

Standard Command support table  
V002

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THIS DOCUMENT DESCRIBES APPLICATION PROGRAMMING INTERFACE TO CONTROL JVC PTZ cameras VIA NETWORK, AND IT SHALL NOT BE USED FOR ANY OTHER PURPOSE.

Version	Outline	Model
V002	First release	KY-PZ510 series KY-PZ400N series KY-PZ200N series

KY-PZ510/PZ400/PZ200 series Standard Command List

V002

Feature	Command name	Command	Instructions
Other	Address Set	88 30 01 FF	
Zoom	Zoom In	8x 01 04 07 02 FF	
Zoom	Zoom Out	8x 01 04 07 03 FF	
Zoom	Zoom In (Fast)	8x 01 04 07 2p FF	p = 0(low) - 7(high)
Zoom	Zoom Out (Fast)	8x 01 04 07 3p FF	p = 0(low) - 7(high)
Zoom	Zoom Stop	8x 01 04 07 00 FF	
Zoom	Zoom Direct	8x 01 04 47 0p 0q 0r 0s FF	pqrs: Zoom Position 0000h-4000h
Zoom	Zoom Focus Direct	8x 01 04 47 0p 0q 0r 0s 0t 0u 0v 0w FF	pqrs: Zoom Position 0000h-4000h tuwv: Focus Position 0000h - 143Ch
Focus	Focus Far	8x 01 04 08 02 FF	
Focus	Focus Near	8x 01 04 08 03 FF	
Focus	Focus Auto	8x 01 04 38 02 FF	
Focus	Focus Manual	8x 01 04 38 03 FF	
Focus	Focus Far (Fast)	8x 01 04 08 2p FF	p = 0(low) - 7(high)
Focus	Focus Near (Fast)	8x 01 04 08 3p FF	p = 0(low) - 7(high)
Focus	Focus Stop	8x 01 04 08 00 FF	
Focus	AUTO/MANUAL	8x 01 04 38 10 FF	
Focus	Focus Direct	8x 01 04 48 0p 0q 0r 0s FF	pqrs:Focus Position 0000h - 143Ch 0 - 5180
Focus	One Push Trigger	8x 01 04 18 01 FF	
WB	White Balance Auto	8x 01 04 35 00 FF	
WB	White Balance Indoor	8x 01 04 35 01 FF	
WB	White Balance Outdoor	8x 01 04 35 02 FF	
WB	White Balance OnePush	8x 01 04 35 03 FF	
WB	OnePush trigger	8x 01 04 10 05 FF	
WB	White Balance Manual	8x 01 04 35 05 FF	
Color	RG tuning direct -10	8x 0A 01 12 00 FF	
Color	RG tuning direct +10	8x 0A 01 12 14 FF	
Color	BG tuning direct -10	8x 0A 01 13 00 FF	
Color	BG tuning direct +10	8x 0A 01 13 14 FF	
Color	Red Gain	8x 01 04 43 00 00 0p 0q FF	pq:00 - FF (0-255)
Color	Red Gain Up	8x 01 04 03 02 FF	
Color	Red Gain Down	8x 01 04 03 03 FF	
Color	Red Gain Reset	8x 01 04 03 00 FF	
Color	Blue Gain	8x 01 04 44 00 00 0p 0q FF	pq:00 - FF (0-255)
Color	Blue Gain Up	8x 01 04 04 02 FF	
Color	Blue Gain Down	8x 01 04 04 03 FF	
Color	Blue Gain Reset	8x 01 04 04 00 FF	
Exposure	Exposure Mode Auto	8x 01 04 39 00 FF	
Exposure	Exposure Mode Manual	8x 01 04 39 03 FF	
Exposure	Exposure Mode Shutter Priority	8x 01 04 39 0A FF	
Exposure	Exposure Mode Iris Priority	8x 01 04 39 0B FF	
