SONY

DATA PROJECTOR

PROTOCOL MANUAL
(SUPPORTED COMMAND LIST)
1st Edition

Table of Contents

Related Manuals ..... 1 (E)

1. Overview ..... 1 (E)

2. Correspondence of ADCP Command in Each Projector Model

2-1. System Command ..... 3 (E)
2-1-1. Command Type: sys_sel ..... 3 (E)
2-1-2. Command Type: sys_stat ..... 5 (E)
2-1-3. Command Type: sys_var ..... 9 (E)
2-2. Menu Command ..... 10 (E)
2-2-1. Command Type: menu_sel/menu_val/ menu_exec ..... 10 (E)
2-2-2. Command Type: menu_stat ..... 23 (E)
2-3. Remote Controller Key Command ..... 24 (E)
2-3-1. Command Type: key ..... 24 (E)
2-4. Advanced Adjustment Command ..... 28 (E)
2-4-1. Command Type: panel_align_zone ..... 29 (E)
2-4-2. Command Type: user_gamma ..... 31 (E)
2-4-3. Command Type: pattern_sel/pattern_pos ..... 33 (E)

3. Network Communication ..... 35 (E)

4. Model List ..... 36 (E)

Revision History

The information contained in this manual does not guarantee compatibility or operability of the Sony projector models listed in this manual with all other equipment and systems.
Sony is not responsible for product malfunctions resulting from failure to follow the instructions and information contained herein. For details on the projector models listed herein, please refer to the Sony user manuals and operating instructions.
The information and specifications contained herein are subject to change without notice.

Related Manuals

The following manual is provided for this unit in addition to this "Protocol Manual (SUPPORTED COMMAND LIST) ".

- **"Protocol Manual" (COMMON)**

This manual describes the basic configuration and operation to write the various commands to be used in the serial communication (RS-232C) and network communication for the projector.

1. Overview

This manual is a protocol and command correspondence list in each projector model.
For details of each protocol, refer to REMOTE CONTROL PROTOCOL MANUAL (COMMON) on separate sheet.
"Standby" refers to any of the following states: standby, network standby, or constant communication (network management: ON or standby mode: standard).

Protocol for each model

(○: supported (initial setting: ON), ●: supported (initial setting: OFF), −: unsupported)

Protocol	VPL-GTZ∗∗∗ series (∗∗∗ means model name)				Remarks
	270	280	240	380	
SDAP	○	○	○	●	
ADCP	○	○	○	●	Initial setting of authentication during connection is also ON. For the individual command correspondence, refer to ADCP in Section 2.
PJLink	–	–	–	–	
DDDP (AMX Dynamic Device Discovery Protocol)	○	○	○	●	Function is always ON during serial connection.
SDDP (Control4 Simple Device Discovery Protocol)	○	○	○	●	You cannot start the system from the Control4-related device. Use the remote start.
CIP (Crestron Internet Protocol)	○	○	○	●	
SNMP (Simple Network Management Protocol)	○	○	–	●	

Other items for each model

(○: supported/–: not supported)

Protocol	VPL-GTZ∗∗∗ series (∗∗∗ means model name)				Remarks
	270	280	240	380	
Ethernet terminal provided	○	○	○	○	
Standby mode menu setting item	–	–	–	–	Power consumption setting during the standby state If set to “Low”, the network function cannot be used during the standby state. When performing the power ON/OFF and so on in the network connection, set this item to “standard”.
Network management menu setting item	○	○	○	○	Menu setting item to set whether or not to always perform the communication with the projector control device in the environment where network is connected.

2. Correspondence of ADCP Command in Each Projector Model

2-1. System Command

A system command can acquire the projector power operation and the power, error, or warning status.
The type of a command is classified as follows:

- sys_sel command type: Sets the selected value for turning on and off the power.
- sys_stat command type: Acquires the status.
- sys_var command type: Sets the network address.

2-1-1. Command Type: sys_sel

By optional designation, the command of a sys_sel command type can set values and acquire values, settable choices, and command information.

Command name `command`
Value to be set `txt_param1`
Settable choice `txt_param1, txt_param2`
In the case described above, commands conform to the formats below, respectively.

Setting of value

Transmitting example: `command "txt_param1"` ↵ — Sets the selected value using a command. The selected value is enclosed with double quotation marks (`" "`).

Returning example: `ok` ↵

Inquiry of value:

Transmitting example: `command ?` ↵ — Acquires the selected value of the set parameter.

Returning example: `"txt_param1"` ↵ — The selected value that has been set is returned with the value being enclosed in double quotation marks (`" "`).

Inquiry of value range:

Transmitting example: `command ? --range` ↵ — Acquires a list of parameter-selected values that can be set.

Returning example: `["txt_param1","txt_param2"]` ↵

Inquiry of command information:

Transmitting example: `command ? --info` ↵ — Acquires the command information.

Returning example: `{"type":"sys_sel","version":"1.0","range":["txt_param1","txt_param2"]}` ↵

A command type, command version, and a list of selected values that can be set using a command are returned as command information.

1. Command list

Function	Command	Parameter/ response	Remarks	VPL-GTZ∗∗∗ series (∗∗∗ means model name)			
				270	280	240	380
Power on/off operation	power[∗1]	"on"	Power on operation	○	○	○	○
		"off"	Power off operation	○	○	○	○
IPv4 network setting	ipv4_network_setting[∗2]	"start"	Setting start	○	○	○	○
		"apply"	Setting reflection	○	○	○	○
IPv4 address setting method Setting/acquisition	ipv4_set_method ipv4_set_method ?	"auto"	Auto	○	○	○	○
		"manual"	Manual[∗3]	○	○	○	○
Maintenance complete	complete_maintenance	"lamp"	Lamp	–	–	–	–
		"filter"	Filter	–	–	–	–

∗1: A value cannot be acquired. Use the power_status ? command of a sys_stat command type when acquiring the power state.

2. Command example

Transmitting example	Character	p	o	w	e	r	␣	"	o	n	"	⏎	
	Hex code	70	6F	77	65	72	20	22	6F	6E	22	0D	0A
Returning example	Character	o	k	⏎									
	Hex code	6F	6B	0D	0A								

∗2: During network setting, set an address after sending “start”. Then, send “apply” and reflect the setting.

Example

```
ipv4_network_setting "start"⏎
ipv4_set_method "auto"⏎
ipv4_network_setting "apply"⏎
```

∗3: Set each address using the network setting command of a sys_var command category when selecting “manual”. Then, send “apply” and reflect the setting.

Example

```
ipv4_network_setting "start"⏎
ipv4_set_method "manual"⏎
ipv4_ip_address "XXX.XXX.XXX.XXX"⏎
ipv4_sub_net_mask "XXX.XXX.XXX.XXX"⏎
ipv4_default_gateway "XXX.XXX.XXX.XXX"⏎
ipv4_network_setting "apply"⏎
```

2-1-2. Command Type: sys_stat

By optional designation, the command of a sys_stat command type can acquire values and command information.
Command name: In the case of "command", the following format is used.

Acquisition of value:

Transmitting example: `command ?` ↵ The system status information is inquired.

Returning example: `"txt_param"` ↵ When the information of single system status is returned

`["txt_param1","txt_param2"]` ↵ When using the command that handles multiple items in response, it is returned in the JSON array format.

`[{"val1":100},{"val2":200}]` ↵ In the timer and version information, the name of each value and the JSON associative array of the value are returned in the array format.

Acquisition of command information:

Transmitting example: `command ? --info` ↵ The command information is inquired.

