

VP 729 Command Sets

1 Serial Configuration:

- Baud rate : 9600(Bits per second)
- Data bits : 8bits
- Parity : None
- Stop bits : 1bit

2 Command Format:

2.1 Communication confirm

Send	CR
Reply	CR>

2.2 Set Command

Send	Y□Control_Type□Function□Param□CR
Reply	Z□Control_Type□Function□Param□CR>

2.3 Get Command

Send	Y□Control_Type□Function□CR
Reply	Z□Control_Type□Function□Param□CR>

2.4 Example: set Input 1 Source Type to Universal Input 1

Send	Y□0□0□0□0□CR
Reply	Z□0□0□0□0□CR>

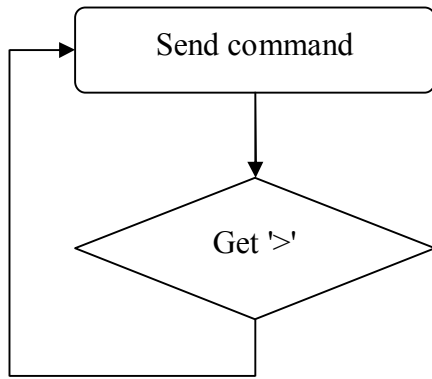
2.5 Example: get current Input 1 Source Type

Send	Y□1□1□CR
Reply	Z□1□1□0□CR >

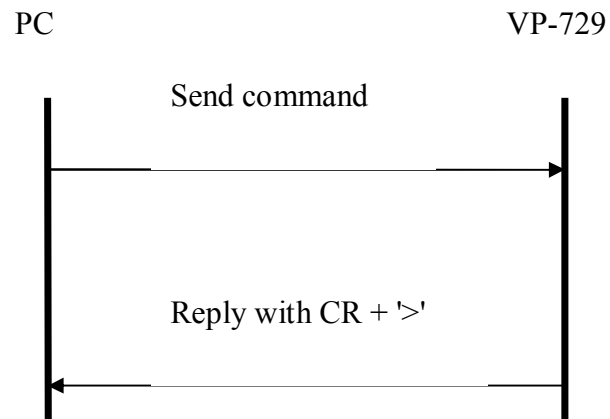
2.6 □ : ASCII Code 0x20

2.7 CR : Ascii Code 0x0D

2.8 Communication flow



2.9 Communication limitation



3 Command List:

Control Type		Function	Parameter	Description
Set	Get			
0	1	0	0: Input 1 1: Input 2 2: Input 3 3: Input 4 4: VGA 1 5: VGA 2 6: HDMI 1 7: HDMI 2 8: USB	Input Source
0	1	1	0: Component 1: YC 2: Video	Input 1 Source Type
0	1	2	0: Component 1: YC 2: Video	Input 2 Source Type
0	1	3	0: Component 1: YC 2: Video	Input 3 Source Type
0	1	4	0: Component 1: YC 2: Video	Input 4 Source Type
0	1	5	0: Auto 1: RGB 2: YUV	Input Color Format

Control Type		Function	Parameter	Description
Set	Get			
0	1	6	0: Auto 1: NTSC 2: PAL 3: PAL-M 4: PAL-N 5: NTSC 4.43 6: SECAM 7: PAL-60	Input Video Standard
0	1	7	1 ~ 50	Input H-Position
0	1	8	2 ~ 50	Input V-Position
0	1	9	0 ~ 50	Input Frequency
0	1	10	0 ~ 31	Input Phase
0	-	11	n/a	Input Auto Image
0	1	12	0~100	Picture Brightness
0	1	13	0~100	Picture Contrast
0	1	14	0~100	Picture Color
0	1	15	0~360	Picture Hue
0	1	16	0~100	Picture Sharpness

Control Type		Function	Parameter	Description
Set	Get			
0	1	17	0: Gamma 1 1: Gamma 2 2: Gamma 3 3: Gamma 4 4: Gamma 5	Picture Output Gamma
0	1	18	0: Auto 1: Video 2: Film	Picture Film Mode
0	1	19	0: Off 1: Low 2: Medium 3: High	Picture Temporal NR
0	1	20	0: Off 1: Low 2: Medium 3: High	Picture Mosquito NR
0	1	21	0: Off 1: On	Picture Block NR
0	1	22	0: Off 1: Low 2: Medium 3: High	Picture Detail Enhancement
0	1	23	0: Off 1: Low	Picture Luma Transition Enhance

