

VISCA Command Setting Values

Exposure control (1/2)

		59.94/29.97 mode	50/25 mode
Shutter Speed	15	1/10000	1/10000
	14	1/6000	1/6000
	13	1/4000	1/3500
	12	1/3000	1/2500
	11	1/2000	1/1750
	10	1/1500	1/1250
	0F	1/1000	1/1000
	0E	1/725	1/600
	0D	1/500	1/425
	0C	1/350	1/300
	0B	1/250	1/215
	0A	1/180	1/150
	09	1/125	1/120
	08	1/100	1/100
	07	1/90	1/75
	06	1/60	1/50
	05	1/30	1/25
	04	1/15	1/12
	03	1/8	1/6
	02	1/4	1/3
01	1/2	1/2	
00	1/1	1/1	

Iris	11	F1.6
	10	F2
	0F	F2.4
	0E	F2.8
	0D	F3.4
	0C	F4
	0B	F4.8
	0A	F5.6
	09	F6.8
	08	F8
	07	F9.6
	06	F11
	05	F14
	00	CLOSE

Gain	0F	50.0 dB (28 step)
	0E	46.4 dB (26 step)
	0D	42.8 dB (24 step)
	0C	39.3 dB (22 step)
	0B	35.7 dB (20 step)
	0A	32.1 dB (18 step)
	09	28.6 dB (16 step)
	08	25.0 dB (14 step)
	07	21.4 dB (12 step)
	06	17.8 dB (10 step)
	05	14.3 dB (8 step)
	04	10.7 dB (6 step)
	03	7.1 dB (4 step)
	02	3.6 dB (2 step)
01	0 dB (0 step)	

Gain Limit	0F	50.0 dB (28 step)
	0E	46.4 dB (26 step)
	0D	42.8 dB (24 step)
	0C	39.3 dB (22 step)
	0B	35.7 dB (20 step)
	0A	32.1 dB (18 step)
	09	28.6 dB (16 step)
	08	25.0 dB (14 step)
	07	21.4 dB (12 step)
	06	17.8 dB (10 step)
05	14.3 dB (8 step)	
04	10.7 dB (6 step)	

Exposure control (2/2)

Exposure Comp.	0E	+7	+10.5 dB
	0D	+6	+9 dB
	0C	+5	+7.5 dB
	0B	+4	+6 dB
	0A	+3	+4.5 dB
	09	+2	+3 dB
	08	+1	+1.5 dB
	07	0	0 dB
	06	-1	-1.5 dB
	05	-2	-3 dB
	04	-3	-4.5 dB
	03	-4	-6 dB
	02	-5	-7.5 dB
	01	-6	-9 dB
	00	-7	-10.5 dB

**Zoom Ratio and Zoom Position
(for reference)**

Optical Zoom Ratio	Optical Zoom Position Data
1×	0000
2×	16A1
3×	2063
4×	2628
5×	2A1D
6×	2D13
7×	2F6D
8×	3161
9×	330D
10×	3486
11×	35D7
12×	3709
13×	3820
14×	3920
15×	3AOA
16×	3ADD
17×	3B9C
18×	3C46
19×	3CDC
20×	3D60
21×	3DD4
22×	3E39
23×	3E90
24×	3EDC
25×	3F1E
26×	3F57
27×	3F8A
28×	3FB6
29×	3FDC
30×	4000

Digital Zoom Combine mode

Digital Zoom Ratio	Digital Zoom Position Data
1×	4000
2×	6000
3×	6A80
4×	7000
5×	7300
6×	7540
7×	76C0
8×	7800
9×	78C0
10×	7980
11×	7A00
12×	7AC0

Zoom Separate mode

Digital Zoom Ratio	Digital Zoom Position Data
1×	00
2×	80
3×	AA
4×	C0
5×	CC
6×	D5
7×	DB
8×	E0
9×	E3
10×	E6
11×	E8
12×	EB

Lens control

Zoom Position	0000 to 4000 to 7AC0 Wide end Optical Digital Tele end Tele end																
Focus Position	1000 to F000 Far end Near end																
Focus Near Limit	<table border="1"> <tr> <td>1000: Over Inf</td> <td rowspan="14">As the distance on the left will differ due to temperature characteristics, etc., use as approximate values. *The lower 1 byte is fixed at 00.</td> </tr> <tr><td>2000: 20 m</td></tr> <tr><td>3000: 10 m</td></tr> <tr><td>4000: 6 m</td></tr> <tr><td>5000: 4.2 m</td></tr> <tr><td>6000: 3.1 m</td></tr> <tr><td>7000: 2.5 m</td></tr> <tr><td>8000: 2.0 m</td></tr> <tr><td>9000: 1.65 m</td></tr> <tr><td>A000: 1.4 m</td></tr> <tr><td>B000: 1.2 m</td></tr> <tr><td>C000: 0.8 m</td></tr> <tr><td>D000: 30 cm (initial setting)</td></tr> <tr><td>E000: 11 cm</td></tr> <tr><td>F000: 1 cm</td></tr> </table>	1000: Over Inf	As the distance on the left will differ due to temperature characteristics, etc., use as approximate values. *The lower 1 byte is fixed at 00.	2000: 20 m	3000: 10 m	4000: 6 m	5000: 4.2 m	6000: 3.1 m	7000: 2.5 m	8000: 2.0 m	9000: 1.65 m	A000: 1.4 m	B000: 1.2 m	C000: 0.8 m	D000: 30 cm (initial setting)	E000: 11 cm	F000: 1 cm
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Temperature Reading Conversion Value (Reference Value)

