

[SRG-X40UH / H40UH]

UVC Command List

25th July, 2022

CONTENTS

1. Command List	2
1.1. Camera Terminal Descriptor	2
1.2. Processing Unit Descriptor	3
2. UVC / VISCA command table.....	4
2.1. Camera Terminal Descriptor	4
2.2. Processing Unit Descriptor	17
3. VISCA Command Values.....	25

1. Command List

1.1. Camera Terminal Descriptor

bmControl	
D0: Scanning Mode	Not support
D1: Auto-Exposure Mode	Support
D2: Auto-Exposure Priority	Not support
D3: Exposure Time (Absolute)	Support
D4: Exposure Time (Relative)	Not support
D5: Focus (Absolute)	Support
D6: Focus (Relative)	Not support
D7: Iris (Absolute)	Support
D8: Iris (Relative)	Support
D9: Zoom (Absolute)	Support
D10: Zoom (Relative)	Not support
D11: PanTilt (Absolute)	Support
D12: PanTilt (Relative)	Support
D13: Roll (Absolute)	Not support
D14: Roll (Relative)	Not support
D15: Reserved	Not support
D16: Reserved	Not support
D17: Focus, Auto	Support
D18: Privacy	Support
D19: Focus, Simple	Not support
D20: Window	Not support
D21: Region of Interest	Not support
D22 – D23: Reserved, set to zero	

[SRG-X40UH/H40UH] UVC command list

1.2. Processing Unit Descriptor

bmControl	
D0: Brightness	Support
D1: Contrast	Not support
D2: Hue	Not support
D3: Saturation	Not support
D4: Sharpness	Support
D5: Gamma	Not support
D6: White Balance Temperature	Support
D7: White Balance Component	Not support
D8: Backlight Compensation	Support
D9: Gain	Support
D10: Power Line Frequency	Not support
D11: Hue, Auto	Not support
D12: White Balance Temperature, Auto	Support
D13: White Balance Component, Auto	Not support
D14: Digital Multiplier	Not support
D15: Digital Multiplier Limit	Not support
D16: Analog Video Standard	Not support
D17: Analog Video Lock Status	Not support
D18: Contrast, Auto	Not support
D19 – D23: Reserved. Set to zero.	

2. UVC / VISCA command table

2.1. Camera Terminal Descriptor

UVC					VISCA	
Control	Field	Description	wLength	Request	Command Packet /Fixed Value	
D0: Scanning Mode	bScanningMode	0: Interlaced 1: Progressive	1	GET_CUR		
				GET_INFO		
				SET_CUR		
D1: Auto-Exposure Mode	bAutoExposureMode	D0: Manual Mode D1: Auto Mode D2: Shutter Priority Mode D3: Aperture Priority Mode	1	GET_DEF	None	D1: Auto Mode → 8x 01 04 39 00 FF (Full. Auto)
				GET_CUR	Yes	CAM_AE_ModelInq: 8x 09 04 39 FF → y0 50 03 FF : Manual y0 50 00 FF : Full.Auto y0 50 0A FF : Shutter.Priority y0 50 0B FF : Iris.Priority
				GET_RES	None	0x0F
				GET_INFO	None	
				SET_CUR	Yes	D0: Manual : 8x 01 04 39 03 FF D1: Full Auto: 8x 01 04 39 00 FF D2: Shutter Priority: 8x 01 04 39 0A FF D3: Iris Priority: 8x 01 04 39 0B FF
D2: Auto-Exposure Priority	bAutoExposurePriority	The setting for the attribute of the addressed AutoExposure Priority control.	1	GET_CUR		
				SET_CUR		

