELDX2=1

Note: '>' indicates a command; '<' indicates a response.

ASELDX4

DVI 2x2 / 1x4 Audio input terminal selection

Format

Setting	Command	ASELDX4=<Digital PC audio terminal selection parameter:ID>
	Response	i:OK
Reference	Command	GET=ASELDX4
	Response	g: ASELDX4=<Digital PC audio terminal selection parameter:ID>

Note: See "Error list" for any response other than the above.

< Digital PC audio terminal selection parameter:ID>

Parameter	Meaning
1	Audio In 1
OFF	Turned off

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Example

(Setting)

> ASELDX4=1

< i:OK

(Reference)

> GET=ASELDX4

< g:ASELDX4=1

Note: '>' indicates a command; '<' indicates a response.

ASELH1

HDMI-1 audio input terminal selection

Format

Setting	Command	ASELH1=<HDMI audio terminal selection parameter:ID>
	Response	i:OK
Reference	Command	GET=ASELH1
	Response	g:ASELH1=<HDMI audio terminal selection parameter:ID>

Note: See "Error list" for any response other than the above.

<HDMI audio terminal selection parameter:ID>

Parameter	Meaning
H1	HDMI1 audio
1	Audio In 1
OFF	Turned off

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Example

(Setting)

>ASELH1=H1

< i:OK

(Reference)

> GET=ASELH1

< g:ASELH1=H1

Note: '>' indicates a command; '<' indicates a response.

ASELH2

HDMI-2 audio input terminal selection

Format

Setting	Command	ASELH2=<HDMI audio terminal selection parameter:ID>
	Response	i:OK
Reference	Command	GET=ASELH2
	Response	g:ASELH2=<HDMI audio terminal selection parameter:ID>

Note: See "Error list" for any response other than the above.

<HDMI audio terminal selection parameter:ID>

Parameter	Meaning
H2	HDMI2 audio
OFF	Turned off

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Example

(Setting)

>ASELH2=H2

< i:OK

(Reference)

> GET=ASELH2

< g:ASELH2=H2

Note: '>' indicates a command; '<' indicates a response.

ASELHX2

HDMIx2 audio input terminal selection

Format

Setting	Command	ASELHX2=<HDMI audio terminal selection parameter:ID>
	Response	i:OK
Reference	Command	GET=ASELHX2
	Response	g:ASELHX2=<HDMI audio terminal selection parameter:ID>

Note: See "Error list" for any response other than the above.

<HDMI audio terminal selection parameter:ID>

Parameter	Meaning
H1	HDMI1 audio
H2	HDMI2 audio
1	Audio in 1
OFF	Turned off

Environment

Power mode restriction										Input							
LAN					RS-232C												
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None		
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		

Example

(Setting)
>ASELHX2=H2
<i:OK

(Reference)
>GET=ASELHX2
<g:ASELHX2=H2

Note: '>' indicates a command; '<' indicates a response.

ASPECT

Aspect ratio

Format

Setting	Command	ASPECT=<Screen setting parameters:ID>
	Response	i:OK
Reference	Command	GET=ASPECT
	Response	g:ASPECT=<Screen setting parameters:ID>

Note: See "Error list" for any response other than the above.

< Screen setting parameters:ID >

Parameter	Meaning
AUTO	Auto
TRUE	Real

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Remarks

- (1) Aspect setting may be automatically changed by other setting when the input terminal is changed or input signal is disturbed.

Example

(Setting)
>ASPECT=AUTO
<i:OK

(Reference)
> GET=ASPECT
< g:ASPECT=AUTO

Note: '>' indicates a command; '<' indicates a response.

AVOL

Audio volume adjustment

Format

Setting	Command	AVOL=<Audio volume:Number>
	Response	i:OK
Reference	Command	GET= AVOL
	Response	g:AVOL=<Audio volume:Number>

Note: See "Error list" for any response other than the above.

Setting values for <Audio volume:Number> are 0 to 20.

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Remarks

- (1) Audio mute setting is canceled if audio volume is adjusted during audio mute.

Example

(Setting)

>AVOL=10

< i:OK

(Reference)

> GET=AVOL

< g:AVOL=10

Note: '>' indicates a command; '<' indicates a response.

BLANK

Screen blank

Format

Setting	Command	BLANK=<BLANK parameter:ID>
	Response	i:OK
Reference	Command	GET=BLANK
	Response	g:BLANK=<BLANK parameter:ID>

Note: See "Error list" for any response other than the above.

< BLANK parameter:ID >

Parameter	Meaning
ON	BLANK ON
OFF	BLANK OFF

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Remarks

- (1) Executing this command in a FREEZE status will cancel the FREEZE status and become BLANK.

Example

(Setting)

```
> BLANK=ON
< i:OK
```

(Reference)

```
> GET=BLANK
< g:BLANK=ON
```

Note: '>' indicates a command; '<' indicates a response.

BRI

Brightness setting

Format

Setting	Command	BRI=<Brightness setting:Number>
	Response	i:OK
Reference	Command	GET=BRI
	Response	g:BRI=<Brightness setting:Number>

Note: See "Error list" for any response other than the above.

Setting values for <Brightness setting:Number> are -20 to 20.

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Remarks

- (1) This sets the currently selected input signal and image mode.

Example

(Setting)

> BRI=3

< i:OK

(Reference)

> GET=BRI

< g:BRI=3

Note: '>' indicates a command; '<' indicates a response.

