SONY

DATA PROJECTOR

PROTOCOL MANUAL
(SUPPORTED COMMAND LIST)
1st Edition (Revised 2)

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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 (E)

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.

Protocol for each model

(○: supported (initial setting: ON), ●: supported (initial setting: OFF), –: not supported)

Protocol	VPL-⁎⁎⁎ series (⁎⁎⁎ means model name)													Remarks
	FHZ120/FHZ90/ F1200Z/F900Z	FHZ70/FHZ60/FHZ50/ FWZ60/ F640HZ/F630HZ/ F540HZ/F530HZ/F430HZ/ F630WZ/F530WZ	FH60/FW60/ F530H/F630H/ F630W/F530W	FHZ700/ F700HZ	FH30/ F400H/ F500H	C300	E200	E300	E400/ E500	S200	S600	P10/P500	U300	
SDAP	○	○	○	●	●	●	●	●	●	●	●	●	●	
ADCP	○	○	○	○	○	○	○	○	○	○	○	○	○	Initial setting of authentication during connection is also ON. For the individual command correspondence, refer to ADCP in Section 2.
PJLink	○	○	○	●	●	○	○	○	○	○	○	○	○	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.
DDDP (AMX Dynamic Device Discovery Protocol)	○	○	○	●	●	●	●	●	●	●	●	●	●	Function is always ON during serial connection.
SDDP (Control4 Simple Device Discovery Protocol)	–	–	–	–	–	–	–	–	–	–	–	–	–	
CIP (Crestron Internet Protocol)	○	○	○	○	○	○	○	○	○	○	○	○	○	
SNMP (Simple Network Management Protocol)	○	○	○	○	○	–	–	–	–	–	–	–	–	
PJ Control API	–	○ ⁎ FHZ70/F640HZ/ F540HZ series only	–	–	–	–	–	–	–	–	–	–	–	

Other items for each model

(○: supported/–: not supported)

Item	VPL-⁎⁎⁎ series (⁎⁎⁎ means model name)													Remarks
	FHZ120/FHZ90/ F1200Z/F900Z	FHZ70/FHZ60/FHZ50/ FWZ60/ F640HZ/F630HZ/ F540HZ/F530HZ/F430HZ/ F630WZ/F530WZ	FH60/FW60/ F530H/F630H/ F630W/F530W	FHZ700/ F700HZ	FH30/ F400H/ F500H	C300	E200	E300	E400/ E500	S200	S600	P10/P500	U300	
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.

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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-⁎⁎⁎ series (⁎⁎⁎ means model name)												
				FHZ120/FHZ90/ F1200Z/F900Z	FHZ70/FHZ60/FHZ50/ FWZ60/ F640HZ/F630HZ/ F540HZ/F530HZ/F430HZ/ F630WZ/F530WZ	FH60/FW60/ F530H/F630H/ F630W/F530W	FHZ700/ F700HZ	FH30/ F400H/ F500H	C300	E200	E300	E400/ E500	S200	S600	P10/P500	U300
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]	○	○	○	○	○	○	○	○	○	○	○	○	○

⁎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

```
power "on"↵
ok↵
```

⁎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_dns_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_dns_server1 "XXX.XXX.XXX.XXX"↵
ipv4_dns_server2 "XXX.XXX.XXX.XXX"↵
ipv4_network_setting "apply"↵
```


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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: 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 etc., 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-∗∗∗ series (∗∗∗ means model name)												
				FHZ120/FHZ90/ F1200Z/F900Z	FHZ70/FHZ60/FHZ50/ FWZ60/ F640HZ/F630HZ/ F540HZ/F530HZ/F430HZ/ F630WZ/F530WZ	FH60/FW60/ F530H/F630H/ F630W/F530W	FHZ700/ F700HZ	FH30/ F400H/ F500H	C300	E200	E300	E400/ E500	S200	S600	P10/P500	U300
Power status acquisition	power_status ?	"standby"	Standby	○	○	○	○	○	○	○	○	○	○	○	○	○
		"startup"	Start up in progress	○	○	○	○	○	○	○	○	○	○	○	○	○
		"on"	Power on	○	○	○	○	○	○	○	○	○	○	○	○	○
		"cooling1"	Cooling 1	○	○	○	○	○	○	○	○	○	○	○	○	○
		"cooling2"	Cooling 2	○	○	○	○	○	○	○	○	○	○	○	○	○
		"saving_cooling1"	Power saving cooling 1	○	○	○	○	○	○	○	○	○	○	○	○	○
		"saving_cooling2"	Power saving cooling 2	○	○	○	○	○	○	○	○	○	○	○	○	○
		"saving_standby"	Power saving standby	○	○	○	○	○	○	○	○	○	○	○	○	○
		"update"	Software update	○	○	–	–	–	–	–	–	–	–	–	–	–
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_system2"	System error 2	○	○	○	○	○	○	○	○	○	○	○	○	○
		"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 rotation error	○	○	–	○	–	–	–	–	–	–	–	○	○
		"err_light_over"	Luminance error	○	○	–	○	–	–	–	–	–	–	–	○	○
		"err_assy"	Assembling error	○	○	○	○	○	○	○	○	○	○	○	○	○
		"err_lens_shift"	Lens shift error	○	○	○	○	–	–	–	–	–	–	–	–	–
		"err_shutter"	Shutter error	–	–	–	–	–	–	–	–	○	–	–	–	–

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Function	Command	Response	Remarks	VPL-⁎⁎⁎ series (⁎⁎⁎ means model name)												
				FHZ120/FHZ90/ F1200Z/F900Z	FHZ70/FHZ60/FHZ50/ FWZ60/ F640HZ/F630HZ/ F540HZ/F530HZ/F430HZ/ F630WZ/F530WZ	FH60/FW60/ F530H/F630H/ F630W/F530W	FHZ700/ F700HZ	FH30/ F400H/ F500H	C300	E200	E300	E400/ E500	S200	S600	P10/P500	U300
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}, {"prev_light_src":3000}]`	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.	○	○	–	–	–	–	–	–	–	–	–	–	–
		`"cleanup_step1"`	Filter auto-cleaning is required. 1	○	○	○	–	–	–	–	–	–	–	–	○*	○*
		`"cleanup_step2"`	Filter auto-cleaning is required. 2	○	○	○	–	–	–	–	–	–	–	–	○*	○*
Model name acquisition	`modelname ?`	Example) `"VPL-FHZ65"`	Model name	○	○	○	○	○	○	○	○	○	○	○	○	○
Serial number acquisition	`serialnum ?`	Example) `"012345678"`	Serial number	○	○	○	○	○	○	○	○	○	○	○	○	○
Input signal status acquisition	`signal ?`	`"Video60"`	60Hz video signal	○	○	○	○	○	○	○	○	○	○	○	○	○
		`"Video50"`	50Hz 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	○	○	○	○	○	○	○	○	○	○	○	○	○
		`"1152x900"`	1152 × 900	○	○	○	○	○	○	○	○	○	○	○	○	○

⁎: Some models are not provided with the function. Check the Operating Instructions supplied with this unit.

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Function	Command	Response	Remarks	VPL-∗∗∗ series (∗∗∗ means model name)												
				FHZ120/FHZ90/ F1200Z/F900Z	FHZ70/FHZ60/FHZ50/ FWZ60/ F640HZ/F630HZ/ F540HZ/F530HZ/F430HZ/ F630WZ/F530WZ	FH60/FW60/ F530H/F630H/ F630W/F530W	FHZ700/ F700HZ	FH30/ F400H/ F500H	C300	E200	E300	E400/ E500	S200	S600	P10/P500	U300
Input signal status acquisition	signal ?	"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	–	–	–	–	–	–	–	–	–	–	–	–	–
		"Invalid"	Unknown status	○	○	○	○	○	○	○	○	○	○	○	○	○
		"<H resolution> x <V resolution?"	Custom resolution	○	○	○	○	○	○	○	○	○	○	○	○	○
MAC address acquisition	mac_address ?	Example) "08-12-34-ab-cd-ef"	MAC address character string	○	○	○	○	○	○	○	○	○	○	○	○	○
IPv6 address setting method acquisition	ipv6_set_method ?	"auto"	Auto	○	○	○	○	–	–	–	–	–	–	–	–	–
		"manual"	Manual	○	○	○	○	–	–	–	–	–	–	–	–	–
IPv6 DNS address setting method acquisition	ipv6_dns_set_method ?	"auto"	Auto	○	○	○	○	–	–	–	–	–	–	–	–	–
		"manual"	Manual	○	○	○	○	–	–	–	–	–	–	–	–	–
(IPv6) IP address acquisition	ipv6_ip_address ?	IPv6 address character string Example) "2001:db8::1:0:0:1" ∗ For details of the notation, refer to RFC5952 “A Recommendation for IPv6 Address Representation”. IPv6 prefix length Example) 64		○	○	○	○	–	–	–	–	–	–	–	–	–
(IPv6) default gateway address acquisition	ipv6_default_gateway ?			○	○	○	○	–	–	–	–	–	–	–	–	–
(IPv6) DNS1 address acquisition	ipv6_dns_server1 ?			○	○	○	○	–	–	–	–	–	–	–	–	–
(IPv6) DNS2 address acquisition	ipv6_dns_server2 ?			○	○	○	○	–	–	–	–	–	–	–	–	–
(IPv6) IP address prefix acquisition	ipv6_prefix ?			○	○	○	○	–	–	–	–	–	–	–	–	–

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2. Command example

```
power_status ?↵
"standby"↵
```

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-✻✻✻ series (✻✻✻ means model name)												
			FHZ120/FHZ90/ F1200Z/F900Z	FHZ70/FHZ60/FHZ50/ FWZ60/ F640HZ/F630HZ/ F540HZ/F530HZ/F430HZ/ F630WZ/F530WZ	FH60/FW60/ F530H/F630H/ F630W/F530W	FHZ700/ F700HZ	FH30/ F400H/ F500H	C300	E200	E300	E400/ E500	S200	S600	P10/P500	U300
(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 ?`		○	○	○	○	○	○	○	○	○	○	○	○	○
(IPv4) DNS1 address setting/acquisition	`ipv4_dns_server1` `ipv4_dns_server1 ?`		○	○	○	○	○	○	○	○	○	○	○	○	○
(IPv4) DNS2 address setting/acquisition	`ipv4_dns_server2` `ipv4_dns_server2 ?`		○	○	○	○	○	○	○	○	○	○	○	○	○

2. Command example

