海思平台 VISCA 协议列表

FCB Camera Commands

该协议列表主要做了以下修改：

Command List

注意：

。。。。。。。。在“部分协议范围，默认值（说明）”栏中，蓝色的字体表示的是默认值说明。。。。。。。。

其余：

蓝色表示该协议没有实现功能，但有回复

红色表示该协议的附注说明（包括自定义）。

Command Set	Command	Command Packet	Comments	部分协议范围,默认值(说明)
AddressSet	Broadcast	88 30 01 FF	Address setting	----------
IF_Clear	Broadcast	88 01 00 01 FF	I/F Clesr	----------
CommandCancel	–	8x 2p FF	p: Socket No. (=1 or 2)	----------
CAM_Power	On	8x 01 04 00 02 FF	Power ON/OFF	没有该功能
	Off (Standby)	8x 01 04 00 03 FF		
CAM_Zoom	Stop	81 01 04 07 00 FF		
	Tele (Standard)	81 01 04 07 02 FF		
	Wide (Standard)	81 01 04 07 03 FF		
	Tele (Variable)	81 01 04 07 2p FF	p=0 (Low) to 7 (High)	
	Wide (Variable)	81 01 04 07 3p FF		
	Direct	81 01 04 47 0p 0q 0r 0s FF	pqrs: Zoom Position	
	Speed_Direct(新)	81 0A 04 47 0t 0p 0q 0r 0s FF	t:速度 0 – 7 pqrs: Zoom Position	自定义带速度的 Zoom_Direct
CAM_DZoom (新)	On	81 01 04 06 02 FF	Digital zoom ON/OFF	该功能与实际SONY有差异，主要差异在于数量级的不一样。。 Separate模式下，电子放大的范围为: 12X范围为 0 - 40 33X范围为 0 - 64 5X范围为0-64
	Off	81 01 04 06 03 FF		
	Combine Mode	81 01 04 36 00 FF	电子放大Combined模式	
	Separate Mode	81 01 04 36 01 FF	电子放大Separate模式	
	Stop	81 01 04 06 00 FF		
	Tele (Variable)	81 01 04 06 2p FF	Separate模式下可用	
	Wide (Variable)	81 01 04 06 3p FF		
	Direct	81 01 04 46 0p 0q 0r 0s FF	Separate模式下可用	
CAM_Focus	Stop	81 01 04 08 00 FF		----------
	Far (Standard)	81 01 04 08 02 FF		----------
	Near (Standard)	81 01 04 08 03 FF		----------
	Far (Variable)	81 01 04 08 2p FF	p=0 (Low) to 7 (High)	----------
	Near (Variable)	81 01 04 08 3p FF		----------
	Direct	81 01 04 48 0p 0q 0r 0s FF	pqrs: Focus Position	----------
	Auto Focus	81 01 04 38 02 FF	AF ON/OFF	----------
	Manual Focus	81 01 04 38 03 FF		----------

	Auto/Manual	81 01 04 38 10 FF		----------
	One Push Trigger	81 01 04 18 01 FF	One Push AF Trigger	实际测试One Push Trigger功能: 1.必须在手动聚焦下才能生效，生效时会启动一次聚焦---启动聚焦后就恢复手动聚焦的状态。 ---90 41 FF 90 51 FF 2.如果在自动聚焦下，回复90 61 41 FF
	Infinity	81 01 04 18 02 FF	Forced infinity	实际测试Infinity功能: 1.在自动聚焦和手动聚焦下均可以实现该功能，并且使用该功能，会自动变成手动聚焦，并且走到无穷远处。
	Near Limit(新)	81 01 04 28 0p 0q 0r 0s FF	pqrs: Focus Near Limit Position	该指令只做了5个档位, Pqrs：0000---1.5M 1000------2M 2000------3M 3000------6M 4000-----10M
AF Sensitivity	Normal	8x 01 04 58 02 FF	AF Sensitivity Normal /Low /high	与SONY的不太一样 默认值: Normal
	Low	8x 01 04 58 03 FF		
	High	8x 01 04 58 01 FF		
CAM_AFMode	Normal AF	8x 01 04 57 00 FF	AF Movement Mode	自动聚焦---自定义
CAM_ZoomFocus	Direct	8x 01 04 47 0p 0q 0r 0s 0t 0u 0v 0w	pqrs: Zoom Position tuvw: Focus Position	----------
CAM_Initialize	Lens	81 01 04 19 01 FF	Lens Initialization Start	----------
	Camera	81 01 04 19 03 FF	Camera reset	没有实现
CAM_WB	Auto	8x 01 04 35 00 FF	Normal Auto	默认值: Auto
	Indoor	8x 01 04 35 01 FF	Indoor mode	
	Outdoor	8x 01 04 35 02 FF	Outdoor mode	
	One Push WB	8x 01 04 35 03 FF	One Push WB mode	
	ATW	8x 01 04 35 04 FF	Auto Tracing White Balance	
	Manual	8x 01 04 35 05 FF	Manual Control mode	
	Manual2	8x 01 04 35 06 FF	Manual2 Control mode	
	钠灯（自定义）	8x 01 04 35 08 FF		自定义
	日光灯（自定义）	8x 01 04 35 09 FF		
	色温	8x 01 04 2a 0p 0q 0r 0s FF	需在WB模式为手动2的模式下设置	
CAM_RGain	Reset	8x 01 04 03 00 FF	Manual Control of R Gain	该指令仅在手动白平衡下有用。 范围 0 – 0xFF
	Up	8x 01 04 03 02 FF		
	Down	8x 01 04 03 03 FF		