COLOR_TEMP

Color temperature setting

Format

Setting	Command	COLOR_TEMP=<Color temperature setting:Number>
	Response	i:OK
Reference	Command	GET=COLOR_TEMP
	Response	g:COLOR_TEMP=<Color temperature setting:Number>

Note: See "Error list" for any response other than the above.

Setting values for <Color temperature setting:Number> are -17 to 21.

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Remarks

- (1) This sets the currently selected input signal and image mode.

Example

(Setting)

```
> COLOR_TEMP=3  
< i:OK
```

(Reference)

```
> GET=COLOR_TEMP  
< g:COLOR_TEMP=3
```

Note: '>' indicates a command; '<' indicates a response.

COMVER

User command version inquiry

Format

Setting	Command	—
	Response	—
Reference	Command	GET=COMVER
	Response	g:COMVER=<User command version:Character string>

Note: See "Error list" for any response other than the above.

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Remarks

- (1) User command version consists of <2-digit number> and <4-digit number>. (Example "01.1234")

Example

> GET=COMVER
< g:COMVER="01.1234"

Note: '>' indicates a command; '<' indicates a response.

CONT

Contrast setting

Format

Setting	Command	CONT=<Contrast setting:Number>
	Response	i:OK
Reference	Command	GET=CONT
	Response	g:CONT=<Contrast setting:Number>

Note: See "Error list" for any response other than the above.

Setting values for <Contrast setting:Number> are -20 to 20.

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Remarks

- (1) This sets the currently selected input signal and image mode.

Example

(Setting)

> CONT=3
< i:OK

(Reference)

> GET=CONT
< g:CONT=3

Note: '>' indicates a command; '<' indicates a response.

DGAMMA

Dynamic gamma

Format

Setting	Command	DGAMMA=<Dynamic gamma setting parameter:ID>
	Response	i:OK
Reference	Command	GET=DGAMMA
	Response	g:DGAMMA=<Dynamic gamma setting parameter:ID>

Note: See "Error list" for any response other than the above.

< Dynamic gamma setting parameter:ID >

Parameter	Meaning
OFF	Turned off
WEAK	Weak
MIDDLE	Middle
STRONG	Strong

Environment

Power mode restriction										Input							
LAN					RS-232C												
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None		
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		

Remarks

- (1) This sets the currently selected input signal and image mode.

Example

(Setting)

```
> DGAMMA=WEAK
< i:OK
```

(Reference)

```
> GET=DGAMMA
< g:DGAMMA=WEAK
```

Note: '>' indicates a command; '<' indicates a response.

ERR

Error information inquiry

Format

Setting	Command	—
	Response	—
Reference	Command	GET=ERR
	Response	g:ERR=<ErrorID:Character string>

Note: See "Error list" for any response other than the above.

<ErrorID:Character string>

Parameter	Meaning
NO_ERROR	No error
ABNORMAL_TEMPERATURE	Temperature error
FAULTY_LAMP	Lamp error
FAULTY_LAMP_COVER	Lamp cover error
FAULTY_COOLING_FAN	Cooling fan error
FAULTY_POWER_SUPPLY	Power supply error
FAULTY_AIR_FILTER	Air filter error

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Remarks

- (1) Information when the warning LED of the projector is flashing can be obtained.
NO_ERROR is returned when the warning LED is not lighted.

Example

```
>GET=ERR
< g:ERR=FAULTY_LAMP
```

Note: '>' indicates a command; '<' indicates a response.

FINE_GAMMA_R

Fine gamma (R)

Format

Setting	Command	FINE_GAMMA_R=<Fine gamma (R) adjustment point 1 adjustment value:Number>,<Fine gamma (R) adjustment point 2 adjustment value:Number>, · · · ,<Fine gamma (R) adjustment point n adjustment value:Number>
		i:OK
Reference	Command	GET=FINE_GAMMA_R
	Response	g: FINE_GAMMA_R=<Fine gamma (R) adjustment point 1 adjustment value:Number>,<Fine gamma (R) adjustment point 2 adjustment value:Number>, · · · ,<Fine gamma (R) adjustment point n adjustment value:Number>

Note: See "Error list" for any response other than the above.

Adjustment values for <Fine gamma (R) adjustment point n adjustment value:Number> are 0 to 1024.

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Remarks

- (1) This sets the currently selected input signal and image mode.
- (2) In the projector menu, the difference between adjustment point 1 and adjustment point 9 is controlled so that it is 128 or greater, but this limitation does not apply to settings specified from user commands.

Example

(Setting)

```
> FINE_GAMMA_R=0,128,256,384,512,640,768,896,1024
< i:OK
```

(Reference)

```
> GET=FINE_GAMMA_R
< g:FINE_GAMMA_R=9:0,128,256,384,512,640,768,896,1024
```

Note: '>' indicates a command; '<' indicates a response.

FINE_GAMMA_G

Fine gamma (G)

Format

Setting	Command	FINE_GAMMA_G=<Fine gamma (G) adjustment point 1 adjustment value:Number>,<Fine gamma (G) adjustment point 2 adjustment value:Number>, · · · ,<Fine gamma (G) adjustment point n adjustment value:Number>
	Response	i:OK
Reference	Command	GET=FINE_GAMMA_G
	Response	g: FINE_GAMMA_G=<Fine gamma (G) adjustment point 1 adjustment value:Number>,<Fine gamma (G) adjustment point 2 adjustment value:Number>, · · · ,<Fine gamma (G) adjustment point n adjustment value:Number>

Note: See "Error list" for any response other than the above.