Exposure	Exposure Mode Bright	8x 01 04 39 0D FF	
Exposure	MeteringMode Average	8x 01 04 3A 00 FF	
Exposure	MeteringMode Center	8x 01 04 3A 01 FF	
Exposure	MeteringMode Smart	8x 01 04 3A 02 FF	
Exposure	MeteringMode Top	8x 01 04 3A 03 FF	
Exposure	Shutter Reset	8x 01 04 0A 00 FF	
Exposure	Shutter Up	8x 01 04 0A 02 FF	
Exposure	Shutter Down	8x 01 04 0A 03 FF	
Exposure	Shutter Direct	8x 01 04 4A 00 00 0p 0q FF	pq:01 - 11 (01:1/30, 02:1/60 03:1/90, 04:1/100, 05:1/125, 06:1/180, 07:1/250, 08:1/350, 09:1/500, 0A:1/725, 0B:1/1000, 0C:1/1500, 0D:1/2000, 0E:1/3000, 0F:1/4000, 10:1/6000, 11:1/10000)
Exposure	Gain Reset	8x 01 04 0C 00 FF	
Exposure	Gain Up	8x 01 04 0C 02 FF	
Exposure	Gain Down	8x 01 04 0C 03 FF	
Exposure	Gain Direct	8x 01 04 0C 00 00 0p 0q FF	pq: Gain Position 00h - 0Fh menu: 0 - 15
Exposure	Gain Limit direct	8x 01 04 2c 0p FF	p:l - F menu:l - 15
Brightness	Brightness Reset (Brightness under brightness priority)	8x 01 04 0D 00 FF	
Brightness	Brightness Up	8x 01 04 0D 02 FF	
Brightness	Brightness Down	8x 01 04 0D 03 FF	
Brightness	Brightness Direct	8x 01 04 0D 00 00 0p 0q FF	pq:Bright Position 00h - 11h menu: 0 - 17
Exposure	Iris Reset	8x 01 04 0B 00 FF	
Exposure	Iris Up	8x 01 04 0B 02 FF	
Exposure	Iris Down	8x 01 04 0B 03 FF	
Exposure	Iris Direct	8x 01 04 4B 00 00 0p 0q FF	pq:00 - 0C (0:off,1:f11.0, 2:f9.6, 3:f8.0, 4:f6.8, 5:f5.6, 6:f4.8, 7:f4.0, 8:f3.4, 9:f2.8, A:f2.4, B:f2.0, C:f1.8)
Exposure	Exposure Compensation On	8x 01 04 3E 02 FF	
Exposure	Exposure Compensation Reset	8x 01 04 0E 00 FF	
Exposure	Exposure Compensation Up	8x 01 04 0E 02 FF	
Exposure	Exposure Compensation Down	8x 01 04 0E 03 FF	
Exposure	Exposure Compensation Direct	8x 01 04 4E 00 00 0p 0q FF	pq: ExpComp Position 00h - 0Eh menu:-7(00) - 0(07) - +7(0E)
Exposure	Exposure Compensation off	8x 01 04 3E 03 FF	
Exposure	Backlight On	8x 01 04 33 02 FF	
Exposure	Backlight off	8x 01 04 33 03 FF	
Noise Reduction	Noise Reduction 3D Direct	8x 01 04 54 0p FF	p: NR Setting (0: Off, 1: Low, 5: Middle, 9: High)
Flicker Reduction	Flicker Reduction OFF	8x 01 04 23 0p FF	p: Flicker Settings (0: Off, 1: 50Hz, 2: 60Hz)
Detail	Aperture Reset (sharpness)	8x 01 04 02 00 FF	
Detail	Aperture Up	8x 01 04 02 02 FF	
Detail	Aperture Down	8x 01 04 02 03 FF	
Detail	Aperture Direct	8x 01 04 42 00 00 0p 0q FF	pq: Sharpness Gain 00h - 0Bh menu: 0 - 11

