

# HD/4K Integrated Camera Interface Specifications

## Compatible model Table

Feb. 1, 2022

Connected Solutions Company  
Panasonic Corporation

### Camera command

ITEM	Command Control / Response / Confirmation	Data	Data Contents Control and Response to control	UE80/UE50/UE40	UE20/HE20	UE100	UE4	UE150/HE145	HR140	UB300	UE70series	HE42series	HE40series	HE130	HE120	HE60	HE50	
Color Bar	DCB: [Data] OBR: [Data]	0 1	Camera Color Bar	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Color Bar Setup	DCS: [Data] OCS: [Data]	0 1	0.0% 7.5%	---	---	---	---	---	---	---	---	---	---	○	○	---	---	
Menu Down	DDW: [Data]	1h Ah	1step 10step	supports only 1h(1step)	supports only 1h(1step)	supports only 1h(1step)	supports only 1h(1step)	supports only 1h(1step)	○	supports only 1h(1step)	○	○	○	○	○	○	○	
Menu Enter	DIT: [data]	1	Enter	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
Menu Left	DLT: [Data]	1h Ah	1step 10step	supports only 1h(1step)	supports only 1h(1step)	supports only 1h(1step)	supports only 1h(1step)	supports only 1h(1step)	○	supports only 1h(1step)	---	---	---	○	○	---	---	
Menu Cancel	DPG: [Data]	1	Cancel	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
Menu Right	DRT: [Data]	1h Ah	1step 10step	supports only 1h(1step)	supports only 1h(1step)	supports only 1h(1step)	supports only 1h(1step)	supports only 1h(1step)	○	supports only 1h(1step)	---	---	---	○	○	---	---	
Menu Up	DUP: [Data]	1h Ah	1step 10step	supports only 1h(1step)	supports only 1h(1step)	supports only 1h(1step)	supports only 1h(1step)	supports only 1h(1step)	○	supports only 1h(1step)	○	○	○	○	○	○	○	
Menu On/Off	DUS: [Data] OUS: [Data]	0 1	Off On	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
Focus (Far)	DFP: [Data]	---	Move to far	---	---	---	---	---	---	○	○	○	○	---	---	○	○	
Focus (Near)	DFN: [Data]	---	Move to near	---	---	---	---	---	---	○	○	○	○	---	---	○	○	
Focus (Stop)	DFS: [Data]	---	Stop focus	---	---	---	---	---	---	○	○	○	○	---	---	○	○	
Zoom (Tele)	DZT: [Data]	---	Move to tele	---	---	---	---	---	---	○	○	○	○	---	---	○	○	
Zoom (Stop)	DZS: [Data]	---	Stop zoom	---	---	---	---	---	---	○	○	○	○	---	---	○	○	
Zoom (Wide)	DZW: [Data]	---	Move to wide	---	---	---	---	---	---	○	○	○	○	---	---	○	○	
Focus Speed	LFS: [Data]	0 - 9	Slow Fast	---	---	---	---	---	---	○	○	○	○	---	---	○	○	
Zoom Speed	LZS: [Data]	0 - 9	Slow Fast	---	---	---	---	---	---	○	○	○	○	---	---	○	○	
Focus Mode	OAF: [Data] OAF: [Data]	0 1	Manual Auto	○	○	○	---	○	○	---	○	○	○	○	○	○	○	
ABC/ABB SET	OAS: [Data]	---	ABC/ABB Start	○	---	○	---	○	○	○	○	○	○	○	○	---	---	
White Balance Mode	OAW: [Data] OAW: [Data]	※ ---	※ ---	※	※	※	※	※	※	---	※	※	※	※	※	※	※	
Focus Adjust With PTZ	OAZ: [Data] OAZ: [Data]	0 1	Off On	○	○	○	---	○	○	---	○	○	○	○	○	○	○	
B Pedestal	OBD: [Data] OBD	00h - 1Eh - 3Ch	-150 - 0 - +150	---	---	---	---	---	supports only 0A (-100) - 32 (+100)	---	---	---	---	supports only 0A (-100) - 32 (+100)	---	---	---	
B Gain	OBI: [Data] OBI	000h - 096h - 12Ch  000h - 096h - 12Ch	-150 - 0 - +150  -30 - 0 - 30	---	---	---	---	---	○	○	○	○	○	○	○	○	○	
B Gain	OBS: [Data] OBS OBS: [Data]	00h - 1Eh - 3Ch  00h - 1Eh - 3Ch	-30 - 0 - +30  -150 - 0 - 150	---	---	---	---	---	○	○	○	○	○	○	○	○	○	
B Pedestal	OBP: [Data] OBP	000h - 096h - 12Ch	-150 - 0 - +150	---	---	supports only -100~+100	---	supports only -100~+100	supports only -100~+100	---	---	---	---	supports only -100~+100	○	---	---	

ITEM	Command Control / Response / Confirmation	Data	Data Contents																
			Control and Response to control	UE80/UE50/UE40	UE20/HE20	UE100	UE4	UE150/HE145	HR140	UB300	UE70series	HE42series	HE40series	HE130	HE120	HE60	HE50		
Chroma Level	00G: [Data] 00G	00h - 03h - 06h - 0Dh	-3 - 0 - +3 - 10	---	supports only 03h (0) - 0Dh (10)	---	---	supports only 03h (0) - 0Dh (10)	---	---	---	supports only 00h (-3) - 06h (3)	supports only 00h (-3) - 06h (3)	supports only 00h (-3) - 06h (3)	---	supports only 00h (-3) - 06h (3)	supports only 00h (-3) - 06h (3)	supports only 00h (-3) - 06h (3)	
Digital Extender	0DE: [Data] 0DE	0 1	Off On	---	---	---	---	0n mean x1.4	○	○	○	○	○	○	○	---	---	---	
Detail	0DT: [Data] 0DT	0 1 2  0 1 2 3	Off Low High  UE100, UE150, HE145, HR140, UB300, HE130 Off On On	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
Error Information	0ER: [Data] 0ER: [Data]	0 1 2	Normal Fan Error Other Error	○	---	○	---	○	○	supports only 0(Normal) 1(Fan Error)	supports only 0(Normal) 1(Fan Error)	---	---	---	---	supports only 0(Normal) 1(Fan Error)	---	---	
Flip Status	0FS: [Data] 0FS: [Data]	0 1	Normal Flip	---	---	○	---	○	○	---	---	---	---	○	○	---	---	---	
ND Filter	0FT: [Data] 0FT	0 1 2 3 4 8	Clear 1/4 ND 1/16 ND 1/64 ND 1/8 ND Auto ND	UE80 supports only 0h: 1h: 1/4 ND 2h: 1/16 ND 3h: 1/64 ND 4h: 1/8 ND 8h: Auto ND	---	supports only 0h: 1h: 1/4 ND 2h: 1/16 ND 3h: 1/64 ND	---	supports only 0h: 1h: 1/4 ND 2h: 1/16 ND 3h: 1/64 ND	supports only 0h: Clear 1h: 1/4 ND 2h: 1/16 ND 3h: 1/64 ND 4h: 1/8 ND	supports only 0h: Clear 1h: 1/4 ND 2h: 1/16 ND 3h: 1/64 ND 8h: Auto ND	supports only 0h: Clear 1h: 1/4 ND 2h: 1/16 ND 3h: 1/64 ND 8h: Auto ND	---	supports only 0h: Clear 1h: 1/4 ND 2h: 1/16 ND 3h: 1/64 ND 4h: 1/8 ND	supports only 0h: Clear 1h: 1/4 ND 2h: 1/16 ND 3h: 1/64 ND	---	---	---	---	
Gain Select	0GS: [Data] 0GS	01h 04h 08h 06h 0Ch 0Eh	Low Mid High S. Gain1 S. Gain2 S. Gain3	---	---	---	---	---	○	---	---	---	---	---	---	---	---	---	---
Gain	0GU: [Data] 0GU	05h - 08h - 11h - 1Ah - 38h 80h	-3dB - 0dB - 9dB - 18dB - 48dB AGC On	supports only 08 (0dB) -32 (42dB), 80 (AGC On)	supports only 08 (0dB) -32 (42dB), 80 (AGC On)	supports only 08 (0dB) -32 (42dB), 80 (AGC On)	supports only 08 (0dB) -32 (42dB), 80 (AGC On)	supports only 05 (-3dB) - 32 (42dB), 80 (AGC On)	supports only 08 (0dB) -32 (42dB), 80 (AGC On)	---	supports only 08h: 0dB-38h: 48dB 80h: AGC On	supports only 08h: 0dB-38h: 48dB 80h: AGC On	supports only 08h: 0dB-38h: 48dB 80h: AGC On	supports only 08 (0dB) -20 (36dB), 80 (AGC On)	supports only 08 (0dB) -1A (18dB), 80 (AGC On)	supports only 08 (0dB) -1A (18dB), 80 (AGC On)	supports only 08 (0dB) -1A (18dB), 80 (AGC On)	supports only 08 (0dB) -1A (18dB), 80 (AGC On)	
Horizontal Phase	0HP: [Data] 0HP	000h - 3FFh	-206 - +49	○ (UE80) --- (UE50, UE40)	---	○	---	○	○	---	○	○	---	○	○	○	○	○	○
Model Number	01D: [Data] 01D: [Data]		Returns model No. by ASC11	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Request Iris F No.	0IF: [Data] 0IF: [Data]	0Eh (=14) - 1Ch (=28) - 38h (=56) - A0h (=160) - FFh	F1.4 - F2.8 - F5.6 - F16 - Close	○	○	○	---	○	---	○	---	---	---	---	---	---	---	---	---
OIS	0IS: [Data] 0IS	0 1  HR140 0 1 2  UE100 0 1 2 3  UE80 0 1 2	Off On  HR140 Off OIS Dynamic I. S. System  UE100 Off OIS Hybrid (STABLE) Hybrid (PAN/TILT)  UE80 Off OIS (STABLE) OIS (PAN/TILT)	○	---	○	---	○	○	---	○	○	○	○	○	---	---	---	