Adjustment values for <Fine gamma (R) adjustment point n adjustment value:Number> are 0 to 1024.

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Remarks

- (1) This sets the currently selected input signal and image mode.
- (2) In the projector menu, the difference between adjustment point 1 and adjustment point 9 is controlled so that it is 128 or greater, but this limitation does not apply to settings specified from user commands.

Example

(Setting)

```
> FINE_GAMMA_G=0,128,256,384,512,640,768,896,1024
< i:OK
```

(Reference)

```
> GET=FINE_GAMMA_G
< g:FINE_GAMMA_G=9:0,128,256,384,512,640,768,896,1024
```

Note: '>' indicates a command; '<' indicates a response.

FINE_GAMMA_B

Fine gamma (B)

Format

Setting	Command	FINE_GAMMA_B=<Fine gamma (B) adjustment point 1 adjustment value:Number>,<Fine gamma (B) adjustment point 2 adjustment value:Number>, · · · ,<Fine gamma (B) adjustment point n adjustment value:Number>
	Response	i:OK
Reference	Command	GET=FINE_GAMMA_B
	Response	g: FINE_GAMMA_B=<Fine gamma (B) adjustment point 1 adjustment value:Number>,<Fine gamma (B) adjustment point 2 adjustment value:Number>, · · · ,<Fine gamma (B) adjustment point n adjustment value:Number>

Note: See "Error list" for any response other than the above.

Adjustment values for <Fine gamma (R) adjustment point n adjustment value:Number> are 0 to 1024.

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Remarks

- (1) This sets the currently selected input signal and image mode.
- (2) In the projector menu, the difference between adjustment point 1 and adjustment point 9 is controlled so that it is 128 or greater, but this limitation does not apply to settings specified from user commands.

Example

(Setting)

```
> FINE_GAMMA_B=0,128,256,384,512,640,768,896,1024
< i:OK
```

(Reference)

```
> GET=FINE_GAMMA_B
< g:FINE_GAMMA_B=9:0,128,256,384,512,640,768,896,1024
```

Note: '>' indicates a command; '<' indicates a response.

FLTWRN

Air filter cleaning warning

Format

Setting	Command	FLTWRN=<Filter warning parameter:ID>
	Response	i:OK
Reference	Command	GET=FLTWRN
	Response	g: FLTWRN=<Filter warning parameter:ID>

Note: See "Error list" for any response other than the above.

FLTWRN=<Filter warning parameter:ID>

Parameter	Meaning
OFF	Turned off
ON	Turned on

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Example

(Setting)

>FLTWRN=OFF

< i:OK

(Reference)

>GET=FLTWRN

< g:FLTWRN=OFF

Note: '>' indicates a command; '<' indicates a response.

FREEZE

Screen freeze

Format

Setting	Command	FREEZE=<FREEZE parameter:ID>
	Response	i:OK
Reference	Command	GET= FREEZE
	Response	g: FREEZE=<FREEZE parameter:ID>

Note: See "Error list" for any response other than the above.

< FREEZE parameter:ID >

Parameter	Meaning
ON	On
OFF	Off

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No

Example

(Setting)

>FREEZE=ON

< i:OK

(Reference)

>GET=FREEZE

< g:FREEZE=ON

Note: '>' indicates a command; '<' indicates a response.

GAMMA

Gamma adjustment

Format

Setting	Command	GAMMA=<Gamma adjustment:Number>
	Response	i:OK
Reference	Command	GET=GAMMA
	Response	g: GAMMA=<Gamma adjustment:Number>

Note: See "Error list" for any response other than the above.

Setting values for <Gamma adjustment: Number> are -10 to 10.

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Remarks

- (1) This sets the currently selected input signal and image mode.

Example

(Setting)
>GAMMA=-1
< i:OK

(Reference)
>GET=GAMMA
< g:GAMMA=-1

Note: '>' indicates a command; '<' indicates a response.

HTMPINF

High temperature caution display

Format

Setting	Command	HTMPINF=<High temperature caution display setting parameter:ID>
	Response	i:OK
Reference	Command	GET= HTMPINF
	Response	g:HTMPINF=<High temperature caution display setting parameter:ID>

Note: See "Error list" for any response other than the above.

<High temperature caution display setting parameter:ID>

Parameter	Meaning
ON	Turned on
OFF	Turned off

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Example

(Setting)

>HTMPINF=ON

< i:OK

(Reference)

>GET=HTMPINF

< g:HTMPINF=ON

Note: '>' indicates a command; '<' indicates a response.

HUE

Hue setting

Format

Setting	Command	HUE=<Hue setting value:Number>
	Response	i:OK
Reference	Command	GET= HUE
	Response	g:HUE=<Hue setting value:Number>

Note: See "Error list" for any response other than the above.

Setting values for <Hue setting value:Number> are -20 to 20.

Environment

Power mode restriction										Input							
LAN					RS-232C												
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None		
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		

Remarks

- (1) This sets the currently selected input signal and image mode.

Example

(Setting)

>HUE=8

< i:OK

(Reference)

>GET=HUE

< g:HUE=1

Note: '>' indicates a command; '<' indicates a response.

IMAGE

Image mode setting

Format

Setting	Command	IMAGE=<Image mode setting parameter:ID>
	Response	i:OK
Reference	Command	GET= IMAGE
	Response	g: IMAGE=<Image mode setting parameter:ID>

Note: See "Error list" for any response other than the above.