[SRG-X40UH/H40UH] UVC command list

UVC				VISCA	
Control	Field	Description	wLength	Request	Command Packet /Fixed Value
D3: Exposure Time (Absolute)	dwExposure Time Absolute	0: Reserved 1: 0.0001 sec ... 100000: 10 sec ...	4	GET_DEF	None initial value in Shutter Priority Mode is 1/60(=167us) →8x 01 04 4A 00 00 00 06 FF
				GET_CUR	Yes CAM_ShutterPosInq: 8x 09 04 4A FF →y0 50 00 00 0p 0p FF pp: Shutter Position
				GET_MIN	None -14
				GET_MAX	None 0
				GET_RES	None 1
				GET_INFO	None
				SET_CUR	Yes 8x 01 04 4A 00 00 0p 0p FF pp: Shutter Position Refer to the VISCA Command Values (SHUTTER / MIN SHUTTER) section
D4: Exposure Time (Relative)	bExposureTimeRelative	0: default 1: incremented by 1 step 0xFF: decremented by 1 step	1	GET_CUR	
				GET_INFO	
				SET_CUR	

[SRG-X40UH/H40UH] UVC command list

UVC					VISCA		
Control	Field	Description	wLength	Request	Command Packet /Fixed Value		
D5: Focus (Absolute)	wFocusAbsolute	0: default 1: incremented by 1 step 0xFF: decremented by 1 step	2	GET_DEF	None	350	
				GET_CUR	Yes	CAM_FocusPosInq: 8x 09 04 48 FF → y0 50 0p 0q 0r 0s FF pqr:..Focus.Position	
				GET_MIN	Yes	CAM_FocusNearLimitInq: 8x 09 04 28 FF → y0 50 0p 0q 0r 0s FF pqr:..Focus.Near.Limit.Position	
				GET_MAX	None		
				GET_INFO	None		
				GET_RES	None	1	
				SET_CUR	Yes	8x 01 04 48 0p 0q 0r 0s FF pqr: Focus Position Refer to the VISCA Command Values (FOCUS POSITION) section	
D6 : Focus (Relative)	bFocusRelative	0: Stop 1: Focus Near direction 0xFF: Focus Infinite direction	1	GET_DEF			
				GET_CUR			
				GET_MIN			
				GET_MAX			
				GET_INFO			
				GET_RES			
				SET_CUR			
	bSpeed	Speed for the control change		1	GET_DEF		
					GET_CUR		
					GET_MIN		
					GET_MAX		
					GET_INFO		
					GET_RES		
					SET_CUR		

[SRG-X40UH/H40UH] UVC command list

UVC					VISCA	
Control	Field	Description	wLength	Request	Command Packet /Fixed Value	
D7: Iris (Absolute)	wIrisAbsolute	The setting for the attribute of the addressed Iris (Absolute) Control.	2	GET_DEF	None	200(F2.0)
				GET_CUR	Yes	CAM_IrisPosInq: 8x 09 04 4B FF → y0 50 00 00 0p 0q FF pq:.Iris.Position
				GET_MIN	None	0
				GET_MAX	None	250
				GET_INFO	None	
				GET_RES	None	10
				SET_CUR	Yes	8x 01 04 4B 00 00 0p 0q FF pq: Iris Position Refer to the VISCA Command Values (IRIS POSITION) section
D8 : Iris (Relative)	bIrisRelative	0: Default 1: Iris is opened by 1 step. 0xFF: Iris is closed by 1 step.	1	GET_CUR	None	CAM_IrisPosInq: 8x.09.04.4B.FF → y0.50.00.00.0p.0q.FF pq:.Iris.Position
				GET_INFO	None	
				SET_CUR	Yes	Reset: 8x 01 04 0B 00 FF Up: 8x 01 04 0B 02 FF Down: 8x 01 04 0B 03 FF
D9: Zoom (Absolute)	wObjectiveFocalLength	The value of Z cur (see section 2.4.2.5.1 "Optical Zoom".)	2	GET_DEF	None	8x 01 04 47 00 00 00 00 FF: Wide End
				GET_CUR	Yes	CAM_ZoomPosInq: 8x.09.04.47.FF → y0.50.0p.0q.0r.0s.FF pqr:.Zoom.Position
				GET_MIN	None	0
				GET_MAX	None	201
				GET_INFO	None	
				GET_RES	None	1
				SET_CUR	Yes	8x 01 04 47 0p 0q 0r 0s FF pqr: Zoom Position Refer to the VISCA Command Values (ZOOM POSITION) section