Returning example: `{"type":"sys_stat","version":"1.0"}` ↵

1. Command list

Function	Command	Response	Remarks	VPL-GTZ*** series (*** means model name)			
				270	280	240	380
Power status acquisition	power_status ?	"standby"	Standby	○	○	○	○
		"startup"	Start up in progress	○	○	○	○
		"on"	Power on	○	○	○	○
		"cooling1"	Cooling 1	○	○	○	○
		"cooling2"	Cooling 2	○	○	○	○
Error status acquisition	error ?	Example) ["err_power","err_fan"]	The JSON array data of a factor is as follows:				
		"no_err"	No error	○	○	○	○
		"err_power"	Power supply error	○	○	○	○
		"err_power2"	Power supply (D5V) error	○	○	○	○
		"err_cover"	Cover error	–	–	○	○
		"err_light_src"	Light-source error	○	○	○	○
		"err_lens_cover"	Lens cover error	–	–	–	–
		"err_shock"	Shock error	○	○	○	○
		"err_nolens"	Lens not attached error	○	○	○	○
		"err_attitude"	Installation angle error	–	–	–	–
		"err_temp"	Temperature error	○	○	○	○
		"err_fan"	Fan error	○	○	○	○
		"err_wheel"	Wheel error	○	○	○	○
		"err_light_over"	Luminance error	○	○	○	○
		"err_assy"	ASSY error	–	–	–	○
		"err_ballast_update"	Ballast updating error	–	–	–	–

Function	Command	Response	Remarks	VPL-GTZ∗∗∗ series (∗∗∗ means model name)			
				270	280	240	380
Warning status acquisition	warning ?	Example) ["warn_temp","warn_signal_sel"]	The JSON array data of a factor is as follows:				
		"no_warn"	No warning	○	○	○	○
		"warn_light_src_life"	Light source life warning	–	–	–	–
		"warn_highland"	High altitude warning	○	○	○	○
		"warn_temp"	Temperature warning	○	○	○	○
		"warn_signal_freq"	Signal frequency warning	○	○	○	○
		"warn_signal_sel"	Signal type warning	–	–	–	–
Timer acquisition	timer ?	Example) [{"operation":3400}, {"light_src":2300}]	JSON object array of each timer value	○	○	○	○
Filter status acquisition	filter_status ?	"normal"	Maintenance is not required.	–	–	–	–
		"clean"	Filter cleaning is required.	–	–	–	–
		"replace"	Filter replacement is required.	–	–	–	–
Model name acquisition	modelname ?	Example) "VPL-GTZ280"	Model name	○	○	○	○
Serial number acquisition	serialnum ?	Example) "50045"	Serial number	○	○	○	○
Input signal status acquisition	signal ?	"Video60"	60 Hz Video signal	–	–	–	–
		"Video50"	50 Hz Video signal	–	–	–	–
		"480_60i"	480/60i	–	–	–	–
		"576/50i"	576/50i	–	–	–	–
		"480/60p"	480/60p	○	○	○	○
		"576/50p"	576/50p	○	○	○	○
		"1080/60i"	1080/60i	○	○	○	○
		"1080/50i"	1080/50i	○	○	○	○
		"1080/24psF"	1080/24psF	–	–	–	–
		"720/60p"	720/60p	○	○	○	○
		"720/50P"	720/50P	○	○	○	○
		"1080/60p"	1080/60p	○	○	○	○
		"1080/50p"	1080/50p	○	○	○	○
		"1080/24p"	1080/24p	○	○	○	○
		"1080/30p"	1080/30p	–	–	–	–
		"640x350"	640 × 350	–	–	–	–
		"640x400"	640 × 400	–	–	–	–
		"640x480"	640 × 480	○	○	○	○
		"800x600"	800 × 600	○	○	○	○
		"832x624"	832 × 624	–	–	–	–
		"1024x768"	1024 × 768	○	○	○	○
		"1152x864"	1152 × 864	–	–	–	–

Function	Command	Response	Remarks	VPL-GTZ∗∗∗ series (∗∗∗ means model name)			
				270	280	240	380
Input signal status acquisition	signal ?	"1152x900"	1152 × 900	–	–	–	–
		"1280x960"	1280 × 960	○	○	○	○
		"1280x1024"	1280 × 1024	○	○	○	○
		"1400x1050"	1400 × 1050	–	–	–	–
		"1600x1200"	1600 × 1200	–	–	–	–
		"1280x768"	1280 × 768	○	○	○	○
		"1280x720"	1280 × 720	–	–	–	–
		"1920x1080"	1920 × 1080	–	–	–	–
		"1920x1200"	1920 × 1200	–	–	–	–
		"1366x768"	1366 × 768	–	–	–	–
		"1440x900"	1440 × 900	–	–	–	–
		"1680x1050"	1680 × 1050	–	–	–	–
		"1280x800"	1280 × 800	–	–	–	–
		"1600x900"	1600 × 900	–	–	–	–
		"2048x1080/24p"	2048 × 1080/24p	–	–	–	–
		"2048x1080/24psF"	2048 × 1080/24psF	–	–	–	–
		"3840x2160/60p"	3840 × 2160/60p	○	○	○	○
		"3840x2160/50p"	3840 × 2160/50p	○	○	○	○
		"4096x2160/60p"	4096 × 2160/60p	○	○	○	○
		"4096x2160/50p"	4096 × 2160/50p	○	○	○	○
		"4096x2160/30p"	4096 × 2160/30p	○	○	○	○
		"4096x2160/25p"	4096 × 2160/25p	○	○	○	○
		"3840x2160/24p"	3840 × 2160/24p	○	○	○	○
		"3840x2160/25p"	3840 × 2160/25p	○	○	○	○
		"3840x2160/30p"	3840 × 2160/30p	○	○	○	○
		"4096x2160/24p"	4096 × 2160/24p	○	○	○	○
		"4096x2160/120p"	4096 × 2160/120p	–	○	–	○
		"3840x2160/120p"	3840 × 2160/120p	–	○	–	○
		"4096x2160/100p"	4096 × 2160/100p	–	○	–	○
		"3840x2160/100p"	3840 × 2160/100p	–	○	–	○
		"2048x1536/60p"	2048 × 1536/60p	–	–	–	○
		"2560x1600/60p"	2560 × 1600/60p	–	–	–	○
		"2880x2160/60p"	2880 × 2160/60p	–	–	–	○
		"2560x1440/60p"	2560 × 1440/60p	–	–	–	○
		"2048x1536/120p"	2048 × 1536/120p	–	–	–	○
		"2560x1600/120p"	2560 × 1600/120p	–	–	–	○
		"2880x2160/120p"	2880 × 2160/120p	–	–	–	○
		"2560x1440/120p"	2560 × 1440/120p	–	–	–	○
		"Invalid"	Unknown status	○	○	○	○
Firmware version acquisition	version ?	Example) [{"main":"1.000"}, {"laser":"1.000"}]	Object array of each software version	○	○	○	○
MAC address acquisition	mac_address ?	Example) "08-12-34-ab-cd-ef"	MAC address character string	○	○	○	○

Function	Command	Response	Remarks	VPL-GTZ∗∗∗ series (∗∗∗ means model name)			
				270	280	240	380
Valid license name acquisition	licenses ?		Format: JSON array of valid license name "<license_name>" Transmitting example) licenses ? Returning example) ["license_a", "license_b","license_c"] Transmitting example) licenses ? --info Returning example) {"type":"sys_stat","version":"1.0"}	○	○	–	–
Acquisition of single display LCD panel resolution	panel_resolution ?		Format: Numeric array format of horizontal (x) and vertical (y) Example of acquisition [1920, 1080]	○	○	○	–
IPv6 address acquisition	ipv6_ip_address ?	Pv6 address character string Example) "2001:db8::1:0:0:1" ∗ For details of the notation, refer to RFC5952 “A Recommendation for IPv6 Address Text Representation”.		○	○	○	○
(IPv6) default gateway address acquisition	ipv6_default_gateway ?			○	○	○	○
(IPv6) IP address prefix acquisition	ipv6_prefix ?	IPv6 prefix length Example) 64		○	○	○	○
Temperature acquisition	temperature ?	Example) 30.0	Temperature	○	○	–	○
3D status acquisition	3d_status ?	"2d"	2D	○	○	○	○
		"3d"	3D	○	○	○	○
DisplayPort input signal information acquisition	dp_info ?	Example) [["Detecting"], ["2048x2160/60p", "2048x2160/60p"], ["No Input"], ["Out of Range"]]	Character string array of input signal information	○	○	–	○

2. Command example

Transmitting example	Character	p	o	w	e	r	_	s	t	a	t	u	s	␣	?	⏎
	Hex code	70	6F	77	65	72	5F	73	74	61	74	75	73	20	3F	0D 0A
Returning example	Character	"	s	t	a	n	d	b	y	"	⏎					
	Hex code	22	73	74	61	6E	64	62	79	22	0D	0A				

2-1-3. Command Type: sys_var

You can set and obtain the items of special value representation with the command of the “sys_var” command type.
Command name: In the case of “command”, the following format is used.
Setting of value:
Transmitting example: `command "192.168.0.1"` ↵
Returning example: `ok` ↵

Inquiry of value:
Transmitting example: `command ?` ↵
Returning example: `"192.168.0.1"` ↵

Inquiry of settable value range:
Transmitting example: `command ? --range` ↵
Returning example: `{"min":"0.0.0.0","max":"255.255.255.255"}` ↵

1. System numeric command

Function	Command	Parameter/response	VPL-GTZ∗∗∗ series (∗∗∗ means model name)			
			270	280	240	380
(IPv4) IP address setting/acquisition	`ipv4_ip_address` `ipv4_ip_address ?`	IPv4 address character string Example) `"192.168.0.1"`	○	○	○	○
(IPv4) subnet mask setting/acquisition	`ipv4_sub_net_mask` `ipv4_sub_net_mask ?`		○	○	○	○
(IPv4) default gateway address setting/ acquisition	`ipv4_default_gateway` `ipv4_default_gateway ?`		○	○	○	○

2. Command example

Transmitting example	Character	i	p	v	4	_	i	p	_	a	d	d	r	e	s	s	␣	?	↵
	Hex code	69	70	76	34	5F	69	70	5F	61	64	64	72	65	73	73	20	3F	0D 0A
Returning example	Character	"	1	9	2	.	1	6	8	.	0	.	1	"	↵				
	Hex code	22	31	39	32	2E	31	36	38	2E	30	2E	31	22	0D	0A			

2-2. Menu Command

2-2-1. Command Type: menu_sel/menu_val/menu_exec

By optional designation, the command of a menu_sel/menu_val/menu_exec command type can set and acquire menu values, and acquire command information.
Command name: In the case of "cmd", the following format is used.