```
ipv4_ip_address ?↵
"192.168.0.1"↵
```

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"↵	{"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"}↵

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1. Command list

Remote control function command

Function	Command	Selected value/ numeric value	Remarks	VPL-∗∗∗ series (∗∗∗ means model name)													Type
				FHZ120/ FHZ90/ F1200Z/ F900Z	FHZ70/FHZ60/FHZ50/ FWZ60/ F640HZ/F630HZ/ F540HZ/F530HZ/F430HZ/ F630WZ/F530WZ	FH60/FW60/ F530H/F630H/ F630W/F530W	FHZ700/ F700HZ	FH30/ F400H/ F500H	C300	E200	E300	E400/E500	S200	S600	P10/P500	U300	
Input terminal selection command	input	The following terminal names are used in all models.															menu_sel
	"video1"	Video terminal 1		–	○	○	○	○	○	○	○	○	○	○	○	○	
	"svideo1"	S video terminal 1		–	–	–	○	○	○	○	○	○	○	○	–	○	
	"rgb1"	RGB terminal 1		○ (Input A)	○ (Input A)	○ (Input A)	○ (Input A)	○ (Input A)	○ (Input A)	○ (Input A)	○ (Input A)	○ (Input A)	○ (Input A)	○ (Input A)	○ (Input A)	○ (Input A)	
	"rgb2"	RGB terminal 2		○ (Input B)	–	–	○ (Input B)	○ (Input B)	–	○ (Input B)	○ (Input B)	○ (Input B)	○ (Input B)	○ (Input B)	–	○ (Input B)	
	"dvi1"	DVI terminal 1		○ (Input C)	○ (Input B)	○ (Input B)	○ (Input C)	○ (Input C)	–	–	–	–	–	–	–	–	
	"hdmi1"	HDMI terminal 1		○ (Input D)	○ (Input C)	○ (Input C)	○ (Input D)	○ (Input D)	○ (Input B)	○ (Input C)	○ (Input C)	○ (Input C)	○ (Input C)	○ (Input C)	○ (Input B)	○ (Input C)	
	"hdmi2"	HDMI terminal 2		–	–	–	–	–	○ (Input C)	–	○ (Input D)	○ (Input D)*	–	–	○ (Input C)	○ (Input D)	
	"network"	Network		–	–	–	–	–	○	○	○	○	○	○	○	○	
	"usb_a"	USB (type A)		–	–	–	–	–	–	○	○	○	○	○	–	–	
	"usb_b"	USB (type B)		–	–	–	–	–	○	○	○	○	○	○	○	○	
	"hdbaset1"	HDBaseT terminal 1		○ (Input E)	○ (Input D)	○ (Input D)	–	–	○ (Input D)*	–	○ (Input E)*	○ (Input E)*	–	–	○ (Input D)	–	
	"option1"	Option adapter 1	∗ FHZ120/ F1200 series only	○ (Input F)	–	–	○ (Input E)	–	–	–	–	–	–	–	–	–	
	"web_content"	Web content		○ (Input G)	–	–	–	–	–	–	–	–	–	–	–	–	
Video muting command	blank	"on"	ON	○	○	○	○	○	○	○	○	○	○	○	○	○	
		"off"	OFF	○	○	○	○	○	○	○	○	○	○	○	○	○	
Audio muting command	muting	"on"	ON	–	○	○	–	○	○*	○*	○*	○*	○	○	○	○	
		"off"	OFF	–	○	○	–	○	○*	○*	○*	○*	○	○	○	○	
Freeze (pausing of screen) function selection command	freeze	"on"	ON	○	○	○	○	○	○	○	○	○	○	○	○	○	
		"off"	OFF	○	○	○	○	○	○	○	○	○	○	○	○	○	
Dual-screen mode function selection command	multi_screen	"on"	ON	○	○	○	○	○	–	–	–	–	–	–	–	–	
		"off"	OFF	○	○	○	○	○	–	–	–	–	–	–	–	–	

∗: Some models are not provided with the function. Check the Operating Instructions supplied with this unit.

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Image quality setting function/Projection setting function

Function	Command	Selected value/numeric value	Remarks	VPL-✻✻✻ series (✻✻✻ means model name)													Type
				FHZ120/ FHZ90/F1200Z/ F900Z	FHZ70/FHZ60/FHZ50/ FWZ60/ F640HZ/F630HZ/ F540HZ/F530HZ/F430HZ/ F630WZ/F530WZ	FH60/FW60/ F530H/F630H/ F630W/F530W	FHZ700/ F700HZ	FH30/ F400H/ F500H	C300	E200	E300	E400/ E500	S200	S600	P10/ P500	U300	
Selection of intelligent setting	intelligent_setting	"on"	On	–	○ (FHZ70/F640HZ/ F540HZ series only)	–	–	–	–	–	–	–	–	–	–	–	menu_sel
		"off"	Off	–	○ (FHZ70/F640HZ/ F540HZ series only)	–	–	–	–	–	–	–	–	–	–	–	
Selection of intelligent setting location	intelligent_setting_location	"meeting_class_room"	Meeting/class room	–	○ (FHZ70/F640HZ/ F540HZ series only)	–	–	–	–	–	–	–	–	–	–	–	
		"museum"	Museum	–	○ (FHZ70/F640HZ/ F540HZ series only)	–	–	–	–	–	–	–	–	–	–	–	
		"entertainment"	Entertainment	–	○ (FHZ70/F640HZ/ F540HZ series only)	–	–	–	–	–	–	–	–	–	–	–	
		"multi_screen"	Multi screen	–	○ (FHZ70/F640HZ/ F540HZ series only)	–	–	–	–	–	–	–	–	–	–	–	
Application of intelligent setting location	intelligent_setting_apply		Applies the selection of location.	–	○ (FHZ70/F640HZ/ F540HZ series only)	–	–	–	–	–	–	–	–	–	–	–	menu_exec
Selection of image quality mode	picture_mode	"dynamic"	Dynamic	○	○	○	○	○	○	○	○	○	○	○	○	○	menu_sel
		"standard"	Standard	○	○	○	○	○	○	○	○	○	○	○	○	○	
		"brt_priority"	Brightness priority	○	○	○	○	–	–	–	–	–	–	–	–	–	
		"multi_screen"	Multi-screen	○	○	○	–	–	–	–	–	–	–	–	–	–	
		"presentation"	Presentation	–	–	–	○	○	○	○	○	○	○	○	○	○	
		"blackboard"	Blackboard	–	–	–	–	–	–	○	○	○	○	○	–	–	
		"whiteboard"	Whiteboard	–	–	–	–	–	–	○	○	○	○	○	–	–	
		"cinema"	Cinema	–	–	–	–	–	–	○	○	○	○	○	–	–	
		"vivid"	Vivid	–	–	–	–	–	–	–	–	○	–	–	–	–	
		"srgb"	sRGB	○ ✻ FHZ120/ F1200 series only	–	–	–	–	–	○	○	–	○	○	–	–	
Resetting of image quality 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	"9300K"	9300K	○	○	○	–	–	–	–	–	–	–	–	–	–	menu_sel
		"7500K"	7500K	○	○	○	–	–	–	–	–	–	–	–	–	–	
		"6500K"	6500K	○	○	○	–	–	–	–	–	–	–	–	–	–	

Function	Command	Selected value/ numeric value	Remarks	VPL-✻✻✻ series (✻✻✻ means model name)													Type
				FHZ120/FHZ90/ F1200Z/F900Z	FHZ70/FHZ60/FHZ50/ FWZ60/ F640HZ/F630HZ/ F540HZ/F530HZ/F430HZ/ F630WZ/F530WZ	FH60/FW60/ F530H/F630H/ F630W/F530W	FHZ700/ F700HZ	FH30/ F400H/ F500H	C300	E200	E300	E400/ E500	S200	S600	P10/P500	U300	
Selection of color temperature	color_temp	"high"	High	–	–	–	○	○	○	○	○	○	○	○	○	○	menu_sel
		"mid"	Middle	–	–	–	○	○	○	○	○	○	○	○	○	○	
		"mid2"	Middle 2	–	–	–	–	–	–	–	–	○	–	–	–	–	
		"low"	Low	–	–	–	○	○	○	○	○	○	○	○	○	○	
		"brt_priority"	Brightness priority*1	○	○	○	–	–	–	–	–	–	–	–	–	–	
		"brt_priority2"	Brightness priority 2	○	–	–	–	–	–	–	–	–	–	–	–	–	
		"custom1"	Custom 1	○	○	○	○	○	–	–	–	–	–	–	–	–	
		"custom2"	Custom 2	○	○	○	○	○	–	–	–	–	–	–	–	–	
		"custom3"	Custom 3	○	○	○	○	○	–	–	–	–	–	–	–	–	
		"custom4"	Custom 4	○	○	○	–	–	–	–	–	–	–	–	–	–	
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>		○	○	○	○	○	–	–	–	–	–	–	–	–	
Fine adjustment of custom color temperature Bias G	coltemp_bias_g	<val>		○	○	○	○	○	–	–	–	–	–	–	–	–	
Fine adjustment of custom color temperature Bias B	coltemp_bias_b	<val>		○	○	○	○	○	–	–	–	–	–	–	–	–	
Selection of light source (light/lamp) mode	light_output_mode	"high"	High	○	○	○	○	○	○	○	○	○	○	○	○	○	menu_sel
		"mid"	Standard	○	○	○	○	○	○	○	○	○	○	○	○	○	
		"low"	Low	○	–	–	–	–	○	○	○	○	○	○	○	○	
		"auto"	Auto	–	–	–	○	–	○*2	○	○	○	○	○	○	○	
		"custom"	Custom	○	○	○	○	–	–	–	–	–	–	–	–	–	
		"extended"	Extended	○	○	–	○	–	–	–	–	–	–	–	–	–	
Adjustment of custom output in light source (light/lamp) mode	light_output_val	<val>	Light output	○	○	○	○	–	–	–	–	–	–	–	–	–	menu_num
Selection of brightness constant mode	constant_brt	"on"	ON	○	○	–	○	–	○	○	○	○	○	○	○	○	menu_sel
		"off"	OFF	○	○	–	○	–	○	○	○	○	○	○	○	○	
Selection of light source dynamic mode	light_output_dyn	"on"	ON	○	○	–	–	–	–	–	–	–	–	–	–	–	
		"off"	OFF	○	○	–	–	–	–	–	–	–	–	–	–	–	

✻1: VPL-FHZ120/FHZ90/F1200/F900 series is in “Brightness priority 1”.
✻2: Some models are not provided with the function. Check the Operating Instructions supplied with this unit.

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Function	Command	Selected value/numeric value	Remarks	VPL-✻✻✻ series (✻✻✻ means model name)													Type
				FHZ120/FHZ90/ F1200Z/F900Z	FHZ70/FHZ60/FHZ50/ FWZ60/ F640HZ/F630HZ/ F540HZ/F530HZ/F430HZ/ F630WZ/F530WZ	FH60/FW60/ F530H/F630H/ F630W/F530W	FHZ700/ F700HZ	FH30/ F400H/ F500H	C300	E200	E300	E400/ E500	S200	S600	P10/ P500	U300	
Selection of color space	color_space	"custom1"	Custom 1	○	○	○	–	–	–	–	–	–	–	–	○	○	menu_sel
		"custom2"	Custom 2	○	○	○	–	–	–	–	–	–	–	–	○	○	
		"custom3"	Custom 3	○	○	○	–	–	–	–	–	–	–	–	○	○	
		"custom4"	Custom 4	–	–	–	–	–	–	–	–	–	–	–	–	–	
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>		○	○	○	–	–	–	–	–	–	–	–	○	○	
Selection of gamma mode	gamma_correction	"2.2"	2.2	○	○	○	–	–	–	–	–	–	–	–	○	○	menu_sel
		"2.4"	2.4	○	○	○	–	–	–	–	–	–	–	–	○	○	
		"gamma3"	Gamma 3	○	○	○	–	–	–	–	–	–	–	–	○	○	
		"gamma4"	Gamma 4	○	○	○	–	–	–	–	–	–	–	–	○	○	
		"graphics1"	Graphics1	–	–	–	○	○	○	○	○	○	○	○	–	–	
		"graphics2"	Graphics2	–	–	–	○	○	○	○	○	○	○	○	–	–	
		"graphics3"	Graphics3	–	–	–	–	–	–	○	○	○	○	○*	–	–	
		"text"	Txt	–	–	–	○	○	○	–	–	–	–	○*	–	–	
		"dicom_sim"	DICOM GSDF Sim.	○	○	○	○	○	○	–	–	–	–	–	○	○	
Selection of film mode	film_mode	"auto"	Auto	○	○	○	○	○	–	–	–	–	–	–	–	–	
		"off"	OFF	○	○	○	○	○	–	–	–	–	–	–	–	–	
Selection command of reality creation	real_cre	"on"	ON	○	○	○	–	–	–	–	–	–	–	–	○	○	
		"off"	OFF	○	○	○	–	–	–	–	–	–	–	–	○	○	
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 contrast enhancer effect	contrast_enh	"high"	High	○	○	○	○	○	–	–	–	–	–	–	○	○	menu_sel
		"mid"	Middle	○	○	○	–	–	–	–	–	–	–	–	○	○	
		"low"	Low	○	○	○	○	○	–	–	–	–	–	–	○	○	
		"off"	OFF	○	○	○	○	○	–	–	–	–	–	–	○	○	