ITEM	Command Control / Response / Confirmation	Data	Data Contents															
			Control and Response to control	UE80/UE50/UE40	UE20/HE20	UE100	UE4	UE150/HE145	HR140	UB300	UE70series	HE42series	HE40series	HE130	HE120	HE60	HE50	
Synchro Scan	OMS: [Data] OMS	001h - 0FFh	- See right	---	---	---	---	---	---	(59Hz) 001h(60.15Hz) - 0FFh(642.21Hz)	---	(59.94Hz) 001h(59.94Hz) - 0FFh(660.09Hz)	(59.94Hz) 001h(59.94Hz) - 0FFh(660.09Hz)	(59.94Hz) 001h(60.15Hz) - 0FFh(642.21Hz)	(59Hz) 001h(60.17Hz) - 0FFh(646.21Hz)	(59Hz) 001h(60.17Hz) - 0FFh(644.25Hz)	(N Model) 001h(60.17Hz) - 0FFh(644.25Hz)	
R Pedestal	ORD: [Data] ORD	00h - 1Eh - 3Ch	-150 0 - +150	---	---	---	---	---	---	supports only 0A (-100) 32 (+100)	---	---	---	---	supports only 0A (-100) 32 (+100)	○	---	---
R Gain	ORG: [Data] OGR OGR: [Data]	00h - 1Eh - 3Ch	-30 0 - +30  HR140, HE130, HE120 -150 - 0 - 150	---	---	---	---	---	---	○	---	○	○	○	○	○	○	○
R Gain	ORI: [Data] ORI	000h - 096h - 12Ch	-150 0 - +150  UE70series, HE75series, HE70series, HE60, HE50 -30 0 - 30	---	---	---	---	---	---	○	---	○	○	○	○	○	○	○
R Pedestal	ORP: [Data] ORP	000h - 096h - 12Ch	-150 0 - +150	---	---	supports only -100~+100	---	supports only -100~+100	supports only -100~+100	---	---	---	---	---	supports only -100~+100	○	---	---
Iris Mode	ORS: [Data] ORS	0 1	Manual Auto	○	○	○	---	supports only 1(Auto)	○	○	○	○	○	○	○	○	○	○
Iris Control	ORV: [Data] ORV	000h - 3FFh	Close Open	○	○	○	---	---	○	○	○	○	○	○	○	○	○	○
Linear Table	OSA:00: [Data] OSA:00	0 1	Table A Table B	---	---	---	---	---	---	○	---	---	---	---	---	---	---	---
Master Black Gamma	OSA:07: [Data] OSA:07	50h - 80h - 80h	-48 0 - +48	---	---	supports only 78h (-8) 88h (+8)	---	supports only 78h (-8) 88h (+8)	---	○	---	---	---	---	---	---	---	---
R Black Gamma	OSA:08: [Data] OSA:08	6Ch - 71h - 80h - 8Fh - 94h	-20 - -15 0 - +15 - +20	---	---	---	---	---	---	○	---	---	---	---	---	---	---	---
B Black Gamma	OSA:09: [Data] OSA:09	6Ch - 71h - 80h - 8Fh - 94h	-20 - -15 0 - +15 - +20	---	---	---	---	---	---	○	---	---	---	---	---	---	---	---
Gamma SW	OSA:0A: [Data] OSA:0A	0 1	Off On	---	---	---	---	---	---	---	○	---	---	---	---	---	---	---
Black Gamma SW	OSA:0B: [Data] OSA:0B	0 1	Off On	---	---	---	---	---	---	---	○	---	---	---	---	---	---	---
DRS SW	OSA:0D: [Data] OSA:0D	0 1	Off On	---	---	---	---	---	---	---	○	---	---	---	---	---	---	---
Black Stretch Level (#FILM MENU & FILM REC)	OSA:0F: [Data] OSA:0F	00h - 1Eh	0 - 30	---	---	---	---	---	○	---	---	---	---	---	---	---	---	---

ITEM	Command Control / Response / Confirmation	Data	Data Contents																
			Control and Response to control	UE80/UE50/UE40	UE20/HE20	UE100	UE4	UE150/HE145	HR140	UB300	UE70series	HE42series	HE40series	HE130	HE120	HE60	HE50		
Dynamic Level (@FILM MENU & FILM REC)	OSA: 10: [Data] OSA: 10	0	200%																
		1	300%																
		2	400%																
		3	500%																
		4	600%																
Flare SW	OSA: 11: [Data] OSA: 11	0	Off																
		1	On																
Master Knee Point (@VIDEO MENU)	OSA: 20: [Data] OSA: 20	22h	70.00%			support only 22h (70.00%) - 66h (107.00%) (1step=0.5%)				support only 22h (70.00%) - 66h (107.00%) (1step=0.5%)	support only 22h (70.00%) - 66h (107.00%) (1step=0.5%)						support only 22h (70.00%) - 66h (107.00%) (1step=0.5%)		
		80h	93.50%																
		86h	107.00%																
		-	-																
		02h	110.00% (1step=0.25%)																
Master Knee Point (@FILM MENU & VIDEO REC)	OSA: 21: [Data] OSA: 21	62h	30%																
		-	-																
		80h	60%																
		9Eh	90%																
		-	107%																
R Knee Point	OSA: 22: [Data] OSA: 22	1Ch	-25.00%																
		80h	0.00%																
		-	-																
B Knee Point	OSA: 23: [Data] OSA: 23	E4h	+25.00% (1step=0.25%)																
		1Ch	-25.00%																
		80h	0.00%																
Master Knee Slope (@VIDEO MENU)	OSA: 24: [Data] OSA: 24	-	0			support only 00h (0) - 63h (99)				support only 00h (0) - 63h (99)	support only 00h (0) - 63h (99)						support only 00h (0) - 63h (99)		
		63h	99																
		07h	199																
Master Knee Slope (@FILM MENU & VIDEO REC)	OSA: 25: [Data] OSA: 25	7Ch	150%							supports only 7Ch (150%) - 83h (500%)									
		80h	350%																
		-	-																
R Knee Slope (@VIDEO MENU)	OSA: 26: [Data] OSA: 26	85h	600% (1step=50%)																
		1Dh	-99																
		80h	0																
B Knee Slope (@VIDEO MENU)	OSA: 27: [Data] OSA: 27	-	-																
		E3h	+99																
		1Dh	-99																
Auto Knee Point (@VIDEO MENU)	OSA: 28: [Data] OSA: 28	80h	93.50%																
		-	-																
		86h	107.00% (1step=0.25%)																
Auto Knee Level (@VIDEO MENU)	OSA: 29: [Data] OSA: 29	7Ch	100%																
		85h	109% (1step=1%)																
White Clip Level	OSA: 2A: [Data] OSA: 2A	00h	90%																
		13h	109%																
Knee Mode	OSA: 2D: [Data] OSA: 2D	0	Off			supports only 0 (Off)				supports only 0 (Off)	supports only 0 (Off)								
		1	Manual																
		2	Auto																
		3	Low																
		4	Mid																
White Clip	OSA: 2E: [Data] OSA: 2E	0	Off																
		1	On																

ITEM	Command Control / Response / Confirmation	Data	Data Contents														
			Control and Response to control	UE80/UE50/UE40	UE20/HE20	UE100	UE4	UE150/HE145	HR140	UB300	UE70series	HE42series	HE40series	HE130	HE120	HE60	HE50
Master Detail	OSA: 30: [Data] OSA: 30	61h	-31	○		○			○	○							
		-	0														
		80h	-														
		9Fh	+31														
		61h	0														
		-	-														
		80h	+31														
		9Fh	+62														
H Detail Level	OSA: 31: [Data] OSA: 31	00h	0														
		3Fh	63														
		61h	-31			○			○								
		-	0														
		80h	-														
		9Fh	+31														
		61h	-31			○			○								
		-	0														
		80h	-														
		9Fh	+31														
		0	(G+R)/2														
		1	(G+B)/2														
		2	(2G+B+R)/4														
		3	(3G+R)/4														
		4	R														
		5	G														
Skin Tone Detail	OSA: 40: [Data] OSA: 40	0	Off	○		○			○								
		1	On														
		0	Off														
		1	On														
		2	Get														
		00h	0														
		FFh	255														
		00h	0														
		-	-														
		FFh	255														
		00h	0														
		FFh	255														
		00h	0														
		FFh	255														
		0	Off														
		1	On														
		7Ah	-6dB														
		-	0dB														
		7Ch	0dB														
		-	-														
		80h	12dB														
		-	-														
		86h	30dB														
		-	-														
		88h	36dB														
		7Ah	-6dB														
		-	0dB														
		7Ch	0dB														
		-	-														
		80h	12dB														
		-	-														
		86h	30dB														
		-	-														
		88h	36dB														
		0	S. Gain1														
		1	S. Gain2														
		2	S. Gain3														

ITEM	Command Control / Response / Confirmation	Data	Data Contents													
			Control and Response to control	UE80/UE50/UE40	UE20/HE20	UE100	UE4	UE150/HE145	HR140	UB300	UE70series	HE42series	HE40series	HE130	HE120	HE60
Frame Mix	OSA: 65: [Data] OSA: 65	00h 06h 0Ch 12h 18h 1Eh 80h	Off +6dB +12dB +18dB +24dB +30dB Auto	support only 00h(Off) - 18h(+24dB). 80h(Auto)	support only 00h(Off) - 18h(+24dB). 80h(Auto)	support only 00h(Off) - 18h(+24dB). 80h(Auto)	---	supports only 00h(Off) - 18h(+24dB)	supports only 00h(Off) - 18h(+24dB)	supports only 00h(Off) - 18h(+24dB)	supports only 00h(Off) - 18h(+24dB). 80h(Auto)	supports only 00h(Off) - 18h(+24dB). 80h(Auto)	supports only 00h(Off) - 18h(+24dB).	supports only 00h(Off) - 18h(+24dB)	supports only 00h(Off) - 12h(+18dB). 80h(Auto)	supports only 00h(Off) - 12h(+18dB). 80h(Auto)
Master Gamma	OSA: 6A: [Data] OSA: 6A	67h 80h - 94h	0.30 - 0.55 - 0.75	○	---	○	---	○	○	---	---	---	---	○	---	---
Linear Matrix	OSA: 84: [Data] OSA: 84	0 1 2	Off On On	---	---	---	---	---	---	○	---	---	---	---	---	---
Color Correction	OSA: 85: [Data] OSA: 85	0 1	Off On	---	---	---	---	---	---	○	---	---	---	---	---	---
Format	OSA: 87: [Data] OSA: 87	※	※	※	※	※	※	※	※	※	※	※	※	※	※	※
OSD Status	OSA: 88: [Data] OSA: 88	0 1	Off On	○	---	○	---	○	○	○	○	○	○	○	○	○
Total Dtail Level High	OSA: B1: [Data] OSA: B1	61h 80h - 9Fh	-31 - 0 - +31	---	---	---	---	---	---	---	supports only 82h(2)-92h(18) for Detail Level (H)	supports only 82h(2)-92h(18) for Detail Level (H)	supports only 82h(2)-92h(18) for Detail Level (H)	---	---	supports only 82h(2)-92h(18) for Total Detail Level (H)
Audio	OSA: D0: [Data] OSA: D0	0 1	Off On	○	○	○	○	○	○	○	○	○	○	○	---	---
Audio Input Type	OSA: D1: [Data] OSA: D1	0 1 2 3 4 5	Mic High Mic Middle Mic Low Line High Line Middle Line Low	supports only 0(Mic) 3(Line)	supports only 0(Mic) 3(Line)	supports only 0(Mic) 3(Line)	---	supports only 0(Mic) 3(Line)	---	---	○	○	○	○	---	---
Audio Plugin Power	OSA: D2: [Data] OSA: D2	0 1	Off On	○	○	○	---	○	---	○	○	○	○	○	---	---
Tally Brightness	OSA: D3: [Data] OSA: D3	0 1 2	Low Mid High	○	---	○	---	○	---	---	---	---	---	○	---	---
Audio Line Input Level	OSA: D4: [Data1]:[Data2] OSA: D4: [Data1]	[Data1] 0 1 [Data2] 0 1 2	[Data1] OH1/OH3 CH2/CH4 +4dB 0dB -20dB	---	---	---	---	○	---	---	---	---	---	---	---	---
Audio Volume Level	OSA: D5: [Data1]:[Data2] OSA: D5: [Data1]	[Data1] 0 1 2 3 [Data2] 58h - 80h - 8Ch	[Data1] CH1 CH2 CH3 CH4 [Data2] -40dB - 0dB - 12dB	[Data1] supports only 0(CH1) [Data2] supports only 5Ch(-36dB) - 8C(12dB) (step:3dB)	[Data1] supports only 0(CH1) [Data2] supports only 5Ch(-36dB) - 8C(12dB) (step:3dB)	[Data1] supports only 0(CH1) [Data2] supports only 5Ch(-36dB) - 8C(12dB) (step:3dB)	---	[Data1] supports only 0(CH1) [Data2] supports only 5Ch(-36dB) - 8C(12dB) (step:3dB)	○	---	---	---	---	---	---	---
Audio Head Room	OSA: D6: [Data] OSA: D6	0 1 2	FS-12dB FS-18dB FS-20dB	---	---	---	---	---	○	---	---	---	---	---	---	---
Audio Line CH Select	OSA: D7: [Data] OSA: D7	0 1 2 3	All OH1/CH2 OH3/CH4 None	---	---	---	---	---	○	---	---	---	---	---	---	---
SC Coarse	OSC: [Data] OSC	※	※	---	---	---	---	---	---	---	---	---	---	---	---	※
H Detail Level H	OSD: 0A: [Data] OSD: 0A	02h - 3Fh	2 - 63	---	---	---	---	---	---	---	---	---	---	○	---	---
V Detail Level H	OSD: 0E: [Data] OSD: 0E	02h - 1Fh	2 - 31	---	---	---	---	---	---	---	---	---	---	○	---	---
H Detail Level L	OSD: 12: [Data] OSD: 12	01h - 3Eh	1 - 62	---	---	---	---	---	---	---	---	---	---	○	---	---
V Detail Level L	OSD: 16: [Data] OSD: 16	01h - 1Eh	1 - 30	---	---	---	---	---	---	---	---	---	---	○	---	---
Detail Band	OSD: 1E: [Data] OSD: 1E	01 - 05	01 - 05	---	---	---	---	---	---	---	---	---	---	○	---	---