Control Type		Function	Parameter	Description
Set	Get			
			2: High	
0	1	24	0: Off 1: Low 2: High	Picture Chroma Transition Enhance
0	1	25	0 : Native HDMI 1 : 640x480@60Hz 2 : 640x480@75Hz 3 : 800x600@50Hz 4 : 800x600@60Hz 5 : 800x600@75Hz 6 : 1024x768@50Hz 7 : 1024x768@60Hz 8 : 1024x768@75Hz 9 : 1280x768@50Hz 10: 1280x768@60Hz 11: 1280x800@60Hz 12: 1280x1024@50Hz 13: 1280x1024@60Hz 14: 1280x1024@75Hz 15: 1366x768@50Hz 16: 1366x768@60Hz 17: 1400x1050@50Hz 18: 1400x1050@60Hz 19: 1600x1200@50Hz	Output Resolution

Control Type		Function	Parameter	Description
Set	Get			
			20: 1600x1200@60Hz 21: 1680x1050@60Hz 22: 1920x1080@60Hz 23: 1920x1200@60Hz 24: 480p@60Hz 25: 576p@60Hz 26: 720p@50Hz 27: 720p@60Hz 28: 1080i@50Hz 29: 1080i@60Hz 30: 1080p@50Hz 31: 1080p@60Hz 32: Custom	
0	1	26	0: Auto 1: HDMI 2: DVI	Output HDMI Type
0	1	27	0: Standard 1: Letterbox 2: Follow Output 3: Virtual Wide 4: Follow Input 5: Custom	Aspect Ratio
0	1	28	-16 ~ 16	H-Pan
0	1	29	-16 ~ 16	V-Pan

Control Type		Function	Parameter	Description
Set	Get			
0	1	30	-8 ~ 8	H-Zoom
0	1	31	-8 ~ 8	V-Zoom
0	1	32	0: 100% 1: 150% 2: 200% 3: 225% 4: 250% 5: 275% 6: 300% 7: 325% 8: 350% 9: 375% 10: 400% 11: Custom	Zoom
0	1	33	0 ~ 32	Custom Zoom
0	1	34	0 ~ 31	Zoom H-Pan
0	1	35	0 ~ 31	Zoom V-Pan
0	1	36	0: Off 1: On	PIP On/Off
0	1	37	0: Picture-In-Picture 1: Picture + Picture 2: Split	PIP Type

Control Type		Function	Parameter	Description
Set	Get			
0	1	38	0: Input 1 1: Input 2 2: Input 3 3: Input 4 4: VGA 1 5: VGA 2 6: HDMI 1 7: HDMI 2	PIP Source
0	1	39	0: 1/25 1: 1/16 2: 1/9 3: 1/4 4: Custom	PIP Size
0	1	40	0 ~ 128	PIP H-Position
0	1	41	0 ~ 128	PIP V-Position
0	1	42	0 ~ 32	PIP H-Size
0	1	43	0 ~ 32	PIP V-Size
0	1	44	0: Off 1: On	PIP Frame
0	1	45	0: Red 1: Green 2: Blue	PIP Frame Color
0	1	46	0: Analog 1: S/PDIF	Audio Input Type

Control Type		Function	Parameter	Description
Set	Get			
0	1	47	-22~0~+22	Audio Input Volume
0	1	48	-100~24	Audio Output Volume
0	-	48	+111	Increase Audio Output Volume (+ 1 step)
0	-	48	-111	Decrease Audio Output Volume (-1 step)
0	1	49	-36~0~+36	Audio Bass
0	1	50	-36~0~+36	Audio Treble
0	1	51	-10~10	Audio Balance
0	1	52	0: Off 1: On	Audio Loudness
0	1	53	0: Dynamic 1: User Define	Audio Delay
	1	54	0~340(step 2)	User Delay
0	1	55	0: No audio 1: Input 1 2: Input 2 3: Input 3 4: Input 4 5: VGA1 6: VGA2 7: HDMI1 8: HDMI2	Audio Input For USB