Picture Effect	Black White Pattern Off	8x 01 04 63 00 FF	
Picture Effect	Black White Pattern On	8x 01 04 63 04 FF	
Memory	Memory Preset Reset	8x 01 04 3F 00 pq FF	pq: preset number 00 - FE 0 - 254
Memory	Set	8x 01 04 3F 01 pq FF	pq: preset number 00 - FE
Memory	Recall	8x 01 04 3F 02 pq FF	pq: preset number 00 - FE
Memory	Clear All Preset	8x 0A 11 26 00 FF	
Flip	Flip Horizontal On	8x 01 04 61 02 FF	
Flip	Flip Horizontal Off	8x 01 04 61 03 FF	
Flip	Flip Vertical On	8x 01 04 66 02 FF	
Flip	Flip Vertical Off	8x 01 04 66 03 FF	
Color	Color Gain Direct	8x 01 04 49 00 00 0p FF	p: Color Gain setting 0h (60%) to Eh (200%)
IR	IR remotecontroller On	8x 01 06 08 02 FF	
IR	IR remotecontroller Off	8x 01 06 08 03 FF	
Color	Color Hue Direct	8x 01 04 4F 00 00 0p FF	p: Color Hue setting 0h (-7 degrees) to Eh (+7 degrees)
WB	WhiteBalance Sensitivity High	8x 01 04 A9 00 FF	
WB	WhiteBalance Sensitivity Middle	8x 01 04 A9 01 FF	
WB	WhiteBalance Sensitivity Low	8x 01 04 A9 02 FF	
Focus	Focus Area Top	8x 01 04 AA 00 FF	
Focus	Focus Area Center	8x 01 04 AA 01 FF	
Focus	Focus Area Bottom	8x 01 04 AA 02 FF	
Focus	Focus Area Front	8x 01 04 AA 03 FF	
Flip	Flip On	8x 01 04 A4 03 FF	
Flip	Only Vertical Flip	8x 01 04 A4 02 FF	
Flip	Only Horizontal Flip	8x 01 04 A4 01 FF	
Flip	Flip Off	8x 01 04 A4 00 FF	
Focus	Focus Sensitivity High	8x 01 04 58 01 FF	
Focus	Focus Sensitivity Middle	8x 01 04 58 02 FF	
Focus	Focus Sensitivity Low	8x 01 04 58 03 FF	
Brightness	Brightness	8x 01 04 A1 00 00 0p 0q FF	pq: 00 - OE
Detail	Contrast	8x 01 04 A2 00 00 0p 0q FF	pq: 00 - OE
Other	Save	8x 01 04 A5 10 FF	Save Current Setting
Other	Restore	8x 01 04 A0 10 FF	Restore default Settings
Pan/Tilt	P/T head Up	8x 01 06 01 VV WW 03 01 FF	VV: Pan speed 0x01 (low speed) to 0x18 (high speed) WW: Tilt speed 0x01 (low speed) to 0x14 (high speed) YYYY: Pan Position ZZZZ: Tilt Position
Pan/Tilt	P/T head Down	8x 01 06 01 VV WW 03 02 FF	
Pan/Tilt	P/T head Left	8x 01 06 01 VV WW 01 03 FF	
Pan/Tilt	P/T head Right	8x 01 06 01 VV WW 02 03 FF	
Pan/Tilt	P/T head LeftUp	8x 01 06 01 VV WW 01 01 FF	
Pan/Tilt	P/T head RightUp	8x 01 06 01 VV WW 02 01 FF	
Pan/Tilt	P/T head LeftDown	8x 01 06 01 VV WW 01 02 FF	
Pan/Tilt	P/T head RightDown	8x 01 06 01 VV WW 02 02 FF	
Pan/Tilt	P/T head Stop	8x 01 06 01 VV WW 03 03 FF	
Pan/Tilt	Absolute Position	8x 01 06 02 VV WW 0Y 0Y 0Y 0Z 0Z 0Z 0Z FF	
Pan/Tilt	Relative Position	8x 01 06 03 VV WW 0Y 0Y 0Y 0Z 0Z 0Z 0Z FF	
Pan/Tilt	HOME	8x 01 06 04 FF	
Pan/Tilt	RESET	8x 01 06 05 FF	
Menu	Menu On/Off	8x 01 06 06 10 FF	
Menu	Menu Off	8x 01 06 06 03 FF	
Menu	Menu On	8x 01 06 06 02 FF	
Menu	Up	8x 01 06 01 0E 0E 03 01 FF	
Menu	Down	8x 01 06 01 0E 0E 03 02 FF	
Menu	Save	8x 01 06 06 05 FF	
Menu	Left	8x 01 06 01 0E 0E 01 03 FF	
Menu	Right	8x 01 06 01 0E 0E 02 03 FF	
Menu	Back	8x 01 06 06 04 FF	
Tally	Tally Mode On	8x 0a 11 47 02 FF	
Tally	Tally Mode Off	8x 0a 11 47 03 FF	
Tally	Is flash Green	8x 0a 02 02 01 00 FF	
Tally	Is flash Red	8x 0a 02 02 01 01 FF	
Tally	Lighting Green	8x 0a 02 02 02 00 FF	
Tally	Lighting Red	8x 0a 02 02 02 01 FF	
Tally	Turn Off	8x 0a 02 02 03 00 FF	
Tally	Turn Off	8x 0a 02 02 03 01 FF	
Other	IP Streaming Off	8x 01 04 00 A3 FF	
Other	IP Streaming On	8x 01 04 00 A2 FF	
Tally	Tally Lamp On (Preview GREEN)	8x 01 7E 01 0A 00 01 FF	
Tally	Tally Lamp On (Program RED)	8x 01 7E 01 0A 00 02 FF	
Tally	Tally Lamp Off	8x 01 7E 01 0A 00 03 FF	
Other	CAM DVIMode (HDMI)	8x 01 04 AB 02 FF	DVI output mode, default: HDMI
Other	CAM DVIMode (DVI)	8x 01 04 AB 03 FF	
Other	CAM Power (On)	8x 01 04 00 02 FF	Power ON/OFF
Other	CAM Power (Off)	8x 01 04 00 03 FF	