[SRG-X40UH/H40UH] UVC command list

D10: Zoom (Relative)	bZoom	0: Stop 1: moving to telephoto direction 0xFF: moving to wide-angle direction	1	GET_DEF		
				GET_CUR		
				GET_MIN		
				GET_MAX		
				GET_INFO		
				GET_RES		
				SET_CUR		
	bDigitalZoom	0: Digital Zoom OFF 1: Digital Zoom On	1	GET_DEF		
				GET_CUR		
				GET_MIN		
				GET_MAX		
				GET_INFO		
				GET_RES		
				SET_CUR		
	bSpeed	Speed for the control change	1	GET_DEF		
				GET_CUR		
				GET_MIN		
				GET_MAX		
				GET_INFO		
				GET_RES		
				SET_CUR		

[SRG-X40UH/H40UH] UVC command list

UVC					VISCA	
Control	Field	Description	wLength	Request	Command Packet /Fixed Value	
D11: PanTilt (Absolute)	dwPanAbsolute	The setting for the attribute of the addressed Pan (Absolute) Control.	4	GET_DEF	None	0
				GET_CUR	Yes	Pan-tiltModelInq 8x 09 06 10 FF → y0 50 pq rs FF pqrs:.Pan-tilt.Status Pan-tiltPosInq 8x.09.06.12.FF → y0 50 0w 0w 0w 0w 0z 0z 0z 0z FF wwww.=.Pan.Position. zzzz.....=.Tilt.Position
				GET_MIN	None	-612000
				GET_MAX	None	612000
				GET_INFO	None	
				GET_RES	None	1
				SET_CUR	Yes	8x 01 06 02 VV WW 0Y 0Y 0Y 0Y 0Z 0Z 0Z 0Z FF VV:...Pan.Speed Setting.0x01 (Low Speed) ~.0x18. (High Speed). WW:...Tilt.Speed Setting.0x01 (Low Speed) ~.0x14. (High Speed) YYYY:...Pan.Position.EC00.~.1400. (CENTER.0000). ZZZZ:...Tilt.Position..FB00.~.0500. (CENTER.0000)

[SRG-X40UH/H40UH] UVC command list

	dwTiltAbsolute	The setting for the attribute of the addressed Tilt (Absolute) Control.	4	GET_DEF	None	0
				GET_CUR	Yes	Pan-tiltModelInq 8x 09 06 10 FF → y0 50 pq rs FF pqrs:.Pan-tilt.Status Pan-tiltPosInq 8x 09 06 12 FF → y0 50 0w 0w 0w 0w 0z 0z 0z 0z FF wwww.=.Pan.Position. zzzz.....=.Tilt.Position
				GET_MIN	None	Image Flip Off: -72000 Image Flip On: -324000
				GET_MAX	None	Image Flip Off: 324000 Image Flip On: 72000
				GET_INFO	None	
				GET_RES	None	1
				SET_CUR	Yes	8x 01 06 02 VV WW 0Y 0Y 0Y 0Y 0Z 0Z 0Z 0Z FF VV:..Pan.Speed Setting.0x01 (Low Speed) ~.0x18. (High Speed). WW:..Tilt.Speed Setting.0x01 (Low Speed) ~.0x14. (High Speed) YYYY:..Pan.Position.EC00.~.1400. (CENTER.0000). ZZZZ:..Tilt.Position..FB00.~.0500. (CENTER.0000)