Command Type		Set		Reset	Query
		Direct	Relative		Value
menu_sel	Transmitting example	cmd "item"↵		cmd --reset↵	cmd ?↵
	Returning example	ok↵		ok↵	"item"↵
menu_num	Transmitting example	cmd 10↵	cmd --rel -1↵	cmd --reset↵	cmd ?↵
	Returning example	ok↵	ok↵	ok↵	10↵
menu_exec	Transmitting example	cmd↵	–	–	–
	Returning example	ok↵			

Command Type		Query	
		Range	Command info
menu_sel	Transmitting example	cmd ? --range↵	cmd ? --info↵
	Returning example	["item","item2"]↵	{"type":"menu_sel","version":"1.0","range":["item","item2"]}↵
menu_num	Transmitting example	cmd ? --range↵	cmd ? --info↵
	Returning example	{"min":0,"max":10}↵	{"type":"menu_num","version":"1.0","range":{"min":0,"max":10}}↵
menu_exec	Transmitting example	–	cmd ? --info↵
	Returning example		{"type":"menu_exec","version":"1.0"}↵

1. Command list

Remote control function command

Function	Command	Selected value/numeric value	Remarks	VPL-GTZ*** series (*** means model name)				Type
				270	280	240	380	
Input terminal selection command	input	The following terminal names are used in all models.						menu_sel
		"hdmi1"	HDMI terminal 1	○	–	○	○	
		"hdmi2"	HDMI terminal 2	○	–	○	○	
		"hdmi3"	HDMI terminal 3	–	–	–	–	
		"hdmi4"	HDMI terminal 4	–	–	–	–	
		"dp1"	DP terminal 1	○	○	–	○	
		"dp2"	DP terminal 2	○	○	–	○	
		"dp3"	DP terminal 3	–	○	–	–	
		"dp4"	DP terminal 4	–	○	–	–	
		"dp1_2"	DP terminal 1/2	○	○	–	○	
		"dp1_2_3_4"	DP terminal 1/2/3/4	–	○	–	–	
Video muting command	blank	"on"	ON	○	○	○	○	
		"off"	OFF	○	○	○	○	
Audio muting command	muting	"on"	ON	–	–	–	–	
		"off"	OFF	–	–	–	–	

Image quality setting function

Function	Command	Selected value/ numeric value	Remarks	VPL-GTZ∗∗∗ series (∗∗∗ means model name)				Type
				270	280	240	380	
Selection of picture preset	picture_mode	"cinema_film1"	Cinema film 1	○	○	○	○	menu_sel
		"cinema_film2"	Cinema film 2	○	○	○	○	
		"reference"	Reference	○	○	○	○	
		"tv"	TV	○	○	○	○	
		"photo"	Photo	○	○	○	○	
		"brt_cinema"	BRT cinema	○	○	○	○	
		"brt_tv"	BRT TV	○	○	○	○	
		"user"	User	–	–	○	–	
		"user1"	User 1	○	○	–	○	
		"user2"	User 2	○	○	–	○	
		"user3"	User 3	○	○	–	○	
		"cinema_digital"	Cinema digital	○	–	–	○	
		"game"	Game	○	○	○	○	
Resetting of preset mode adjustment being selected	picture_mode_reset		Execution of reset	○	○	○	○	menu_exec
Adjustment of contrast	contrast	<val>		○	○	○	○	menu_num
Adjustment of brightness	brightness	<val>		○	○	○	○	
Adjustment of color depth	color	<val>		○	○	○	○	
Adjustment of hue	hue	<val>		○	○	○	○	
Adjustment of sharpness	sharpness	<val>		○	○	○	○	
Selection of color temperature	color_temp	"custom1"	Custom 1	○	○	○	○	menu_sel
		"custom2"	Custom 2	○	○	○	○	
		"custom3"	Custom 3	○	○	○	○	
		"custom4"	Custom 4	○	○	○	○	
		"custom5"	Custom 5	○	○	○	○	
		"d93"	D93	○	○	○	○	
		"d75"	D75	○	○	○	○	
		"d65"	D65	○	○	○	○	
		"d55"	D55	○	○	○	○	
		"dci"	DCI	○	–	–	○	
Fine adjustment of custom color temperature Gain R	coltemp_gain_r	<val>		○	○	○	○	menu_num
Fine adjustment of custom color temperature Gain G	coltemp_gain_g	<val>		○	○	○	○	
Fine adjustment of custom color temperature Gain B	coltemp_gain_b	<val>		○	○	○	○	
Fine adjustment of custom color temperature Bias R	coltemp_bias_r	<val>		○	○	○	○	

Function	Command	Selected value/ numeric value	Remarks	VPL-GTZ∗∗∗ series (∗∗∗ means model name)				Type
				270	280	240	380	
Fine adjustment of custom color temperature Bias G	coltemp_bias_g	<val>		○	○	○	○	menu_num
Fine adjustment of custom color temperature Bias B	coltemp_bias_b	<val>		○	○	○	○	
Selection of brightness constant mode	constant_brt	"on"	ON	○	○	–	–	menu_sel
		"off"	OFF	○	○	–	–	
Adjustment command of brightness of constant luminance mode	constant_brt_output	<val>		○	○	–	–	menu_num
Adjustment command of chromaticity X axis (Cyan-Red) of white	coltemp_x	<val>		○	○	○	○	
Adjustment command of chromaticity Y axis (Magenta-Green) of white	coltemp_y	<val>		○	○	○	○	
Selection of color space	color_space	"bt709"	BT709	○	○	○	○	menu_sel
		"bt2020"	BT2020	○	○	○	○	
		"adobe_rgb"	Adobe RGB	○	–	–	–	
		"color_space1"	Color space 1	○	○	○	○	
		"color_space2"	Color space 2	○	○	○	○	
		"color_space3"	Color space 3	○	○	○	○	
		"custom"	Custom	–	○	○	○	
		"custom1"	Custom 1	○	–	–	–	
		"custom2"	Custom 2	○	–	–	–	
		"dci"	DCI	○	–	–	○	
Adjustment of chromaticity X axis (Cyan-Red) in color space	col_space_x	<val>	Specify the adjustment color from r/g/b with Suffix. Example) col_space_x --r 20 ↵ The chromaticity X axis of R (red) in color space is set to 20.	○	○	○	○	menu_num
Adjustment of chromaticity Y axis (Magenta-Green) in color space	col_space_y	<val>		○	○	○	○	