	Direct	8x 01 04 43 00 00 0p 0q FF	pq: R Gain	默认值为58
CAM_BGain	Reset	8x 01 04 04 00 FF	Manual Control of B Gain	该指令仅在手动白平衡下有用。 范围0 – 0xFF 默认值为52
	Up	8x 01 04 04 02 FF		
	Down	8x 01 04 04 03 FF		
	Direct	8x 01 04 44 00 00 0p 0q FF	pq: B Gain	
CAM_AE	Full Auto	81 01 04 39 00 FF	Automatic Exposure mode	默认Full Auto
	Manual	81 01 04 39 03 FF	Manual Control mode	
	Shutter Priority	81 01 04 39 0A FF	Shutter Priority Automatic Exposure mode	
	Iris Priority	81 01 04 39 0B FF	Iris Priority Automatic Exposure mode	
	Bright	81 01 04 39 0D FF	Bright Mode (Manual control)	
CAM_SlowShutter	Auto	81 01 04 5A 02 FF	Auto Slow Shutter ON/OFF	默认为OFF
	OFF	81 01 04 5A 03 FF		
CAM_Shutter	Reset	81 01 04 0A 00 FF	Shutter Setting	仅在手动曝光和快门优先下可调（详见末尾的表格）。 默认值为0
	Up	81 01 04 0A 02 FF		
	Down	81 01 04 0A 03 FF		
	Direct	81 01 04 4A 00 00 0p 0q FF	pq: Shutter Position	
CAM_Iris	Reset	81 01 04 0B 00 FF	Iris Setting	仅在手动曝光和光圈优先下可调（详见末尾的表格）。 默认值为10
	Up	81 01 04 0B 02 FF		
	Down	81 01 04 0B 03 FF		
	Direct	81 01 04 4B 00 00 0p 0q FF	pq: Iris Position	
CAM_Gain	Reset	81 01 04 0C 00 FF	Gain Setting	仅在手动曝光下可调。(详见末尾的表格) 默认值为0
	Up	81 01 04 0C 02 FF		
	Down	81 01 04 0C 03 FF		
	Direct	81 01 04 4C 00 00 0p 0q FF	pq: Gain Position	
	Gain Limit	81 01 04 2C 0p FF	p: Gain Position	默认值为0x0F
CAM_Bright	Reset	8x 01 04 0D 00 FF	Bright Setting	仅在手动曝光和亮度优先下可调。（详见末尾的表格） 默认值11
	Up	8x 01 04 0D 02 FF		
	Down	8x 01 04 0D 03 FF		
	Direct	8x 01 04 4D 00 00 0p 0q FF	pq: Bright Position	
CAM_BackLight	On	81 01 04 33 02 FF	Back Light Compensation ON/OFF	默认值为关
	Off	81 01 04 33 03 FF		
CAM_WD(新)	On	81 01 04 3D 02 FF	Wide-D ON/OFF	新修改 默认为OFF
	Off	81 01 04 3D 03 FF		
CAM_WD_LEVEL	Direct	81 01 04 D3 0p FF	WD的等级（1-6）	新修改，默认值为1
CAM_Aperture	Reset	8x 01 04 02 00 FF	Aperture Control	锐度范围 0 – 15 白天默认值为 3 夜间默认值为 3
	Up	8x 01 04 02 02 FF		
	Down	8x 01 04 02 03 FF		
	Direct	8x 01 04 42 00 00 0p 0q FF	pq: Aperture Gain	
CAM_NR		8x 01 04 53 0p FF	p: NR Setting (0: OFF, level 1 to 5)	3d降噪 范围为0 – OFF 1 – AUTO