Selection command of color correction	col_correction	"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>		○	○	○	–	–	–	–	–	–	–	–	–	–	

∗: Some models are not provided with the function. Check the Operating Instructions supplied with this unit.

13 (E)

Screen setting function

Function	Command	Selected value/ numeric value	Remarks	VPL-⁎⁎⁎ series (⁎⁎⁎ means model name)													Type
				FHZ120/FHZ90/ F1200Z/F900Z	FHZ70/FHZ60/FHZ50/ FWZ60/ F640HZ/F630HZ/ F540HZ/F530HZ/F430HZ/ F630WZ/F530WZ	FH60/FW60/ F530H/F630H/ F630W/F530W	FHZ700/ F700HZ	FH30/ F400H/ F500H	C300	E200	E300	E400/ E500	S200	S600	P10/ P500	U300	
Selection of video display aspect ratio	aspect	"4_3"	4:3	○	○	○	○	○	○	○	○	○	○	○	○	○	menu_sel
		"16_9"	16:9	○	○	○	○	○	○	○	○	○	○	○	○	○	
		"full1"	Full 1	○	○	○	○	○	○	○	○	○	○	○	○	○	
		"full2"	Full 2	○	○	○	○	○	○	○*	○*	○*	○*	○*	○*	○*	
		"full3"	Full 3	–	–	–	–	–	○	○*	○*	○*	○*	○*	○*	○*	
		"normal"	Normal	○	○	○	○	○	○	○	○	○	○	○	○	○	
		"full"	Full	○	○	○	○	○	○	○*	○*	○*	○*	○*	○*	○*	
		"zoom"	Zoom	○	○	○	○	○	○	○	○	○	○	○	○	○	
Adjustment of V center	v_center	<val>	Screen position up and down	○	○	○	○	○	–	–	–	–	–	–	–	–	menu_num
Adjustment of V size	v_size	<val>	Vertical Size	○	○	○	○	○	–	–	–	–	–	–	–	–	
Selection of overscan	overscan	"on"	ON	○	○	○	○	○	–	–	–	–	–	–	–	–	menu_sel
		"off"	OFF	○	○	○	○	○	–	–	–	–	–	–	–	–	
Execution of APA	apa_exec	–		○	○	○	○	○	○	○	○	○	○	○	○	○	menu_exec
Adjustment of video phase	pic_phase	<val>		○	○	○	○	○	○	○	○	○	○	○	○	○	menu_num
Adjustment of video pitch	pic_pitch	<val>		○	○	○	○	○	○	○	○	○	○	○	○	○	
Adjustment of video shift (H)	pic_shift_h	<val>		○	○	○	○	○	○	○	○	○	○	○	○	○	
Adjustment of video shift (V)	pic_shift_v	<val>		○	○	○	○	○	○	○	○	○	○	○	○	○	

⁎: Some models are not provided with the function. Check the Operating Instructions supplied with this unit.

14 (E)

Function setting function

Function	Command	Selected value/ numeric value	Remarks	VPL-✻✻✻ series (✻✻✻ means model name)													Type
				FHZ120/FHZ90/ F1200Z/F900Z	FHZ70/FHZ60/FHZ50/ FWZ60/ F640HZ/F630HZ/ F540HZ/F530HZ/F430HZ/ F630WZ/F530WZ	FH60/FW60/ F530H/F630H/ F630W/F530W	FHZ700/ F700HZ	FH30/ F400H/ F500H	C300	E200	E300	E400/ E500	S200	S600	P10/P500	U300	
Adjustment of volume	volume	<val>	Volume	–	○	○	–	○	○*	○*	○*	○*	○	○	○	○	menu_num
Adjustment of micro-phone volume	mic_volume	<val>	Microphone volume	–	–	–	–	–	○*	○*	○*	○*	○	○	–	○	
Selection of speaker	speaker	"on"	ON	–	–	–	–	–	○*	○*	○*	○*	○	○	○	○	menu_sel
		"off"	OFF	–	–	–	–	–	○*	○*	○*	○*	○	○	○	○	
Selection of speaker setting	speaker_setting	"sync_power"	SYNC power	–	–	–	–	–	○*	–	–	–	–	–	○	○	
		"always_on"	Always ON	–	–	–	–	–	○*	–	–	–	–	–	○	○	
Selection of smart APA	smart_apa	"on"	ON	○	○	○	○	○	○	○	○	○	○	○	○	○	
		"off"	OFF	○	○	○	○	○	○	○	○	○	○	○	○	○	
Selection of CC display	cc_display	"off"	OFF	–	○	○	○	○	○	○	○	○	○	○	○	○	
		"cc1"	CC1	–	○	○	○	○	○	○	○	○	○	○	○	○	
		"cc2"	CC2	–	○	○	○	○	○	○	○	○	○	○	○	○	
		"cc3"	CC3	–	○	○	○	○	○	○	○	○	○	○	○	○	
		"cc4"	CC4	–	○	○	○	○	○	○	○	○	○	○	○	○	
		"text1"	Text1	–	○	○	○	○	○	○	○	○	○	○	○	○	
		"text2"	Text2	–	○	○	○	○	○	○	○	○	○	○	○	○	
		"text3"	Text3	–	○	○	○	○	○	○	○	○	○	○	○	○	
		"text4"	Text4	–	○	○	○	○	○	○	○	○	○	○	○	○	
Selection of back-ground	background	"blue"	Blue	○	○	○	○	○	–	–	–	–	–	–	–	–	
		"black"	Black	○	○	○	○	○	–	–	–	–	–	–	–	–	
		"image"	Image	○	○	○	○	○	–	–	–	–	–	–	–	–	
		"web_content"	Web content	○	–	–	–	–	–	–	–	–	–	–	–	–	
Selection of startup screen	startup_image	"on"	ON	○	○	○	○	○	○	○	○	○	○	○	○	○	
		"off"	OFF	○	○	○	○	○	○	○	○	○	○	○	○	○	
Auto execution setting of color calibration	calibration_auto	"on"	ON	○	○	○	–	–	–	–	–	–	–	–	○	○	
		"off"	OFF	○	○	○	–	–	–	–	–	–	–	–	○	○	
Execution of color calibration	calibration_start	–		○	○	○	–	–	–	–	–	–	–	–	○	○	menu_exec
Return the color calibration value to the previous it.	calibration_return	–		○	○	○	–	–	–	–	–	–	–	–	○	○	
Reset of color calibra-tion	calibration_reset	–		○	○	○	–	–	–	–	–	–	–	–	○	○	

∗: Some models are not provided with the function. Check the Operating Instructions supplied with this unit.

15 (E)

Operation setting function

Function	Command	Selected value/ numeric value	Remarks	VPL-✻✻✻ series (✻✻✻ means model name)													Type
				FHZ120/FHZ90/ F1200Z/F900Z	FHZ70/FHZ60/FHZ50/ FWZ60/ F640HZ/F630HZ/ F540HZ/F530HZ/F430HZ/ F630WZ/F530WZ	FH60/FW60/ F530H/F630H/ F630W/F530W	FHZ700/ F700HZ	FH30/ F400H/ F500H	C300	E200	E300	E400/ E500	S200	S600	P10/P500	U300	
Selection of display language	language	"english"	English	○	○	○	○	○	○	○	○	○	○	○	○	○	menu_sel
		"dutch"	Dutch	○	○	○	○	○	○	○	○	○	○	○	○	○	
		"french"	French	○	○	○	○	○	○	○	○	○	○	○	○	○	
		"italian"	Italian	○	○	○	○	○	○	○	○	○	○	○	○	○	
		"german"	German	○	○	○	○	○	○	○	○	○	○	○	○	○	
		"spanish"	Spanish	○	○	○	○	○	○	○	○	○	○	○	○	○	
		"portuguese"	Portuguese	○	○	○	○	○	○	○	○	○	○	○	○	○	
		"greek"	Greek	○	○	○	○	–	○	○	○	○	○	○	○	○	
		"turkish"	Turkish	○	○	○	○	○	○	○	○	○	○	○	○	○	
		"polish"	Polish	○	○	○	○	○	○	○	○	○	○	○	○	○	
		"czech"	Czech	–	–	–	–	–	–	○	○	○	○	○	○	○	
		"slovak"	Slovak	–	–	–	–	–	–	○	○	○	○	○	○	○	
		"romanian"	Romanian	–	–	–	–	–	–	○	○	○	○	○	○	○	
		"hungarian"	Hungarian	○	○	○	○	○	○	○	○	○	○	○	○	○	
		"russian"	Russian	○	○	○	○	○	○	○	○	○	○	○	○	○	
		"finnish"	Finnish	○	○	○	○	○	○	○	○	○	○	○	○	○	
		"swedish"	Swedish	○	○	○	○	○	○	○	○	○	○	○	○	○	
		"norwegian"	Norwegian	○	○	○	○	○	○	○	○	○	○	○	○	○	
		"japanese"	Japanese	○	○	○	○	○	○	○	○	○	○	○	○	○	
		"chinese_s"	Simplified Chinese	○	○	○	○	○	○	○	○	○	○	○	○	○	
		"chinese_t"	Traditional Chinese	○	○	○	○	○	○	○	○	○	○	○	○	○	
		"korean"	Korean	○	○	○	○	○	○	○	○	○	○	○	○	○	
		"thai"	Thai	○	○	○	○	○	○	○	○	○	○	○	○	○	
		"vietnamese"	Vietnamese	○	○	○	○	○	○	○	○	○	○	○	○	○	
		"indonesian"	Indonesian	○	○	○	○	○	○	○	○	○	○	○	○	○	
		"arabic"	Arabic	○	○	○	○	○	○	○	○	○	○	○	○	○	
		"persian"	Persian	○	○	○	○	○	○	○	○	○	○	○	○	○	
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 and rear	○	○	○	○	○	○	–	–	–	–	–	○	–	
		"front"	Front	○	○	○	○	○	○	–	–	–	–	–	○	–	
		"rear"	Rear	○	○	○	○	○	○	–	–	–	–	–	○	–	
Selection of remote control ID	remote_id	"all"	All	○	○	○	○	○	–	–	–	–	–	–	–	–	
		"1"	1	○	○	○	○	○	–	–	–	–	–	–	–	–	
		"2"	2	○	○	○	○	○	–	–	–	–	–	–	–	–	
		"3"	3	○	○	○	○	○	–	–	–	–	–	–	–	–	
		"4"	4	○	○	○	○	–	–	–	–	–	–	–	–	–	
Selection of control key lock	controlkey_lock	"on"	ON	○	○	○	○	○	○	○	○	○	○	○	○	○	
		"off"	OFF	○	○	○	○	○	○	○	○	○	○	○	○	○	
Selection of lens control lock	lens_lock	"on"	ON	○	○	○	○	–	–	–	–	–	–	–	–	–	
		"off"	OFF	○	○	○	○	–	–	–	–	–	–	–	–	–	

16 (E)

Connection/power setting function

Function	Command	Selected value/ numeric value	Remarks	VPL-∗∗∗ series (∗∗∗ means model name)													Type
				FHZ120/FHZ90/ F1200Z/F900Z	FHZ70/FHZ60/FHZ50/ FWZ60/ F640HZ/F630HZ/ F540HZ/F530HZ/F430HZ/ F630WZ/F530WZ	FH60/FW60/ F530H/F630H/ F630W/F530W	FHZ700/ F700HZ	FH30/ F400H/ F500H	C300	E200	E300	E400/ E500	S200	S600	P10/P500	U300	
Selection of HDBaseT/ LAN Port of HDBT setting	hdbt_lan_mode	"hdbt"	HDBaseT	–	–	–	–	–	○∗1	–	○∗1	○∗1	–	–	○	–	menu_sel
		"lan"	LAN	–	–	–	–	–	○∗1	–	○∗1	○∗1	–	–	○	–	
Selection of LAN setting of HDBT setting	hdbt_lan_term	"via_hdbt"	via HDBaseT	○	○	○	○∗2	–	–	–	–	–	–	–	–	–	
		"lan"	LAN terminal	○	○	○	○∗2	–	–	–	–	–	–	–	–	–	
Selection of HDBT/232C setting	hdbt_232c_term	"via_hdbt"	Via HDBaseT	○	○	○	○∗2	–	○∗1	–	○∗1	○∗1	–	–	○	–	
		"232c"	RS-232C	○	○	○	○∗2	–	○∗1	–	○∗1	○∗1	–	–	○	–	
Setting of Extron XTP connection	extron_xtp	"on"	On	–	○ (FHZ70/F640HZ/ F540HZ series only)	–	–	–	–	–	–	–	–	–	–	–	
		"off"	Off	–	○ (FHZ70/F640HZ/ F540HZ series only)	–	–	–	–	–	–	–	–	–	–	–	
Selection of signal type	signal_sel	"auto"	Auto	○	○	○	○	○	○	○	○	○	○	○	○	○	
		"computer"	Computer	○	○	○	○	○	○	○	○	○	○	○	○	○	
		"video_gbr"	Video GBR	○	○	○	○	○	○	○	○	○	○	○	○	○	
		"component"	Component	○	○	○	○	○	○	○	○	○	○	○	○	○	
		Select the input terminal with Suffix. Example) signal_sel --rgb1 "computer" ↵ Set Input-A terminal to “computer”.		Only –rgb 1” can be specified.													
Selection of web content setting	web_content	"usb"	Via USB	○	–	–	–	–	–	–	–	–	–	–	–	–	
		"network"	Via network	○	–	–	–	–	–	–	–	–	–	–	–	–	
Selection of color system	color_sys	"auto"	Auto	–	○	○	○	○	–	–	–	–	–	–	–	–	
		"ntsc358"	NTSC3.58	–	○	○	○	○	–	–	–	–	–	–	–	–	
		"pal"	PAL	–	○	○	○	○	–	–	–	–	–	–	–	–	
		"secam"	SECAM	–	○	○	○	○	–	–	–	–	–	–	–	–	
		"ntsc443"	NTSC4.43	–	○	○	○	○	–	–	–	–	–	–	–	–	
		"pal_m"	PAL-M	–	○	○	○	○	–	–	–	–	–	–	–	–	
		"pal_n"	PAL-N	–	○	○	○	○	–	–	–	–	–	–	–	–	
Selection of auto power saving (no signal)	powsave_nosig	"lampoff"	Lamp off	○	○	○	○	○	○	○	○	–	○	○	○	○	
		"sleep"	Sleep	–	–	–	–	–	–	–	–	○	–	–	–	–	
		"standby"	Standby	○	○	○	○	○	○	○	○	○	○	○	○	○	
		"off"	OFF	○	○	○	○	○	○	○	○	○	○	○	○	○	