[SRG-X40UH/H40UH] UVC command list

UVC					VISCA	
Control	Field	Description	wLength	Request	Command Packet /Fixed Value	
D12: PanTilt (Relative)	bPanRelative	0: Stop 1: moving to clockwise direction 0xFF: moving to counter clockwise direction	1	GET_DEF	None	0
				GET_CUR	None	Pan-tiltPosInq 8x 09 06 12 FF → y0 50 0w 0w 0w 0w 0z 0z 0z 0z FF www.=.Pan.Position. zzzz.....=.Tilt.Position
				GET_MIN	None	0
				GET_MAX	None	0
				GET_INFO	None	
				GET_RES	None	0
				SET_CUR	Yes	Stop: 8x 01 06 01 VV WW 03 03 FF Left: 8x 01 06 01 VV WW 01.03 FF Right: 8x 01 06 01 VV WW 02 03 FF VV: .Pan.Speed Setting.0x01 (Low Speed) ~.0x18. (High Speed). WW: Tilt.Speed Setting.0x01 (Low Speed) ~.0x14. (High Speed)
	bPanSpeed	Speed of the Pan movement	1	GET_DEF	None	0x18: MAX
				GET_CUR	None	Return PAN Speed Value
				GET_MIN	None	0x01
				GET_MAX	None	0x18
				GET_INFO	None	
GET_RES	None	1				
SET_CUR	Yes	VV: .Pan.Speed Setting.0x01 (Low Speed) ~.0x18. (High Speed).				

[SRG-X40UH/H40UH] UVC command list

	bTiltRelative	0: Stop 1: point the imaging plane up 0xFF: point the imaging plane down	1	GET_DEF	None	0
				GET_CUR	None	Pan-tiltPosInq 8x 09 06 12 FF → y0 50 0w 0w 0w 0w 0z 0z 0z 0z FF www.=.Pan.Position. zzzz.....=.Tilt.Position
				GET_MIN	None	0
				GET_MAX	None	0
				GET_INFO	None	
				GET_RES	None	0
				SET_CUR	Yes	Stop: 8x 01 06 01 VV WW 03 03 FF Up: 8x 01 06 01 VV WW 03 01 FF Down: 8x 01 06 01 VV WW 03 02 FF VV: .Pan.Speed Setting.0x01 (Low Speed) ~.0x18. (High Speed). WW: Tilt.Speed Setting.0x01 (Low Speed) ~.0x14. (High Speed)
	bTiltSpeed	Speed for the Tilt movement	1	GET_DEF	None	0x14: MAX
				GET_CUR	None	Return PAN Speed Value
				GET_MIN	None	0x01
				GET_MAX	None	0x14
				GET_INFO	None	
				GET_RES	None	1
	Yes	WW: Tilt.Speed Setting.0x01 (Low Speed) ~.0x14. (High Speed)				

[SRG-X40UH/H40UH] UVC command list

UVC					VISCA	
Control	Field	Description	wLength	Request	Command Packet /Fixed Value	
D17: Focus, Auto	bFocusAuto	0: Manual 1: Auto	1	GET_DEF	None	1
				GET_INFO	None	
				GET_CUR	Yes	CAM_FocusModelnq: 8x 09 04 38 FF → y0 50 02 FF Auto.Focus y0 50 03 FF Manual.Focus
				SET_CUR	Yes	Auto.Focus: 8x 01 04 38 02 FF Manual.Focus: 8x 01 04 38 03 FF
D18: Privacy	bPrivacy	0: Open 1: Close	1	GET_CUR	Yes	CAM_MuteModelnq(※FCB Command) : 8x 09 04 75 FF → y0 50 02 FF On y0 50 03 FF Off
				GET_INFO	None	
				SET_CUR	Yes	CAM_Mute(※FCB Command) On 8x 01 04 75 02 FF Off 8x 01 04 75 03 FF
D19: Focus, Simple	bFocus	0: full range 1: macro. Less than 0.3meters. 2: people. 0.3m to 3m 3: scene. 3m to infinity 0x04 to 0xFF - reserved	1	GET_DEF	None	
				GET_INFO	None	
				GET_CUR	None	
				SET_CUR	None	