				2-5：level 默认值为 1 – AUTO
CAM_Gamma	—	8x 01 04 5B 0p FF	p: Gamma 的范围	Gamma值范围为0–4 白天默认值 0 夜间默认值 0
CAM_LR_Reverse	On	8x 01 04 61 02 FF	Mirror Image ON/OFF	镜像 默认为关
	Off	8x 01 04 61 03 FF		
CAM_Freeze	On	81 01 04 62 02 FF	Still Image ON/OFF	冻结 默认为关
	Off	81 01 04 62 03 FF		
CAM_PictureEffect	Off	8x 01 04 63 00 FF	Picture Effect Setting	默认：负片和B&W关
	Neg.Art	8x 01 04 63 02 FF		负片
	B&W	8x 01 04 63 04 FF		B&W
CAM_PictureFlip	On	8x 01 04 66 02 FF	Picture flip ON/OFF	翻转 默认为关
	Off	8x 01 04 66 03 FF		
CAM_ICR	On	8x 01 04 01 02 FF	Infrared Mode ON/OFF	----------
	Off	8x 01 04 01 03 FF		----------
CAM_AutoICR	On	81 01 04 51 02 FF	Auto dark-field mode On/Off	----------
	Off	81 01 04 51 03 FF		----------
CAM_Memory(新)	Reset	8x 01 04 3F 00 00 FF	p: Memory Number (=0 to 5)	只完成一个数据的复位功能
	Set	8x 01 04 3F 01 0p FF		
	Recall	8x 01 04 3F 02 0p FF		
	Set_new	8x 01 04 3F 01 0p 0q FF	pq：0x0~0xFF	
	Recall_new	8x 01 04 3F 02 0p 0q FF		
	delete	8x 01 04 3F 03 0p 0q FF		
CAM_CUSTOM	Reset	8x 01 04 3F 00 7F FF	Starts up in this mode when the power is turned on.	
	Set	8x 01 04 3F 01 7F FF		
	Recall	8x 01 04 3F 02 7F FF		
CAM_Display	On	8x 01 04 15 02 FF (8x 01 06 06 02 FF)	Display ON/OFF	该指令只是将OSD倍数显示开/关 默认为开
	Off	8x 01 04 15 03 FF (8x 01 06 06 03 FF)		
	On/Off	8x 01 04 15 10 FF (8x 01 06 06 10 FF)		
CAM_MultiLineTitle	Title Set1	8x 01 04 73 1L 00 nn pp qq 00 00 00 00 00 00 FF	L: Line Number, nn: H-position pp: Color, qq: Blink	无闪烁功能，颜色方面也有所差别
	Title Set2	8x 01 04 73 2L mm nn pp qq rr ss tt uu vv ww FF	L: Line Number, mnpqrstuvw: Setting of characters (1 to 10)	----------
	Title Set3	8x 01 04 73 3L mm nn pp qq rr ss tt uu vv ww FF	L: Line Number, mnpqrstuvw: Setting of characters (1 to 10)	----------
	Title Clear	8x 01 04 74 1p FF	Title Setting clear (p: 0 to a, f= all lines)	----------
	On	8x 01 04 74 2p FF	Title display On/Off (0 to a, f= all lines)	----------
	Off	8x 01 04 74 3p FF		----------
CAM_Mute	On	8x 01 04 75 02 FF	Muting ON/OFF	----------

	Off	8x 01 04 75 03 FF		----------
	On/Off	8x 01 04 75 10 FF		----------
CAM_IDWrite	—	8x 01 04 22 0p 0q 0r 0s FF	pqrs: Camera ID (=0000 to FF)	ID号的范围从0-FF 默认为1
CAM_RegisterValue	—	8x 01 04 24 mm 0p 0p FF	mm: Register No. (=00-7F) pp: Register Value (=00-7F)	主要是帧率切换指令，和波特率，详见附件
CAM_IAMGE_RESET	Direct	81 01 04 A0 01 FF	图像参数复位	01使能复位
CAM_Saturation （自定义）	Direct	81 01 04 A1 00 00 0p 0q FF	修改色度值	范围为 0 – 15 默认值为 9
CAM_Constrast （自定义）	Direct	81 01 04 A2 00 00 0p 0q FF	该指令主要是修改对比度的值。	Pq范围为 0 – 15 白天默认 7 夜间默认 7
CAM_NewBright （自定义）	Direct	81 01 04 A4 00 00 0p 0q FF	该指令主要修改一个新的亮度值，（与AE的bright分开）	Pq范围为 0 – 15 白天默认值为 8 夜间默认值为 8
CAM_Defog	Direct	81 01 04 A3 0p FF	P: 0 -0x0F	默认值为 0
CAM_2D	Direct	81 01 04 A5 0p FF	P:0-OFF， 1-ON	默认值为 OFF
CAM_HighLight	Direct	81 01 04 A6 0p FF	P:0-OFF ，1-ON	默认值为 OFF
CAM_Menu	Menu	8x 01 04 7F 02 FF	模拟按键 MENU 键	菜单开/关
	Up	8x 01 04 07 02 FF	菜单打开状态时，复用菜单上键	
	Down	8x 01 04 07 03 FF	菜单打开状态时，复用菜单下键	
	Left	8x 01 04 08 02 FF	菜单打开状态时，复用菜单左键	
	Right	8x 01 04 08 03 FF	菜单打开状态时，复用菜单右键	
CAM_MenuInq	菜单状态查询指令	81 09 04 7F FF	回复：90 50 02 FF菜单开状态 回复：90 50 03 FF菜单关状态	
CAM_Flick	OFF	8x 01 04 AA 00 FF	关掉flick模式	（新） 默认为1 50HZ
	50HZ	8x 01 04 AA 01 FF	打开flick功能 50HZ	
	60HZ	8x 01 04 AA 02 FF	打开flick功能 60HZ	
网络设置	IP设置	8x 01 04 AB 0p 0q 0r 0s 0m 0n 0x 0y FF	设置ip为pq.rs.mn.xy	参数保存 (DHCP=0) R/W
	掩码设置	8x 01 04 AC 0p 0q 0r 0s 0m 0n 0x 0y FF	设置掩码为pq.rs.mn.xy	参数保存 (DHCP=0) R/W
	网关设置	8x 01 04 AD 0p 0q 0r 0s 0m 0n 0x 0y FF	设置网关为pq.rs.mn.xy	参数保存 (DHCP=0) R/W
DHCP设置	DHCP关闭	8x 01 04 AE 00 FF	DHCP关闭	参数保存 R/W
	DHCP开启	8x 01 04 AE 01 FF	DHCP开启	参数保存 R/W
ARM version	STM32版本设定	8x 01 04 B0 02 FF		
	FPGA版本设定	8x 01 04 B1 02 FF		