ITEM	Command Control / Response / Confirmation	Data	Data Contents															
			Control and Response to control	UE80/UE50/UE40	UE20/HE20	UE100	UE4	UE150/HE145	HR140	UB300	UE70series	HE42series	HE40series	HE130	HE120	HE60	HE50	
Noise Suppress /Crisp	OSD: 22: [Data] OSD: 22	00h - 3Fh	0 - 63	---	---	---	---	---	---	support only 00 (0) -3C (60)	○	---	---	---	support only 00 (0) -3C (60)	support only 00 (0) -07 (7)	---	---
Level Dependent	OSD: 26: [Data] OSD: 26	00h 0Fh	00 15	---	---	---	---	---	---	---	○	---	---	---	---	---	---	---
Matrix (R-G)	OSD: 2F: [Data] OSD: 2F	00h - 1Fh - 3Eh	-31 - 0 - +31	---	---	---	---	---	---	---	---	---	---	---	---	○	---	---
Matrix (R-B)	OSD: 30: [Data] OSD: 30	00h - 1Fh - 3Eh	-31 - 0 - +31	---	---	---	---	---	---	---	---	---	---	---	---	○	---	---
Matrix (G-R)	OSD: 31: [Data] OSD: 31	00h - 1Fh - 3Eh	-31 - 0 - +31	---	---	---	---	---	---	---	---	---	---	---	---	○	---	---
Matrix (G-B)	OSD: 32: [Data] OSD: 32	00h - 1Fh - 3Eh	-31 - 0 - +31	---	---	---	---	---	---	---	---	---	---	---	---	○	---	---
Matrix (B-R)	OSD: 33: [Data] OSD: 33	00h - 1Fh - 3Eh	-31 - 0 - +31	---	---	---	---	---	---	---	---	---	---	---	---	○	---	---
Matrix (B-G)	OSD: 34: [Data] OSD: 34	00h - 1Fh - 3Eh	-31 - 0 - +31	---	---	---	---	---	---	---	---	---	---	---	---	○	---	---
Flare R	OSD: 35: [Data] OSD: 35	9C ~ FF 00 01 ~ 64	-100 ~ -1 0 +1 ~ +100	---	---	---	---	---	---	---	○	---	---	---	---	---	---	---
Flare G	OSD: 36: [Data] OSD: 36	9C ~ FF 00 01 ~ 64	-100 ~ -1 0 +1 ~ +100	---	---	---	---	---	---	---	○	---	---	---	---	---	---	---
Flare B	OSD: 37: [Data] OSD: 37	9C ~ FF 00 01 ~ 64	-100 ~ -1 0 +1 ~ +100	---	---	---	---	---	---	---	○	---	---	---	---	---	---	---
DNR	OSD: 3A: [Data] OSD: 3A	00 01 02  AK-UB300 00 01 02	Off Low High  UB300 Off On On	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○



ITEM	Command Control / Response / Confirmation	Data	Data Contents	Control and Response to control													
				UE80/UE50/UE40	UE20/HE20	UE100	UE4	UE150/HE145	HR140	UB300	UE70series	HE42series	HE40series	HE130	HE120	HE60	HE50
Picture Level /A Iris Level /Iris Offset	OSD: 48: [Data] OSD: 48	00h	UE100, UE20, HE20, UE4, UE150, HE145, HE140, HE130	○	○	○	○	○	○	○	○	○	○	○	○	○	
		-	-50	○	○	○	○	○	○	○	○	○	○	○	○	○	
		32h	0	○	○	○	○	○	○	○	○	○	○	○	○	○	
64h	-	+50	○	○	○	○	○	○	○	○	○	○	○	○	○		
00h	-	-10	UE70series, HE75series, HE70series, HE120	○	○	○	○	○	○	○	○	○	○	○	○	○	
32h	-	0	-	○	○	○	○	○	○	○	○	○	○	○	○	○	
64h	-	10	-	○	○	○	○	○	○	○	○	○	○	○	○	○	
00h	-	-5	HE60, HE50	○	○	○	○	○	○	○	○	○	○	○	○	○	
32h	-	0	-	○	○	○	○	○	○	○	○	○	○	○	○	○	
64h	-	5	-	○	○	○	○	○	○	○	○	○	○	○	○	○	
00h	-	0	UB300	○	○	○	○	○	○	○	○	○	○	○	○	○	
32h	-	100	-	○	○	○	○	○	○	○	○	○	○	○	○	○	
64h	-	100	-	○	○	○	○	○	○	○	○	○	○	○	○	○	
Flesh Noise Suppress	OSD: 4B: [Data] OSD: 4B	00 01 02	Off Low High	---	---	---	---	---	---	---	---	---	---	---	○	---	
Iris Follow	OSD: 4F OSD: 4F: [Data]	00h - FFh	Close Open	○	○	○	---	○	○	---	○	○	○	○	○	○	
Contrast (Gamma)	OSD: 50: [Data] OSD: 50	00	Low	---	○	---	○	---	---	---	○	○	---	○	○	○	
		01	Mid	---	---	---	---	---	---	---	---	---	---	---	---	---	
		02	High	---	---	---	---	---	---	---	---	---	---	---	---	---	
0	-	4	UE20/HE20/UE4	---	---	---	---	---	---	---	---	---	---	---	---		
01	-	4	-	---	---	---	---	---	---	---	---	---	---	---	---		
02	-	4	-	---	---	---	---	---	---	---	---	---	---	---	---		
Output Select	OSD: 65: [Data] OSD: 65	00 01 02	RGB YPbPr Y/C	---	---	---	---	---	---	---	---	---	---	---	Y/C is Valid	---	
AGC Max Gain	OSD: 69: [Data] OSD: 69	01	6dB	supports only	01 (6dB)	supports only	04 (24dB)	supports only	01 (6dB)	supports only	04 (24dB)	supports only	01 (6dB)	supports only	01 (6dB)	supports only	01 (6dB)
		02	12dB	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		03	18dB	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		04	24dB	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		05	30dB	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		06	36dB	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		07	42dB	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		08	48dB	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		08	48dB	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Color Correction B_Mg Saturation	OSD: 80: [Data] OSD: 80	01h	-127	supports only	41h(-63)	---	---	supports only	41h(-63)	---	---	supports only	01h(-127)	---	---	supports only	41h(-63)
		-	0	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		80h	-	BFh(+63)	---	---	---	---	---	---	---	---	---	---	---	---	---
FFh	-	+127	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Color Correction B_Mg Phase	OSD: 81: [Data] OSD: 81	01h	-127	supports only	41h(-63)	---	---	supports only	41h(-63)	---	---	---	---	---	---	supports only	41h(-63)
		-	0	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		80h	-	BFh(+63)	---	---	---	---	---	---	---	---	---	---	---	---	---
FFh	-	+127	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Color Correction Mg Saturation	OSD: 82: [Data] OSD: 82	01h	-127	supports only	41h(-63)	---	---	supports only	41h(-63)	---	---	supports only	01h(-127)	---	---	supports only	41h(-63)
		-	0	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		80h	-	BFh(+63)	---	---	---	---	---	---	---	---	---	---	---	---	---
FFh	-	+127	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Color Correction Mg Phase	OSD: 83: [Data] OSD: 83	01h	-127	supports only	41h(-63)	---	---	supports only	41h(-63)	---	---	---	---	---	---	supports only	41h(-63)
		-	0	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		80h	-	BFh(+63)	---	---	---	---	---	---	---	---	---	---	---	---	---
FFh	-	+127	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Color Correction Mg_R Saturation	OSD: 84: [Data] OSD: 84	01h	-127	supports only	41h(-63)	---	---	supports only	41h(-63)	---	---	supports only	01h(-127)	---	---	supports only	41h(-63)
		-	0	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		80h	-	BFh(+63)	---	---	---	---	---	---	---	---	---	---	---	---	---
FFh	-	+127	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Color Correction Mg_R Phase	OSD: 85: [Data] OSD: 85	01h	-127	supports only	41h(-63)	---	---	supports only	41h(-63)	---	---	---	---	---	---	supports only	41h(-63)
		-	0	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		80h	-	BFh(+63)	---	---	---	---	---	---	---	---	---	---	---	---	---
FFh	-	+127	---	---	---	---	---	---	---	---	---	---	---	---	---	---	