Function	Command	Selected value/ numeric value	Remarks	VPL-GTZ∗∗∗ series (∗∗∗ means model name)				Type
				270	280	240	380	
Selection of gamma correction mode	gamma_correction	"1.8"	1.8	○	○	○	○	menu_sel
		"2.0"	2.0	○	○	○	○	
		"2.1"	2.1	○	○	○	○	
		"2.2"	2.2	○	○	○	○	
		"2.4"	2.4	○	○	○	○	
		"2.6"	2.6	○	○	○	○	
		"gamma7"	Gamma 7	○	○	○	○	
		"gamma8"	Gamma 8	○	○	○	○	
		"gamma9"	Gamma 9	○	○	○	○	
		"gamma10"	Gamma 10	○	○	○	○	
		"off"	OFF	○	○	○	○	
Selection of film mode	film_mode	"auto"	Auto	○	–	○	–	
		"off"	OFF	○	–	○	–	
Selection command of reality creation	real_cre	"on"	ON	○	○	○	○	
		"off"	OFF	○	○	○	○	
Database selection command of reality creation	real_cre_db	"mi4k"	MI4K	○	○	○	–	
		"normal"	Normal	○	○	○	–	
Adjustment command of resolution of reality creation	real_cre_reso	<val>	Resolution	○	○	○	○	menu_num
Adjustment command of noise reduction of reality creation	real_cre_noise	<val>	Noise filtering	○	○	○	○	
Selection command of correction function to optimally project 4K HDR image with original resolution feel	real_cre_dfopt	"on"	ON	–	–	–	○	menu_sel
		"off"	OFF	–	–	–	○	
Selection command of auto iris operation	iris_dyn_cont	"full"	Full	–	–	–	–	
		"limited"	Limited	–	–	–	–	
		"off"	OFF	–	–	–	–	
Manual adjustment command of aperture amount of iris	iris_brightness	<val>		○	○	–	–	menu_num
Selection command of light source output dynamic control operation	light_output_dyn	"full"	Full	–	–	○	○	menu_sel
		"limited"	Limited	–	–	○	○	
		"on"	ON	○	–	–	–	
		"off"	OFF	○	–	○	○	
Output adjustment command of light mode custom	light_output_val	<val>		○	○	○	○	menu_num
Selection command of motion flow effect	motionflow	"smooth_high"	Smooth high	○	○	○	○	menu_sel
		"smooth_low"	Smooth low	○	○	○	○	
		"impulse"	Impulse	○	–	–	–	
		"combination"	Combination	○	○	–	○	
		"true_cinema"	True cinema	○	○	○	○	
		"off"	OFF	○	○	○	○	
		"impulse1"	Impulse 1	–	○	○	○	
		"impulse2"	Impulse 2	–	○	○	○	
		"impulse3"	Impulse 3	–	○	–	○	

Function	Command	Selected value/ numeric value	Remarks	VPL-GTZ∗∗∗ series (∗∗∗ means model name)				Type
				270	280	240	380	
Selection command of noise reduction level	nr	"auto"	Auto	○	○	○	○	menu_sel
		"high"	High	○	○	○	○	
		"mid"	Middle	○	○	○	○	
		"low"	Low	○	○	○	○	
		"off"	OFF	○	○	○	○	
Selection command of MPEG NR	mnr	"auto"	Auto	○	○	○	–	
		"high"	High	○	○	○	–	
		"mid"	Middle	○	○	○	–	
		"low"	Low	○	○	○	–	
		"off"	OFF	○	○	○	–	
Selection command of smooth gradation	smooth_grd	"high"	High	○	○	○	○	
		"mid"	Middle	○	○	○	○	
		"low"	Low	○	○	○	○	
		"off"	OFF	○	○	○	○	
Selection command of contrast enhancer effect	contrast_enh	"high"	High	○	○	○	○	
		"mid"	Middle	○	○	○	○	
		"low"	Low	○	○	○	○	
		"off"	OFF	○	○	○	○	
Selection command of color correction	col_correction	"on"	ON	○	○	○	○	
		"off"	OFF	○	○	○	○	
Selection command of digital contrast optimizer	dcontrast_opt	"on"	ON	–	–	–	○	
		"off"	OFF	–	–	–	○	
Adjustment command of hue of color correction	col_corr_hue	<val>	Select the adjustment color from six colors (r/g/b/c/y/m) with Suffix. Example) col_corr_hue --r 20 ↵ Red is adjusted to 20.	○	○	○	○	menu_num
Adjustment command of color depth of color correction	col_corr_color	<val>		○	○	○	○	
Adjustment command of color brightness of color correction	col_corr_brt	<val>		○	○	○	○	
Selection command of clear white	clear_white	"high"	High	○	○	○	–	menu_sel
		"low"	Low	○	○	○	–	
		"off"	OFF	○	○	○	–	
Selection command of x.v. Color operation	xvcolor	"on"	ON	○	–	○	–	
		"off"	OFF	○	–	○	–	
Selection command of lag reduction	input_lag_red	"on"	ON	○	○	○	○	
		"off"	OFF	○	○	○	○	
Selection command of lamp control	lamp_control	"high"	High	–	–	–	–	
		"low"	Low	–	–	–	–	

Function	Command	Selected value/numeric value	Remarks	VPL-GTZ*** series (*** means model name)				Type
				270	280	240	380	
Selection command of HDR	hdr	"auto"	Auto	○	–	○	○	menu_sel
		"on"	ON	–	–	–	–	
		"hdr10"	HDR10	○	○	○	○	
		"hdr_reference"	HDR Reference	–	–	○	○	
		"hlg"	HLG	○	○	○	○	
		"off"	OFF	○	○	○	○	
Selection command of HDR auto	hdr_auto	"hdr10_hlg"	HDR10/ HLG	–	–	–	○	
		"hdr_reference_hlg"	HDR Reference/ HLG	–	–	–	○	
Selection command of periodic LD calibration	periodic_ld_calibration	"on"	ON	○	○	–	–	
		"off"	OFF	○	○	–	–	
Adjustment command of light source coefficient (R/G/B/R+G channel)	light_output_coeff	<val>		○	○	–	○	menu_num
Range selection command of light source output	visible_light_range	"high"	High	–	–	–	○	menu_sel
		"mid"	Mid	–	–	–	○	
		"low"	Low	–	–	–	○	
		"auto"	Auto	–	–	–	○	
		When NVG setting is set to ON/SINGLE, the "high" is disabled.						

Screen setting function

Function	Command	Selected value/ numeric value	Remarks	VPL-GTZ*** series (*** means model name)				Type
				270	280	240	380	
Selection of video display aspect ratio	aspect	"normal"		○	○	○	○	menu_sel
		"v_stretch"		–	–	○	○	
		"squeeze"		–	–	○	○	
		"1.85_1_zoom"		○	○	○	○	
		"2.35_1_zoom"		○	○	○	○	
		"stretch"		○	○	○	○	
		"h_stretch"		–	–	–	○	
Save execution command of picture position	pic_pos_save	"1.85_1"	1.85_1	○	○	○	○	menu_exec
		"2.35_1"	2.35_1	○	○	○	○	
		"custom1"	Custom 1	○	○	○	○	
		"custom2"	Custom 2	○	○	○	○	
		"custom3"	Custom 3	○	○	○	○	
Deletion execution command of picture position	pic_pos_del	"1.85_1"	1.85_1	○	○	○	○	
		"2.35_1"	2.35_1	○	○	○	○	
Deletion execution command of picture position	pic_pos_del	"custom1"	Custom 1	○	○	○	○	
		"custom2"	Custom 2	○	○	○	○	
		"custom3"	Custom 3	○	○	○	○	

Function	Command	Selected value/ numeric value	Remarks	VPL-GTZ∗∗∗ series (∗∗∗ means model name)				Type
				270	280	240	380	
Selection command of picture position	pic_pos_sel	"1.85_1"	1.85_1	○	○	○	○	menu_sel
		"2.35_1"	2.35_1	○	○	○	○	
		"custom1"	Custom 1	○	○	○	○	
		"custom2"	Custom 2	○	○	○	○	
		"custom3"	Custom 3	○	○	○	○	
Image shift adjustment command	image_shift	<val>		○	○	–	–	menu_num
		Adjust the image shift from h/v with Suffix. Example) image_shift --h 2 ⏎ The image shift is adjusted by 2 in the horizontal direction.						
Image shift ON/OFF section command	image_shift_enable	"on"	ON	○	○	–	–	menu_sel
		"off"	OFF	○	○	–	–	