Control Type		Function	Parameter	Description
Set	Get			
0	1	56	0: Keystone 1: Anyplace 2: Rotation	Geometry Application
0	1	57	0: Front 1: Rear 2: Ceiling 3: Rear ceiling	Geometry Location
0	1	58	-40 ~ 40	Geometry Horizontal Keystone
0	1	59	-30~30	Geometry Vertical Keystone
0	1	60	-2000~2000	Geometry Diagonal Projection - Top Left H
0	1	61	-2000~2000	Geometry Diagonal Projection - Top Left V
0	1	62	-2000~2000	Geometry Diagonal Projection - Top Right H
0	1	63	-2000~2000	Geometry Diagonal Projection - Top Right V
0	1	64	-2000~2000	Geometry Diagonal Projection - Bottom Left H
0	1	65	-2000~2000	Geometry Diagonal Projection - Bottom Left V
0	1	66	-2000~2000	Geometry Diagonal Projection - Bottom Right H
0	1	67	-2000~2000	Geometry Diagonal Projection - Bottom Right V
0	-	68	n/a	Geometry Diagonal Projection – Reset
0	1	69	-20 ~ 20	Geometry Pincushion/Barrel
0	1	70	-180 ~ 180	Geometry Rotation

Control Type		Function	Parameter	Description
Set	Get			
0	-	71	n/a	Geometry Reset all
0	-	72	0: Profile 1 1: Profile 2 2: Profile 3 3: Profile 4 4: Profile 5 5: Profile 6 6: Profile 7 7: Profile 8	Save Setting
0	-	73	0: Profile 1 1: Profile 2 2: Profile 3 3: Profile 4 4: Profile 5 5: Profile 6 6: Profile 7 7: Profile 8	Recall Setting
0	1	74	0: Off 1: On	Frame Lock
0	-	75	n/a	Factory Reset
-	1	76	n/a	Firmware Revision
0	1	77	0: 1400x1050x60 1: 1680x1050x60	Mode Set – Mode 1
0	1	78	0: 1280x1024x75 1: 1280x1024x76	Mode Set – Mode 2

Control Type		Function	Parameter	Description
Set	Get			
0	1	79	0: Center 1: Top Left 2: Top Right 3: Bottom Left 4: Bottom Right	OSD Menu Position
0	1	80	0: 5 sec 1: 10 sec 2: 20 sec 3: 30 sec 4: 60 sec 5: 90 sec 6: Off	OSD Time Out
0	1	81	0: Off 1: On 2: Custom	Logo
0	1	82	0: Black 1: Blue	Blank Color
0	-	83	n/a	Capture
0	1	84	0: Black 1: Blue 2: Custom	Background
0	1	85	0: Off 1: On	Save Lock
0	1	86	0: Off 1: On	Input Lock

Control Type		Function	Parameter	Description
Set	Get			
0	1	87	0: Blank & Mute 1: Blank 2: Mute	Blank key function
0	1	88	0: Freeze & Mute 1: Freeze 2: Mute	Freeze key function
0	1	89	0: Off 1: On	Freeze
0	1	90	0: Off 1: On	Blank
0	1	91	0: Off 1: On	Power
0	-	92	n/a	Info
0	-	93	n/a	Menu
0	-	94	n/a	Top
0	-	95	n/a	Down
0	-	96	n/a	Left
0	-	97	n/a	Right
0	-	98	n/a	Enter
0	-	99	n/a	Picture
0	-	100	n/a	Swap

Control Type		Function	Parameter	Description
Set	Get			
0	1	101	0: Off 1: On	Mute
0	1	102	0: Off 1: On	Lock
-	1	103	0: 640x480 60 1: 640x480 67 Mac13 2: 640x480 72 3: 640x480 75 4: 640x480 85 5: 720x400 70 6: 720x400 85 7: 800x600 56 8: 800x600 60 9: 800x600 72 10: 800x600 75 11: 800x600 85 12: 832x624 75 Mac16 13: 1024x768 60 14: 1024x768 70 15: 1024x768 75 16: 1024x768 75 Mac19 17: 1024x768 85 18: 1024x800 84 Sun 19: 1152x864 75 20: 1152x870 75 Mac21	Main Input status

Control Type		Function	Parameter	Description
Set	Get			
			21: 1152x900 66 Sun	
			22: 1152x900 76 Sun	
			23: 1280x960 60	
			24: 1280x960 85	
			25: 1280x768 60	
			26: 1280x1024 60	
			27: 1280x1024 75	
			28: 1280x1024 76 Sun	
			29: 1280x1024 85	
			30: 1400x1050 60	
			31: 1400x1050 75	
			32: 1600x1200 60	
			33: 1680x1050 60	
			34: 1080i 60	
			35: 1080i 50	
			36: 1080p 60	
			37: 1080p 50	
			38: 720p60	
			39: 720p50	
			40: 480i	
			41: 480p	
			42: 576i	
			43: 576p	
			98: other	
			99: No Input detected	