Selection of auto power saving (invariable signal)	powsave_statsig	"dimming"	Dimming	○	○	–	○	–	○	○	○	○	○	○	○	○	
		"off"	OFF	○	○	–	○	–	○	○	○	○	○	○	○	○	
Selection of auto power saving (invariable) dimming time	powsave_dim_time	"5min"	5 min	○	○	–	○	–	○	○	○	○	○	○	○	○	
		"10min"	10 min	○	○	–	○	–	○	○	○	○	○	○	○	○	
		"15min"	15 min	○	○	–	○	–	○	○	○	○	○	○	○	○	
		"20min"	20 min	○	○	–	○	–	○	○	○	○	○	○	○	○	
		"demo"	Demo	○	○	–	○	–	○	○	○	○	○	○	○	○	
Selection of standby mode	standby_mode	"standard"	Standard	○	○	○	○	○	○	○	○	○	○	○	○	○	
		"low"	Low	○	○	○	○	○	○	○	○	○	○	○	○	○	

∗1: Some models are not provided with the function. Check the Operating Instructions supplied with this unit.
∗2: Enabled only when the supported option is installed.

17 (E)

Function	Command	Selected value/ numeric value	Remarks	VPL-⁎⁎⁎ series (⁎⁎⁎ means model name)													Type
				FHZ120/FHZ90/ F1200Z/F900Z	FHZ70/FHZ60/FHZ50/ FWZ60/ F640HZ/F630HZ/ F540HZ/F530HZ/F430HZ/ F630WZ/F530WZ	FH60/FW60/ F530H/F630H/ F630W/F530W	FHZ700/ F700HZ	FH30/ F400H/ F500H	C300	E200	E300	E400/E500	S200	S600	P10/P500	U300	
Selection of instant-on setting	instant_on	"off"	OFF	○	○	○	○	–	–	–	–	–	–	–	–	–	menu_sel
		"10min"	10 min	○	○	○	○	–	–	–	–	–	–	–	–	–	
		"30min"	30 min	○	○	○	○	–	–	–	–	–	–	–	–	–	
Selection of direct power on	direct_powon	"on"	ON	○	○	○	○	○	○	○	○	○	○	○	○	○	
		"off"	OFF	○	○	○	○	○	○	○	○	○	○	○	○	○	
Selection of digital input dynamic range	dynamic_range	"auto"	Auto	○	○	○	○	–	○	–	○	○	–	○*	○	○	
		"limited"	Limited	○	○	○	○	–	○	–	○	○	–	○*	○	○	
		"full"	Full	○	○	○	○	–	○	–	○	○	–	○*	○	○	
		Select the input terminal with Suffix. Example) dynamic_range --dvi1 "full" ↵ Set DVI terminal to “full”.		--dvi1 --hdmi1 --hdbaset1 --option1 (--option1: FHZ120/F1200 only) can be specified.	--dvi1 --hdmi1 --hdbaset 1 can be specified.			–	--hdmi1 --hdmi2 --hdbaset*1 can be specified.	–	--hdmi1 --hdmi2 --hdbaset*1 can be specified.	--hdmi1 --hdmi2 --hdbaset*1 can be specified.	–	--hdmi1 can be speci- fied.	--hdmi1 --hdmi2 --hdbaset1	--hdmi1 --hdmi2	
Selection of digital long cable setting	digital_cable	"normal"	Normal	○	○	○	–	–	–	–	–	–	–	–	–	–	
		"long"	Long	○	○	○	–	–	–	–	–	–	–	–	–	–	
		Select the input terminal with Suffix. Example) digital_cable --hdmi1 "long" ↵ Set HDMI terminal to “long”.		Only –hdmi 1 can be specified.			–	–	–	–	–	–	–	–	–	–	

⁎: Some models are not provided with the function. Check the Operating Instructions supplied with this unit.

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Installation setting function

Function	Command	Selected value/ numeric value	Remarks	VPL-⁎⁎⁎ series (⁎⁎⁎ means model name)													Type
				FHZ120/ FHZ90/ F1200Z/ F900Z	FHZ70/FHZ60/FHZ50/ FWZ60/ F640HZ/ F630HZ/F540HZ/ F530HZ/F430HZ/ F630WZ/F530WZ	FH60/FW60/ F530H/F630H/ F630W/F530W	FHZ700/ F700HZ	FH30/ F400H/ F500H	C300	E200	E300	E400/ E500	S200	S600	P10/P500	U300	
Selection of V keystone mode	v_keystone_mode	"auto"	Auto	–	–	–	–	–	○	○	○	○	○	–	–	–	menu_sel
		"manual"	Manual	–	–	–	–	–	○	○	○	○	○	–	–	–	
Adjustment of V key-stone	v_keystone	<val>		–	–	–	○	○	○	○	○	○	○	○	○	○	menu_num
Adjustment of H key-stone	h_keystone	<val>		–	–	–	○	○	○	–	–	–	–	–	○	○	
Adjustment of V linearity	v_linearity	<val>		○	○	○	–	–	–	–	–	–	–	–	–	–	
Adjustment of H linearity	h_linearity	<val>		○	○	○	–	–	–	–	–	–	–	–	–	–	
Adjustment of V coordi-nate of corner keystone	corner_keystone_v	<val>		○	○	○	○	○	○	–	–	–	–	–	○	○	
		Select the adjustment point from the following with Suffix. --top_left/--top_center/--top_right/--center_left/--center_right/--bottom_left/--bottom_center/--bottom_right Example) corner_keystone_v --top_left -30 ↵ Move the upper left adjustment point to the lower by 30.		The following adjustment points can be specified. --top_left --top_center --top_right --center_left --center_right --bottom_left --bottom_center --bottom_right					The following adjustment points can be specified. --top_left --top_right --bottom_left --bottom_right	–	–	–	–	–	The following adjustment points can be specified. --top_left --top_right --bottom_left --bottom_right	The following adjustment points can be specified. --top_left --top_right --bottom_left --bottom_right	
Adjustment of H coordi-nate of corner keystone	corner_keystone_h	<val>		○	○	○	○	○	○	–	–	–	–	–	○	○	
		Select the adjustment point from the following with Suffix. --top_left/--top_center/--top_right/--center_left/--center_right/--bottom_left/--bottom_center/--bottom_right Example) corner_keystone_h --top_left 30 ↵ Move the upper left adjustment point to the right by 30.		The following adjustment points can be specified. --top_left --top_center --top_right --center_left --center_right --bottom_left --bottom_center --bottom_right					The following adjustment points can be specified. --top_left --top_right --bottom_left --bottom_right	–	–	–	–	–	The following adjustment points can be specified. --top_left --top_right --bottom_left --bottom_right	The following adjustment points can be specified. --top_left --top_right --bottom_left --bottom_right	
Resetting of screen fit adjustment	screen_fitting_reset			○	○	○	○	○	○	–	–	–	–	–	○	○	menu_exec
Selection of image split	image_split	"off"	OFF	○	○	○	–	–	–	–	–	–	–	–	–	–	menu_sel
		"left"	Left side	○	○	○	–	–	–	–	–	–	–	–	–	–	
		"right"	Right side	○	○	○	–	–	–	–	–	–	–	–	–	–	
Selection of image flip	image_flip	"hv"	HV	○	○	○	○	○	○	○	○	○	○	○	○	○	
		"h"	H	○	○	○	○	○	○	○	○	○	○	○	○	○	
		"v"	V	○	○	○	○	○	○	○	○	○	○	○	○	○	
		"off"	OFF	○	○	○	○	○	○	○	○	○	○	○	○	○	
		"auto"	Auto	○	○	○	–	–	–	–	–	–	–	–	○	○	
Selection of install attitude	install_attitude	"link_imgflip"	Link to Image Flip	–	–	–	○	○	○	○	○	○	○	○	–	–	
		"rightsideup"	Right Side Up	–	–	–	○	○	○	○	○	○	○	○	–	–	
		"upsidedown"	Upside Down	–	–	–	○	○	○	○	○	○	○	○	–	–	
		"frontup"	Front Up	–	–	–	○	–	–	–	–	–	–	○	–	–	
		"frontdown"	Front Down	–	–	–	○	–	–	–	–	–	–	○	–	–	

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Function	Command	Selected value/ numeric value	Remarks	VPL-✻✻✻ series (✻✻✻ means model name)													Type
				FHZ120/ FHZ90/ F1200Z/ F900Z	FHZ70/FHZ60/FHZ50/ FWZ60/ F640HZ/F630HZ/ F540HZ/F530HZ/F430HZ/ F630WZ/F530WZ	FH60/FW60/ F530H/F630H/ F630W/F530W	FHZ700/ F700HZ	FH30/ F400H/ F500H	C300	E200	E300	E400/ E500	S200	S600	P10/ P500	U300	
Selection of install attitude	install_attitude	"portrait1"	Portrait 1	–	–	–	○	–	–	–	–	–	–	–	–	–	menu_sel
		"portrait2"	Portrait 2	–	–	–	○	–	–	–	–	–	–	–	–	–	
Selection of screen aspect	screen_aspect	"16_10"	16:10	○	○	○	○	○	–	–	–	–	–	–	–	–	
		"16_9"	16:9	○	○	○	○	○	–	–	–	–	–	–	–	–	
		"4_3"	4:3	○	○	○	○	○	–	–	–	–	–	–	–	–	
Adjustment of blanking	blanking	<val>	Blanking Select the adjustment position from top/bottom/ left/right with Suffix. Example) blanking --top 10 ↵ The blanking top is set to 10.	○	○	○	–	–	–	–	–	–	–	–	–	–	menu_num
Adjustment of color matching (brightness)	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.	○	○	○	○	○	○	–	–	–	–	–	○	○	
Adjustment of color matching (color) R	color_matching_r	<val>		○	○	○	○	○	○	–	–	–	–	–	○	○	
Adjustment of color matching (color) B	color_matching_b	<val>		○	○	○	○	○	○	–	–	–	–	–	○	○	
Execution of reset for overall 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 ↵ The 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>		○	○	○	○	○	○	–	–	–	–	–	○	○	
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		Execute the reset of panel alignment.	○	○	○	○	○	○	–	–	–	–	–	○	○	menu_exec
Selection of ON/ OFF of blending adjustment	blend_sw	"on"	ON	○	○	○	–	–	–	–	–	–	–	–	–	–	menu_sel
		"off"	OFF	○	○	○	–	–	–	–	–	–	–	–	–	–	
		Select the adjustment position from top/bottom/left/right with Suffix. Example) blend_sw --top "on" ↵ The blending adjustment of top is set to ON.					–	–	–	–	–	–	–	–	–	–	
Adjustment of blending start position	blend_start	<val>	Blending start position Select the adjustment position from top/bottom/ left/right with Suffix. Example) blend_start --top 10 ↵ The blending start position (top) is adjusted to 10.	○	○	○	–	–	–	–	–	–	–	–	–	–	menu_num
Adjustment of blending adjustment width	blend_width	<val>		○	○	○	–	–	–	–	–	–	–	–	–	–	

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Function	Command	Selected value/ numeric value	Remarks	VPL-⁎⁎⁎ series (⁎⁎⁎ means model name)													Type
				FHZ120/ FHZ90/ F1200Z/ F900Z	FHZ70/FHZ60/FHZ50/ FWZ60/ F640HZ/F630HZ/ F540HZ/F530HZ/F430HZ/ F630WZ/F530WZ	FH60/FW60/ F530H/F630H/ F630W/F530W	FHZ700/ F700HZ	FH30/ F400H/ F500H	C300	E200	E300	E400/ E500	S200	S600	P10/ P500	U300	