Function setting function

Function	Command	Selected value/ numeric value	Remarks	VPL-GTZ∗∗∗ series (∗∗∗ means model name)				Type
				270	280	240	380	
Illumination selection command	illumination	"on"	ON	–	–	–	–	menu_sel
		"off"	OFF	–	–	–	–	
Selection command of 2D-3D display	2d3d_sel	"auto"	Auto	○	–	○	○	
		"3d"	3D	○	○	○	○	
		"2d"	2D	–	○	–	○	
Selection command of 3D format	3d_format	"sim3d"	SIM 3D	○	–	○	–	
		"sidebyside"	Side by side	○	–	○	○	
		"overunder"	Over under	○	–	○	○	
Selection command of 3D screen brightness	3d_brt	"high"	High	○	○	–	–	
		"standard"	Standard	○	○	–	–	
Selection command of 3D glasses brightness	3d_glass_brt	"high"	High	–	–	–	–	
		"mid"	Middle	–	–	–	–	
		"low"	Low	–	–	–	–	
Adjustment command of depth of 3D display except for simulated 3D	3d_depth	<val>		○	–	○	–	menu_num
Selection command of 3D effect during simulated 3D	sim3d_effect	"high"	High	○	–	○	–	menu_sel
		"mid"	Middle	○	–	○	–	
		"low"	Low	○	–	○	–	
Selection command of test pattern display during adjustment	test_pattern	"on"	ON	○	○	○	○	
		"off"	OFF	○	○	○	○	
Selection command of setting of setting lock	setting_lock	"off"	OFF	○	○	○	○	
		"level_a"	Level A	○	○	○	○	
		"level_b"	Level B	○	○	○	○	
Selection command of NVG Off/Single/Dual	infrared	"on"	ON	○	○	–	○	
		"off"	OFF	○	○	–	○	
		"single"	Single	–	–	–	–	
		"dual"	Dual	–	–	–	–	

Function	Command	Selected value/ numeric value	Remarks	VPL-GTZ∗∗∗ series (∗∗∗ means model name)				Type
				270	280	240	380	
Adjustment command of NVG output	infrared_output	<val>		○	○	–	○	menu_num
Selection command of NVG neutral density filter	dimming_filter	"on"	ON	○	○	–	–	menu_sel
		"off"	OFF	○	○	–	–	
Selection command of HDMI input/HDMI signal format	hdmi_signal_format	"standard"	Standard	○	–	○	○	
		"enhanced"	Enhanced	○	–	○	○	
		Select an input terminal from hdmi1 through hdmi4 with Suffix. Example) hdmi_signal_format --hdmi1 "enhanced"↵ The HDMI signal format of the HDMI 1 terminal is set to “enhanced”.						
Selection command of DisplayPort Stream Format	stream_format	"single"	Single	–	○	–	–	
		"dual"	Dual	–	○	–	–	
		"3d"	3D	–	○	–	–	
		Select an input terminal from dp1 through dp4 and dp1/2/3/4 with Suffix. Example) stream_format --dp1 "dual"↵ The stream format of the Display Port 1 terminal is set to “dual”.						
Selection command of DisplayPort format (Dual input)	dp_format	"v_split"		–	○	–	○	
		"hv_split"		–	○	–	–	
		"sequential"		–	–	–	○	

Operation setting function

Function	Command	Selected value/ numeric value	Remarks	VPL-GTZ∗∗∗ series (∗∗∗ means model name)				Type
				270	280	240	380	
Selection of display language	language	"english"	English	○	○	○	○	menu_sel
		"dutch"	Dutch	○	○	○	○	
		"french"	French	○	○	○	○	
		"italian"	Italian	○	○	○	○	
		"german"	German	○	○	○	○	
		"spanish"	Spanish	○	○	○	○	
		"portuguese"	Portuguese	○	○	○	○	
		"turkish"	Turkish	○	○	○	○	
		"polish"	Polish	○	○	○	○	
		"russian"	Russian	○	○	○	○	
		"swedish"	Swedish	○	○	○	○	
		"norwegian"	Norwegian	○	○	○	○	
		"japanese"	Japanese	○	○	○	○	
		"chinese_s"	Simplified Chinese	○	○	○	○	
		"chinese_t"	Traditional Chinese	○	○	○	○	
		"korean"	Korean	○	○	○	○	
		"thai"	Thai	○	○	○	○	
		"arabic"	Arabic	○	○	○	○	
Selection of menu display position	menu_pos	"bottom_left"	Bottom left	○	○	○	○	
		"center"	Center	○	○	○	○	
Selection of screen display	status_disp	"on"	ON	○	○	○	○	
		"off"	OFF	○	○	○	○	
		"all_off"	All OFF	○	○	○	○	
Selection of remote control light receiving portion	ir_receiver	"front_rear"	Front rear	○	○	○	○	
		"front"	Front	○	○	○	○	
		"rear"	Rear	○	○	○	○	
Selection of remote control ID	remote_id	"all"	All	○	○	○	○	
		"1"	1	○	○	○	○	
		"2"	2	○	○	○	○	
		"3"	3	○	○	○	○	
		"4"	4	○	○	○	○	
Lens control lock selection command	lens_lock	"on"	ON	○	○	○	○	
		"off"	OFF	○	○	○	○	
Web page On/Off selection command	web_control_ui	"on"	ON	–	–	–	○	
		"off"	OFF	–	–	–	○	

Connection/power setting function

Function	Command	Selected value/ numeric value	Remarks	VPL-GTZ∗∗∗ series (∗∗∗ means model name)				Type
				270	280	240	380	
Selection of auto power saving (no signal)	powsave_nosig	"standby"	Standby	○	○	○	○	menu_sel
		"off"	OFF	○	○	○	○	
Selection of digital input dynamic range	dynamic_range	"auto"	Auto	○	–	○	○	
		"limited"	Limited	○	–	○	○	
		"full"	Full	○	–	○	○	
		Select an input terminal from hdmi1/hdmi2/hdmi3/hdmi4 with Suffix. Example) dynamic_range --hdmi1 "full" ↵ The digital input dynamic range of the HDMI terminal is set to “full”.						

Installation setting function

Function	Command	Selected value/ numeric value	Remarks	VPL-GTZ∗∗∗ series (∗∗∗ means model name)				Type
				270	280	240	380	
Selection of image flip	image_flip	"hv"	HV	○	○	○	○	menu_sel
		"h"	H	○	○	○	○	
		"v"	V	○	○	○	○	
		"off"	OFF	○	○	○	○	
		"auto"	Auto	–	–	–	–	
Adjustment of blanking	blanking	<val>	Blanking Select the adjustment position from top/bottom/left/right with Suffix. Example) blanking --top 10 ↵ The upper side of blanking is set to 10.	○	○	○	○	menu_num
Color matching (brightness) adjustment	color_matching_brt	<val>	Specify the adjustment level with Suffix: --lev1 (level 1) to --lev6 (level 6). Example) color_matching_brt --lev1 10 ↵ The brightness of color matching level 1 is set to 10.	○	○	○	○	
Color matching (color) R adjustment	color_matching_r	<val>		○	○	○	○	
Color matching (color) B adjustment	color_matching_b	<val>		○	○	○	○	
Reset execution of whole color matching adjustment	color_matching_reset		Color matching reset	○	○	○	○	menu_exec
Adjustment of panel alignment (shift) R	panel_align_shift_adj_r	<val>	Select the shift direction from h (horizontal)/v (vertical) with Suffix. Example) panel_align_shift_adj_r --h 10 ↵ Panel alignment (shift) R is adjusted by 10 in the horizontal direction.	○	○	○	○	menu_num
Adjustment of panel alignment (shift) B	panel_align_shift_adj_b	<val>		○	○	○	○	

Function	Command	Selected value/ numeric value	Remarks	VPL-GTZ∗∗∗ series (∗∗∗ means model name)				Type
				270	280	240	380	
Selection of pattern color during the adjustment of panel alignment menu	panel_align_pattern	"rgb"	R/G/B	○	○	○	○	menu_sel
		"rg"	R/G	○	○	○	○	
		"bg"	B/G	○	○	○	○	
Selection of ON/OFF of panel alignment adjustment	panel_alignment	"on"	Panel alignment ON	○	○	○	○	
		"off"	Panel alignment OFF	○	○	○	○	
Execution of reset for overall panel alignment adjustment	panel_align_reset		Panel alignment Execution of reset	○	○	○	○	menu_exec
Selection of high altitude mode	high_alt_mode	"on"	ON	○	○	○	–	menu_sel
		"off"	OFF	○	○	○	○	
		"level1"		–	–	–	○	
		"level2"		–	–	–	○	
Blending adjustment ON/OFF selection	blend_sw	"on"	ON	○	○	–	–	
		"off"	OFF	○	○	–	–	
		Select the blending adjustment position from top/bottom/left/right with Suffix. Example) blend_sw --top "on" ↵ The upper side of blending is set to “on”.						
Blending area correction gamma curve mode selection	blend_gamma	"1.8"	1.8	○	○	–	–	
		"1.9"	1.9	○	○	–	–	
		"2.0"	2.0	○	○	–	–	
		"2.1"	2.1	○	○	–	–	
		"2.2"	2.2	○	○	–	–	
		"2.3"	2.3	○	○	–	–	
		"2.4"	2.4	○	○	–	–	
		"2.5"	2.5	○	○	–	–	
		"2.6"	2.6	○	○	–	–	
		Select the gamma curve adjustment position from top/bottom/left/right with Suffix. Example) blend_gamma --top 2.1 ↵ The upper side of the gamma curve is set to “2.1”.						
Blending start position adjustment	blend_start	<val>		○	○	–	–	menu_num
		Select the blending adjustment start position from top/bottom/left/right with Suffix. Example) blend_start --top 10 ↵ The blending adjustment start position is set to 10 from the top of the screen.						
Blending adjusting width adjustment	blend_width	<val>		○	○	–	–	
		Select the blending adjustment width from top/bottom/left/right with Suffix. Example) blend_width --top 10 ↵ The blending adjustment width is set to 10 from the top of the screen.						
Execution of blending adjustment reset	blend_reset			○	○	–	–	menu_exec