KY-PZ510/PZ400/PZ200 series Inquiry Command List

V001

Feature	Command name	命令 Command	Reply Packet	Comments
System	Query SOC Packaging Date	8x 09 96 97 FF	y0 50 0s 0s 0s 0s 0m 0m 0u 0u FF	ssss:year mm:month uu: day
System	Query ARM chipet	8x 09 11 21 FF	y0 50 0A FF	A:1 Artery
Color	CAM RG tuningInq	8x 09 04 12 FF	y0 50 00 00 0r 0q FF	rq: 0x0 to 0x14 (-10 ~ +10)
Color	CAM BG tuningInq	8x 09 04 13 FF	y0 50 00 00 0r 0q FF	rq: 0x0 to 0x14 (-10 ~ +10)
System	Query Power	8x 09 04 00 FF	y0 50 02 FF y0 50 03 FF	On Off(Standby)
Zoom	Query Zoom Position	8x 09 04 47 FF	y0 50 0p 0q 0r 0s FF	pqrs: Zoom Position
Focus	Query Focus Mode	8x 09 04 38 FF	y0 50 02 FF y0 50 03 FF	Auto Focus Manual Focus
Focus	Query Focus Position	8x 09 04 48 FF	y0 50 0p 0q 0r 0s FF	pqrs: Focus Position
WB	Query White Balance Mode	8x 09 04 35 FF	y0 50 00 FF	Auto
			y0 50 01 FF	Indoor mode
			y0 50 02 FF	Outdoor mode
			y0 50 03 FF	OnePush mode
			y0 50 05 FF	Manual
Color	Query Red Gain	8x 09 04 43 FF	y0 50 00 00 0p 0q FF	pq: R Gain
Color	Query Blue Gain	8x 09 04 44 FF	y0 50 00 00 0p 0q FF	pq: B Gain
Exposure	Query Exposure Mode	8x 09 04 39 FF	y0 50 00 FF	Full Auto
			y0 50 03 FF	Manual
			y0 50 0A FF	Shutter priority
			y0 50 0B FF	Iris priority
Exposure	Query Shutter Position	8x 09 04 4A FF	y0 50 0D FF	Bright
			y0 50 00 00 0p 0q FF	pq: Shutter Position
Exposure	Query Iris Position	8x 09 04 4B FF	y0 50 00 00 00 0p FF	p: Iris
Exposure	Query Gain	8x 09 04 4C FF	y0 50 00 00 0p 0q FF	pq: Gain Position
Brightness	Query Brightness	8x 09 04 4D FF	y0 50 00 00 0p 0q FF	pq: Bright Position
Exposure	Query Exposure Compensation Mode	8x 09 04 3E FF	y0 50 02 FF	On
Exposure			y0 50 03 FF	Off
Exposure	Query Exposure Compensation Position	8x 09 04 4E FF	y0 50 00 00 0p 0q FF	pq: ExpComp Position 00 - 0E menu:-7(00) - 0(07) - +7(0E)
Exposure	Query Backlight Mode	8x 09 04 33 FF	y0 50 02 FF	On
Exposure			y0 50 03 FF	Off
Noise Reduction	Query Noise 3D Level	8x 09 04 54 FF	y0 50 0p FF	Noise Reduction (3D) p: 0 to 5
Detail	Query Flicker Level	8x 09 04 55 FF	y0 50 0p FF	p: Flicker Settings(0: OFF, 1: 50Hz, 2: 60Hz)
Detail	Query Aperture Level (Sharpness)	8x 09 04 42 FF	y0 50 00 00 0p 0q FF	pq: Aperture Gain 00 - 0B menu: 0 - 11
Menu	Query Menu Status	8x 09 06 06 FF	y0 50 02 FF	On
			y0 50 03 FF	Off
Picture	Picture Effect ModeInq	8x 09 04 63 FF	y0 50 02 FF	Off
			y0 50 04 FF	B&W
System	DateInq (The date of the arm)	8x 09 00 04 FF	y0 50 0r ss uu vv ww 0D FF	Version date r: Big Version Number ss: Little Version Number uuu: Year vv: Month ww: Day
Exposure	Query Metering Mode	8x 09 04 3A FF	y0 50 00 FF	Average Metering
Exposure	Query Metering Mode	8x 09 04 3A FF	y0 50 01 FF	Center-weighted Average Metering
Exposure	Query Gain Limit	8x 09 04 2C FF	y0 50 0p FF	p: Gain Limit 1 - F menu:1 - 15