Adjustment of blending black level R offset	`blend_bk_level_r`	<val>	Specify the adjustment position from pos1 to pos9 with Suffix. Example) `blend_bk_level_r --pos3 10` ↵ The blending black level R offset adjustment position 3 is set to 10.	○	○	○	–	–	–	–	–	–	–	–	–	–	menu_num
Adjustment of blending black level G offset	`blend_bk_level_g`	<val>		○	○	○	–	–	–	–	–	–	–	–	–	–	
Adjustment of blending black level B offset	`blend_bk_level_b`	<val>		○	○	○	–	–	–	–	–	–	–	–	–	–	
Adjustment of blending black level Execution of reset	`blend_bk_level_reset`			○	○	○	–	–	–	–	–	–	–	–	–	–	menu_exec
Execution of reset for blending adjustment	`blend_reset`			○	○	○	–	–	–	–	–	–	–	–	–	–	
Selection of cursor display during the blending adjustment	`blend_cursor`	`"on"`	ON	○	○	○	–	–	–	–	–	–	–	–	–	–	menu_sel
		`"off"`	OFF	○	○	○	–	–	–	–	–	–	–	–	–	–	
Selection of pattern (marker) color during the blending adjustment	`blend_cursor_color`	`"r"`	Red	○	○	○	–	–	–	–	–	–	–	–	–	–	
		`"g"`	Green	○	○	○	–	–	–	–	–	–	–	–	–	–	
		`"b"`	Blue	○	○	○	–	–	–	–	–	–	–	–	–	–	
		`"c"`	Cyan	○	○	○	–	–	–	–	–	–	–	–	–	–	
		`"m"`	Magenta	○	○	○	–	–	–	–	–	–	–	–	–	–	
		`"y"`	Yellow	○	○	○	–	–	–	–	–	–	–	–	–	–	
		Select the marker portion with Suffix. Example) `blend_cursor_color --start "r"` ↵ The color of blending cursor (start position) is set to Red.					–	–	–	–	–	–	–	–	–	–	
Saving of lens position memory	`pic_pos_save`	`"custom1"`	Memory 1	○	–	–	–	–	–	–	–	–	–	–	–	–	menu_exec
		`"custom2"`	Memory 2	○	–	–	–	–	–	–	–	–	–	–	–	–	
		`"custom3"`	Memory 3	○	–	–	–	–	–	–	–	–	–	–	–	–	
		`"custom4"`	Memory 4	○	–	–	–	–	–	–	–	–	–	–	–	–	
		`"custom5"`	Memory 5	○	–	–	–	–	–	–	–	–	–	–	–	–	
		`"custom6"`	Memory 6	○	–	–	–	–	–	–	–	–	–	–	–	–	
Deletion of lens position memory	`pic_pos_del`	`"custom1"`	Memory 1	○	–	–	–	–	–	–	–	–	–	–	–	–	
		`"custom2"`	Memory 2	○	–	–	–	–	–	–	–	–	–	–	–	–	
		`"custom3"`	Memory 3	○	–	–	–	–	–	–	–	–	–	–	–	–	
		`"custom4"`	Memory 4	○	–	–	–	–	–	–	–	–	–	–	–	–	
		`"custom5"`	Memory 5	○	–	–	–	–	–	–	–	–	–	–	–	–	
		`"custom6"`	Memory 6	○	–	–	–	–	–	–	–	–	–	–	–	–	
Selection of lens position memory	`pic_pos_sel`	`"custom1"`	Memory 1	○	–	–	–	–	–	–	–	–	–	–	–	–	menu_sel
		`"custom2"`	Memory 2	○	–	–	–	–	–	–	–	–	–	–	–	–	
		`"custom3"`	Memory 3	○	–	–	–	–	–	–	–	–	–	–	–	–	
		`"custom4"`	Memory 4	○	–	–	–	–	–	–	–	–	–	–	–	–	
		`"custom5"`	Memory 5	○	–	–	–	–	–	–	–	–	–	–	–	–	
		`"custom6"`	Memory 6	○	–	–	–	–	–	–	–	–	–	–	–	–	

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Function	Command	Selected value/ numeric value	Remarks	VPL-∗∗∗ series (∗∗∗ means model name)													Type
				FHZ120/ FHZ90/ F1200Z/ F900Z	FHZ70/FHZ60/FHZ50/ FWZ60/ F640HZ/F630HZ/ F540HZ/F530HZ/F430HZ/ F630WZ/F530WZ	FH60/FW60/ F530H/F630H/ F630W/F530W	FHZ700/ F700HZ	FH30/ F400H/ F500H	C300	E200	E300	E400/ E500	S200	S600	P10/ P500	U300	
Selection of high altitude mode	high_alt_mode	"on"	ON	○	○	○	○	○	○	○	○	○	○	○	○	○	menu_sel
		"off"	OFF	–	○	○	○	○	○	○	○	○	○	○	○	○	
		"auto"	Auto	○	–	–	–	–	–	–	–	–	–	–	–	–	
Execution of filter cleaning (with the power turned off)	filter_cleaning			○	○	○	–	–	–	–	–	–	–	–	○*	○*	menu_exec
Selection of filter box	filter_box	"installed"	Installed	–	○	–	–	–	–	–	–	–	–	–	–	–	menu_sel
		"not_installed"	Not installed	–	○	–	–	–	–	–	–	–	–	–	–	–	

∗: Some models are not provided with the function. Check the Operating Instructions supplied with this unit.

2. Command example

(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.

2-3. 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

`key "menu"` ↵ Description: Press the MENU key.

`ok` ↵

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Key code list

Key code	Function	VPL-⁎⁎⁎ series (⁎⁎⁎ means model name)												
		FHZ120/FHZ90/ F1200Z/F900Z	FHZ70/FHZ60/FHZ50/FWZ60/ F640HZ/F630HZ/F540HZ/ F530HZ/F430HZ/F630WZ/ F530WZ	FH60/FW60/ F530H/F630H/ F630W/F530W	FHZ700/ F700HZ	FH30/ F400H/ F500H	C300	E200	E300	E400/ E500	S200	S600	P10/P500	U300
"power_on"	Power ON	○	○	○	○	○	○	○	○	○	○	○	○	○
"power_off"	Power OFF	○	○	○	○	○	○	○	○	○	○	○	○	○
"power"	Power toggle	○	○	○	○	○	○	○	○	○	○	○	○	○
"video"	Video	–	○	○	○	○	○	○	○	○	○	○	○	○
"s_video"	S 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	○ (FHZ120/ F1200 series only)	–	–	–	–	○*	○	○	○	○	○	○	○
“input_g”	Input G	○	–	–	–	–	–	–	○	○	–	–	–	–
“input_h”	Input H	–	–	–	–	–	–	–	○*	○*	–	–	–	–
"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	○	○	○	○	○	○	○	○	○	○	○	○	○
"return"	Return	○	○	○	○	○	○	○	○	○	○	○	○	○
"picmode1"	Picture quality mode Dynamic	○	○	○	○	○	○	○	○	○	○	○	○	○
"picmode2"	Picture quality mode Standard	○	○	○	○	○	○	○	○	○	○	○	○	○
"picmode3"	Picture quality mode Luminance priority or presentation	○	○	○	○	○	○	○	○	○	○	○	○	○
"picmode4"	Picture quality mode Multi-screen or blackboard	○	○	○	–	–	–	○	○	○	○	○	–	–
“picmode5”	Picture quality mode Whiteboard, game or sRGB	○	–	–	–	–	–	○	○	○	○	○	–	–
“picmode6”	Picture quality mode Cinema	–	–	–	–	–	–	○	○	○	○	○	–	–
"picmode"	Picture quality mode toggle	○	○	○	○	○	○	○	○	○	○	○	○	○
"picture+"	Contrast +	○	○	○	○	○	○	○	○	○	○	○	○	○
"picture–"	Contrast –	○	○	○	○	○	○	○	○	○	○	○	○	○
"color+"	Color depth +	○	○	○	○	○	○	○	○	○	○	○	○	○
"color–"	Color depth –	○	○	○	○	○	○	○	○	○	○	○	○	○
"bright+"	Brightness +	○	○	○	○	○	○	○	○	○	○	○	○	○
"bright–"	Brightness –	○	○	○	○	○	○	○	○	○	○	○	○	○
"hue+"	Hue +	○	○	○	○	○	○	○	○	○	○	○	○	○
"hue–"	Hue –	○	○	○	○	○	○	○	○	○	○	○	○	○

⁎: Some models are not provided with the function. Check the Operating Instructions supplied with this unit.

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Key code	Function	VPL-✻✻✻ series (✻✻✻ means model name)												
		FHZ120/FHZ90/ F1200Z/F900Z	FHZ70/FHZ60/FHZ50/FWZ60/ F640HZ/F630HZ/F540HZ/ F530HZ/F430HZ/F630WZ/ F530WZ	FH60/FW60/ F530H/F630H/ F630W/F530W	FHZ700/ F700HZ	FH30/ F400H/ F500H	C300	E200	E300	E400/ E500	S200	S600	P10/P500	U300
"sharpness+"	Sharpness +	○	○	○	○	○	○	○	○	○	○	○	○	○
"sharpness–"	Sharpness –	○	○	○	○	○	○	○	○	○	○	○	○	○
"picture_adj"	Picture quality adjustment toggle	○	○	○	○	○	○	○	○	○	○	○	○	○
"color_temp"	Color temperature toggle	○	○	○	○	○	○	○	○	○	○	○	○	○
"color_mode"	Color space toggle	○	○	○	–	–	–	–	–	–	–	–	○	○
"black_level"	Contrast enhancer toggle	○	○	○	○	○	–	–	–	–	–	–	○	○
"aspect"	ASPECT	○	○	○	○	○	○	○	○	○	○	○	○	○
"apa"	APA	○	○	○	○	○	○	○	○	○	○	○	○	○
"phase"	Phase	○	○	○	○	○	○	○	○	○	○	○	○	○
"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	○	○	○	○	–	–	–	–	–	–	–	–	–
"twin"	TWIN	○	○	○	○	○	–	–	–	–	–	–	–	–
"freeze"	Freeze	○	○	○	○	○	○	○	○	○	○	○	○	○
"d_zoom+"	Digital zoom +	○	○	○	○	○	○	○	○	○	○	○	○	○
"d_zoom–"	Digital zoom –	○	○	○	○	○	○	○	○	○	○	○	○	○
"keystone"	Keystone	○	○	○	○	○	○	○	○	○	○	○	○	○
"keystone+"	V Keystone +	○	○	○	○	○	○	○	○	○	○	○	○	○
"keystone–"	V Keystone –	○	○	○	○	○	○	○	○	○	○	○	○	○
"pattern"	Test pattern	○	○	○	○	○	○	○	○	○	○	○	○	○
"eco"	ECO mode	–	○	○	○	○	○	○	○	○	○	○	○	○
"lens_position"	Lens position	○	–	–	–	–	–	–	–	–	–	–	–	–

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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-∗∗∗ series (∗∗∗ means model name)											
		FHZ120/ FHZ90/ F1200Z/ F900Z	FHZ70/FHZ60/FHZ50/FWZ60/ F640HZ/F630HZ/F540HZ/ F530HZ/F430HZ/F630WZ/ F530WZ	FH60/FW60/ F530H/F630H/ F630W/F530W	FHZ700/ F700HZ	FH30/ F400H/ F500H	C300	E200	E300	E400/ E500	S200	S600	P10/P500	U300
warp	Used in the warp adjustment	○	○	○	–	–	–	–	–	–	–	–	–	–
area_bk_level	Used in the zone black level/zone fitting adjustment	○	○	○	–	–	–	–	–	–	–	–	–	–
panel_align_zone	Used in the panel alignment zone adjustment	○	○	○	–	–	–	–	–	–	–	–	–	–
user_gamma	Used in the gamma table adjustment	○	○	○	–	–	–	–	–	–	–	–	–	–
color_gamut	Used in the color space adjustment	○	○	○	–	–	–	–	–	–	–	–	–	–
pattern_sel/pattern_pos	Displays the adjustment test pattern for experts	○	○	○	–	–	–	–	–	–	–	–	–	–

2-4-1. Command Type: warp

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

Transmission of value

After transmitting the adjustment value for the warp 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: `warp [1,2] --pos=[1,2,3,4] --ch=w`↵
Sets all adjustment points 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 warp adjustment point. Specifies w (White) (--ch = w) that is common in R/G/B as the warp adjustment channel.

Returning example: `ok`↵

Relative value

Transmitting example: `warp --rel=[1,2] --pos=[1,2,3,4] --ch=w`↵
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 warp adjustment point.

Returning example: `ok`↵

Table value

Transmitting example: `warp [[1,2],[3,4],[5,6],[7,8]] --pos=[1,1,2,2] --ch=w`↵
Sets the adjustment points 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 warp 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`↵