Reading Value pq (hex)	Temperature Conversion Value (°C)
FB	-8 to -2
00	-3 to +3
0A	7 to 13
14	17 to 23
1E	27 to 33
28	37 to 43
32	47 to 53
3C	57 to 63

Wide/Tele Limit Setting

Wide/Tele Limit Setting Value	Wide Limit		Tele Limit	
	Zoom Position	Zoom Ratio	Zoom Position	Zoom Ratio
00	0000	1	4000	30
10	00C4	1.02	3F3B	25.5
20	0188	1.04	3E77	22.7
30	024C	1.06	3DB3	20.7
40	0310	1.08	3CEF	19.1
50	03D4	1.11	3C2B	17.8
60	0498	1.13	3B67	16.7
70	055C	1.15	3AA3	15.7
80	0620	1.18	39DF	14.8
90	06E4	1.2	391B	14
A0	07A8	1.23	3857	13.2
B0	086C	1.26	3793	12.5
C0	0930	1.28	36CF	11.8
D0	09F4	1.31	360B	11.2
E0	0AB8	1.34	3547	10.6
F0	0B7C	1.38	3483	10
FF	0C33	1.41	33CC	9.5

Register Setting

Register name	Register No.	Setting value		Setting value reflection timing*
VISCA Baud Rate	00	00 (Initial Setting)	9600 bps	Reflected after camera reset
		01	19200 bps	
		02	38400 bps	
		03	115200 bps	
Monitoring Mode	72	01 (Initial Setting)	1080i/59.94	Reflected after camera reset
		02	1080i/60	
		04	1080i/50	
		06	1080p/29.97	
		07	1080p/30	
		08	1080p/25	
		09	720p/59.94	
		0A	720p/60	
		0B	Reserved	
		0C	720p/50	
		0D	Reserved	
		0E	720p/29.97	
		0F	720p/30	
		10	Reserved	
		11	720p/25	
		12	Reserved	
13	1080p/59.94			
14	1080p/50			
15	1080p/60			
LVDS Mode	74	00 (Initial Setting)	Single output	Reflected after camera reset
		01	Double output	
Zoom Limit	50	00-FF (Initial Setting: 00)	Wide Limit (0: Disabled)	Reflected after camera reset
	51	00-FF (Initial Setting: 00)	Tele Limit (0: Disabled)	
D-Zoom Max	52	00-EB (Initial Setting: EB)	Max. digital zoom ratio = 256 ÷ (256-Value)	Reflected after camera reset
"StableZoom"	53	00 (Initial Setting: 00)	Off	Immediate reflection
		01	On	

* Timing to reflect register setting value changes

- Reflect after camera reset: After the setting value is changed, changes are reflected following camera reset by "Camera reset command" or "Camera power supply turned OFF and then ON again".
- Reflect immediately: Changes are reflected immediately after the setting value is changed.

Register name	Register No.	Setting value		Setting value reflection timing*
FocusTrace @ZoomDirect	54	00	Off	Reflected after camera reset
		01 (Initial Setting: 01)	On	
FocusOffset @DomeCover	55	00-FF (Initial Setting: 00)	00: None to FF: Max.	Reflected after camera reset
AE Parameter Change During VE On, Defog On	58	00	OFF	Immediate reflection
		01 (Initial Setting)	ON	
Auto Slow Shutter Limit	59	01	1/30	Immediate reflection
		02	1/15	
		03	1/8	
		04 (Initial Setting)	1/4	
		05	1/2	
		06	1/1	
		Extended Normal Shutter	5A	
01	Allowed up to 1/30			
02	Allowed up to 1/15			
03	Allowed up to 1/8			
04	Allowed up to 1/4			
05	Allowed up to 1/2			
06	Allowed up to 1/1			
Defog Limit	5B	00-FF (Initial Setting: FF)	Defog level Low Limit	Immediate reflection
	5C	00-FF (Initial Setting: FF)	Defog level Mid Limit	
	5D	00-FF (Initial Setting: FF)	Defog level High Limit	
Extended Mode	5F	00 (Initial Setting)	OFF	Immediate reflection
		bit: 0 Exposure compensation Extended 256 levels On/Off bit: 1 Aperture Extended 256 levels On/Off bit: 2 Color Gain/Hue Extended 256 levels On/Off bit: 3 Auto ICR Off → On setting enable On/Off * For all of bit, 1 is to activate, 0 is Off		

Others

AF Active Time ¹⁾	00	to	FF
AF Interval Time ¹⁾	00	to	FF
Spot AE X position	00	to	10
Spot AE Y position	00	to	0E
R Gain	00	to	FF
B Gain	00	to	FF
Aperture Control Level	00	to	0F
AE Response	01	to	30
AutoICR On → Off Threshold Level	00	to	1C
MD Threshold Level	00	to	FF
MD Interval Time ¹⁾	00	to	FF
MD Set Horizontal Position	00	to	11
MD Set Vertical Position	00	to	0F
Chroma Suppress setting level	00	to	03
Color Gain setting level	00	to	0E
Color Hue setting level	00	to	0E

¹⁾ Unit: One second