Function	Command	Selected value/numeric value	Remarks	VPL-GTZ*** series (*** means model name)				Type
				270	280	240	380	
Pattern (marker) display during blending adjustment	blend_cursor	"on"	ON	–	–	–	–	menu_sel
		"off"	OFF	–	–	–	–	
Pattern (marker) color selection during blending adjustment	blend_cursor_color	"r"	Red	○	○	–	–	
		"g"	Green	○	○	–	–	
		"b"	Blue	○	○	–	–	
		"c"	Cyan	○	○	–	–	
		"m"	Magenta	○	○	–	–	
		"y"	Yellow	○	○	–	–	
		Select the pattern (marker) color during adjustment from start/end with Suffix. Example) blend_cursor_color --start "g" ↵ The start marker color during blending adjustment is set to G (green).						
Correction command of short throw lens	flange_back_correction	<val>		○	○	○	○	menu_num
Selection command of Wake up on LAN operation	remote_start	"on"	ON	○	○	○	○	menu_sel
		"off"	OFF	○	○	○	○	
Selection command of network management	network_mgmt	"on"	ON	○	○	○	○	
		"off"	OFF	○	○	○	○	
Selection command of anamorphic lens type	anamorphic_lens	"1.24x"	1.24x	–	–	○	○	
		"1.32x"	1.32x	–	–	○	○	
Selection command of trigger terminal function	trigger	"off"	OFF	○	○	○	○	
		"power"	Power	○	○	○	○	
		"v_stretch"	V stretch	–	–	○	○	
		"2.35_1_zoom"	2.35_1 zoom	○	○	○	○	
		"3d"	3D	○	○	–	–	
		Select the trigger terminal from port1/port2 with Suffix. Example) trigger --port1 "power" ↵ The PORT1 trigger terminal is set to the output terminal in the “power” state.						
Selection command of blanking On/Off	blanking_enable	"on"	ON	○	○	○	○	
		"off"	OFF	○	○	○	○	
Activating a license	activate_licenses	Transmitting example) activate_licenses Returning example) ok Transmitting example) activate_licenses --info Returning example) {"type":"menu_exec","version":"1.0"}		○	–	–	–	menu_exec

2. Command example

Transmitting example	Character	i	n	p	u	t	␣	"	h	d	m	i	1	"	↵	
	Hex code	69	6E	70	75	74	20	22	68	64	6D	69	31	22	0D	0A
Returning example	Character	o	k	↵												
	Hex code	6F	6B	0D	0A											

(Classification is specified using menu_sel command Suffix.)

Setting of value

Transmitting example: `command --suffix "txt_param1"`↵ Sets the selected value of a parameter.

Returning example: `ok`↵

Inquiry of value:

Transmitting example: `command --suffix ?`↵ Acquires the selected value of a parameter that has been set.

Returning example: `"txt_param1"`↵

Inquiry of value range:

Transmitting example: `command --suffix ? --range`↵ Acquires a list of parameter-selected values that can be set.

Returning example: `["txt_param1","txt_param2"]`↵

Inquiry of command information:

Transmitting example: `command --suffix ? --info`↵ Acquires the command information.

Returning example: `{"type":"sys_sel","version":"1.0","range":["txt_param1","txt_param2"]}`↵

A command category, command version and a list of parameter-selected values that can be set using a command are returned as command information.

2-2-2. Command Type: menu_stat

By optional designation, the command of a sys_stat command type can acquire menu values, and acquire command information.

Command name: In the case of "command", the following format is used.

Acquisition of value

Transmitting example: `command ?`↵ Inquires the system status information.

Returning example: `"txt_param"`↵ When the choice is returned.

`10`↵ When the numeric value is returned.

Acquisition of command information

Transmitting example: `command ? --info`↵

Returning example: `{"type":"menu_stat,"version":"1.0"}`↵

1. Command list

Function	Command	Parameter	Remarks	VPL-GTZ∗∗∗ series (∗∗∗ means model name)			
				270	280	240	380
Power status acquisition	ac_voltage_range ?	"100v"		–	–	–	○
		"200v"		–	–	–	○
		"low_voltage"		–	–	–	○

2. Command example

Transmitting example	Character	a	c	_	v	o	l	t	a	g	e	_	r	a	n	g	e	␣	?	⏎
	Hex code	61	63	5F	76	6F	6C	74	61	67	65	5F	72	61	6E	67	65	20	3F	0D	0A
Returning example	Character	"	1	0	0	v	"	⏎													
	Hex code	22	31	30	30	76	22	0D	0A												

2-3. Remote Controller Key Command

2-3-1. Command Type: key

1. Command list

Function	Command	Parameter	Remarks
Pressing of remote control key	key	Refer to next page in a key code list.	–

2. Command example

Transmitting example	Character	k	e	y	␣	"	m	e	n	u	"	⏎	
	Hex code	6B	65	79	20	22	6D	65	6E	75	22	0D	0A
Returning example	Character	o	k	⏎									
	Hex code	6F	6B	0D	0A								

Key code list

Key code	Function	VPL-GTZ*** series (*** means model name)			
		270	280	240	380
"power_on"	Power ON	○	○	○	○
"power_off"	Power OFF	○	○	○	○
"power"	Power toggle	○	○	○	○
"video"	Video	–	–	–	–
"input_a"	Input A	○	○	○	○
"input_b"	Input B	○	○	○	○
"input_c"	Input C	○	○	–	○
"input_d"	Input D	○	○	–	○
"input_e"	Input E	○	○	–	○
"input_f"	Input F	–	○	–	–
"input"	Input toggle	○	○	○	○
"blank"	Video muting	○	○	○	○
"muting"	Audio muting	–	–	–	–
"vol+"	Volume +	–	–	–	–
"vol–"	Volume –	–	–	–	–
"menu"	Menu	○	○	○	○
"right"	Cursor [→]	○	○	○	○
"left"	Cursor [←]	○	○	○	○
"up"	Cursor [↑]	○	○	○	○
"down"	Cursor [↓]	○	○	○	○
"enter"	Enter	○	○	○	○
"reset"	Reset	○	○	○	○
"picmode1"	Picture preset Bright TV	○	○	○	○
"picmode2"	Picture preset TV	○	○	○	○
"picmode3"	Picture preset Cinema film 1	○	○	○	○
"picmode4"	Picture preset User	○	○	○	○
"picmode5"	Picture preset Reference	○	○	○	○
"picmode6"	Picture preset Game	○	○	○	○
"picmode7"	Picture preset Photograph	○	○	○	○
"picmode8"	Picture preset Cinema film 2	○	○	○	○
"picmode9"	Picture preset Bright cinema	○	○	○	○
"picmode"	Picture preset toggle	○	○	○	○
"picture+"	Contrast +	○	○	○	○
"picture–"	Contrast –	○	○	○	○
"color+"	Color depth +	○	○	○	○
"color–"	Color depth –	○	○	○	○
"bright+"	Brightness +	○	○	○	○
"bright–"	Brightness –	○	○	○	○
"hue+"	Hue +	○	○	○	○
"hue–"	Hue –	○	○	○	○
"sharpness+"	Sharpness +	○	○	○	○
"sharpness–"	Sharpness –	○	○	○	○
"color_temp"	Color temperature toggle	○	○	○	○
"color_mode"	Color space toggle	○	○	○	○
"black_level"	Contrast enhancer toggle	○	○	○	○
"reality_creation"	Reality creation	○	○	○	○