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Reset value

Transmitting example: `warp --reset --pos=[1,1,64,40] --ch=w`↵
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 warp adjustment point.

Returning example: `ok`↵

Reflection of value

Reflects the transmitted warp adjustment value on the screen.

Transmitting example: `warp --apply`↵

Returning example: `ok`↵

Acquisition of value

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

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

Acquisition of command information

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

Returning example:
```
{"type":"warp","version":"1.0","range":{
"pos":[1,1,64,40],
"adj":[{"min":-16384,"max":49151,"step":1},{"min":-16384,"max":49151,"step":1}],
"adj_step_per_dot":[16,16],
"pos_pitch":[32,32],
"pos_offset":[0,0],
"limit_angle":[35,35],
"limit_macro_scale":[{"min":0.500000,"max":5},{"min":0.500000,"max":5}],
"limit_micro_scale":[{"min":0.083333,"max":5},{"min":0.083333,"max":5}],
"ch":["w"]
}}
```
↵

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) and 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
`limit_angle`	Maximum inclination absolute angular (x-axis, y-axis) of the line segment connecting the adjustment points
`limit_macro_scale`	Maximum scaling (x-axis, y-axis) of the entire screen
`limit_micro_scale`	Maximum scaling (x-axis, y-axis) of the line segment connecting the adjustment points
`ch`	Choice of adjustment channel

2-4-2. Command Type: area_bk_level

By optional designation, the command of an area_bk_level command type can transmit, reflect and acquire the zone black level/zone fitting adjustment values, and acquire the command information.
For example, the following formats are used.

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Transmission of value

After transmitting the adjustment value for the zone black level/zone fitting adjustment points, the value is reflected on the image by transmitting the reflection command. The format of a range and value is described as the JSON array data.

Direct value

Transmitting example: `area_bk_level [100,-50] --pos=[0,1,2,3] --ch=w`↵
Sets all adjustment points contained in the range from the upper left (x = 0, y = 1) to the lower right (x = 2, y = 3) on the coordinates of the zone black level/zone fitting adjustment points to value (x, y) = [100, –50].
Specifies w (white)(--ch = w), common in R, G, and B, as the zone black level/zone fitting adjustment channels.

Returning example: `ok`↵

Relative value

Transmitting example: `area_bk_level --rel=[100,-50] --pos=[0,1,2,3] --ch=w`↵
Adds (x, y) = [100, –50] to all adjustment values of adjustment points contained in the range from the upper left (x = 0, y = 1) to the lower right (x = 2, y = 3) on the coordinates of the zone black level/zone fitting adjustment points.

Returning example: `ok`↵

Table value

Transmitting example: `area_bk_level [[1,2],[3,4],[5,6],[7,8]] --pos=[1,1,2,2] --ch=w`↵
Sets the adjustment points contained in the range from the upper left (x = 1, y = 1) to the lower right (x = 2, y = 2) on the coordinates of the zone black level/zone fitting adjustment points respectively as follows.

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: `area_bk_level --reset --pos=[0,0,3,3] --ch=w`↵
Sets the adjustment points contained in the range from the upper left (x = 0, y = 0) to the lower right (x = 3, y = 3) on the coordinates of the zone black level/zone fitting adjustment points respectively as follows.

Returning example: `ok`↵

Reflection of value

Reflects the transmitted zone black level/zone fitting adjustment value on the screen.

Transmitting example: `area_bk_level --apply`↵

Returning example: `ok`↵

Acquisition of value

Transmitting example: `area_bk_level ? --pos=[1,1,3,3] --ch=w`↵
Inquires the adjustment value of the adjustment points of the red channel contained in the range from the upper left (1, 1) to the lower right (3, 3) as the coordinates (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 zone black level/zone fitting adjustment values of each adjustment point contained in the specified area in a JSON array format.

Acquisition of command information

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

Returning example:
```
{"type":"area_bk_level","version":"1.0","range":{
pos:[0,0,3,3],
adj:[{"min":-1920,"max":1920,"step":1},{"min":-1200,"max":1200,"step":1}],
adj_step_per_dot:[1,1],
pos_pitch_x:[480,960,480],
pos_pitch_y:[300,600,300],
pos_offset:[0,0],
ch:["w"]
}}
```
↵
The following range information is returned as “range”.

`pos`	Maximum specified range of adjustment point (upper-left coordinates x, y to lower-right coordinates x, y)
`adj`	Maximum adjustment range in the x-axis direction (minimum/maximum moving amount and step), maximum adjustment range in the y-axis direction (minimum/maximum moving amount and step)
`adj_step_per_dot`	Adjustment values (x, y) for moving on the screen by 1 pixel
`pos_pitch_x`	Pixel pitch x of an adjustment point on the screen
`pos_pitch_y`	Pixel pitch y of an adjustment point on the screen
`pos_offset`	Offset pixel amount (x, y) of adjustment points (x, y = 1, 1) from the upper-left corner of the screen
`ch`	Choice of adjustment channels

2-4-3. 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`↵

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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

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2-4-4. 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`↵

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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":["2.2","2.4","gamma3","gamma4","dicom"],`
	`"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

2-4-5. Command Type: color_gamut

The command of a color_gamut command type can acquire the color gamut selected in color space.

Acquisition of value	
Transmitting example:	`color_gamut ? --sel=custom1`↵ Inquires the color gamut of color space custom1.
Returning example:	`[[0.640000,0.330000],[0.280000,0.638000],[0.142000,0.035000]]`↵ Returns the CIE xy chromaticity of R/G/B in the specified color space as the data [[Rx, Ry], [Gx, Gy], [Bx, By]] of the JSON array format.

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

Returning example:	`{"type":"color_gamut","version":"1.0",`
	`"sel":["original","custom1","custom2","custom3"],`
	`"range":{`
	`"adj":{"min":0,"max":1},`
	`"ch":["r","g","b"]`
	`}}`↵
	Returns the choice of color space that can be adjusted as “sel”.
	
	The following range information is returned as “range”.
	`adj` Maximum range of adjustment value
	`ch` Acquirable color channel included in the chromaticity table

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2-4-6. 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>}]}↵

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1. Command list

Function	Command	Selected value/ numeric value	Remarks	VPL***series (*** means model name)			Type
				FHZ120/FHZ90/ F1200Z/F900Z	FHZ70/FHZ60/FHZ50/ FWZ60/ F640HZ/F630HZ/ F540HZ/F530HZ/F430HZ/ F630WZ/F530WZ	FH60/FW60/ F530H/F630H/ F630W/F530W	
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 pointer for warp adjustment.	pat_warp_cursor	"on" "off"	When the display position is not specified, display the cursor in the adjustment point [0. 0].	○	○	○	
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 pointer in the zone black level/ zone fitting adjustment points.	pat_area_bk_level_cursor	"on" "off"	When the display position is not specified, display the cursor in the adjustment point [0. 0].	○	○	○	
Displays the crosshatch pattern in the warp adjustment point.	pat_warp_cross_hatch	"r" "g" "b" "w" "g_inv" "off"		○	○	○	
Displays the flat field pattern for color matching adjustment.	pat_color_matching	"lev1" "lev2" "lev3" "lev4" "lev5" "lev6" "off"		○	○	○	
Displays the flat field pattern for zone black level adjustment.	pat_area_bk_level	"on" "off"		○	○	○	
Specifies the display position of the cursor for warp adjustment.	pat_warp_cursor	[<x>,<y>]	Upper left of OSD (0, 0), left and upper “–“, right and lower “+” Specify with the x, y coordinate before warp adjustment.	○	○	○	pattern_pos
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.	○	○	○	
Displays the pointer in the zone black level/ zone fitting adjustment points. (Specifies the position)	pat_area_bk_level_cursor_pos	[<x>,<y>]		○	○	○	