[SRG-X40UH/H40UH] UVC command list

UVC					VISCA	
Control	Field	Description	wLength	Request	Command	
D20: Window	wWindow_Top	Top coordinate In global sensor coordinates (pixels)	2	GET_DEF	None	
				GET_CUR	None	
				GET_MIN	None	
				GET_MAX	None	
				SET_CUR	None	
	wWindow_Left	Left coordinate In global sensor coordinates (pixels)	2	GET_DEF	None	
				GET_CUR	None	
				GET_MIN	None	
				GET_MAX	None	
				SET_CUR	None	
	wWindow_Bottom	Bottom coordinate In global sensor coordinates (pixels)	2	GET_DEF	None	
				GET_CUR	None	
				GET_MIN	None	
				GET_MAX	None	
				SET_CUR	None	
	wWindow_Right	Right coordinate In global sensor coordinates (pixels)	2	GET_DEF	None	
				GET_CUR	None	
				GET_MIN	None	
				GET_MAX	None	
				SET_CUR	None	
wNumSteps	Number of steps to move from current window to window specified by rectangle above.	2	GET_DEF	None		
			GET_CUR	None		
			GET_MIN	None		
			GET_MAX	None		
			SET_CUR	None		

[SRG-X40UH/H40UH] UVC command list

	bmNumStepsUnits	Units of number of steps specified above. D0: video frames D1: milliseconds D2-D15: Reserved	2	GET_DEF	None	
				GET_CUR	None	
				GET_MIN	None	
				GET_MAX	None	
				SET_CUR	None	
D21: Region of Interest	wROI_Top	Top coordinate In global sensor coordinates (pixels)	2	GET_DEF	None	
				GET_CUR	None	
				GET_MIN	None	
				GET_MAX	None	
				SET_CUR	None	
	wROI_Left	Left coordinate In global sensor coordinates (pixels)	2	GET_DEF	None	
				GET_CUR	None	
				GET_MIN	None	
				GET_MAX	None	
				SET_CUR	None	
	wROI_Bottom	Bottom coordinate In global sensor coordinates (pixels)	2	GET_DEF	None	
				GET_CUR	None	
				GET_MIN	None	
				GET_MAX	None	
				SET_CUR	None	
	wROI_Right	Right coordinate In global sensor coordinates (pixels)	2	GET_DEF	None	
				GET_CUR	None	
				GET_MIN	None	
				GET_MAX	None	
				SET_CUR	None	
bmAutoControls	D0: Auto Exposure D1: Auto Iris	2	GET_DEF	None		

[SRG-X40UH/H40UH] UVC command list

		D2: Auto White Balance D3: Auto Focus D4: Auto Face Detect D5: Auto Detect and Track D6: Image Stabilization D7: Higher Quality D8 – D15: Reserved, set to zero		GET_CUR	None	
				GET_MIN	None	
				GET_MAX	None	
				SET_CUR	None	

[SRG-X40UH/H40UH] UVC command list

2.2. Processing Unit Descriptor

UVC					VISCA	
Control	Field	Description	wLength	Request	Command Packet /Fixed Value	
D0: Brightness	wBrightness	The setting for the attribute of the addressed Brightness control.	2	GET_DEF	None	0
				GET_CUR	Yes	CAM_ExpCompModelInq: 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
				GET_MIN	None	0x00
				GET_MAX	None	0x0E
				GET_INFO	None	
				GET_RES	None	1
				SET_CUR	Yes	CAM_ExpComp: 8x 01 04 3E 02 FF: Exposure compensation On 8x 01 04 4E 00 00 0p 0q FF: pq:.ExpComp.Position Refer to the VISCA Command Values (Exposure Compensation) section

[SRG-X40UH/H40UH] UVC command list

UVC					VISCA	
Control	Field	Description	wLength	Request	Command Packet /Fixed Value	
D1: Contrast	wContrast	The setting for the attribute of the addressed Contrast control.	2	GET_DEF		
				GET_CUR		
				GET_MIN		
				GET_MAX		
				GET_INFO		
				GET_RES		
				SET_CUR		
D2: Hue	wHue	The setting for the attribute of the addressed Hue control.	2	GET_DEF		
				GET_CUR		
				GET_MIN		
				GET_MAX		
				GET_INFO		
				GET_RES		
				SET_CUR		
D3: Saturation	wSaturation	The setting for the attribute of the addressed Saturation control.	2	GET_DEF		
				GET_CUR		
				GET_MIN		
				GET_MAX		
				GET_INFO		
				GET_RES		
				SET_CUR		