Key code	Function	VPL-GTZ*** series (*** means model name)			
		270	280	240	380
"laser_brightness+"	Laser dimming +	○	○	○	○
"laser_brightness−"	Laser dimming −	○	○	○	○
"iris_mode"	Light source dynamic control toggle	○	–	–	–
"motionflow"	Motion enhancer toggle	○	○	○	○
"black_insertion"	Film projection toggle	–	–	–	–
"noise_reduction"	NR toggle	–	–	–	–
"gamma_correction"	Gamma correction toggle	○	○	○	○
"color_correction"	Color correction	○	○	○	○
"aspect"	ASPECT	○	○	○	○
"aspect_widezoom"	Wide mode Wide zoom	–	–	–	–
"aspect_full1"	Wide mode Full 1	–	–	–	–
"aspect_full2"	Wide mode Full 2	–	–	–	–
"aspect_normal"	Wide mode Normal	○	○	○	○
"aspect_full"	Wide mode Full	–	–	–	–
"aspect_zoom"	Wide mode Zoom	–	–	–	–
"aspect_v_stretch"	Wide mode Anamorphic zoom	–	–	○	○
"aspect_1.85_1_zoom"	Wide mode 1.85:1 zoom	○	○	○	○
"aspect_2.35_1_zoom"	Wide mode 2.35:1 zoom	○	○	○	○
"aspect_stretch"	Wide mode Stretch	○	○	○	○
"aspect_squeeze"	Wide mode Anamorphic squeeze	–	–	○	○
"aspect_h_stretch"	Wide mode H Stretch	–	–	–	○
"video_size"	Pitch	–	–	–	–
"video_shift"	Shift	–	–	–	–
"status_on"	Screen display ON	○	○	○	○
"status_off"	Screen display OFF	○	○	○	○
"lens_control"	Lens toggle	○	○	○	○
"lens_focus"	Lens focus	○	○	○	○
"lens_focus_far"	Lens focus far	○	○	○	○
"lens_focus_near"	Lens focus near	○	○	○	○
"lens_zoom"	Lens zoom	○	○	○	○
"lens_zoom_up"	Lens zoom +	○	○	○	○
"lens_zoom_down"	Lens zoom −	○	○	○	○
"lens_shift"	Lens shift	○	○	○	○
"lens_shift_up"	Lens shift up	○	○	○	○
"lens_shift_down"	Lens shift down	○	○	○	○
"lens_shift_left"	Lens shift left	○	○	○	○
"lens_shift_right"	Lens shift right	○	○	○	○
"lens_position"	Picture position	○	○	○	○
"lens_position1"	Accesses the picture position 1.	○	○	○	○
"lens_position2"	Accesses the picture position 2.	○	○	○	○
"lens_position3"	Accesses the picture position 3.	○	○	○	○
"lens_position4"	Accesses the picture position 4.	○	○	○	○
"lens_position5"	Accesses the picture position 5.	○	○	○	○
"lens_precise_adj"	Flange back correction	○	○	○	○
"lens_precise_adj_far"	Flange back correction +	–	–	○	○
"lens_precise_adj_near"	Flange back correction −	–	–	○	○
"pattern"	Test pattern	–	–	–	–

Key code	Function	VPL-GTZ*** series (*** means model name)			
		270	280	240	380
"3d"	3D setting	○	○	○	○
"2d_3d_display_select"	2D-3D display selection toggle	○	○	○	○
"2d_3d_display_select_auto"	2D-3D display selection Auto	○	–	○	○
"2d_3d_display_select_3d"	2D-3D display selection 3D	○	○	○	○
"2d_3d_display_select_2d"	2D-3D display selection 2D	–	○	–	○
"3d_format"	3D format toggle	○	–	○	○
"3d_format_simulated_3d"	3D format Simulated 3D	○	–	○	–
"3d_format_side_by_side"	3D format Right/left division system	○	–	○	○
"3d_format_over_under"	3D format Upper/lower division system	○	–	○	○
"3d_glasses_brightness"	3D glasses brightness toggle	–	–	–	–
"3d_glasses_brightness_high"	3D glasses brightness High	–	–	–	–
"3d_glasses_brightness_middle"	3D glasses brightness Middle	–	–	–	–
"3d_glasses_brightness_low"	3D glasses brightness Low	–	–	–	–
"3d_glass_brightness+"	3D glasses brightness +	–	–	–	–
"3d_glass_brightness–"	3D glasses brightness –	–	–	–	–
"3d_brightness"	Toggle of 3D brightness	○	○	–	–
"3d_brightness_high"	3D brightness Bright	○	○	–	–
"3d_brightness_standard"	3D brightness Dark	○	○	–	–
"simulated_3d_effect"	Simulated 3D effect toggle	○	–	○	–
"simulated_3d_effect_high"	Simulated 3D effect High	○	–	○	–
"simulated_3d_effect_middle"	Simulated 3D effect Middle	○	–	○	–
"simulated_3d_effect_low"	Simulated 3D effect Low	○	–	○	–
"3d_depth+"	3D depth adjustment +	○	–	○	–
"3d_depth–"	3D depth adjustment –	○	–	○	–

2-4. Advanced Adjustment Command

The following is the ADCP command correspondence list to be used for the advanced adjustment for the experts.
The type of a command is classified as follows.

Adjustment command type for experts

Command type	Function	VPL-GTZ∗∗∗ series (∗∗∗ means model name)			
		270	280	240	380
panel_align_zone	Used in the panel alignment zone adjustment	○	○	○	○
user_gamma	Used in the gamma table adjustment	○	○	○	–
pattern_sel/pattern_pos	Displays the adjustment test pattern for experts	○	○	○	○

2-4-1. Command Type: panel_align_zone

By optional designation, the command of a panel_align_zone command type can transmit, reflect and acquire the panel alignment zone adjustment values, and acquire the command information.
For example, the following formats are used.

Transmission of value		
After transmitting the adjustment value for the panel alignment zone adjustment point, the value is reflected on the image by transmitting the reflection command. The format of range and value is described as the JSON array data.		
Direct value		
	Transmitting example:	`panel_align_zone [1,2] --pos=[1,2,3,4] --ch=r`↵ Sets all adjustment points of red channel to the value (x, y) = [1, 2] in the range from the upper left (x=1, y=2) to the lower right (x=3, y=4) on the coordinate of the panel alignment zone adjustment point. Specifies red (--ch=r) or blue (--ch=b) as the panel alignment zone adjustment channel.
	Returning example:	`ok`↵
Relative value		
	Transmitting example:	`panel_align_zone --rel=[1,2] --pos=[1,2,3,4] --ch=r`↵ Adds (x, y)=[1, 2] to all adjustment values of adjustment points in the range from the upper left (x=1, y=2) to the lower right (x=3, y=4) on the coordinate of the panel alignment zone adjustment point.
	Returning example:	`ok`↵
Table value		
	Transmitting example:	`panel_align_zone [[1,2],[3,4],[5,6],[7,8]] --pos=[1,1,2,2] --ch=r`↵ Sets the adjustment points of red channel respectively as follows in the range from the upper left (x=1, y=1) to the lower right (x=2, y=2) on the coordinate of the panel alignment zone adjustment point. Coordinate of adjustment point (x, y) → Adjustment value [x, y] (1, 1) → [1, 2] (2, 1) → [3, 4] (1, 2) → [5, 6] (2, 2) → [7, 8]
	Returning example:	`ok`↵
Reset value		
	Transmitting example:	`panel_align_zone --reset --pos=[1,1,16,10] --ch=r`↵ Sets all adjustment points to the initial value in the range from the upper left (x=1, y=1) to the lower right (x=64, y=40) on the coordinate of the panel alignment zone adjustment point.
	Returning example:	`ok`↵

Reflection of value

Reflects the transmitted panel alignment zone adjustment value on the screen.

Transmitting example: `panel_align_zone --apply`↵

Returning example: `ok`↵

Acquisition of value

Transmitting example: `panel_align_zone ? --pos=[1,1,3,3] --ch=r`↵
Inquires the adjustment value of the adjustment points of red channel in the range from the upper left (1, 1) to the lower right (3, 3) as the coordinate (x, y) of the panel alignment zone adjustment point.

Returning example: `[[0,0],[0,0],[0,0],[0,0],[0,0],[0,0],[0,0],[0,0],[0,0]]`↵
Returns the panel alignment zone adjustment value of each adjustment point in the specified area in the JSON array format.

Acquisition of command information

Transmitting example: `panel_align_zone ? --info`↵
Inquires the command information.

Returning example:
```
{"type":"panel_align_zone","version":"1.0","range":{
"pos":[1,1,16,10],
"adj":[{"min":-20,"max":20,"step":1},{"min":-20,"max":20,"step":1}],
"adj_step_per_dot":[10,10],
"pos_pitch":[128,128],
"pos_offset":[0,24],
"ch":["r","b"]
}}
```
↵

The following range information is returned as “range”.