	CYUSB3014 版本设定	8x 01 04 B2 02 FF		
Color adjust	Color adjust OFF	8x 01 04 B6 00 FF	Color adjust off	R/W
	Color adjust ON	8x 01 04 B6 01 FF	Color adjust on	R/W
	brightness balance OFF	8x 01 04 B7 00 FF	Keep Brightness	R/W
	brightness balance ON	8x 01 04 B7 01 FF	No keep Brightness	R/W
	Flare red	8x 01 04 B8 dat FF	Flare mode red value Default is 32	R/W Range：0~0x3F
	Flare green	8x 01 04 B9 dat FF	Flare mode green value Default is 32	R/W Range：0~0x3F
	Flare green	8x 01 04 BA dat FF	Flare mode blue value Default is 32	R/W Range：0~0x3F
Screen Mute	Mute Off	8x 01 04 BC 00 FF	关闭屏幕黑屏蓝屏	参数不保存
	Mute On(black)	8x 01 04 BC 01 FF	开启屏幕黑屏	参数不保存
	Mute Off(blue)	8x 01 04 BC 02 FF	开启屏幕蓝屏	参数不保存
CAM_Roate	Roate Off	8x 01 04 C0 00 FF	正常模式	参数保存 R/W
	Roate On	8x 01 04 C0 01 FF	倒装模式	参数保存 R/W
IR Code	IR code num	8x 01 04 C1 0p 0q 0r 0s 0m 0n 0x 0y FF	Code Range:0~0xFFFFFFFF Code num:0Xpqrsmnxy	TLK红外code 长按数据循环发送，间隔为(108ms)
Main Stream	resolution	8x 01 04 C2 00 0p 0q 0r 0s 0m 0n 0x 0y FF	Code Range:0~0xFFFF Col:pqrs Line:mnxy	Col 和 line 为主码流的视频大小
	Rate	8x 01 04 C2 01 0p 0q 0r 0s 0m 0n 0x 0y FF	Code Range:0~0xFFFFFFFF Code num:0Xpqrsmnxy	主码流编码率设置，一般设置 0~10240
Sub Stream	resolution	8x 01 04 C3 00 0p 0q 0r 0s 0m 0n 0x 0y FF	Code Range:0~0xFFFF Col:pqrs Line:mnxy	Col 和 line 为次码流的视频大小
	Rate	8x 01 04 C3 01 0p 0q 0r 0s 0m 0n 0x 0y FF	Code Range:0~0xFFFFFFFF Code num:0Xpqrsmnxy	次码流编码率设置，一般设置 0~10240
CAM Net Reset	Net reset para file delte	8x 01 04 C4 00 FF	网络模式复位的时候删除默认保存的文件参数	这个协议的作用是这样的，比如出厂的机器要使用固定的ip，则可以通过visca命令进行ip设置后再
	Net reset file para save	8x 01 04 C4 01 FF	网络模式复位的时候复位到当前值，比如ip设置为固定	

			192.168.1.75 (81 01 04 AE 00 FF 81 01 04 AB 0C 00 0A 08 00 01 04 0B FF 81 01 04 C4 01 FF)	发送这条命令，这样在使用web的网络中的完全恢复功能的时候不会复位到ip地址