<Image mode setting parameter:ID>

Parameter	Meaning
STANDARD	Standard
PRESENTATION	Presentation
PHOTO_SRGB	Photo/sRGB
DCM_SIM	DICOM Sim
DYNAMIC	Dynamic
VIDEO	Video
USER_1	User 1
USER_2	User 2
USER_3	User 3

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Remarks

- (1) When Image Mode setting is changed, the following set of setting items are reapplied as these sets are unique to the individual image modes.

Example

(Setting)

```
>IMAGE=STANDARD
< i:OK
```

(Reference)

```
>GET=IMAGE
< g:IMAGE=STANDARD
```

Note: '>' indicates a command; '<' indicates a response.

IMAGEFLIP

Flip display

Format

Setting	Command	IMAGEFLIP=<Image flip setting parameters:ID>
	Response	i:OK
Reference	Command	GET= IMAGEFLIP
	Response	g: IMAGEFLIP=<Image flip setting parameters:ID>

Note: See "Error list" for any response other than the above.

< Image flip setting parameters:ID >

Parameter	Meaning
NONE	None
CEILING	Ceiling mount (upside down and right side left)
REAR	Rear (right side left)
REAR_CEILING	Rear, ceiling mount (upside down)

Environment

Power mode restriction										Input							
LAN					RS-232C												
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None		
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		

Remarks

- (1) When the display is flipped, the "keystone distortion" settings are initialized.

Example

(Setting)

```
>IMAGEFLIP=REAR
<i:OK
```

(Reference)

```
>GET=IMAGEFLIP
<g:IMAGEFLIP=REAR_CEILING
```

Note: '>' indicates a command; '<' indicates a response.

INPUT

Input signal selection

Format

Setting	Command	INPUT=<Input selection parameters:ID>
	Response	i:OK
Reference	Command	GET= INPUT
	Response	g: INPUT=<Input selection parameters:ID>

Note: See "Error list" for any response other than the above.

< Input selection parameters:ID >

Parameter	Meaning
HDMI1	HDMI-1
HDMI2	HDMI-2
HDMI1X2	HDMI 1X2
D-RGB1	DVI-1
D-RGB2	DVI-2
D-RGB3	DVI-3
D-RGB4	DVI-4
D-RGB1X2	DVI 1X2
D-RGB2X2	DVI 2X2
D-RGB1X4	DVI 1X4

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Example

(Setting)

>INPUT=D-RGB1

< i:OK

(Reference)

>GET=INPUT

< g:INPUT=D-RGB1

Note: '>' indicates a command; '<' indicates a response.

IRIS

Iris setting

Format

Setting	Command	IRIS=<Iris setting parameters:ID>
	Response	i:OK
Reference	Command	GET= IRIS
	Response	g: IRIS=<Iris setting parameters:ID>

Note: See "Error list" for any response other than the above.

< Iris setting parameters:ID >

Parameter	Meaning
OPEN	Open
CLOSE1	Close 1
CLOSE2	Close 2
CLOSE3	Close 3

Environment

Power mode restriction										Input							
LAN					RS-232C												
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None		
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		

Example

(Setting)

> IRIS=OPEN
< i:OK

(Reference)

>GET=IRIS
< g:IRIS=OPEN

Note: '>' indicates a command; '<' indicates a response.

KREP

Key repeat

Format

Setting	Command	KREP=<Key repeat parameter:ID>
	Response	i:OK
Reference	Command	GET=KREP
	Response	g:KREP=<Key repeat parameter:ID>

Note: See "Error list" for any response other than the above.

< Key repeat parameter:ID >

Parameter	Meaning
OFF	Turned off
ON	Turned on

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Example

(Setting)

>KREP=OFF

< i:OK

(Reference)

>GET=KREP

< g:KREP=OFF

Note: '>' indicates a command; '<' indicates a response.

LAMP

Lamp mode

Format

Setting	Command	LAMP=<Lamp output setting parameters:ID>
	Response	i:OK
Reference	Command	GET=LAMP
	Response	g:LAMP=<Lamp output setting parameters:ID>

Note: See "Error list" for any response other than the above.

< Lamp output setting parameters:ID >

Parameter	Meaning
FULL	Full power
ECO	Eco

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Remarks

- (1) This sets the currently selected input signal and image mode.

Example

(Setting)

```
>LAMP=ECO
<i:OK
```

(Reference)

```
>GET=LAMP
<g:LAMP=ECO
```

Note: '>' indicates a command; '<' indicates a response.

LAMPCOUNTER

Lamp counter inquiry

Format

Setting	Command	-
	Response	-
Reference	Command	GET=LAMPCOUNTER
	Response	g:LAMPCOUNTER=<Lamp ON time:Character string>

Note: See "Error list" for any response other than the above.

< Lamp ON time:Character string >

Lamp counter	ON time:H
"[G____]"	0 to 539
"[GG____]"	540 to 1079
"[GGG____]"	1080 to 1619
"[GGGG____]"	1620 to 2159
"[GGGGG____]"	2160 to 2699
"[GGGGGY____]"	2700 to 2849
"[GGGGGYY____]"	2850 to 2999
"[GGGGGYYR____]"	3000 to

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Example

```
>GET=LAMPCOUNTER
< g:LAMPCOUNTER="[GG____]"
```

Note: '>' indicates a command; '<' indicates a response.

LMPWRN

Lamp replacement warning display

Format

Setting	Command	LMPWRN=<Lamp warning parameter:ID>
	Response	i:OK
Reference	Command	GET=LMPWRN
	Response	g: LMPWRN=<Lamp warning parameter:ID>

Note: See "Error list" for any response other than the above.