`pos`	Maximum specified range of adjustment point (upper left coordinate x, y to lower right coordinate x, y)
`adj`	Maximum adjustment range in the x-axis direction (minimum and maximum moving amount, step), y-axis direction (minimum and maximum moving amount, step)
`adj_step_per_dot`	Adjustment value (x, y) for moving 1 pixel on the screen
`pos_pitch`	Pixel pitch (x, y) of adjustment point on the screen
`pos_offset`	Offset pixel amount(x, y) of adjustment point (x, y=1, 1) from the upper left corner of the screen
`ch`	Choice of adjustment channel

2-4-2. Command Type: user_gamma

By optional designation, the command of a user_gamma command type can transmit, reflect and acquire the gamma curve adjustment values, and acquire the command information.
For example, the following formats are used.

Transmission of value		
After transmitting the adjustment value for the gamma curve adjustment point, the value is reflected on the image by transmitting the reflection command. The format of range and value is described as the JSON array data. **Note** For the gamma curve, it is required to set to the value that is “equal to or greater than” the adjustment value of all adjustment points located in the black side of the adjustment point.		
Direct value		
	Transmitting example:	`user_gamma 0 --sel=gamma3 --pos=[0,63] --ch=r`↵ Sets all adjustment points of red channel to the value “0” in the range from the adjustment point “0” to “63” of the gamma curve “gamma3”. Specifies red (--ch=r), green (--ch=g) or blue (--ch=b) as the gamma curve adjustment channel.
	Returning example:	`ok`↵
Relative value		
	Transmitting example:	`user_gamma --rel=10 --sel=gamma4 --pos=[0,60] --ch=r`↵ Adds “10” to all adjustment points of red channel in the range from the adjustment point “0” to “60 of the gamma curve “gamma4”.
	Returning example:	`ok`↵
Table value		
	Transmitting example:	`user_gamma [1,2,3,4,5] --sel=gamma4 --pos=[0,4] --ch=g`↵ Sets the adjustment points of green channel respectively as follows in the range from the adjustment point “0” to “4” of the gamma curve “gamma4”. Adjustment point → Adjustment value 0 → 1 1 → 2 2 → 3 3 → 4 4 → 5
	Returning example:	`ok`↵
Reset value		
	Transmitting example:	user_gamma --reset --sel=gamma3 --pos=[0,63] --ch=r↵ Sets all adjustment points of red channel to the initial value in the range from the adjustment point “0” to “63” of the gamma curve “gamma3”.
	Returning example:	`ok`↵

Reflection of value	
Reflects the transmitted gamma curve adjustment value on the screen.	
Transmitting example:	`user_gamma --apply`↵
Returning example:	`ok`↵

Acquisition of value	
Transmitting example:	user_gamma ? --sel=gamma3 --pos=[0,4] --ch=r↵ Inquires the adjustment points of red channel in the range from the adjustment point “0” to “4” of the gamma curve “gamma3”.
Returning example:	`[1,2,3,4,5]`↵ Returns the gamma curve adjustment value of each adjustment point in the specified area in the JSON array format.

Acquisition of command information	
Transmitting example:	`user_gamma ? --info`↵ Inquires the command information.

Returning example:	`{"type":"user_gamma","version":"1.0",`
	`sel:["1.8","2.0","2.1","2.2","2.4","2.6","gamma7","gamma8","gamma9","gamma10","off"],`
	`"range":{`
	`"pos":{"min":0,"max":63},`
	`"adj":{"min":0,"max":1023,"step":1},`
	`"ch":["r","g","b"]`
	`}}`↵
	Returns the choice of gamma curve that can be adjusted as “sel”.
	
	The following range information is returned as “range”.
	`pos` Maximum specified range of adjustment point
	`adj` Maximum adjustment range
	`ch` Choice of adjustment channel

2-4-3. Command Type: pattern_sel/pattern_pos

The command of a pattern_sel_pattern_pos command type can display the test pattern for various adjustments.

Note

The menu display and the message display on the screen may not be displayed correctly while the test pattern is displayed.

Command name: In the case of "command", the following command formats are used.

Command type		pattern_sel	pattern_pos (In the case of set coordinate=<x, <y> and coordinate range <x1><y1> to <x2>, <y2>)
Setting of value	Transmitting side	command "item1"↵	command [<x>,<y>]↵
	Returning side	ok↵	ok↵
Inquiry of value	Transmitting side	command ?↵	command ?↵
	Returning side	"item1"↵	[<x>,<y>]↵
Inquiry of value range	Transmitting side	command ? --range↵	command ? --range↵
	Returning side	["item1","item2"]↵	[{"min":<x1>,"max":<x2>},{"min":<y1>,"max":<y2>}]↵
Inquiry of command information	Transmitting side	command ? --info↵	command ? --info↵
	Returning side	{"type":"pattern_sel","version":"1.0","range":["item1","item2"]}↵	{"type":"pattern_sel","version":"1.0","range":[{"min":<x1>,"max":<x2>},{"min":<y1>,"max":<y2>}]}↵

1. Command list

Function	Command	Selected value/ numeric value	Remarks	VPL-GTZ∗∗∗ series (∗∗∗ means model name)				Type
				270	280	240	380	
Displays the cursor for blending adjustment.	pat_blend_cursor	"on" "off"	Specify the display position from top/ bottom/left/right with Suffix. Example) pat_blend_cursor --top "on"⏎ The cursor display on the upper portion of the screen is set to ON.	○	○	–	–	pattern_sel
Displays the flat field pattern for color space adjustment.	pat_color_space	"r" "g" "b" "w" "off"		○	○	○	–	
Displays the cursor in the panel alignment zone adjustment point.	pat_panel_align_zone_cursor	"rg" "bg" "rgb" "off"	When the display position is not specified, display the cursor in the adjustment point [1. 1].	○	○	○	○	
Displays the pattern for Panel alignment shift adjustment.	pat_panel_align_shift	"rg" "bg"" "rgb" "off"		–	–	–	○	
Displays the pattern for lens control adjustment.	pat_lens_control	"on" "off"		–	–	–	○	
Displays the flat field pattern for color matching adjustment.	pat_color_matching	"lev1" "lev2" "lev3" "lev4" "lev5" "lev6" "off"		○	○	○	○	
Selection of test pattern drawing frame rate	pat_frame_rate	"60" "50" "24"	Applies this function to pat_color_space.	○	○	○	○	
Specifies whether to output the internal test pattern as the 3D video signal.	pat_3d_mode	"3d" "2d"	Applies this function to pat_color_space.	○	○	–	○	

Function	Command	Selected value/ numeric value	Remarks	VPL-GTZ∗∗∗ series (∗∗∗ means model name)				Type
				270	280	240	380	
Specifies the display position of the cursor for panel alignment zone adjustment.	pat_panel_align_zone_cursor_pos	[<x>,<y>]	Upper left of OSD (1, 1), left and upper "–", right and lower "+" Specify with the x, y coordinate of the adjustment point.	○	○	○	○	pattern_pos

3. Network Communication

The ports used in the unit are as shown below.

Protocol/function	Port No.	Service state at the factory	Setting change enabled/disabled	
			Service ON/OFF	Port No.
SDAP	UDP:53862	ON	Enabled	Enabled
ADCP	TCP:53595	ON	Enabled	Enabled
DDDP	UDP:9131	ON	Enabled	Disabled
SDDP	UDP:1902	ON	Disabled	Disabled
CIP	TCP:41794	ON	Disabled	Enabled

Note that "Service state at the factory" is set to OFF for all items in VPL-GTZ380 only. As for "Service ON/OFF", it is set to "Enabled" for all items as setting change.

4. Model List

VPL-GTZ270 Series
VPL-GTZ270

VPL-GTZ280 Series
VPL-GTZ280

VPL-GTZ240 Series
VPL-GTZ240

VPL-GTZ380 Series
VPL-GTZ380

Note

Note that the model that is not listed in the above table is not supported even if it is the model in the product series

Revision History

Date	History	Contents
2024. 12	1st Edition 9-976-955-51	—

VPL-GTZ240 (SY)
VPL-GTZ270 (CN)
VPL-GTZ270 (CE)
VPL-GTZ270 (UC)
VPL-GTZ280 (CE)
VPL-GTZ280 (CN)
VPL-GTZ280 (UC)
VPL-GTZ380 (CN)
VPL-GTZ380 (SY) E

(SUPPORTED COMMAND LIST)

9-976-955-51

Sony Corporation

Printed in Japan
2024. 12 32
©2024