修改一条没有协议的指令;
DB FE 00 00 D9
回复:
90 50 0p 0q 0r 0s 0m 0n FF
P:协议
1- PELCO_P
2- PELCO_D
3- VISCA
q -- sony地址码：1 - 7
rs --- pelcod地址码： 0 -255 拆成2个数
0r = (id >> 4) &0x0F;
0s = (id) &0x0F;

m:波特率；1- 4
1 - 2400
2 - 4800
3 - 9600
4 - 115200
n:帧率，与提供的数值协议一样。
0:1080P59.94
1:1080P50
2:1080I59.94
3:1080I50
4:1080P29.97
5:1080P25
6:720P59.94
7:720P50
8:720P29.97
9:720P25

Inquiry Command List

回复部分与功能部分相对应，蓝色字体的指令，由于功能没有实现，回复是固定的。
红色部分表示自定义的回复指令

Inquiry Command	Command Packet	Inquiry Packet	Comments
CAM_PowerInq	8x 09 04 00 FF	y0 50 02 FF	On
		y0 50 03 FF	Off (Standby)
CAM_ZoomPosInq	8x 09 04 47 FF	y0 50 0p 0q 0r 0s FF	pqrs: Zoom Position
CAM_DzoomModeInq	8x 09 04 06 FF	y0 50 02 FF	D-Zoom On
		y0 50 03 FF	D-Zoom Off

CAM_DzoomC/SmodeInq	8x 09 04 36 FF	y0 50 00 FF	Combine Mode
		y0 50 01 FF	Separate Mode
CAM_DzoomPosInq	8x 09 04 46 FF	y0 50 00 00 0p 0q FF	pq: D-Zoom Position
CAM_FocusModeInq	8x 09 04 38 FF	y0 50 02 FF	Auto Focus
		y0 50 03 FF	Manual Focus
CAM_FocusPosInq	8x 09 04 48 FF	y0 50 0p 0q 0r 0s FF	pqrs: Focus Position
CAM_FocusNearLimitInq	8x 09 04 28 FF	y0 50 0p 0q 0r 0s FF	pqrs: Focus Near Limit Position
CAM_AFSensitivityInq	8x 09 04 58 FF	y0 50 01 FF	AF Sensitivity High
		y0 50 02 FF	AF Sensitivity Normal
		y0 50 03 FF	AF Sensitivity Low
CAM_AFModeInq	8x 09 04 57 FF	y0 50 00 FF	Normal AF
		y0 50 01 FF	Interval AF
		y0 50 02 FF	Zoom Trigger AF
CAM_AFTimeSettingInq	8x 09 04 27 FF	y0 50 0p 0q 0r 0s FF	pq: Movement Time, rs: Interval
CAM_IRCorrectionInq	8x 09 04 11 FF	y0 50 02 FF	Standard
		y0 50 03 FF	IR Light
CAM_WBModeInq	8x 09 04 35 FF	y0 50 00 FF	Auto
		y0 50 01 FF	In Door
		y0 50 02 FF	Out Door
		y0 50 03 FF	One Push WB
		y0 50 04 FF	ATW
		y0 50 05 FF	Manual
		y0 50 06 FF	Outdoor Auto
		y0 50 08 FF	钠灯（自定义）
		y0 50 09 FF	日光灯（自定义）
CAM_RgainInq	8x 09 04 43 FF	y0 50 00 00 0p 0q FF	pq: R Gain
CAM_BgainInq	8x 09 04 44 FF	y0 50 00 00 0p 0q FF	pq: B Gain
CAM_AEModeInq	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
		y0 50 0D FF	Bright
CAM_SlowShutterModeInq	8x 09 04 5A FF	y0 50 02 FF	Auto
		y0 50 03 FF	Manual
CAM_ShutterPosInq	8x 09 04 4A FF	y0 50 00 00 0p 0q FF	pq: Shutter Position
CAM_IrisPosInq	8x 09 04 4B FF	y0 50 00 00 0p 0q FF	pq: Iris Position
CAM_GainPosInq	8x 09 04 4C FF	y0 50 00 00 0p 0q FF	pq: Gain Position
CAM_GainLimitInq	8x 09 04 2C FF	y0 50 0q FF	p: Gain Limit
CAM_BrightPosInq	8x 09 04 4D FF	y0 50 00 00 0p 0q FF	pq: Bright Position
CAM_ExpCompModeInq	8x 09 04 3E FF	y0 50 02 FF	On
		y0 50 03 FF	Off
CAM_ExpCompPosInq	8x 09 04 4E FF	y0 50 00 00 0p 0q FF	pq: ExpComp Position
CAM_BackLightModeInq	8x 09 04 33 FF	y0 50 02 FF	On
		y0 50 03 FF	Off
CAM_SpotAEModeInq	8x 09 04 59 FF	y0 50 02 FF	On