ITEM	Command Control / Response / Confirmation	Data	Data Contents														
			Control and Response to control	UE80/UE50/UE40	UE20/HE20	UE100	UE4	UE150/HE145	HR140	UB300	UE70series	HE42series	HE40series	HE130	HE120	HE60	HE50
Color Correction B Saturation	OSD:96:[Data] OSD:96	01h - 80h - FFh	-127 - 0 - +127	supports only 41h(-63) - BFh(+63)	---	supports only 41h(-63) - BFh(+63)	---	supports only 41h(-63) - BFh(+63)	supports only 41h(-63) - BFh(+63)	supports only 01h(-127) - FEh(+126)	supports only 61h(-31) - 9Fh(+31)	supports only 61h(-31) - 9Fh(+31)	supports only 61h(-31) - 9Fh(+31)	supports only 41h(-63) - BFh(+63)	○	---	---
Color Correction B Phase	OSD:97:[Data] OSD:97	01h - 80h - FFh	-127 - 0 - +127	supports only 41h(-63) - BFh(+63)	---	supports only 41h(-63) - BFh(+63)	---	supports only 41h(-63) - BFh(+63)	supports only 41h(-63) - BFh(+63)	○	supports only 41h(-63) - BFh(+63)	supports only 41h(-63) - BFh(+63)	supports only 41h(-63) - BFh(+63)	supports only 41h(-63) - BFh(+63)	○	---	---
Character Mix Select	OSD:98:[Data1]:[Data2] OSD:98:[Data1] OSD:98:[Data2]	Data1 0 1 Data2 0 1 2	Output Browser/Video SDI/HDMI Component Character Mix Select Off On Off By Browser	---	---	---	---	---	---	---	---	---	---	---	---	---	supports only Output 0 (Browser/Video), 1 (SDI/HDMI Component) Character Mix Select 2 (Off By Browser) is Valid when Output is 1 (SDI/HDMI Component)
Color Correction Mg_R Saturation	OSD:9A:[Data] OSD:9A	41h - 80h - BFh	-63 - 0 - +63	○	---	○	---	○	○	---	---	---	---	○	---	---	---
Color Correction Mg_R Phase	OSD:9B:[Data] OSD:9B	41h - 80h - BFh	-63 - 0 - +63	○	---	○	---	○	○	---	---	---	---	○	---	---	---
Color Correction R_R_YI Saturation	OSD:9C:[Data] OSD:9C	41h - 80h - BFh	-63 - 0 - +63	○	---	○	---	○	○	---	supports only 61h(-31) - 9Fh(+31)	supports only 61h(-31) - 9Fh(+31)	supports only 61h(-31) - 9Fh(+31)	○	---	---	---
Color Correction R_R_YI Phase	OSD:9D:[Data] OSD:9D	41h - 80h - BFh	-63 - 0 - +63	○	---	○	---	○	○	---	○	○	○	○	---	---	---
Color Correction R_YI_YI Saturation	OSD:9E:[Data] OSD:9E	41h - 80h - BFh	-63 - 0 - +63	○	---	○	---	○	○	---	supports only 61h(-31) - 9Fh(+31)	supports only 61h(-31) - 9Fh(+31)	supports only 61h(-31) - 9Fh(+31)	○	---	---	---
Color Correction R_YI_YI Phase	OSD:9F:[Data] OSD:9F	41h - 80h - BFh	-63 - 0 - +63	○	---	○	---	○	○	---	○	○	○	○	---	---	---
V Detail Level	OSD:A1:[Data] OSD:A1	79h - 80h - 87h	-7 - 0 - 7	○	---	○	---	○	○	---	---	---	---	○	---	---	---
Detail Band /Detail Frequency	OSD:A2:[Data] OSD:A2	79h - 80h - 87h	-7 - 0 - 7	---	---	○	---	○	○	---	---	---	---	○	---	---	---
Flesh Tone Noise Suppress /Skin Detail Effect	OSD:A3:[Data] OSD:A3	80h - 9Fh	0 - 31	○	---	○	---	○	○	---	---	---	---	○	---	---	---
Matrix (R-G)	OSD:A4:[Data] OSD:A4	41h - 80h - BFh	-63 - 0 - 63	○	---	○	---	○	○	---	---	---	---	○	---	---	---
Matrix (R-B)	OSD:A5:[Data] OSD:A5	41h - 80h - BFh	-63 - 0 - 63	○	---	○	---	○	○	---	---	---	---	○	---	---	---
Matrix (G-R)	OSD:A6:[Data] OSD:A6	41h - 80h - BFh	-63 - 0 - 63	○	---	○	---	○	○	---	---	---	---	○	---	---	---
Matrix (G-B)	OSD:A7:[Data] OSD:A7	41h - 80h - BFh	-63 - 0 - 63	○	---	○	---	○	○	---	---	---	---	○	---	---	---

ITEM	Command Control / Response / Confirmation	Data	Data Contents															
			Control and Response to control	UE80/UE50/UE40	UE20/HE20	UE100	UE4	UE150/HE145	HR140	UB300	UE70series	HE42series	HE40series	HE130	HE120	HE60	HE50	
Matrix (B-R)	OSD: A8: [Data] OSD: A8	41h	-63	○	---	○	---	○	---	○	---	---	---	○	---	---	---	
		-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
		80h	0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		BFh	63	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Matrix (B-G)	OSD: A9: [Data] OSD: A9	41h	-63	○	---	○	---	○	---	○	---	---	---	○	---	---	---	
		-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
		80h	0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		BFh	63	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Color Correction Cy_Cy_B Saturation	OSD: AA: [Data] OSD: AA	61h	-31	---	---	---	---	---	---	---	○	○	○	---	---	---	---	
		-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
		80h	0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		9Fh	+31	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Color Correction Cy_Cy_B Phase	OSD: AB: [Data] OSD: AB	41h	-63	---	---	---	---	---	---	---	○	○	○	---	---	---	---	
		-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
		80h	0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		BFh	+63	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Color Correction Cy_B_B Saturation	OSD: AC: [Data] OSD: AC	61h	-31	---	---	---	---	---	---	---	○	○	○	---	---	---	---	
		-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
		80h	0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		9Fh	+31	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Color Correction Cy_B_B Phase	OSD: AD: [Data] OSD: AD	41h	-63	---	---	---	---	---	---	---	○	○	○	---	---	---	---	
		-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
		80h	0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		BFh	+63	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Chroma Level	OSD: B0: [Data] OSD: B0	00h	Off	○	---	○	---	---	---	○	---	---	---	---	---	---	---	
		1Dh	-99%	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		80h	0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		A8h	40%	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		E3h	99%	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
AK-UB300	UB300	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
00h	-100%	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
1Dh	-99%	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
80h	0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
A8h	40%	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Color Temperature	OSD: B1: [Data] OSD: B1	※	※	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Night Mode Select	OSD: B2: [Data] OSD: B2	0 1	Manual Auto	---	---	---	---	---	---	---	○	○	○	---	---	---	---	
i. Zoom	OSD: B3: [Data] OSD: B3	0	Disable	[Zoom Mode]	[Zoom Mode]	[Zoom Mode]	[Zoom Mode]	---	---	---	○	○	○	---	---	---	---	
		1	Enable	-Dpt Zoom OSE: 70:0 OSD: B3:0	-Dpt Zoom OSE: 70:0 OSD: B3:0	-Dpt Zoom OSE: 70:0 OSD: B3:0	-Dpt Zoom OSE: 70:0 OSD: B3:0	---	---	---	---	---	---	---	---	---	---	
		-i Zoom	-i Zoom	-i Zoom	-i Zoom	---	---	---	---	---	---	---	---	---	---	---	---	---
		-D Zoom	-D Zoom	-D Zoom	-D Zoom	---	---	---	---	---	---	---	---	---	---	---	---	---
HR	OSD: B4: [Data] OSD: B4	0 1 2 3	Off Low Mid High	---	---	---	---	---	---	---	---	---	---	---	---	---		
Night-Day Level	OSD: B7: [Data] OSD: B7	0 1 2	Low Mid High	---	---	---	---	---	---	---	○	○	○	---	---	---	---	
Digital Extender Magnification	OSD: B8: [Data] OSD: B8	0 1 2 3 4	x1.4 x2.0 x4.0 x6.0 x8.0	---	---	---	---	---	---	---	○	○	---	---	---	---	---	