[SRG-X40UH/H40UH] UVC command list

UVC					VISCA	
Control	Field	Description	wLength	Request	Command Packet /Fixed Value	
D4: Sharpness	wSharpness	The setting for the attribute of the addressed Sharpness control.	2	GET_DEF	None	
				GET_CUR	Yes	CAM_ApertureInq: 8x 09 04 42 FF → y0 50 00 00 0p 0q FF pq:.Aperture.Gain
				GET_MIN	None	0x00
				GET_MAX	None	0x0F
				GET_INFO	None	
				GET_RES	None	1
				SET_CUR	Yes	Direct: 8x 01 04 42 00 00 0p 0q FF pq: Aperture.Gain Aperture level: 00 ~ 0F
D5: Gamma	wGamma	The setting for the attribute of the addressed Gamma control.	2	GET_DEF		
				GET_CUR		
				GET_MIN		
				GET_MAX		
				GET_INFO		
				GET_RES		
				SET_CUR		

[SRG-X40UH/H40UH] UVC command list

UVC					VISCA	
Control	Field	Description	wLength	Request	Command Packet /Fixed Value	
D6: White Balance Temperature	wWhiteBalanceTemperature	The setting for the attribute of the addressed White Balance Temperature control.	2	GET_DEF	None	
				GET_CUR	Yes	R.Gain 8x 09 04 43 FF→y0 50 00 00 0p 0p FF B.Gain 8x 09 04 43 FF →y0 50 00 00 0p 0p FF From returned value combination,
				GET_MIN	None	2800
				GET_MAX	None	6500
				GET_INFO	None	
				GET_RES	None	100
				SET_CUR	Yes	R.Gain 8x 01 04 43 00 00 0p 0p FF B.Gain 8x 01 04 43 00 00 0p 0p FF Refer to the VISCA Command Values (WB Temp) section

[SRG-X40UH/H40UH] UVC command list

UVC					VISCA	
Control	Field	Description	wLength	Request	Command Packet /Fixed Value	
D7: White Balance Component	wWhiteBalanceBlue	The setting for the blue component of the addressed White Balance Component control.	2	GET_DEF		
				GET_CUR		
				GET_MIN		
				GET_MAX		
				GET_INFO		
				GET_RES		
				SET_CUR		
	wWhiteBalanceRed	The setting for the red component of the addressed White Balance Component control.	2	GET_DEF		
				GET_CUR		
				GET_MIN		
				GET_MAX		
				GET_INFO		
				GET_RES		
				SET_CUR		
D8: Backlight Compensation	wBacklightCompensation	The setting for the attribute of the addressed Backlight Compensation control.	2	GET_DEF	None	0x00
				GET_CUR	Yes	CAM_BackLightModelInq: 8x 09 04 33 FF → y0 50 02 FF: On y0 50 03 FF: Off
				GET_MIN	None	0x00
				GET_MAX	None	0x01
				GET_INFO	None	
				GET_RES	None	1
				SET_CUR	Yes	On: 8x 01 04 33 02 FF Off: 8x 01 04 33 03 FF

[SRG-X40UH/H40UH] UVC command list

UVC					VISCA	
Control	Field	Description	wLength	Request	Command Packet /Fixed Value	
D9: Gain	wGain	The setting for the attribute of the addressed Gain control.	2	GET_DEF	None	0x01
				GET_CUR	Yes	CAM_GainPosInq: 8x 09 04 4C FF →y0 50 00 00 0p 0q FF pq: Gain.Position
				GET_MIN	None	1
				GET_MAX	None	Need to check CAM_HighSensitivity by the command, 8x 09 04 5E FF and issue CAM_GainLimitInq: 8x 09 04 2C FF → y0 50 0q FF p:Gain.Limit Return value should be followed gain table of SET_CUR. if HighSensitivity is On and GainLimit is 0x0D(48dB) then return 0x11. if HighSensitivity is Off and GainLimit is 0x0D(36dB) then return 0x0D. Refer to the VISCA Command Values (Gain Limit) section
				GET_INFO	None	
				GET_RES	None	1
				SET_CUR	Yes	Direct: 8x 01 04 4C 00 00 0p 0q FF pq: Gain.Position Refer to the VISCA Command Values (GAIN) section