		y0 50 03 FF	Off
CAM_SpotAEPosInq	8x 09 04 29 FF	y0 50 0p 0q 0r 0s FF	pq: X position, rs: Y position
CAM_AE_ResponseInq	8x 09 04 5D FF	y0 50 pp FF	pp: 01 to 20 (hex)
CAM_WDModeInq	8x 09 04 3D FF	y0 50 02 FF	On Wide-D
		y0 50 03 FF	Off
CAM_WDParameterInq	8x 09 04 2D FF	y0 50 0p FF	查询宽动态的等级 1-6（仿菜单）
CAM_WDAlarmReplyInq	8x 09 04 3B FF	y0 50 02 FF	On
		y0 50 03 FF	Off
CAM_ApertureInq	8x 09 04 42 FF	y0 50 00 00 0p 0q FF	pq: Aperture Gain
CAM_HRModeInq	8x 09 04 52 FF	y0 50 02 FF	On (Hi-Resolution)
		y0 50 03 FF	Off
CAM_NRModeInq	8x 09 04 53 FF	y0 50 0p FF	Noise Reduction p: 0 to 5
CAM_GammaInq	8x 09 04 5B FF	y0 50 0p FF	Gamma p: 0 to 5
CAM_HighSensitivityInq	8x 09 04 5E FF	y0 50 02 FF	On
		y0 50 03 FF	Off
CAM_LR_ReverseModeInq	8x 09 04 61 FF	y0 50 02 FF	On
		y0 50 03 FF	Off
CAM_FreezeModeInq	8x 09 04 62 FF	y0 50 02 FF	On
		y0 50 03 FF	Off
CAM_PictureEffectModeInq	8x 09 04 63 FF	y0 50 00 FF	Off
		y0 50 02 FF	Neg.Art
		y0 50 04 FF	B&W
CAM_PictureFlipModeInq	8x 09 04 66 FF	y0 50 02 FF	On
		y0 50 03 FF	Off
CAM_ICRModeInq	8x 09 04 01 FF	y0 50 02 FF	On
		y0 50 03 FF	Off
CAM_AutoICRModeInq	8x 09 04 51 FF	y0 50 02 FF	On
		y0 50 03 FF	Off
CAM_AutoICRThresholdInq	8x 09 04 21 FF	y0 50 00 00 0p 0q FF	pq: ICR ON OFF Threshold Level
CAM_AutoICRAlarmReplyInq	8x 09 04 31 FF	y0 50 02 FF	On
		y0 50 03 FF	Off
CAM_MemoryInq	8x 09 04 3F FF	y0 50 pp FF	pp: Memory number recalled last
CAM_MemSaveInq	8x 09 04 23 0X FF	y0 50 0p 0p 0q 0q FF	X: 00 to 07 (Address) ppqq: 0x0000 to 0xFFFF (Data)
CAM_DisplayModeInq	8x 09 04 15 FF (8x 09 06 06 FF)	y0 50 02 FF	On
		y0 50 03 FF	Off
CAM_MuteModeInq	8x 09 04 75 FF	y0 50 02 FF	On
		y0 50 03 FF	Off
CAM_PrivacyDisplayInq	8x 09 04 77 FF	y0 50 pp pp pp pp FF	pp pp pp pp: Mask Display (0: OFF, 1: ON)
CAM_PrivacyPanTiltInq	8x 09 04 79 FF	y0 50 0p 0p 0p 0q 0q 0q FF	ppp: Pan qqq: Tilt
CAM_PrivacyPTZInq	8x 09 04 7B mm FF	y0 50 0p 0p 0p 0q 0q 0q 0r 0r 0r 0r FF	mm: Mask Settings ppp: Pan qqq: Tilt rrr: Zoom
CAM_PrivacyMonitorInq	8x 09 04 6F FF	y0 50 pp pp pp pp FF	pp pp pp pp: Mask is displayed now.
CAM_KeyLockInq	8x 09 04 17 FF	y0 50 00 FF	Off
		y0 50 02 FF	On