Focus	AFSensitivityInq	8x 09 04 58 FF	y0 50 01 FF	High
			y0 50 02 FF	Normal
			y0 50 03 FF	Low
Brightness	BrightnessInq	8x 09 04 A1 FF	y0 50 00 00 0p 0q FF	pq: Luminance Position 00 - 0E 0 - 14
Detail	ContrastInq	8x 09 04 A2 FF	y0 50 00 00 0p 0q FF	pq: Contrast Position 00 - 0E
Flip	FlipInq	8x 09 04 A4 FF	y0 50 00 FF	Off
			y0 50 01 FF	Flip-H
			y0 50 02 FF	Flip-V
			y0 50 03 FF	Flip-HV
Focus	AFZone	8x 09 04 AA FF	y0 50 00 FF	Top
			y0 50 01 FF	Center
			y0 50 02 FF	Bottom
System	DVIModeInq	8x 09 04 AB FF	y0 50 02 FF	DVI Mode:HDMI
			y0 50 03 FF	DVI Mode:DVI
Color	ColorHueInq	8x 09 04 4F FF	y0 50 00 00 00 0p FF	p: Color Hue setting 0h ( - 14 dgree) to Eh ( +14 degrees)
WB	AWBSensitivityInq	8x 09 04 A9 FF	y0 50 00 FF	High
			y0 50 01 FF	Normal
			y0 50 02 FF	Low
Clock	LensBlockInq	8x 09 7E 7E 00 FF	y0 50 0u 0u 0u 0u 00 00 0v 0v 0v 0v 00 0w 00 FF	uuuu: Zoom Position vvvv: Focus Position w.bit0: Focus Mode 1: Auto 0: Manual
Clock	CameraBlockInq	8x 09 7E 7E 01 FF	y0 50 0p 0p 0q 0q 0r 0s tt 0u vv ww 00 xx 0z FF	pp: R_Gain qq: B_Gain r: WB Mode s: Aperture tt: AE Mode u.bit2: Back Light u.bit1: Exposure Comp. vv: Shutter Position ww: Iris Position xx: Bright Position z: Exposure Comp. Position
Clock	OtherBlockInq	8x 09 7E 7E 02 FF	y0 50 0p 0q 00 0r 00 00 00 00 00 00 00 00 00 FF	p.bit0:Power 1:On, 0:Off q.bit2: LR Reverse 1:On, 0:Off r.bit3^0: Picture Effect Mode
Clock	EnlargementBlockInq	8x 09 7E 7E 03 FF	y0 50 00 00 00 00 00 00 0p 0q rr 0s 0t 0u FF	p: AF sensitivity q.bit0: Picture flip(1:On, 0:Off) rr.bit6^3: Color Gain(0h(60%) to Eh(200%)) s: Flip(0: Off, 1:Flip-H, 2:Flip-V, 3:Flip-HV) t.bit2^0: NR2D Level u: Gain Limit
Flip	Query Flip Horizontal	8x 09 04 61 FF	y0 50 02 FF	On
			y0 50 03 FF	Off
Flip	Query Flip Vertical	8x 09 04 66 FF	y0 50 02 FF	On
			y0 50 03 FF	Off
System	Query Camera Version	8x 09 00 02 FF	y0 50 ab cd mn pq rs tu vw FF	ab: Factory Code(00: VHD, 01:MR, 08:T) cd: Hardware Version mnpq: ARM Version rstu: SOC Version vw: Camera model
System	Query Video System	8x 09 06 23 FF	y0 50 rr FF	rr:video format

Pan/Tilt	Query Motor Max Speed	8x 09 06 11 FF	y0 50 ww zz FF	ww: Pan Max Speedzz: Tilt Max Speed
Pan/Tilt	Query Motor Position	8x 09 06 12 FF	y0 50 0w 0w 0w 0z 0z 0z 0z FF	www: Pan Positionzzzz: Tilt Position
Tally	Query Tally Control	8x 09 11 69 FF	y0 50 02 FF	Tally mode On
			y0 50 03 FF	Tally mode Off
Tally	Query Tally	8x 09 06 6A FF	y0 50 0p 0q FF	p:mode q: lamp color p:2 - Normally On, 3 - Close, 1 - flashing; q 0 - green 1 - red