[SRG-X40UH/H40UH] UVC command list

UVC					VISCA	
Control	Field	Description	wLength	Request	Command Packet /Fixed Value	
D10: Power Line Frequency	bPowerLineFrequency	The setting for the attribute of the addressed Flicker Cancel control: 0: Disabled(Off) 1: Enabled(On)	1	GET_DEF		
				GET_CUR		
				GET_MIN		
				GET_MAX		
				GET_INFO		
				GET_RES		
				SET_CUR		
D11: Hue, Auto			2	GET_DEF		
				GET_CUR		
				GET_MIN		
				GET_MAX		
				GET_RES		
				SET_CUR		
D12: White Balance Temperature, Auto	bWhiteBalanceTemperatureAuto	The setting for the attribute of the addressed White Balance Temperature, Auto control.	1	GET_DEF	None	1
				GET_CUR	Yes	CAM_WBModelInq: 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
				GET_INFO	None	
				SET_CUR	Yes	Auto: 8x 01 04 35 00 FF Manual: 8x 01 04 35 05 FF

[SRG-X40UH/H40UH] UVC command list

UVC					VISCA	
Control	Field	Description	wLength	Request	Command Packet /Fixed Value	
D13: White Balance Component, Auto	bWhiteBalanceComponentAuto	The setting for the attribute of the addressed White Balance Component, Auto control.	1	GET_DEF		
				GET_CUR		
				GET_MIN		
				GET_MAX		
				GET_RES		
				SET_CUR		
D14: Digital Multiplier	wMultiplierStep	The value Z' (see section 2.4.2.5.2 "Digital Zoom".)	2	GET_DEF		
				GET_CUR		
				GET_MIN		
				GET_MAX		
				GET_RES		
				SET_CUR		
D15: Digital Multiplier Limit					None	
D16: Analog Video Standard					None	
D17: Analog Video Lock Status					None	
D18: Contrast, Auto					None	

3. VISCA Command Values

SHUTTER /MIN SHUTTER

UVC	VISCA	1080/59.94p 720/59.94p	1080/50p 720/50p
-	06	1/1	1/1
-	07	2/3	2/3
-	08	1/2	1/2
-	09	1/3	1/3
-	0A	1/4	1/4
-	0B	1/6	1/6
-	0C	1/8	1/8
-	0D	1/10	1/12
-	0E	1/15	1/15
-	0F	1/20	1/20
0	10	1/30	1/25
-1	11	1/50	1/30
-2	12	1/60	1/50
-3	13	1/90	1/60
-4	14	1/100	1/100
-5	15	1/125	1/120
-6	16	1/180	1/150
-7	17	1/250	1/215
-8	18	1/350	1/300
-9	19	1/500	1/425
-10	1A	1/725	1/600
-11	1B	1/1000	1/1000
-12	1C	1/1500	1/1250
-13	1D	1/2000	1/1750
-14	1E	1/3000	1/2500
-	1F	1/4000	1/3500
-	20	1/6000	1/6000
-	21	1/10000	1/10000

[SRG-X40UH/H40UH] UVC command list

IRIS POSITION

	Parameter	F value
IRIS	19	F2.0 (Open)
	18	F2.2
	17	F2.4
	16	F2.6
	15	F2.8
	14	F3.1
	13	F3.4
	12	F3.7
	11	F4.0
	10	F4.4
	0F	F4.8
	0E	F5.2
	0D	F5.6
	0C	F6.2
	0B	F6.8
	0A	F7.3
	09	F8.0
	08	F8.7
	07	F9.6
	06	F10
05	F11	
00	CLOSE	

GAIN

	Parameter	Gain value
GAIN	11	48 dB
	10	45 dB
	0F	42 dB
	0E	39 dB
	0D	36 dB
	0C	33 dB
	0B	30 dB
	0A	27 dB
	09	24 dB
	08	21 dB
	07	18 dB
	06	15 dB
	05	12 dB
	04	9 dB
	03	6 dB
	02	3 dB
	01	0 dB

0E-11 is available only when high-sensitivity mode is On.