CAM_IDInq	8x 09 04 22 FF	y0 50 0p 0q 0r 0s FF	pqrs: Camera ID
CAM_VersionInq	8x 09 00 02 FF	y0 50 00 20 0p 0q 0r 0s FF	pqrs: code version
CAM_AlarmInq	8x 09 04 6B FF	y0 50 02 FF	On
		y0 50 03 FF	Off
CAM_AlarmModeInq	8x 09 04 6C FF	y0 50 pp FF	pp: Alarm Mode
CAM_AlarmDayNightLevelInq	8x 09 04 6D FF	y0 50 0p 0p 0p 0q 0q 0q 0r 0r 0r FF	ppp: Day judgement level setting qqq: Night judgement level setting rrr: Current Automatic Exposure level setting
CAM_AlarmDetectLevelInq	8x 09 04 6E FF	y0 50 01 FF	Detection level “High”
		y0 50 00 FF	Detection level “Low”
CAM_MDModeInq	8x 09 04 1B FF	y0 50 02 FF	On
		y0 50 03 FF	Off
CAM_MDFunctionInq	8x 09 04 1C FF	y0 50 0m 0n 0p 0q FF	m: Display mode n: Detection Frame Set (0 to F) pq: Threshold Level (0 to FF) rs: Interval Time set (0 to FF)
CAM_MDWindowInq	8x 09 04 1D 0m FF	y0 50 0p 0q 0r 0s FF	m: Select Detection Frame (0, 1, 2, 3) p: Start Horizontal Position (00 to 0B) q: Start Vertical Position (00 to 07) r: Stop Horizontal Position (01 to 0C) s: Stop Vertical Position (01 to 08)
CAM_ContinuousZoomPosReplyModeInq	8x 09 04 69 FF	y0 50 02 FF	On
		y0 50 03 FF	Off
CAM_ReplyIntervalTimeInq	8x 09 04 6A FF	y0 50 00 00 0p 0p FF	pp: Interval Time
CAM_RegisterValueInq	8x 09 04 24 mm FF	y0 50 0p 0p ff	mm: Register No. (00 to 7F) pp: Register Value (00 to FF)
CAM_ColorEnhanceInq	8x 09 04 20 FF	y0 50 mm nn pp qq rr FF	mm: First byte from the top threshold value nn: Second byte from the top threshold value pp: Third byte from the top threshold value qq: Color specification for high-intensity rr: Color specification for low-intensity Colors 0: Yellow, 1: Cyan, 2: Green, 3: White, 4: Magenta, 5: Red, 6: Blue, 7: Black, 8: Gray
	8x 09 04 50 FF	y0 50 02 FF	On
		y0 50 03 FF	Off
CAM_ChromaSuppressInq	8x 09 04 5F FF	y0 50 pp FF	pp: Chroma Suppress setting level
CAM_ColorGainInq	8x 09 04 49 FF	y0 50 00 00 00 0p FF	p: Color Gain setting 0h (60%) to Eh (200%)
CAM_ColorHueInq	8x 09 04 4F FF	y0 50 00 00 00 0p FF	p: Color Hue setting 0h (− 14 degrees) to Eh (+ 14 degrees)
CAM_TempInq	8x 09 04 68 FF	Y0 50 00 00 0p 0q FF	pq: Temperature *Lens temperature
CAM_SaturationInq	8x 09 04 A1 FF	y0 50 00 00 0p 0q FF	pq: saturation position
CAM_ConstrastInq	81 09 04 A2 FF	y0 50 00 00 0p 0q FF	pq: 对比度值
CAM_NewBirghtInq	81 09 04 A4 FF	y0 50 00 00 0p 0q FF	Pq: 亮度值 白天—10
CAM_DefogInq	8x 09 04 A3 FF	Y0 50 0p FF	P:等级
CAM_2DInq	8x 09 04 A5 FF	Y0 50 0p FF	P: 0 – OFF 1—ON
CAM_HighLightInq	8x 09 04 A6 FF	Y0 50 0p FF	P: 0 – OFF 1—ON
CAM_FrameInq	8x 09 04 B1 FF	Y0 50 0p FF	P: 0:25 1:50 2:30 3:60

CAM_PrivacyDisplayInq	8x 09 04 77 FF	y0 50 pp pp pp pp FF	pp pp pp pp: Mask Display (0: OFF, 1: ON)
CAM_PrivacyPanTiltInq	8x 09 04 79 FF	y0 50 0p 0p 0p 0q 0q 0q FF	ppp: Pan qqq: Tilt
CAM_PrivacyPTZInq	8x 09 04 7B mm FF	y0 50 0p 0p 0p 0q 0q 0q 0r 0r 0r 0r FF	mm: Mask Settings ppp: Pan qqq: Tilt rrrr: Zoom
CAM_PrivacyMonitorInq	8x 09 04 6F FF	y0 50 pp pp pp pp FF	pp pp pp pp: Mask is displayed now.

IP和掩码切换指令:

