

**PTZOptics Direct HEX Commands for specific Pan Angles & Tilt Angles**

Angle (Degrees)	Pan		Angle (Degrees)	Tilt	
	Right (HEX)	Left (HEX)		Up (HEX)	Down (HEX)
HOME	0000	FFFF	HOME	0000	FFFF
10	0090	FF6F	10	0090	FF6F
20	0120	FEDF	20	0120	FEDF
30	01B0	FE4F	30	01B0	FE4F
40	0240	FDBF	40	0240	
50	02D0	FD24	50	02D0	
60	0360	FC9F	60	0360	
70	03F0	FC0F	70	03F0	
80	0480	FB7F	80	0480	
90	0510	FAEF	90	0510	
100	05A0	FA5F			
110	0630	F9CF			
120	06C0	F93F			
130	0750	F8B0			
140	07E0	F820			
150	0870	F790			
160	0900	F700			
170	0990	F670			

**PTZOptics Direct HEX Commands for specific Zoom levels**

PTZOptics 12X Zoom		PTZOptics 20X Zoom		PTZOptics 30X Zoom	
ZOOM Level	HEX	ZOOM Level	HEX	ZOOM Level	HEX
1x	0000	1x	0000	1x	0
2x	1A1A	2x	122D	2x	1121
3x	24A3	3x	1E16	3x	1BB5
4x	2A79	4x	2646	4x	22CB
5x	31F2	5x	2934	5x	27AF
6x	3436	6x	2B60	6x	2B4D
7x	3626	7x	2D00	7x	2E18
8x	3C22	8x	3333	8x	3056
9x	3D83	9x	3435	9x	3250
10x	3E86	10x	3525	10x	33CE
11x	3FB1	11x	3603	11x	356B
12x	4000	12x	36CE	12x	36BF
		13x	378E	13x	37F3
		14x	3845	14x	390F
		15x	38EC	15x	3A12
		16x	398E	16x	3AFC
		17x	39D8	17x	3BD4
		18x	3F21	18x	3C94
		19x	3F69	19x	3D3A
		20x	4000	20x	3D90
				21x	3DDE
				22x	3E2B
				23x	3E78
				24x	3EC5
				25x	3F03
				26x	3F40
				27x	3F7E
				28x	3FAC
				29x	3FE1
				30x	4000

**PTZOptics Direct HEX Commands for specific Shutter, Iris and Gain**

Shutter		Iris		Gain	
Shutter Speed	HEX	F No.	HEX	Gain (dB)	HEX
1/30	0	CLOSE	0	0	0
1/30	1	CLOSE	1	1	1
1/60	2	CLOSE	2	2	2
1/90	3	CLOSE	3	3	3
1/120	4	CLOSE	4	4	4
1/125	5	CLOSE	5	5	5
1/180	6	F11.0	6	6	6
1/250	7	F9.6	7	7	7
1/350	8	F8.0	8		
1/500	9	F6.8	9		
1/725	A	F5.6	A		
1/1000	B	F4.8	B		
1/1500	C	F4.0	C		
1/2000	D	F3.4	D		
1/3000	E	F2.8	E		
1/4000	F	F2.4	F		
1497496	10	F2.0	10		
1/10000	11	F1.8	11		