< Lamp warning parameter:ID>

Parameter	Meaning
OFF	Turned off
ON	Turned on

Environment

Power mode restriction										Input							
LAN					RS-232C												
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None		
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		

Example

(Setting)

>LMPWRN=OFF

< i:OK

(Reference)

>GET=LMPWRN

< g:LMPWRN

Note: '>' indicates a command; '<' indicates a response.

LPOSLD

Lens-position load

Format

Setting	Command	LPOSLD=<Lens-position load setting parameter: ID>
	Response	i:OK
Reference	Command	-
	Response	-

Note: See "Error list" for any response other than the above.

<Lens-position load setting parameter: ID>

Parameter	Meaning
1	Position load 1
2	Position load 2
3	Position load 3

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Remarks

- (1) This parameter cannot be set when position save has not been executed.
- (2) This is not a user command to execute position save. Execute it from the menu.

Example

>LPOSLD=1
<i:OK

Note: '>' indicates a command; '<' indicates a response.

MAIN

Unit control panel emulation

Format

Setting	Command	MAIN=<Side control emulation button parameters:ID>
	Response	i:OK
Reference	Command	-
	Response	-

Note: See "Error list" for any response other than the above.

< Side control emulation button parameters:ID >

Operation		Parameter	Remarks
POWER		POWER	
-		POWER_OFF	Power OFF
MENU		MENU	
INPUT		INPUT	
AUTOPC		AUTOPC	
KEYSTONE		KEYSTONE	
UP		UP	
		UP+REP	Button press start
DOWN		DOWN	
		DOWN +REP	Button press start
LEFT		LEFT	
		LEFT +REP	Button press start
RIGHT		RIGHT	
		RIGHT +REP	Button press start
OK		OK	
-		*-REP	Button press end

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Remarks

- (1) Parameters with "+REP" indicates "Button press start" (same state as when the front panel button is held down). Be absolutely sure to send the '*-REP' parameter, and end the button pressing last of all.
The button pressing is ended in the cases below as well.
When buttons on the panel or the remote are operated
When some command has been received
- (2) When ceiling mount setting is made, functions of UP/DOWN/LEFT/RIGHT buttons on the unit control panel are reversed. But the "MAIN" command's UP/DOWN/LEFT/RIGHT are unaffected and always work in the same way as when installed on the floor.
- (3) Adjust the time between each button press using the application.
- (4) When a button press request is accepted properly, the projector returns "i:OK" even when the function is inexecutable.
(This response is the same also for POWER_OFF parameters. The projector returns "i:OK" as an indication that the power-off request was accepted but does not return information as to whether power-off was actually executed.)

- (5) When a button press request is accepted properly, the projector will behave in the same manner as when the button on the unit control panel is pressed.
- (6) All parameters except "Power" are invalid during standby mode.

■ Example

(Setting)
>MAIN=MENU
< i:OK

Note: '>' indicates a command; '<' indicates a response.

MEMF

Memory color adjustment (flesh)

Format

Setting	Command	MEMF=<Memory color adjustment parameter:ID>
	Response	i:OK
Reference	Command	GET=MEMF
	Response	g:MEMF=<Memory color adjustment parameter:ID>

Note: See "Error list" for any response other than the above.

< Memory color adjustment parameter:ID >

Parameter	Meaning
OFF	Turned off
WEAK	Weak
MIDDLE	Middle
STRONG	Strong

Environment

Power mode restriction										Input							
LAN					RS-232C												
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None		
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		

Remarks

- (3) This sets the currently selected input signal and image mode.

Example

(Control)

>MEMF=MIDDLE

< i:OK

(Reference)

> GET=MEMF

< g:MEMF=MIDDLE

Note: '>' indicates a command; '<' indicates a response.

MEMG

Memory color adjustment (green)

Format

Setting	Command	MEMG=<Memory color adjustment parameter:ID>
	Response	i:OK
Reference	Command	GET=MEMG
	Response	g:MEMG=<Memory color adjustment parameter:ID>

Note: See "Error list" for any response other than the above.

< Memory color adjustment parameter:ID >

Parameter	Meaning
OFF	Turned off
WEAK	Weak
MIDDLE	Middle
STRONG	Strong

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Remarks

- (1) This sets the currently selected input signal and image mode.

Example

(Control)

>MEMG=MIDDLE

< i:OK

(Reference)

> GET=MEMG

< g:MEMG=MIDDLE

Note: '>' indicates a command; '<' indicates a response.

MEMS

Memory color adjustment (sky)

Format

Setting	Command	MEMS=<Memory color adjustment parameter:ID>
	Response	i:OK
Reference	Command	GET=MEMS
	Response	g:MEMS=<Memory color adjustment parameter:ID>

Note: See "Error list" for any response other than the above.

< Memory color adjustment parameter:ID >

Parameter	Meaning
OFF	Turned off
WEAK	Weak
MIDDLE	Middle
STRONG	Strong

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Remarks

- (1) This sets the currently selected input signal and image mode.

Example

(Control)

>MEMS=MIDDLE

< i:OK

(Reference)

> GET=MEMS

< g:MEMS=MIDDLE

Note: '>' indicates a command; '<' indicates a response.

MUTE

Audio mute

Format

Setting	Command	MUTE=<Mute control parameter:ID>
	Response	i:OK
Reference	Command	GET=MUTE
	Response	g:MUTE=<Mute control parameter:ID>

Note: See "Error list" for any response other than the above.