IP设置:81 01 04 AB 0p 0q 0r 0s 0m 0n 0x 0y FF

设置ip 为pq.rs.mn.xy

IP查询：81 09 04 AB FF

查询ip --- 90 50 0p 0q 0r 0s 0m 0n 0x 0y FF

掩码设置:81 01 04 AC 0p 0q 0r 0s 0m 0n 0x 0y FF

设置掩码 为pq.rs.mn.xy

掩码查询：81 09 04 AC FF

查询掩码 --- 90 50 0p 0q 0r 0s 0m 0n 0x 0y FF

CAM_Main StreamInq （resolution）	8x 09 04 C2 00 FF	y0 50 0p 0q 0r 0s 0m 0n 0x 0y FF	Code Range:0~0xFFFF Col:pqrs Line:mnxy
CAM_Main StreamInq （Rate）	8x 09 04 C2 01 FF	y0 50 0p 0q 0r 0s 0m 0n 0x 0y FF	Code Range:0~0xFFFFFFFF Code num:0Xpqrsmnxy
CAM_Sub StreamInq （resolution）	8x 09 04 C3 01 FF	y0 50 0p 0q 0r 0s 0m 0n 0x 0y FF	Code Range:0~0xFFFF Col:pqrs Line:mnxy
CAM_Sub StreamInq （Rate）	8x 09 04 C3 01 FF	y0 50 0p 0q 0r 0s 0m 0n 0x 0y FF	Code Range:0~0xFFFFFFFF Code num:0Xpqrsmnxy

附注:

81 01 04 24 72 0p 0q FF

帧率查询	**Register No.72**	**Value**	
		01	1080i/60 (Frame out: 30PsF)
		04	1080i/50 (Frame out: 25PsF)
		2E（自定义）	1080p/60
		2F（自定义）	1080p/50
		06	1080p/30
		08	1080p/25
		09	720p/60
		0C	720p/50
		0E	720p/30
		11	720p/25
		1D	4K/30
		1E	4K/25

81 01 04 24 52 0p 0q FF

E-Zoom Max (D-Zoom Max)	Register No.52	Value	
		00-FF (Default value: EB)	Max. digital zoom ratio = 256 ÷ (256-Value)

VISCA Command Setting Values
Exposure control (1/2)

Shutter Speed		**60/30bpf**	**50/25mode**
	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 (与SONY协议不一致，从0x00-0x0D)			
	0D	F1.8	
	0C	F2	
	0B	F2.4	
	0A	F2.8	
	09	F3.4	
	08	F4	
	07	F4.8	
	06	F5.6	
	05	F6.8	
	04	F8	
	03	F9.6	
	02	F11	
	01	F14	
	00	CLOSE	

Exposure control (2/2)

		IRIS	GAIN
Bright (与SONY 协议不一致，从 0x00-0x1B)	1B	F1.8	+28 dB
	1A	F1.8	+26 dB
	19	F1.8	+24 dB
	18	F1.8	+22 dB
	17	F1.8	+20 dB
	16	F1.8	+18 dB
	15	F1.8	+16 dB
	14	F1.8	+14 dB
	13	F1.8	+12 dB
	12	F1.8	+10 dB
	11	F1.8	+8 dB
	10	F1.8	+6 dB
	0F	F1.8	+4 dB
	0E	F1.8	+2 dB
	0D	F1.8	0 dB
	0C	F2	0 dB
	0B	F2.4	0 dB
	0A	F2.8	0 dB
	09	F3.4	0 dB
	08	F4	0 dB
	07	F4.8	0 dB
	06	F5.6	0 dB
	05	F6.8	0 dB
	04	F8	0 dB
	03	F9.6	0 dB
	02	F11	0 dB
	01	F14	0 dB
	00	CLOSE	0 dB

Gain	0F	+30 dB
	0E	+28 dB
	0D	+26 dB
	0C	+24 dB
	0B	+22 dB
	0A	+20 dB
	09	+18 dB
	08	+16 dB
	07	+14 dB
	06	+12 dB
	05	+10 dB
	04	+8 dB
	03	+6 dB
	02	+4 dB
	01	+2 dB
	00	0 dB
Gain Limit	0F	+24 dB
	0E	+23 dB
	0D	+22 dB
	0C	+21 dB
	0B	+20 dB
	0A	+19 dB
	09	+17 dB
	08	+16 dB
	07	+14 dB
	06	+11 dB
	05	+7 dB
	04	+0 dB

Title Setting

Line number	00 to 0A	
H-position	00 to 1F	
Blink	00: Dose not blink	
	01: Blinks	
Color	00	White
	01	Yellow
	02	Violet
	03	Red
	04	Cyan
	05	Green
	06	Blue

00	01	02	03	04	05	06	07
A	B	C	D	E	F	G	H
08	09	0a	0b	0c	0d	0e	0f
I	J	K	L	M	N	O	P
10	11	12	13	14	15	16	17
Q	R	S	T	U	V	W	X
18	19	1a	1b	1c	1d	1e	1f
Y	Z			?	!	1	2
20	21	22	23	24	25	26	27
3	4	5	6	7	8	9	0
28	29	2a	2b	2c	2d	2e	2f
30	31	32	33	34	35	36	37
38	39	3a	3b	3c	3d	3e	3f
40	41	42	43	44	45	46	47
48	49	4a	4b	4c	4d	4e	4f
		:		.	,	/	-

Digital Zoom Combine mode

Digital Zoom Ratio	Digital Zoom Position Data
×1	4000
×1.25	5000
×1.5	6000
×1.75	7000
×2	7AC0