Control Type		Function	Parameter	Description
Set	Get			
			101: NTSC 102: PAL 103: PAL-M 104: PAL-N 105: NTSC 4.43 106: SECAM 107: PAL-60	
-	1	104	0: 640x480 60 1: 640x480 67 Mac13 2: 640x480 72 3: 640x480 75 4: 640x480 85 5: 720x400 70 6: 720x400 85 7: 800x600 56 8: 800x600 60 9: 800x600 72 10: 800x600 75 11: 800x600 85 12: 832x624 75 Mac16 13: 1024x768 60 14: 1024x768 70 15: 1024x768 75 16: 1024x768 75 Mac19 17: 1024x768 85	PIP Input status

Control Type		Function	Parameter	Description
Set	Get			
			18: 1024x800 84 Sun	
			19: 1152x864 75	
			20: 1152x870 75 Mac21	
			21: 1152x900 66 Sun	
			22: 1152x900 76 Sun	
			23: 1280x960 60	
			24: 1280x960 85	
			25: 1280x768 60	
			26: 1280x1024 60	
			27: 1280x1024 75	
			28: 1280x1024 76 Sun	
			29: 1280x1024 85	
			30: 1400x1050 60	
			31: 1400x1050 75	
			32: 1600x1200 60	
			33: 1680x1050 60	
			34: 1080i 60	
			35: 1080i 50	
			36: 1080p 60	
			37: 1080p 50	
			38: 720p60	
			39: 720p50	
			40: 480i	
			41: 480p	
			42: 576i	

Control Type		Function	Parameter	Description
Set	Get			
			43: 576p 98: other 99: No Input detected 101: NTSC 102: PAL 103: PAL-M 104: PAL-N 105: NTSC 4.43 106: SECAM 107: PAL-60	
0	1	105	512~3071	Advance Input Mode: HT
0	1	106	32~(HS-48)	Advance Input Mode: HW
0	1	107	80~(HT-HA-12)	Advance Input Mode: HS
0	1	108	640~1920 <= (HT-92)	Advance Input Mode: HA
0	1	109	0: Negative polarity 1: Positive polarity	Advance Input Mode: HP
0	1	110	384~2047	Advance Input Mode: VT
0	1	111	2~(HS-13)	Advance Input Mode: VW
0	1	112	15~(VT-VA-1)	Advance Input Mode: VS
0	1	113	480~1200 <= (VT-16)	Advance Input Mode: VA

Control Type		Function	Parameter	Description
Set	Get			
0	1	114	0: Negative polarity 1: Positive polarity	Advance Input Mode: VP
0	1	115	25 < OCLK < 165	Advance Input Mode: OCLK(Integer)
0	1	116	25 < OCLK < 165	Advance Input Mode: OCLK(Decimal)
0	1	117	0: Off 1: On	Advance Input Mode: Enable
0	-	118	n/a	Advance Input Mode: Apply
0	1	119	512~3071	Advance Output Mode: HT
0	1	120	32~(HS-48)	Advance Output Mode: HW
0	1	121	80~(HT-HA-12)	Advance Output Mode: HS
0	1	122	640~1920 <= (HT-92)	Advance Output Mode: HA
0	1	123	0: Negative polarity 1: Positive polarity	Advance Output Mode: HP
0	1	124	384~2047	Advance Output Mode: VT
0	1	125	2~(HS-13)	Advance Output Mode: VW
0	1	126	15~(VT-VA-1)	Advance Output Mode: VS
0	1	127	480~1200 <= (VT-16)	Advance Output Mode: VA
0	1	128	0: Negative polarity 1: Positive polarity	Advance Output Mode: VP

Control Type		Function	Parameter	Description
Set	Get			
0	1	129	25 < OCLK < 165	Advance Output Mode: OCLK(Integer)
0	1	130	25 < OCLK < 165	Advance Output Mode: OCLK(Decimal)
0	-	131	n/a	Advance Output Mode: Apply
0	-	132	n/a	Advance Output Mode: Set Current
0	1	133	0: Monitor 1: Splitter	HDMI Output Device

4 Error Code

Error code	Description
ERR 1	Unknown command
ERR 2	Unknown function
ERR 3	Unavailable function
ERR 4	Unknown control type
ERR 5	Unavailable get function
ERR 6	Unavailable set function
ERR 7	Unavailable parameter
ERR 8	Too few arguments