< Mute control parameter:ID>

Parameter	Meaning
ON	Disables the audio/beep sound.
OFF	Enables the audio/beep sound.

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Remarks

- (1) Mute setting is always set to "OFF" after the projector is turned on.
- (2) Audio mute is canceled if audio volume is adjusted when audio mute is enabled.

Example

(Setting)
>MUTE=ON
<i:OK

(Reference)
> GET=MUTE
< g:MUTE=ON

Note: '>' indicates a command; '<' indicates a response.

NR

Random noise reduction

Format

Setting	Command	NR=<Random noise reduction setting parameter:ID>
	Response	i:OK
Reference	Command	GET=NR
	Response	g: NR=<Random noise reduction setting parameter:ID>

Note: See "Error list" for any response other than the above.

<Random noise reduction setting parameter:ID>

Parameter	Meaning
OFF	Turned off
WEAK	Weak
MIDDLE	Middle
STRONG	Strong

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes

Remarks

- (1) This sets the currently selected input signal and image mode.

Example

(Setting)
 >NR=MIDDLE
 < i:OK

(Reference)
 > GET=NR
 < g:NR=MIDDLE

Note: '>' indicates a command; '<' indicates a response.

NRMPG

MPEG noise reduction

Format

Setting	Command	NRMPG=<MPEG noise reduction setting parameter:ID>
	Response	i:OK
Reference	Command	GET=NRMPG
	Response	g:NRMPG=<MPEG noise reduction setting parameter:ID>

Note: See "Error list" for any response other than the above.

< MPEG noise reduction setting parameter:ID >

Parameter	Meaning
OFF	Turned off
WEAK	Weak
MIDDLE	Middle
STRONG	Strong

Environment

Power mode restriction										Input							
LAN					RS-232C												
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None		
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	

Remarks

- (1) This sets the currently selected input signal and image mode.

Example

(Setting)

>NRMPG=MIDDLE
<i:OK

(Reference)

> GET=NRMPG
< g:NRMPG=MIDDLE

Note: '>' indicates a command; '<' indicates a response.

POWER

Power supply control

Format

Setting	Command	POWER=<power control parameter:ID>
	Response	i:OK
Reference	Command	GET= POWER
	Response	g: POWER = < Power mode parameter:ID >

Note: See "Error list" for any response other than the above.

< Power control parameter:ID >

Parameter	Meaning
ON	Power ON
OFF	Power OFF

< Power mode parameter:ID >

Parameter	Meaning
OFF	Power OFF
OFF2ON	OFF -> ON in transition
ON	Power ON
ON2PMM	ON -> Lamp OFF in transition
PMM	Lamp OFF
PMM2ON	Lamp OFF -> ON in transition
ON2OFF	ON -> OFF in transition

Environment

Power mode restriction										Input							
LAN					RS-232C												
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None		
No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Remarks

- (1) Lamp Replacement Preparation, "Lamp Replacement Warning," and ""Air Filter Cleaning Warning" are displayed for 10 seconds, regardless of whether the projector was started by the button or command.
- (2) Note that there are different parameters for the setting command and the reference command.

Example

(Control)

```
>POWER=ON
<i:OK
```

(Reference)

```
>GET=POWER
< g:POWER=OFF
```

Note: '>' indicates a command; '<' indicates a response.

PRODCODE

Product name inquiry

Format

Setting	Command	-
	Response	-
Reference	Command	GET= PRODCODE
	Response	g: PRODCODE=<Product name:Character string>

Note: See "Error list" for any response other than the above.

< Product name:Character string >

Parameter	Meaning
4K501ST	4K501ST

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Example

```
>GET=PRODCODE  
< g:PRODCODE=" 4K501ST"
```

Note: '>' indicates a command; '<' indicates a response.

RC

Remote control operation emulate

Format

Setting	Command	RC=<Remote control emulation button parameters:ID>
	Response	i:OK
Reference	Command	-
	Response	-

Note: See "Error list" for any response other than the above.

< Remote control emulation button parameters:ID >

Operation	Parameter	Remarks
POWER	POWER	
-	POWER_OFF	Power OFF
MENU	MENU	
EXIT	EXIT	
INPUT	INPUT	
DIGITAL	DPC	
ANALOG PC1	APC1	
ANALOG PC2	APC2	
HDMI	HDMI	
COMPONENT	COMP	
ASPECT	ASPECT	
AUTOPC	AUTOPC	
UP	UP	
	UP+REP	Button press start
DOWN	DOWN	
	DOWN+REP	Button press start
LEFT	LEFT	
	LEFT+REP	Button press start
RIGHT	RIGHT	
	RIGHT+REP	Button press start
OK	OK	
FOCUS	FOCUS	
ZOOM	ZOOM	
SHIFT	SHIFT	
TEST	TPTN	
PATTERN		
KEYSTONE	KEYSTONE	
0	NUM_0	
1	NUM_1	
2	NUM_2	
3	NUM_3	
4	NUM_4	
5	NUM_5	
6	NUM_6	
7	NUM_7	
8	NUM_8	
9	NUM_9	
DZOOM +	DZOOM_P	
	DZOOM_P+REP	Button press start

DZOOM -	DZOOM_M	
	DZOOM_M+REP	Button press start
VOL +	VOL_P	
VOL +	VOL_P+REP	Button press start
VOL -	VOL_M	
VOL -	VOL_M+REP	Button press start
MUTE	MUTE	
FN	FN	
IMAGE	IMAGE	
FREEZE	FREEZE	
BLANK	BLANK	
GAMMA	GAMMA	
SPLIT	SPLIT	
ECO	ECO	
-	*-REP	Button press end

■ Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

■ Remarks

- (1) A parameter with '+REP' signifies "button press start". (This is the same as the status in which the remote control button is held down.)
When executing these commands, be sure to send '*-REP' at the end to finish the button press.
The button pressing is ended in the cases below as well.
 - When buttons on the panel or the remote are operated
 - When some command has been received
- (2) When a button press request is accepted properly, "i:OK" is returned.
(without notifying the resulting execution of button operation)
(This response is the same also for POWER_OFF parameters. The projector returns "i:OK" as an indication that the power-off request was accepted but does not return information as to whether power-off was actually executed.)
- (3) When a button press request is accepted properly, the projector will behave in the same manner as when the remote key is pressed.

■ Example

(Setting)
>RC=POWER
<i:OK

Note: '>' indicates a command; '<' indicates a response.

RGBGAIN

RGB gain adjustment

Format

Setting	Command	RGBGAIN=<R gain setting:Number>,<G gain setting:Number>,<B gain setting:Number>
	Response	i:OK
Reference	Command	GET=RGBGAIN
	Response	g:RGBGAIN=<R gain setting:Number>,<G gain setting:Number>,<B gain setting:Number>

Note: See "Error list" for any response other than the above.

Setting values for <R/G/B gain setting:Number> are -60 to 60.

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Remarks

- (1) This sets the currently selected input signal and image mode.

Example

(Setting)

```
>RGBGAIN=10,11,12
<i:OK
```

(Reference)

```
> GET=RGBGAIN
< g:RGBGAIN=-10,0,19
```

Note: '>' indicates a command; '<' indicates a response.

RGBOFFSET

RGB offset adjustment

Format

Setting	Command	RGBOFFSET=<R offset setting:Number>,<G offset setting:Number>,<B offset setting:Number>
	Response	i:OK
Reference	Command	GET=RGBOFFSET
	Response	g:RGBOFFSET=<R offset setting:Number>,<G offset setting:Number>,<B offset setting:Number>

Note: See "Error list" for any response other than the above.

Setting values for <R/G/B offset setting:Number> are -60 to 60.

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Remarks

- (1) This sets the currently selected input signal and image mode.

Example

(Setting)

```
>RGBOFFSET=10,11,12
<i:OK
```

(Reference)

```
>GET=RGBOFFSET
<g:RGBOFFSET=-10,0,19
```

Note: '>' indicates a command; '<' indicates a response.

ROMVER

Firmware version inquiry

Format

Setting	Command	-
	Response	-
Reference	Command	GET=ROMVER
	Response	g:ROMVER=<ROM version:Character string>

Note: See "Error list" for any response other than the above.

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Example

> GET=ROMVER
< g:ROMVER="01.234567_12345"

Note: '>' indicates a command; '<' indicates a response.

SAT

Color saturation setting

Format

Setting	Command	SAT=<Color saturation setting value:Number>
	Response	i:OK
Reference	Command	GET=SAT
	Response	g:SAT=<Color saturation setting value:Number>

Note: See "Error list" for any response other than the above.

Setting values for <Color saturation setting value:Number> are -20 to 20.

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Remarks

- (1) This sets the currently selected input signal and image mode.

Example

(Setting)

```
>SAT=-10
<i:OK
```

(Reference)

```
> GET=SAT
< g:SAT=1
```

Note: '>' indicates a command; '<' indicates a response.

SAVEIMGPROF

User memory creation/storage/deletion

Format

Setting	Command	SAVEIMGPROF=<User memory save to parameter:ID>
	Response	i:OK
Reference	Command	GET=SAVEIMGPROF
	Response	g:SAVEIMGPROF=<Number of user memories>:<User 1 present parameter>,<User 2 present parameter>,<User 3 present parameter>'

Note: See "Error list" for any response other than the above.

< User memory save to parameter:ID >

Parameter	Meaning
USER_1	Save to User 1
USER_2	Save to User 2
USER_3	Save to User 3
DEL_ALL	Delete all User memory

< User memory presence parameter:ID >

Parameter	Meaning
0	User memory not created
1	User memory created

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Remarks

- (1) After executing DEL_ALL, the status same as the status (set after execution of the factory default settings menu) is set.

Example

(Setting)

```
>SAVEIMGPROF=USER_2
<i:OK
```

(Reference)

```
> GET=SAVEIMGPROF
< g:SAVEIMGPROF=3:0,1,1
```

Note: '>' indicates a command; '<' indicates a response.

SHARP

Sharpness setting

Format

Setting	Command	SHARP=<Sharpness setting:Number>
	Response	i:OK
Reference	Command	GET=SHARP
	Response	g:SHARP=<Sharpness setting:Number>

Note: See "Error list" for any response other than the above.

Setting values for <Sharpness setting:Number> are -10 to 10.

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Remarks

- (1) This sets the currently selected input signal and image mode.

Example

(Setting)

>SHARP=3

< i:OK

(Reference)

> GET=SHARP

< g:SHARP=3

Note: '>' indicates a command; '<' indicates a response.

SIGMSG

Input status display

Format

Setting	Command	SIGMSG=<Input status display setting parameter:ID>
	Response	i:OK
Reference	Command	GET=SIGMSG
	Response	g:SIGMSG=<Input status display setting parameter:ID>

Note: See "Error list" for any response other than the above.