ITEM	Command Control / Response / Confirmation	Data	Data Contents														
			Control and Response to control	UE80/UE50/UE40	UE20/HE20	UE100	UE4	UE150/HE145	HR140	UB300	UE70series	HE42series	HE40series	HE130	HE120	HE60	HE50
Format_SDI	OSD: B9: [Data] OSD: B9	0h	720/60p	---	---	---	---	---	---	---	[59.94Hz]	[59.94Hz]	---	---	---	---	
		1h	720/59.94p	---	---	---	---	---	---	---	supports only	supports only	---	---	---	---	
		2h	720/50p	---	---	---	---	---	---	---	1h(720/59.94p)	1h(720/59.94p)	---	---	---	---	
		3h	1080/60i	---	---	---	---	---	---	---	4h(1080/59.94i)	4h(1080/59.94i)	---	---	---	---	
		4h	1080/59.94i	---	---	---	---	---	---	---	7h(1080/29.97psF)	7h(1080/29.97psF)	---	---	---	---	
		5h	1080/50i	---	---	---	---	---	---	---	10h(1080/59.94p)	10h(1080/59.94p)	---	---	---	---	
		6h	1080/30psF	---	---	---	---	---	---	---	14h(1080/29.97p)	14h(1080/29.97p)	---	---	---	---	
		7h	1080/29.97psF	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		8h	1080/25psF	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		9h	1080/24psF	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		Ah	1080/23.98psF	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		Bh	480/59.94i	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		Ch	480/29.97psF	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		Dh	576/50i	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		Eh	576/25psF	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		10h	1080/59.94p	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		11h	1080/50p	---	---	---	---	---	---	---	---	---	---	---	---	---	---
12h	480/59.94p	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
13h	576/50p	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
14h	1080/29.97p	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
15h	1080/25p	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
16h	1080/23.98p	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
Color Bar Type	OSD: BA: [Data] OSD: BA	0 1	Type2(Full BAR/EBU) Type1(SMPTE)	○	---	---	○	---	---	---	○	○	V1.21*AW-SFU01	---	---	---	
ALC	OSD: BB: [Data] OSD: BB	0 1	Off On	---	---	---	---	---	---	---	○	○	V1.21*AW-SFU01	---	---	---	
Equalize	OSD: BC: [Data] OSD: BC	0 1 2	Off Low Cut Voice	---	---	---	---	---	---	---	○	○	V1.21*AW-SFU01	---	---	---	
Color Bar Title	OSD: BE: [Data] OSD: BE	0 1	Off On	---	---	---	---	---	---	---	○	○	V1.21*AW-SFU01	---	---	---	
Auto Shutter Limit	OSD: BF: [Data] OSD: BF	0	[59.94Hz] [50Hz]	○	---	---	supports only	---	supports only	---	○	○	---	---	---	---	
		1	Off Off	---	---	---	---	---	---	---	---	---	---	---	---	---	
		2	1/60 1/50	---	---	---	---	---	---	---	---	---	---	---	---	---	
		3	1/100 1/100	---	---	---	---	---	---	---	---	---	---	---	---	---	
		4	1/120 1/125	---	---	---	---	---	---	---	---	---	---	---	---	---	
		5	1/250 1/250	---	---	---	---	---	---	---	---	---	---	---	---	---	
		2	1/100	---	---	---	---	---	---	---	---	---	---	---	---	---	
		3	1/120	---	---	---	---	---	---	---	---	---	---	---	---	---	
Color Correction B_B_Mg Saturation	OSD: C0: [Data] OSD: C0	61h - 80h - 9Fh	-31 - 0 - +31	---	---	---	---	---	---	---	○	○	---	---	---	---	
Color Correction B_B_Mg Phase	OSD: C1: [Data] OSD: C1	41h - 80h - BFh	-63 - 0 - +63	---	---	---	---	---	---	---	○	○	---	---	---	---	
Color Correction B_Mg_Mg Saturation	OSD: C2: [Data] OSD: C2	61h - 80h - 9Fh	-31 - 0 - +31	---	---	---	---	---	---	---	○	○	---	---	---	---	
Color Correction B_Mg_Mg Phase	OSD: C3: [Data] OSD: C3	41h - 80h - BFh	-63 - 0 - +63	---	---	---	---	---	---	---	○	○	---	---	---	---	
Color Correction Y1_Y1_G Saturation	OSD: C4: [Data] OSD: C4	61h - 80h - 9Fh	-31 - 0 - +31	---	---	---	---	---	---	---	○	○	---	---	---	---	
Color Correction Y1_Y1_G Phase	OSD: C5: [Data] OSD: C5	41h - 80h - BFh	-63 - 0 - +63	---	---	---	---	---	---	---	○	○	---	---	---	---	
Color Correction Y1_G_G Saturation	OSD: C6: [Data] OSD: C6	61h - 80h - 9Fh	-31 - 0 - +31	---	---	---	---	---	---	---	○	○	---	---	---	---	
Color Correction Y1_G_G Phase	OSD: C7: [Data] OSD: C7	41h - 80h - BFh	-63 - 0 - +63	---	---	---	---	---	---	---	○	○	---	---	---	---	

ITEM	Command Control / Response / Confirmation	Data	Data Contents														
			Control and Response to control	UE80/UE50/UE40	UE20/HE20	UE100	UE4	UE150/HE145	HR140	UB300	UE70series	HE42series	HE40series	HE130	HE120	HE60	HE50
E.DRS Select	OSD :08 :[Data] OSD :08	0 1 2 3	Off Low Mid High	---	---	---	---	---	---	---	supports only 0(Off), 1(Low), 3(High)	supports only 0(Off), 1(Low), 3(High)	supports only 0(Off), 1(Low), 3(High)	---	---	---	---
D/O Mode (D/C Board)	OSE :20 :[Data] OSE :20	0 1 2 3	Side Cut Squeeze Letter Box Link	---	---	---	---	---	---	---	---	---	---	○	○	○	○
Matrix Type	OSE :31 :[Data] OSE :31	0 1 2 3 4	Normal EBU Matrix NTSC Matrix User Professional	supports only 0(Normal) 3(User) 4(Professional)	---	supports only 0(Normal) 1(EBU Matrix) 2(NTSC Matrix) 3(User)	---	supports only 0(Normal) 1(EBU Matrix) 2(NTSC Matrix) 3(User)	---	---	supports only 0(Normal) 1(EBU Matrix) 2(NTSC Matrix) 3(User)	supports only 0(Normal) 1(EBU Matrix) 2(NTSC Matrix) 3(User)	supports only 0(Normal) 1(EBU Matrix) 2(NTSC Matrix) 3(User)	supports only 0(Normal) 1(EBU Matrix) 2(NTSC Matrix) 3(User)	supports only 0(Normal) 1(EBU Matrix) 2(NTSC Matrix) 3(User)	supports only 0(Normal) 1(EBU Matrix) 2(NTSC Matrix) 3(User)	supports only 0(Normal) 1(EBU Matrix) 2(NTSC Matrix) 3(User)
Soft Skin	OSE :32 :[Data] OSE :32	0 1 2 3	Off Low Mid High	---	---	---	---	---	---	---	supports only 0(Off), 1(Low), 3(High)	supports only 0(Off), 1(Low), 3(High)	supports only 0(Off), 1(Low), 3(High)	---	---	---	supports only 0(Off), 1(Low), 3(High)
DRS	OSE :33 :[Data] OSE :33	0 1 2 3 0 1	Off Low Mid High  UE20/HE20/UE4 Off On	○	○	○	○	○	○	---	supports only 0(Off), 1(Low), 3(High)	supports only 0(Off), 1(Low), 3(High)	supports only 0(Off), 1(Low), 3(High)	○	○	---	supports only 0(Off), 1(Low), 3(High)
HDMI Video Sampling	OSE :68 :[Data] OSE :68	0 1 2 3 4	RGB (NDR) RGB (ENH) YpPr (422) YpPr (444) YpPr (420)	UE80 supports only 2(YpPr (422)) 4(YpPr (420))  UE50, UE40 don't support	---	supports only 2(YpPr (422)) 4(YpPr (420))	---	UE150 supports only 2(YpPr (422)) 4(YpPr (420))	---	---	---	---	---	---	---	---	supports only 0(RGB (NDR)) 1(RGB (ENH)) 2(YpPr (422)) 3(YpPr (444))
Push Auto Focus	OSE :69 :[Data]	0 1	Push Auto Disable Enable	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Digital Zoom	OSE :70 :[Data] OSE :70	0 1	[Zoom Mode] -Opt Zoom OSE:70:0 OSD:B3:0 -i Zoom OSE:70:0 OSD:B3:1 -D Zoom OSE:70:1 OSD:B3:0	[Zoom Mode] -Opt Zoom OSE:70:0 OSD:B3:0 -i Zoom OSE:70:0 OSD:B3:1 -D Zoom OSE:70:1 OSD:B3:0	[Zoom Mode] -Opt Zoom OSE:70:0 OSD:B3:0 -i Zoom OSE:70:0 OSD:B3:1 -D Zoom OSE:70:1 OSD:B3:0	[Zoom Mode] -Opt Zoom OSE:70:0 OSD:B3:0 -i Zoom OSE:70:0 OSD:B3:1 -D Zoom OSE:70:1 OSD:B3:0	○	○	○	○	○	○	○	○	○	○	○
Preset Scope	OSE :71 :[Data] OSE :71	0 1 2	Mode A Mode B Mode C	○	○	○	---	○	○	---	○	○	○	○	○	○	○
Gamma Mode	OSE :72 :[Data] OSE :72	0 1 2 0 1 2 3 4 5 6 7	Off Normal Cinema  UE100, UE150, HE145, HR140, HE130  SD FILMLIKE1 FILMLIKE2 FILMLIKE3 FILM REC VIDEO REC HLG	---	---	supports only 0(HD) 2(FILMLIKE1) 3(FILMLIKE2) 4(FILMLIKE3)	---	supports only 0(HD) 2(FILMLIKE1) 3(FILMLIKE2) 4(FILMLIKE3)	---	---	○	○	○	○	○	○	○
Back Light Compensation	OSE :73 :[Data] OSE :73	0 1	Off On	○	○	---	○	---	---	---	○	○	○	---	---	---	○
Auto F. Mix Max Gain	OSE :74 :[Data] OSE :74	00 01 02 03	(Off) 6dB 12dB 18dB	○	○	○	---	---	---	---	---	○	○	---	---	---	○
OSD Off With Tally	OSE :75 :[Data] OSE :75	0 1	Off On	○	○	○	○	○	○	---	○	○	○	○	○	○	○
Digital Zoom Magnification	OSE :76 :[Data] OSE :76	0100 - 9999	*1.00 0100(x1.00) *99.99 1000(x10.00)	supports only 0100(x1.00) -	supports only 0100(x1.00) -	supports only 0100(x1.00) -	---	supports only 0100(x1.00) -	supports only 0100(x1.00) -	---	supports only 0100(x1.00) -	supports only 0100(*1.00) -	supports only 0100(x1.00) -	supports only 0100(x1.00) -	supports only 0100(x1.00) -	supports only 0100(x1.00) -	supports only 0100(x1.00) -
Frequency	OSE :77 :[Data] OSE :77	0 1 2 3 4	59.94Hz 50.00Hz 24.00Hz 23.98Hz 60.00Hz	supports only 0(59.94Hz), 1(50.00Hz), 2(24.98Hz), 3(23.98Hz)	supports only 0(59.94Hz), 1(50.00Hz), 4(60.00Hz)	supports only 0(59.94Hz), 1(50.00Hz), 2(24.98Hz), 3(23.98Hz)	---	supports only 0(59.94Hz), 1(50.00Hz), 4(60.00Hz)	---	---	supports only 0(59.94Hz), 1(50.00Hz)	supports only 0(59.94Hz), 1(50.00Hz)	supports only 0(59.94Hz), 1(50.00Hz)	supports only 0(59.94Hz), 1(50.00Hz)	supports only 0(59.94Hz), 1(50.00Hz)	supports only 0(59.94Hz), 1(50.00Hz)	supports only 0(59.94Hz), 1(50.00Hz)
Max Digital Zoom	OSE :7A :[Data] OSE :7A	02 - 18	x2 - x18	supports only 02(x2) -	supports only 02(x2) 03(x3) 04(x4)	supports only 02(x2) -	---	supports only 02(x2) -	supports only 02(x2) -	---	supports only 02(x2) -	supports only 02(x2) -	supports only 02(x2) -	supports only 02(x2) -	supports only 02(x2) -	supports only 02(x2) -	---