[SRG-X40UH/H40UH] UVC command list

Gain Limit

	Parameter	Gain value	
		High-sensitivity mode Off	High-sensitivity mode On
Gain limit	D	36 dB	48 dB
	C	33 dB	45 dB
	B	30 dB	42 dB
	A	27 dB	39 dB
	9	24 dB	36 dB
	8	21 dB	33 dB
	7	18 dB	30 dB
	6	15 dB	27 dB
	5	12 dB	24 dB
	4	9 dB	21 dB

Exposure Compensation

	Parameter	Step	Gain
Exposure Compensation	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

[SRG-X40UH/H40UH] UVC command list

FOCUS POSITION (for reference)

Parameter	Focus distance
1000	∞
2000	5 m
3000	3 m
4000	2 m
5000	1.5 m
6000	1.2 m
7000	1.0 m
8000	0.8 m
9000	0.6 m
A000	0.47 m
B000	0.35 m
C000	0.26 m
D000	0.17 m
E000	0.1 m
F000	0.08 m

ZOOM POSITION (for reference)

Parameter	Zoom ratio
0000	×1
0DC1	×2
186C	×3
2015	×4
2594	×5
29B7	×6
2CFB	×7
2FB0	×8
320C	×9
342D	×10
3608	×11
37AA	×12
391C	×13
3A66	×14
3B90	×15
3C9C	×16
3D91	×17
3E72	×18
3F40	×19
4000	×20
5556	×30 (While using Clear Image Zoom)
6000	×40 (While using Clear Image Zoom)
6AAB	×60 (While using digital)
7000	×80 (While using digital)
7334	×100 (While using digital)
7556	×120 (While using digital)
76DC	×140 (While using digital)
7800	×160 (While using digital)
78E4	×180 (While using digital)
799A	×200 (While using digital)
7A2F	×220 (While using digital)
7AC0	×240 (While using digital)

[SRG-X40UH/H40UH] UVC command list

WB Temp

index	WB- Temperature (K)	WB Gain			
		VISCA R.Gain		VISCA B.Gain	
		DEC	HEX	DEC	HEX
0	2800	213	0xD5	151	0x97
1	2900	213	0xD5	152	0x98
2	3000	213	0xD5	153	0x99
3	3100	212	0xD4	154	0x9A
4	3200	212	0xD4	155	0x9B
5	3300	212	0xD4	156	0x9C
6	3400	212	0xD4	157	0x9D
7	3500	211	0xD3	157	0x9D
8	3600	211	0xD3	158	0x9E
9	3700	211	0xD3	159	0x9F
10	3800	211	0xD3	160	0xA0
11	3900	210	0xD2	161	0xA1
12	4000	210	0xD2	162	0xA2
13	4100	210	0xD2	163	0xA3
14	4200	209	0xD1	164	0xA4
15	4300	209	0xD1	165	0xA5
16	4400	209	0xD1	167	0xA7
17	4500	209	0xD1	170	0xAA
18	4600	209	0xD1	171	0xAB

[SRG-X40UH/H40UH] UVC command list

19	4700	209	0xD1	173	0xAD
20	4800	209	0xD1	175	0xAF
21	4900	209	0xD1	176	0xB0
22	5000	209	0xD1	177	0xB1
23	5100	209	0xD1	180	0xB4
24	5200	209	0xD1	182	0xB6
25	5300	209	0xD1	184	0xB8
26	5400	208	0xD0	185	0xB9
27	5500	207	0xCF	186	0xBA
28	5600	205	0xCD	188	0xBC
29	5700	204	0xCC	189	0xBD
30	5800	203	0xCB	190	0xBE
31	5900	201	0xC9	193	0xC1
32	6000	200	0xC8	194	0xC2
33	6100	199	0xC7	195	0xC3
34	6200	197	0xC5	197	0xC5
35	6300	196	0xC4	198	0xC6
36	6400	195	0xC3	199	0xC7
37	6500	193	0xC1	201	0xC9