<Input status display setting parameter:ID>

Parameter	Meaning
ON	Turned on
OFF	Turned off

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Example

(Setting)

>SIGMSG=ON

<i:OK

(Reference)

> GET=SIGMSG

< g:SIGMSG=ON

Note: '>' indicates a command; '<' indicates a response.

SIGNAL_INFO

Displayed signal information inquiry

Format

Setting	Command	-
	Response	-
Reference	Command	GET=SIGNAL_INFO
	Response	g:SIGNAL_INFO=<Input signal information:Character string>

Note: See "Error list" for any response other than the above.

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Remarks

- (1) For USB or LAN, g:SIGNAL_INFO="" is returned even when an image is displayed.
- (2) e:1011 FUNCTION_NOT_AVAILABLE is returned while a test pattern is displayed.

Example

```
>   GET=SIGNAL_INFO
<   g:SIGNAL_INFO="1920 x 1200 60"
```

Note: '>' indicates a command; '<' indicates a response.

SIGNALSTATUS

Signal detection inquiry

Format

Setting	Command	-
	Response	-
Reference	Command	GET=SIGNALSTATUS
	Response	g:SIGNALSTATUS=<Signal status:ID>

Note: See "Error list" for any response other than the above.

< Signal status parameter:ID >

Parameter	Meaning
NO_SIGNAL	Signal not detected
DISPLAYING	Image now displayed or display enable status
SETTING	Signal detection or display preparation in progress
UNSUPPORTED	An unsupported signal is being received.
INSUFFICIENT	In multi-input, the input signals are not aligned, or there is a terminal not receiving input.

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Remarks

- (1) This returns the signal status of the selected input.
- (2) e:1011 FUNCTION_NOT_AVAILABLE is returned during BLANK.

Example

```
> GET=SIGNALSTATUS
< g:SIGNALSTATUS=NO_SIGNAL
```

Note: '>' indicates a command; '<' indicates a response.

TEMP

Temperature sensor value inquiry

Format

Setting	Command	-
	Response	-
Reference	Command	GET=TEMP
	Response	g:TEMP=<Number of sensors>,<Sensor 1 value>,...,<Sensor n value>

Note: See "Error list" for any response other than the above.

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Remarks

- (1) There are cases when number of sensors is 0. In this case, there will not be a comma.

Example

```
> GET=TEMP  
< g:TEMP=5,28.5,53.3,53.3,53.3,33.0
```

Note: '>' indicates a command; '<' indicates a response.

TPTN

Test pattern

Format

Setting	Command	TPTN=<Test pattern parameter:ID>
	Response	i:OK
Reference	Command	GET=TPTN
	Response	g:TPTN=<Test pattern parameter:ID>

Note: See "Error list" for any response other than the above.

< Test pattern parameter:ID>

Parameter	Meaning
OFF	Turned off
CB1	Color bar
SSH1	Stair step H No.1
SSH2	Stair step H No.2
SSH3	Stair step H No.3
SSV1	Stair step V No.1
SSV2	Stair step V No.2
SSV3	Stair step V No.3
RTF1	Raster 100% White
RTF2	Raster 100% Red
RTF3	Raster 100% Green
RTF4	Raster 100% Blue
RTH1	Raster 50% White
RTH2	Raster 50% Red
RTH3	Raster 50% Green
RTH4	Raster 50% Blue
SSC1	Stair step color H
SSC2	Stair step color V
CKR1	Checker No.1
CKR2	Checker No.2
MUL1	Multi No.1
MUL2	Multi No.2
CHR1	Character
FCS1	Focus
BDR1	Border
CRS1	Cross hatch 8 divided
CRS2	Cross hatch 12 divided
CRS3	Cross hatch 4 divided
DCM1	DICOM chart

Environment

Power mode restriction								Input							
LAN				RS-232C											
SL0	SL1	SL3	PM	ON	ST	PM	ON	D-RGB	A-RGB	COMP	HDMI	HDBT	LAN	USB	None
No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

■ Example

(Setting)

> TPTN=OFF
< i:OK

(Reference)

> GET=TPTN
< g:TPTN=OFF

Note: '>' indicates a command; '<' indicates a response.

7. Error List

Response	Description	Reaction
i:OK	The command was successfully processed.	
e:0002 INVALID_COMMAND	The command was invalid (not defined), or the command format was incorrect.	Use a correct command or correct command format.
e:000A INVALID_PARAMETER	Argument (parameter) of the command is invalid.	Use a correct argument (parameter).
e:F001 SYSTEM	An internal error occurred.	Resend the command. Note: If the error persists after repeatedly resending the command with some intervals, turn off the projector and then disconnect and reconnect the power cord before resending the command.
e:0005 NOT_POWER_SUPPLY	The power is off.	Send the command while the power is on.
i:BUSY	Cannot execute as the projector is undergoing internal processing.	Wait for a while, and resend the command. The old items, "i: BUSY (POWER)" and "i: BUSY (Network)" have been integrated into "i:BUSY".
e:1011 FUNCTION_NOT_AVAILABLE	The operation is currently invalid. The setting cannot be made in the current status.	Take one of the following actions: <ul style="list-style-type: none"> · Return the UI state to the usual projection mode, and then resend the command. · Activate the function from the menu, and resend the command. (Commands may be deactivated by the related menu items.)
e:201F INVALID_SIGNAL	Cannot execute with the current input signal.	Execute the command when a different input signal is input.

8. Error Processing