ITEM	Command Control / Response / Confirmation	Data	Data Contents													
			Control and Response to control	UE80/UE50/UE40	UE20/HE20	UE100	UE4	UE150/HE145	HR140	UB300	UE70series	HE42series	HE40series	HE130	HE120	HE60
OSD Mix	OSE: 7B: [Data] OSE: 7B	00h 01h 02h 04h 08h 10h 20h 40h 80h	OSD Mix Off SDI On HDMI On Analog On Video On IP On 12G SDI/Optical On MONI On NDI On ※bit0:SDI, bit1:HDMI, bit2:Analog, bit3:Video, bit4: IP, bit5:12G SDI/Optical, bit6: MONI, bit7:NDI	UE80 supports only 00(OSD Mix Off) 01(3G SDI On) 02(HDMI On) 10(NDI HX On) 80(NDI On) UE50 supports only 00(OSD Mix Off) 01(3G SDI On) 02(HDMI On) 10(NDI HX On) UE40 supports only 00(OSD Mix Off)	---	supports only 00(OSD Mix Off) 01(3G SDI On) 02(HDMI On) 10(NDI HX On) 20(12G SDI On) 80(NDI On)	---	UE150 supports only 00(OSD Mix Off) 01(SDI On) 02(HDMI On) 10(IP On) 20(12G SDI/OPTICAL On) 40(MONI On) HE145 supports only 00(OSD Mix Off) 01(SDI On) 02(HDMI On) 10(IP On)	supports only 00(OSD Mix Off) 01(SDI On) 10(IP On)	supports only 00(OSD Mix Off) 01(SDI On) 10(IP On)	---	---	supports only 00(OSD Mix Off) 01(SDI On) 02(HDMI On) 08(Video On) 10(IP On)	supports only 00(OSD Mix Off) 01(SDI On) 02(HDMI On) 04(Analog On) 08(Video On)	---	---
Preset Digital Extender Enable	OSE: 7C: [Data] OSE: 7C	0 1	Off On	○	---	○	---	○	○	---	---	---	○	---	---	---
Preset Zoom Mode	OSE: 7D: [Data] OSE: 7D	0 1	Mode A Mode B	○	---	○	---	○	○	---	---	---	---	---	---	---
Peak Frequency	OSG: 30: [Data] OSG: 30	00h - 04h - 1Fh	0 - 4 - 31	---	---	---	---	---	---	[In case HD format] 00h(0) - 1Fh(31) [In case 4K format] 00h(0) - 04h(4)	---	---	---	---	---	---
V Detail Level	OSG: 32: [Data] OSG: 32	00h - 3Fh	00 - 63	---	---	---	---	---	---	○	---	---	---	---	---	---
V Detail Frequency	OSG: 35: [Data] OSG: 35	00h - 04h - 1Fh	0 - 4 - 31	---	---	---	---	---	---	[In case HD format] 00h(0) - 1Fh(31) [In case 4K format] 00h(0) - 04h(4)	---	---	---	---	---	---
R Gain	OSG: 39: [Data] OSG: 39	418h - 800h - BE8h	-1000 - 0 - 1000	support only 738h(-200) - 8C8h(200)	support only 7E2h(-30) - 81Eh(30)	support only 738h(-200) - 8C8h(200)	---	support only 738h(-200) - 8C8h(200)	---	○	---	---	---	---	---	---
B Gain	OSG: 3A: [Data] OSG: 3A	418h - 800h - BE8h	-1000 - 0 - 1000	support only 738h(-200) - 8C8h(200)	support only 7E2h(-30) - 81Eh(30)	support only 738h(-200) - 8C8h(200)	---	support only 738h(-200) - 8C8h(200)	---	○	---	---	---	---	---	---
Level Dependent SW	OSG: 3E: [Data] OSG: 3E	0 1	Off On	---	---	---	---	---	---	○	---	---	---	---	---	---
Knee Aperture Level	OSG: 3F: [Data] OSG: 3F	00h - 27h	0 - 39	---	---	supports only 00h(0) - 05h(5)	---	supports only 00h(0) - 05h(5)	---	○	---	---	---	---	---	---
Detail +Clip	OSG: 40: [Data] OSG: 40	00h - 3Fh	0 - 63	---	---	---	---	---	---	○	---	---	---	---	---	---
Detail -Clip	OSG: 41: [Data] OSG: 41	00h - 3Fh	0 - 63	---	---	---	---	---	---	○	---	---	---	---	---	---
Memory Select	OSG: 42: [Data] OSG: 42	0 1 2	A B C	---	---	---	---	---	---	○	---	---	---	---	---	---
H Position	OSG: 44: [Data] OSG: 44	000h - 190h	0 - 100.00% (0.25% step)	---	---	---	---	---	---	○	---	---	---	---	---	---
V Position	OSG: 45: [Data] OSG: 45	000h - 190h	0 - 100.00% (0.25% step)	---	---	---	---	---	---	○	---	---	---	---	---	---
Zebra Effect Memory	OSG: 47: [Data] OSG: 47	0 1 2 3 4 5 6	A B C A+B A+C B+C A+B+C	---	---	---	---	---	---	○	---	---	---	---	---	---
Skin Tone Effect Memory	OSG: 48: [Data] OSG: 48	0 1 2 3 4 5 6	A B C A+B A+C B+C A+B+C	---	---	---	---	---	---	○	---	---	---	---	---	---
Skin Tone Crisp	OSG: 49: [Data] OSG: 49	41h - 80h - BFh	-63 - 0 - +63	---	---	---	---	---	---	○	---	---	---	---	---	---

ITEM	Command Control / Response / Confirmation	Data	Data Contents															
			Control and Response to control	UE80/UE50/UE40	UE20/HE20	UE100	UE4	UE150/HE145	HR140	UB300	UE70series	HE42series	HE40series	HE130	HE120	HE60	HE50	
Master Pedestal	OSG: 4A: [Data] OSG: 4A	10h	-99															
		-	0															
		80h	-															
		E3h	99															
R Pedestal	OSG: 4C: [Data] OSG: 4C	4E0h	-800															
		-	0															
		800h	-															
		B20h	800															
B Pedestal	OSG: 4E: [Data] OSG: 4E	4E0h	-800															
		-	0															
		800h	-															
		B20h	800															
Skin Tone Q Phase	OSG: 4F: [Data] OSG: 4F	000h	0															
		-	359															
Shutter SW	OSG: 59: [Data] OSG: 59	0	Off															
		1	On															
Shutter Mode	OSG: 5A: [Data] OSG: 5A	0	Shutter															
		1	Sync															
Shutter Speed	OSG: 5D: [Data] OSG: 5D	※	※															
Gamma Mode	OSG: 86: [Data] OSG: 86	0	HD															
		1	FILMLIKE1															
		2	FILMLIKE2															
		3	FILMLIKE3															
		4	FILM REC															
Chroma Level SW	OSG: 93: [Data] OSG: 93	0	Off															
		1	On															
Master Flare	OSG: 96: [Data] OSG: 96	10h	-100															
		-	0															
		80h	-															
		E4h	100															
Auto Knee Response	OSG: 97: [Data] OSG: 97	1	1															
		-	8															
Matrix	OSG: A0: [Data] OSG: A0	0	Off															
		1	On															
Color Correct Table	OSG: A4: [Data] OSG: A4	0	A															
		1	B															
Matrix (R-G)_N	OSG: A5: N: [Data] OSG: A5: [N P]: [Data] OSG: A5: N	00h	-31															
		-	-															
		1Fh	0															
		-	+31															
Matrix (R-G)_P	OSG: A5: P: [Data] OSG: A5: [N P]: [Data] OSG: A5: P	00h	-31															
		-	-															
		1Fh	0															
		-	+31															
Matrix (R-B)_N	OSG: A6: N: [Data] OSG: A6: [N P]: [Data] OSG: A6: N	00h	-31															
		-	-															
		1Fh	0															
		-	+31															
Matrix (R-B)_P	OSG: A6: P: [Data] OSG: A6: [N P]: [Data] OSG: A6: P	00h	-31															
		-	-															
		1Fh	0															
		-	+31															
Matrix (G-R)_N	OSG: A7: N: [Data] OSG: A7: [N P]: [Data] OSG: A7: N	00h	-31															
		-	-															
		1Fh	0															
		-	+31															
Matrix (G-R)_P	OSG: A7: P: [Data] OSG: A7: [N P]: [Data] OSG: A7: P	00h	-31															
		-	-															
		1Fh	0															
		-	+31															
Matrix (G-B)_N	OSG: A8: N: [Data] OSG: A8: [N P]: [Data] OSG: A8: N	00h	-31															
		-	-															
		1Fh	0															
		-	+31															
Matrix (G-B)_P	OSG: A8: P: [Data] OSG: A8: [N P]: [Data] OSG: A8: P	00h	-31															
		-	-															
		1Fh	0															
		-	+31															