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3. PJ Control API Correspondence Table for Each Model

Function	Version	VPL***series	Models other than the left
		FHZ70/FHZ60/FHZ50/FWZ60/F640HZ/F630HZ/F540HZ/ F530HZ/F430HZ/F630WZ/F530WZ	
PJ Control API	Data Projector Device Interface - v1.0.0	○ (FHZ70/F640HZ/F540HZ/ series only)	–
		○ (FHZ70/F640HZ/F540HZ/ series only)	–

API reference

Data Projector Device Interface - v1.0.0

3-1. API Service

<service_name> specified as the post destination to a projector is described below. <service_name> is specified by guide, system, audio, or avContent for each API.
Specify service_name described in an API list item: “Post destination to a projector”.

Tip

For more details of the post destination to a projector, refer to the “Post destination to a projector” in a Protocol Manual (COMMON).

guide

Guide service provides an API to get the list of supported services on the server.

API name	API version	Auth Level	description
getSupportedApiInfo	1.0	none	This API provides the supported services and their information.

system

This service handles APIs that are related to basic device functions like as follows.
To provide device related information like category, serial number and so on.
To provide/change general setting information like power status and power saving (picture output).

API name	API version	Auth Level	description
getPowerSavingMode	1.0	none	This API provides setting of power saving mode (Picture output)
getPowerStatus	1.0	none	This API provides current power status of the device.
getSystemInformation	1.0	private	This API provides general information of the device.
setPowerSavingMode	1.0	generic	This API provides setting of power saving mode (Picture output)
setPowerStatus	1.0	generic	This API provides function to change current power status of the device.

audio

This service handles APIs that are related to audio functions like volume.

API name	API version	Auth Level	description
getVolumeInformation	1.0	none	This API provides information about sound volume (also mute status) of the device.
setAudioMute	1.0	generic	This API provides a function to change audio mute status.
setAudioVolume	1.0	generic	This API provides a function to change audio volume level.

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avContent

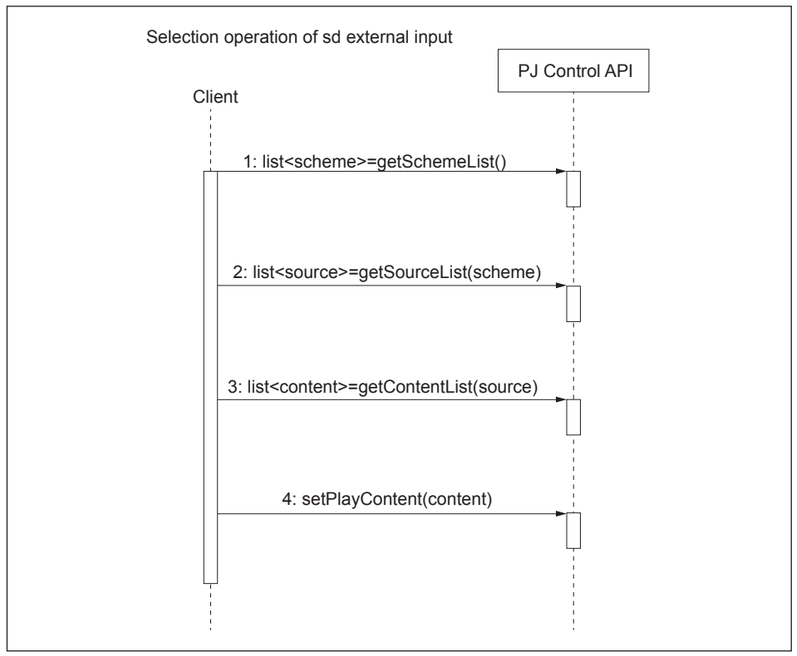
This service handles overall control of input of the device. For example, there is an API to request it to change to an external input like HDMI.

API name	API version	Auth Level	description
getContentList	1.0	private	This API provides the list of contents under the scheme and source.
getPlayingContentInfo	1.0	private	This API provides information of current playing content or current input selected.
getSchemeList	1.0	none	This API provides the list of schemes that device can handle.
getSourceList	1.0	none	This API provides the list of sources information under the scheme.
setPlayContent	1.0	generic	This API provides a function to play content.

・Acquisition of information on input terminal

Tip

For getting information of content that a device has, a client needs to know source of URI. A client can get URI of source by using getSchemeList and getSourceList.
At first, a client gets scheme by getSchemeList. After that, a client sets this scheme to “scheme” parameter of getSourceList and calls this API to get URI of source.
A client sets this URI of source to “URI” parameter of getContentList and calls this API to get content information or browse content.



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3-2. API List

getSupportedApiInfo

This API provides supported services and its information.

- **Syntax**

http://<Base URL>/guide

- **Authentication Level**

none

- **Request**

params' Elements

An object composed by following pair(s).

name	type	multiplicity	default	description
services	string-array	?	null	Services to fetch API information. null or empty array is treated as all services.

- **Response**

result's Elements

An array of objects composed by following pairs.

name	type	multiplicity	default	description
service	string	1		Name of this service.
protocols	string-array	1		Supported transports.
apis	(object-array)	1		APISupported APIs.
name	string	1		Name of this API.
versions	(object-array)	1		Detail of supported versions of this API.
version	string	1		Version of this API.
protocols	string-array	?	null	Transport for this API,
authLevel	string	?	"none"	Authentication level of this API.
notifications	(object-array)	?	null	Supported Notification APIs.
name	string	1		Name of this API.
versions	(object-array)	1		Detail of supported versions of this API.
version	string	1		Version of this API.
authLevel	string	?	"none"	Authentication level of this API.

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getPowerSavingMode

This API provides setting of power saving mode, to adjust the device's power consumption.

- **Syntax**

http://<Base URL>/system

- **Authentication Level**

none

- **Request**

params' Elements

Not necessary.

- **Response**

result's Elements

An object composed by following pairs.

name	type	multiplicity	default	description
mode	string	1		Current power saving mode. "off" : Power saving mode is disabled. "pictureOff" : Power saving mode is enabled with picture output off

Error Code

No additional error code is defined. Refer to error code for common errors.

getPowerStatus

This API provides current power status of the device.

- **Syntax**

http://<Base URL>/system

- **Authentication Level**

none

- **Request**

params' Elements

Not necessary.

- **Response**

result's Elements

An object composed by following pairs.

name	type	multiplicity	default	description
status	string	1		Current power status. "standby" – Device is in power-off state. "active" – Device is in power-on state.

Error Code

No additional error code is defined. Refer to error code for common errors.

37 (E)

getSystemInformation

This API provides general information of the device.

- **Syntax**

http://<Base URL>/system

- **Authentication Level**

private

- **Request**

params' Elements

Not necessary.

- **Responce**

result's Elements

An object composed by following pairs.

name	type	multiplicity	default	description
product	string	1		Device category. Following values are currently defined. "dataProjector"
region	string	?	""	Empty string is returned.
language	string	?	""	Language for OSD
model	string	1		Name of product.
serial	string	?	""	Serial number.
macAddr	string	?	""	Ethernet MAC address.
name	string	1		Product name. Following values are currently defined. "Data Projector"
generation	string	?	""	Data Product Device interface version.
area	string	?	""	Empty string is returned.
cid	string	?	""	Empty string is returned.

Error Code

No additional error code is defined. Refer to error code for common errors.

38 (E)

setPowerSavingMode

This API provides function to change setting of power saving mode, to adjust the device's power consumption.

- **Syntax**

http://<Base URL>/system

- **Authentication Level**

generic

- **Request**

params' Elements

An object composed by following pairs.

name	type	multiplicity	default	description
mode	string	1		Current power saving mode. "off" : Power saving mode is disabled. "pictureOff" : Power saving mode is enabled with picture output off

- **Responce**

result's Elements

Not necessary.

Error Code

No additional error code is defined. Refer to error code for common errors.

setPowerStatus

This API provides function to change current power status of the device.

- **Syntax**

http://<Base URL>/system

- **Authentication Level**

generic

- **Request**

params' Elements

An object composed by following pairs.

name	type	multiplicity	default	description
status	boolean	1		Power status. • true - means lamp-on state • false – means power-off state

- **Response**

result's Elements

Not necessary.

Error Code

No additional error code is defined. Refer to error code for common errors.

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getVolumeInformation

This API provides information about sound volume (also mute status) of the device.

- **Syntax**

http://<Base URL>/audio

- **Authentication Level**

none

- **Request**

params' Elements

Not necessary.

- **Response**

result's Elements

An object composed by following pairs.

name	type	multiplicity	default	description
target	string	1		"speaker" is returned.
volume	integer	1		Current volume.