ITEM	Command Control / Response / Confirmation	Data	Data Contents														
			Control and Response to control	UE80/UE50/UE40	UE20/HE20	UE100	UE4	UE150/HE145	HR140	UB300	UE70series	HE42series	HE40series	HE130	HE120	HE60	HE50
Matrix (B-R)_N	OSG:A9:N:[Data]	00h	-31	---	---	---	---	---	---	○	---	---	---	---	---	---	
	OSG:A9:[NIP]:[Data]	1Fh	0	---	---	---	---	---	---	---	---	---	---	---	---	---	
	OSG:A9:N	3Eh	+31	---	---	---	---	---	---	---	---	---	---	---	---	---	
Matrix (B-R)_P	OSG:A9:P:[Data]	00h	-31	---	---	---	---	---	---	○	---	---	---	---	---	---	
	OSG:A9:[NIP]:[Data]	1Fh	0	---	---	---	---	---	---	---	---	---	---	---	---	---	
	OSG:A9:P	3Eh	+31	---	---	---	---	---	---	---	---	---	---	---	---	---	
Matrix (B-G)_N	OSG:AA:N:[Data]	00h	-31	---	---	---	---	---	---	○	---	---	---	---	---	---	
	OSG:AA:[NIP]:[Data]	1Fh	0	---	---	---	---	---	---	---	---	---	---	---	---	---	
	OSG:AA:N	3Eh	+31	---	---	---	---	---	---	---	---	---	---	---	---	---	
Matrix (B-G)_P	OSG:AA:P:[Data]	00h	-31	---	---	---	---	---	---	○	---	---	---	---	---	---	
	OSG:AA:[NIP]:[Data]	1Fh	0	---	---	---	---	---	---	---	---	---	---	---	---	---	
	OSG:AA:P	3Eh	+31	---	---	---	---	---	---	---	---	---	---	---	---	---	
Skin Area SW	OSG:B0:[Data]	0	Off	---	---	---	---	---	---	○	---	---	---	---	---	---	
	OSG:B0	1	On	---	---	---	---	---	---	---	---	---	---	---	---	---	
Skin Area Table	OSG:B1:[Data]	0	A	---	---	---	---	---	---	○	---	---	---	---	---	---	
	OSG:B1	1	B	---	---	---	---	---	---	---	---	---	---	---	---	---	
Skin Area Hue	OSG:B2:[Data]	01h	-127	---	---	---	---	---	---	○	---	---	---	---	---	---	
	OSG:B2	80h	0	---	---	---	---	---	---	---	---	---	---	---	---	---	
		FFh	+127	---	---	---	---	---	---	---	---	---	---	---	---	---	
Skin Area Tone	OSG:B3:[Data]	01h	-127	---	---	---	---	---	---	○	---	---	---	---	---	---	
	OSG:B3	80h	0	---	---	---	---	---	---	---	---	---	---	---	---	---	
		FEh	+126	---	---	---	---	---	---	---	---	---	---	---	---	---	
DNR Level	OSG:B5:[Data]	1	1	---	---	---	---	---	---	○	---	---	---	---	---	---	
	OSG:B5	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	
Haze Reduction	OSG:B6:[Data]	0	Off	---	---	---	---	---	○	○	---	---	---	---	---	---	
	OSG:B6	1	On	---	---	---	---	---	---	---	---	---	---	---	---	---	
Haze Reduction Level	OSG:B7:[Data]	1	1	---	---	---	---	---	○	○	---	---	---	---	---	---	
	OSG:B7	-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	
Genlock Input	OSG:CA:[Data]	0	BNC	---	---	---	---	---	---	○	---	---	---	---	---	---	
	OSG:CA	1	DSUB	---	---	---	---	---	---	---	---	---	---	---	---	---	
H Phase-Coarse	OSG:CB:[Data]	3h	-5	---	---	---	---	---	---	○	---	---	---	---	---	---	
	OSG:CB	8h	0	---	---	---	---	---	---	---	---	---	---	---	---	---	
		Dh	+5	---	---	---	---	---	---	---	---	---	---	---	---	---	
H Phase-Fine	OSG:CC:[Data]	1Ch	-100	---	---	---	---	---	---	○	---	---	---	---	---	---	
	OSG:CC	80h	0	---	---	---	---	---	---	---	---	---	---	---	---	---	
		E4h	+100	---	---	---	---	---	---	---	---	---	---	---	---	---	
Shutter	OSH:[Data] OSH	0h	Off	---	---	---	---	---	---	---	---	---	---	---	---	---	
		1h	1/50	---	---	---	---	---	---	---	---	---	---	---	---	---	
		2h	1/60	---	---	---	---	---	---	---	---	---	---	---	---	---	
		3h	1/100 (NTSC) 、 1/120 (PAL)	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		4h	1/120 (NTSC) 、 1/100 (PAL)	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		5h	1/250	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		6h	1/500	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		7h	1/1000	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		8h	1/2000	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		9h	1/4000	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		Ah	1/10000	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		Bh	Synchro-Scan	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		Ch	ELC(Auto ND)	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		Dh	1/24	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Eh	1/25	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
Fh	1/30	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
Crop H/V Position Speed Control	OS1:15:[Data1]:[Data2]	[Data1]	[Data1]	---	---	○	---	---	○ (UE150) ---(HE145)	---	○	---	---	---	---	---	
		01	Left Max. Speed	---	---	---	---	---	---	---	---	---	---	---	---	---	
		-	Stop	---	---	---	---	---	---	---	---	---	---	---	---	---	
		50	Right Max. Speed	---	---	---	---	---	---	---	---	---	---	---	---	---	
		99	Down Max. Speed	---	---	---	---	---	---	---	---	---	---	---	---	---	
[Data2]	[Data2]	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
01	Down Max. Speed	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
-	Stop	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
50	UP Max. Speed	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
99		---	---	---	---	---	---	---	---	---	---	---	---	---	---		
Crop Out	OS1:16:[Data]	1	Y1	---	---	○	---	---	---	○	---	---	---	---	---	---	
	OS1:16	2	G	---	---	---	---	---	---	---	---	---	---	---	---	---	
		3	Mg	---	---	---	---	---	---	---	---	---	---	---	---	---	

ITEM	Command Control / Response / Confirmation	Data	Data Contents															
			Control and Response to control	UE80/UE50/UE40	UE20/HE20	UE100	UE4	UE150/HE145	HR140	UB300	UE70series	HE42series	HE40series	HE130	HE120	HE60	HE50	
Crop Adjust	OS1:17:[Data] OS1:17	1 2 3	Y G Mg	---	---	○	---	---	○ (UE150) --- (HE145)	---	○	---	---	---	---	---	---	
Request Zoom/Focus/Iris Position	OS1:18 OS1:18:[Data1]:[Data2]:[Data3]	[Data1] 555h - FFFh [Data2] 555h - FFFh [Data3] 555h - FFFh	[Data1]Zoom Position Wide - Tele [Data2]Focus Position Near - Far [Data3]Iris Position Close - Open	---	---	---	---	---	---	---	○	---	---	---	---	---	---	
Software Version	OS1:19:[Data1] OS1:19:[Data1]:[Data2]	[Data1] 0 1 2 3 4 5 6 [Data2] (Ver. String)	[Data1] System Version 1 Cam Main Network ROM Table Cam FPGA AVIO FPGA Option FPGA [Data2] (ex) 01.00-000-00.00	---	---	---	---	---	---	---	○	---	---	---	---	---	---	
Crop Marker	OS1:1A:[Data] OS1:1A	0 1 2 3 4 5 6 7	Off YI G Mg YI+G YI+Mg G+Mg YI+G+Mg	---	---	○	---	---	○ (UE150) --- (HE145)	---	○	---	---	---	---	---	---	supports only 1(YI) 2(G) 3(Mg) 4(YI+G) 5(YI+Mg) 6(G+Mg) 7(YI+G+Mg)
Crop H Position	OS1:1B:[Data] OS1:1B	738h - 800h - 8C8h	-50% - 0% - +50% (0.25% step)	---	---	---	---	---	---	---	○	---	---	---	---	---	---	---
Crop V Position	OS1:1C:[Data] OS1:1C	738h - 800h - 8C8h	-50% - 0% - +50% (0.25% step)	---	---	---	---	---	---	---	○	---	---	---	---	---	---	---
Auto Iris Level	OS1:1D:[Data] OS1:1D	00h - 64h	0 - 100	---	---	---	---	---	---	---	○	---	---	---	---	---	---	---
Color Temperature Inc	OS1:1E:[Data]	1h - Ah	Inc 1 - Inc 10	○	---	○	---	---	○	---	---	---	---	---	---	---	---	supports only 1h(Inc 1)
Color Temperature Dec	OS1:1F:[Data]	1h - Ah	Dec 1 - Dec 10	○	---	○	---	---	○	---	---	---	---	---	---	---	---	supports only 1h(Dec 1)
Color Temperature	OS1:20:[Data1]:[Data2] OS1:20	[Data1] 00000h - FFFFFh [Data2] 0h 1h 2h	[Data1] OK - 1048575K [Data2] Valid Under Over	[Data1] supports only 007D0h(2000K) - 03A98h(15000K) [Data2] supports only 0(valid)	---	[Data1] supports only 007D0h(2000K) - 03A98h(15000K) [Data2] supports only 0(valid)	---	[Data1] supports only 007D0h(2000K) - 03A98h(15000K) [Data2] supports only 0(valid)	---	[Data1] supports only 007D0h(2000K) - 03A98h(15000K) [Data2] supports only 0(valid)	---	---	---	---	---	---	supports only Confirmation Command	
Intelligent	OS1:21:[Data] OS1:21	0 1 2	Off On Lock	---	---	---	---	---	---	---	○	---	---	---	---	---	---	---
Intelligent Mode	OS1:22:[Data] OS1:22	0 1	AE AE+ATW	---	---	---	---	---	---	---	○	---	---	---	---	---	---	---
Intelligent ND Filter	OS1:23:[Data] OS1:23	0 1 2 3	Through 1/8 1/64 Auto	---	---	---	---	---	---	---	○	---	---	---	---	---	---	---
Intelligent AGC Mode	OS1:24:[Data] OS1:24	0 1 2	Normal Sports SN	---	---	---	---	---	---	---	○	---	---	---	---	---	---	---
ATW Speed	OS1:25:[Data] OS1:25	0 1 2	Normal Slow Fast	○	---	○	---	---	○	○	---	---	---	---	---	---	---	---
ATW Width	OS1:26:[Data] OS1:26	1 2 3 4 5	1 2 3 4 5	---	---	---	---	---	---	---	○	---	---	---	---	---	---	---
Super Gain	OS1:28:[Data] OS1:28	0 1	Off On	○	---	○	---	---	○	○	---	---	---	---	---	---	---	---
3G SDI	OS1:29:[Data]	0	Level A	○ (UE80, UE50)	---	○	---	---	○	○	---	---	---	---	---	---	---	---
3G SDI Out	OS1:29	1	Level B	--- (UE40)	---	---	---	---	---	---	---	---	---	---	---	---	---	---

ITEM	Command Control / Response / Confirmation	Data	Data Contents														
			Control and Response to control	UE80/UE50/UE40	UE20/HE20	UE100	UE4	UE150/HE145	HR140	UB300	UE70series	HE42series	HE40series	HE130	HE120	HE60	HE50
Option Device Type	OS1:2A	[AK-UB300]	[AK-UB300]														
	OS1:2A:[Data]	0 1 2 3	no option 4K default 12G option T100 option														
DC Out	OS1:2B:[Data] OS1:2B	0 1	Off On														
HDR SW (MAIN)	OS1:2C:[Data] OS1:2C	0 1	Off On														
Colormetry	OS1:2D:[Data] OS1:2D	00h 01h	no effect BT 709														
HDR SW (SD11)	OS1:2E:[Data] OS1:2E	0 1	Off On														
HDR SW (LAN)	OS1:2F:[Data] OS1:2F	0 1	Off On														
Shooting Mode	OS1:30:[Data] OS1:30	0 1	Normal High Sens														
HDR SW (SD12)	OS1:31:[Data] OS1:31	0 1	Off On														
Crop	OS1:32:[Data]	0	Full														
SD12/36 SD1 Out	OS1:32	1	Crop														
Crop	OS1:33:[Data]	0	Full														
IP Out	OS1:33	1	Crop														
Master Gamma	OS1:34	05DCh	0.1500														
	OS1:34:[Data]	1194h	0.4500														
		1D4Ch	0.7500														
R Gamma	OS1:35:[Data] OS1:35	35h 80h -	-75 0 -														
		CBh	+75														
		35h	-75														
B Gamma	OS1:36:[Data] OS1:36	80h -	0 -														
		CBh	+75														
		80h	0														
Master Gamma Inc	OS1:37:[Data]	1	Inc														
Master Gamma Dec	OS1:38:[Data]	1	Dec														
HLG Mode (HDR Paint)	OS1:39:[Data] OS1:39	0 1	Fix Var														
SDR Convert Mode (HDR Paint)	OS1:3A:[Data] OS1:3A	0 1	Fix Var														
HLG Type Select (HDR Paint)	OS1:3B:[Data] OS1:3B	0 1	Normal Stretch														
Black Gamma SW (HDR Paint)	OS1:3C:[Data] OS1:3C	0 1	Off On														
Master Black Gamma (HDR Paint)	OS1:3D:[Data] OS1:3D	60h 80h -	-32 0 -														
		A0h	+32														
		60h	-32														
R Black Gamma (HDR Paint)	OS1:3E:[Data] OS1:3E	80h -	0 -														
		A0h	+32														
		80h	-32														
B Black Gamma (HDR Paint)	OS1:3F:[Data] OS1:3F	80h -	0 -														
		A0h	+32														
		80h	-32														
Knee SW (HDR Paint)	OS1:40:[Data] OS1:40	0 1	Off On														
Knee Point (HDR Paint)	OS1:41:[Data] OS1:41	1Ch 30h 80h D0h F4h	55.00% 60.00% 80.00% 100.00% 109.00% (1step=0.25%)														
Knee Slope (HDR Paint)	OS1:42:[Data] OS1:42	00h 7h	0 199														
SDR Convert Gain (HDR Paint)	OS1:43:[Data] OS1:43	74h 77h 74h 80h	-12 -9 -6 -3 0														
SDR Convert Clip (HDR Paint)	OS1:44:[Data] OS1:44	0 1 2	Low Mid High														