mute	boolean	1		Current mute status. • true - mute • false - not mute
maxVolume	integer	1		Max volume level (ex. 100)
minVolume	integer	1		Min volume level (ex. 0)

setAudioMute

This API provides a function to change audio mute status.

- **Syntax**

http://<Base URL>/audio

- **Authentication Level**

generic

- **Request**

params' Elements

An object composed by following pairs.

name	type	multiplicity	default	description
status	boolean	1		Mute status to set. • true - mute • false - not mute

- **Response**

result's Elements

type	description
integer	Always 0 returned.

Error Code

No additional error code is defined. Refer to error code for common errors.

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setAudioVolume

This API provides a function to change audio volume level.

- **Syntax**

http://<Base URL>/audio

- **Authentication Level**

generic

- **Request**

params' Elements

An object composed by following pairs.

name	type	multiplicity	default	description
target	string	1		Always set to "speaker".
volume	string	1		Volume level to set. Following format is applied. • "N" - N is numeric string (ex. "25") set volume to level N. • "+N" - N is numeric string. (ex. "+14") increase volume level by N. • "–N" - N is numeric string. (ex. "–10") reduce volume level by N.

- **Response**

result's Elements

type	description
integer	Always 0 returned.

error code

code	explanation
40800	When an item other than "speaker" is set in "target".
40801	Volume is out of range.

41 (E)

getContentList

This API provides the list of contents under the scheme and source.

- **Syntax**

http://<Base URL>/avContent

- **Authentication Level**

private

- **Request**

params' Elements

An object composed by following pair(s).

name	type	multiplicity	default	description
source	string	1		Source name that can be retrieved by getSourceList.
stIdx	integer	?	0	Start index to get list items.
cnt	integer	?	50	Count of the maximum number of items that can be listed, starting from "stIdx".
type	string	?	""	Set empty string.

- **Response**

result's Elements

An array of objects composed by following pairs.

name	type	multiplicity	default	description
uri	string	1		URI to identify the content. • (ex) "extInput:hdmi?port=1"
title	string	1		Title of this content to be recognized by user. • (ex) "Video" • (ex) "INPUT A"
index	integer	1		Index of the list. This starts with"stIdx" indicated in the request.

Error Code

No additional error code is defined. Refer to error code for common errors.

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getPlayingContentInfo

This API provides information of current input selected.

- **Syntax**

http://<Base URL>/avContent

- **Authentication Level**

private

- **Request**

params' Elements

Not necessary

- **Response**

result's Elements

An object composed by following pair(s).

name	type	multiplicity	default	description
uri	string	1		URI to identify the content. • (ex) "extInput:hdmi?port=1"
source	string	1		Source of the content
title	string	1		Title of this content to be recognized by user. • (ex) "Video" • (ex) "INPUT A"

Error Code

No additional error code is defined. Refer to error code for common errors.

getSchemeList

This API provides the list of schemes that device can handle.

- **Syntax**

http://<Base URL>/avContent

- **Authentication Level**

none

- **Request**

params' Elements

Not necessary.

- **Response**

result's Elements

An array of objects composed by following pairs.

name	type	multiplicity	default	description
scheme	string	1		Scheme name.

Error Code

No additional error code is defined. Refer to error code for common errors.

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getSourceList

This API provides the list of sources under the scheme.

- **Syntax**

http://<Base URL>/avContent

- **Authentication Level**

none

- **Request**

params' Elements

An object composed by following pair(s).

name	type	multiplicity	default	description
scheme	string	1		Scheme name.

- **Response**

result's Elements

An array of objects composed by following pairs.

name	type	multiplicity	default	description
source	string	1		Source name composed by URI with scheme and path.

Error Code

No additional error code is defined. Refer to error code for common errors.

setPlayContent

This API provides a function to play content. By this API, content specified in request parameter are shown to user.

- **Syntax**

http://<Base URL>/avContent

- **Authentication Level**

generic

- **Request**

params' Elements

An object composed by following pair(s).

name	type	multiplicity	default	description
uri	string	1		URI obtained from getContentList.

- **Response**

result's Elements

Not necessary.

Error Code

code	explanation
41001	Content does not exist.

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4. Network Communication

The ports used in the unit are as shown below.

VPL-FHZ120/FHZ90/FHZ70/FHZ50/FHZ60/FWZ60/F640/F540/F630HZ/F530HZ/F430HZ/F630WZ/F530WZ/FH60/F630H/F530H/F630W/F530W/F1200Z/F900Z series

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
SMTP	TCP:25	OFF	Enabled by mail setting	Disabled
POP3	TCP:110	OFF	Enabled by mail setting	Disabled
SNMP	UDP:161	ON	Disabled	Disabled
DDDP	UDP:9131	ON	Disabled	Disabled
PJLink	TCP:4352	ON	Enabled	Disabled
CIP	TCP:41794	ON	Disabled	Enabled
PJ Control API (∗1)	TCP:80	OFF	Enabled	Disabled

∗1: VPL-FHZ70/F640HZ/F540HZ only

VPL-FH30/F400H/FHZ700/F700HZ series

Protocol/function	Port No.	Service state at the factory	Setting change enabled/disabled	
			Service ON/OFF	Port No.
SDAP	UDP:53862	OFF	Enabled	Enabled
ADCP	TCP:53595	ON	Enabled	Enabled
SMTP	TCP:25	OFF	Enabled by mail setting	Disabled
POP3	TCP:110	OFF	Enabled by mail setting	Disabled
SNMP	UDP:161	ON	Disabled	Disabled
DDDP	UDP:9131	OFF	Disabled	Disabled
PJLink	TCP:4352	OFF	Enabled	Disabled
CIP	TCP:41794	ON	Disabled	Enabled

VPL-C300/E200/E300/S200/S600/P10/P500/U300 series

Protocol/function	Port No.	Service state at the factory	Setting change enabled/disabled	
			Service ON/OFF	Port No.
SDAP	UDP:53862	OFF	Enabled	Enabled
ADCP	TCP:53595	ON	Enabled	Enabled
SMTP	TCP:25	OFF	Enabled by mail setting	Disabled
POP3	TCP:110	OFF	Enabled by mail setting	Disabled
DDDP	UDP:9131	OFF	Disabled	Disabled
PJLink	TCP:4352	ON	Enabled	Disabled
CIP	TCP:41794	ON	Disabled	Enabled

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5. Model List

VPL-C300 Series
VPL-CH350
VPL-CH353
VPL-CH355
VPL-CH358
VPL-CH370
VPL-CH373
VPL-CH375
VPL-CH378

VPL-E200 Series
VPL-EW235
VPL-EW236
VPL-EW255
VPL-EW256
VPL-EW295
VPL-EW296
VPL-EX230
VPL-EX231
VPL-EX233
VPL-EX234
VPL-EX235
VPL-EX250
VPL-EX251
VPL-EX253
VPL-EX254
VPL-EX255
VPL-EX283
VPL-EX290
VPL-EX291
VPL-EX293
VPL-EX294
VPL-EX295

VPL-E300 Series
VPL-EW315
VPL-EW345
VPL-EW348
VPL-EX310
VPL-EX315
VPL-EX340
VPL-EX345

VPL-E400 Series
VPL-EW435
VPL-EW455
VPL-EX430
VPL-EX433
VPL-EX435
VPL-EX450
VPL-EX453
VPL-EX455

VPL-E500 Series
VPL-EW578
VPL-EW575
VPL-EX570
VPL-EX573
VPL-EX575

VPL-F540 Series
VPL-F540HZ
VPL-F545HZ

VPL-F640 Series
VPL-F640HZ
VPL-F645HZ

VPL-F400H Series
VPL-F401H

VPL-F430HZ Series
VPL-F430HZ
VPL-F431HZ
VPL-F435HZ
VPL-F436HZ
VPL-F435HZL
VPL-F436HZL

VPL-F530H Series
VPL-F530H
VPL-F535H

VPL-F530HZ Series
VPL-F530HZ
VPL-F531HZ
VPL-F535HZ
VPL-F536HZ
VPL-F535HZL
VPL-F536HZL

VPL-F530W Series
VPL-F530W
VPL-F535W

VPL-F530WZ Series
VPL-F530WZ
VPL-F535WZ

VPL-F630H Series
VPL-F630H
VPL-F635H

VPL-F630HZ Series
VPL-F630HZ
VPL-F631HZ
VPL-F635HZ
VPL-F636HZ

VPL-F630W Series
VPL-F630W
VPL-F635W

VPL-F630WZ Series
VPL-F630WZ
VPL-F635WZ

VPL-F700HZ Series
VPL-F720HZL
VPL-F725HZL

VPL-FH30 Series
VPL-FH31

VPL-FH60 Series
VPL-FH60
VPL-FH65

VPL-FHZ50 Series
VPL-FHZ57
VPL-FHZ58

VPL-FHZ60 Series
VPL-FHZ60
VPL-FHZ61
VPL-FHZ65
VPL-FHZ66

VPL-FHZ70 Series
VPL-FHZ70
VPL-FHZ75

VPL-FHZ700 Series
VPL-FHZ700L

VPL-FW60 Series
VPL-FW60
VPL-FW65

VPL-FWZ60 Series
VPL-FWZ60
VPL-FWZ65

VPL-S200 Series
VPL-SW225
VPL-SW235
VPL-SX226
VPL-SX236

VPL-S600 Series
VPL-SW631
VPL-SW631C
VPL-SW636C
VPL-SX621
VPL-SX631

VPL-P10 Series
VPL-PHZ10
VPL-PWZ10
VPL-PXZ10

VPL-P500 Series
VPL-P500HZ
VPL-P500WZ
VPL-P500XZ

VPL-U300 Series
VPL-U300WZ

VPL-FHZ120 Series
VPL-FHZ120L

VPL-FHZ90 Series
VPL-FHZ90L

VPL-F1200 Series
VPL-F1200ZL
VPL-F1205ZL

VPL-F900 Series
VPL-F900ZL
VPL-F905ZL

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.

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(COMMAND LIST) E
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