ITEM	Command Control / Response / Confirmation	Data	Data Contents														
			Control and Response to control	UE80/UE50/UE40	UE20/HE20	UE100	UE4	UE150/HE145	HR140	UB300	UE70series	HE42series	HE40series	HE130	HE120	HE60	HE50
Error Information	OSJ: 46 OSJ: 46: [Data]	0000000h 0000001h 0000002h 0000004h 0000008h 0000010h	No Error Fan Error High Temperature Lens Error Pan/Tilt Error Sensor Error  ※bit0:Fan Error, bit1:High Temperature. bit2:Lens Error, bit3:Pan/Tilt Error, bit4:Sensor Error	○	---	○	---	○	---	○	---	---	---	---	---	---	---
Auto Iris Speed	OSJ: 01: [Data] OSJ: 01	0h 1h 2h	Slow Normal Fast	○	---	○	---	○	---	○	---	---	---	---	---	---	---
Auto Iris Window	OSJ: 02: [Data] OSJ: 02	0h 1h 2h	Normal1 Normal2 Center	○	---	○	---	○	---	○	---	---	---	---	---	---	---
Shutter Mode	OSJ: 03: [Data] OSJ: 03	0h 1h 2h 3h	Off Step Synchro ELC	○	supports only 0(Off) 1(Step) 2(Synchro)	○	---	○	supports only 0(Off) 1(Step)	○	---	---	---	---	---	---	---
Shutter Step Inc	OSJ: 04: [Data]	01h - 64h	1 - 100	○	○	○	---	○	○	○	---	---	---	---	---	---	---
Shutter Step Dec	OSJ: 05: [Data]	01h - 64h	1 - 100	○	○	○	---	○	○	○	---	---	---	---	---	---	---
Shutter Step Value	OSJ: 06: [Data] OSJ: 06	0001h - 2710 h - 3E80h	1/1 - 1/10000 - 1/16000	supports only 0018h (1/24) - 2710h (1/10000)	○	supports only 0018h (1/24) - 2710h (1/10000)	○	○	supports only 0018h (1/24) - 2710h (1/10000)	○	---	---	---	---	---	---	---
Shutter Synchro Inc	OSJ: 07: [Data]	01h - 64h	1 - 100	○	○	○	---	○	○	○	---	---	---	---	---	---	---
Shutter Synchro Dec	OSJ: 08: [Data]	01h - 64h	1 - 100	○	○	○	---	○	○	○	---	---	---	---	---	---	---
Shutter Synchro Value	OSJ: 09: [Data] OSJ: 09	00000h - 186A0h	0.0 [Hz] - 10000.0[Hz]	supports only 000F0h (24. 0Hz) - 119940 (7200. 0Hz)	○	supports only 001F4h (50. 0Hz) - 019C8h (660. 0Hz)	○	○	supports only 000F0h (24. 0Hz) - 119940 (7200. 0Hz)	○	---	---	---	---	---	---	---
Chroma Phase	OSJ: 08: [Data] OSJ: 08	61h - 80h - 9Fh	-31 - 0 - +31	○	---	○	---	○	○	○	---	---	---	---	---	---	---
AWB Gain Offset	OSJ: 0C: [Data] OSJ: 0C	0 1 76h - 80h - 8Ah	Off On -10 - 0 - +10	○	---	○	---	○	○	○	---	---	---	---	---	---	---
ATW Target R	OSJ: 0D: [Data] OSJ: 0D	76h - 80h - 8Ah	-10 - 0 - +10	○	---	○	---	○	○	○	---	---	---	---	---	---	---
ATW Target B	OSJ: 0E: [Data] OSJ: 0E	76h - 80h - 8Ah	-10 - 0 - +10	○	---	○	---	○	○	○	---	---	---	---	---	---	---
Master Pedestal	OSJ: 0F: [Data] OSJ: 0F	738h - 800h - 8C8h	-200 - 0 - +200	○	supports only 7F6h (-10) - 80Ah (10)	○	---	○	○	○	---	---	---	---	---	---	---
G Pedestal	OSJ: 10: [Data] OSJ: 10	032h - 096h - 0FAh	-100 - 0 - +100	---	---	○	---	○	○	○	---	---	---	---	---	---	---
Pedestal Offset	OSJ: 11: [Data] OSJ: 11	0 1	Off On	○	---	○	---	○	○	○	---	---	---	---	---	---	---
Detail Coring	OSJ: 12: [Data] OSJ: 12	00h - 3Ch	0 - 60	○	---	○	---	○	○	○	---	---	---	---	---	---	---
Level Depend.	OSJ: 13: [Data] OSJ: 13	79h - 80h - 87h	-7 - 0 - 7	---	---	○	---	○	○	○	---	---	---	---	---	---	---
Down Convert Detail	OSJ: 14: [Data] OSJ: 14	0 1 61h - 80h - 9Fh	Off On -31 - 0 - +31	---	---	---	---	○	○	○	---	---	---	---	---	---	---
Down Convert Master Detail	OSJ: 15: [Data] OSJ: 15	0 1 61h - 80h - 9Fh	Off On -31 - 0 - +31	---	---	---	---	○	○	○	---	---	---	---	---	---	---

ITEM	Command Control / Response / Confirmation	Data	Data Contents															
			Control and Response to control	UE80/UE50/UE40	UE20/HE20	UE100	UE4	UE150/HE145	HR140	UB300	UE70series	HE42series	HE40series	HE130	HE120	HE60	HE50	
Down Convert Detail Coring	0SJ: 16: [Data] 0SJ: 16	00h	0						○ (UE150) --- (HE145)									
		-	-															
Down Convert V Detail Level	0SJ: 17: [Data] 0SJ: 17	3Ch	60															
		79h	-7						○ (UE150) --- (HE145)									
Down Convert Detail Frequency	0SJ: 18: [Data] 0SJ: 18	-	-															
		80h	0															
Down Convert Level Depend.	0SJ: 19: [Data] 0SJ: 19	-	-															
		80h	0															
Down Convert Knee Ape Level	0SJ: 1A: [Data] 0SJ: 1A	7Eh	-2															
		80h	0						○ (UE150) --- (HE145)									
Black Gamma Range	0SJ: 1B: [Data] 0SJ: 1B	-	-															
		80h	0															
Color Correction YLYG Saturation	0SJ: 1C: [Data] 0SJ: 1C	-	-															
		80h	0															
Color Correction YLYG Phase	0SJ: 1D: [Data] 0SJ: 1D	-	-															
		80h	0															
12G SDI/Optical Out Output Format	0SJ: 1E: [Data] 0SJ: 1E	41h	-63															
		01h	720/59.94p						○ (UE150) --- (HE145)									
12G SDI/Optical Out HDR Output Select	0SJ: 1F: [Data] 0SJ: 1F	02h	720/50p															
		04h	1080/59.94i															
12G SDI/Optical 3G SDI Out	0SJ: 20: [Data] 0SJ: 20	05h	1080/50i															
		07h	1080/29.97PsF															
3G SDI Out Output Format	0SJ: 21: [Data] 0SJ: 21	08h	1080/25PsF															
		0Ah	1080/23.98PsF															
3G SDI Out HDR Output Select	0SJ: 22: [Data] 0SJ: 22	10h	1080/59.94p															
		11h	1080/50p															

ITEM	Command Control / Response / Confirmation	Data	Data Contents	UE80/UE50/UE40	UE20/HE20	UE100	UE4	UE150/HE145	HR140	UB300	UE70series	HE42series	HE40series	HE130	HE120	HE60	HE50			
			Control and Response to control																	
MONI Out Output Format	OSJ: 23: [Data] OSJ: 23	01h	720/59.94p	---	---	---	---	○ (UE150) --- (HE145)	---	---	---	---	---	---	---	---	---			
		02h	720/50p	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
		04h	1080/59.94i	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
		05h	1080/50i	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
		07h	1080/29.97PsF	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
		08h	1080/25PsF	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		0Ah	1080/23.98PsF	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
MONI Out HDR Output Select	OSJ: 24: [Data] OSJ: 24	0	SDR	---	---	---	---	○ (UE150) --- (HE145)	---	---	---	---	---	---	---	---	---	---		
		1	HDR(2020)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
		2	HDR(709)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
		01h	720/59.94p	○ (UE80)	---	○	---	○ (UE150)	---	---	---	---	---	---	---	---	---	---	---	
		02h	720/50p	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
		04h	1080/59.94i	UE50 doesn't support	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
		05h	1080/50i	19h 2160/59.94p	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
HDMI Out Output Format	OSJ: 25: [Data] OSJ: 25	09h	1080/59.94p	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
		10h	1080/50p	1Ah 2160/50p	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
		11h	1080/50p	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
		14h	1080/29.97p	UE40 doesn't support	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
		15h	1080/25p	16h 1080/23.98p(	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
		16h	1080/23.98p( over 59.94i/p)	over 59.94i/p)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
		17h	2160/29.97p	19h 2160/59.94p	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
		18h	2160/25p	19h 2160/59.94p	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
		19h	2160/59.94p	1Ah 2160/50p	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
		1Ah	2160/50p	18h 2160/23.98p	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
		1Bh	2160/23.98p	21h 2160/24p	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
		21h	2160/24p	1080/24p	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
		22h	1080/24p	1080/23.98p	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
23h	1080/23.98p	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---			
HDMI Out HDR Output Select	OSJ: 26: [Data] OSJ: 26	0	SDR	---	---	---	---	○	---	---	---	---	---	---	---	---	---	---		
		1	HDR(2020)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
Color Bar Tone	OSJ: 27: [Data] OSJ: 27	0	Off	○	---	○	---	○	---	---	---	---	---	---	---	---	---	---		
		1	Low	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
Touch AF	OSJ: 28: [Data1] : [Data2] OSJ: 28	[Data1] 00h	[Data1]H Position 0%	○	---	○	---	○	---	---	---	---	---	---	---	---	---	---		
		[Data2] 00h	[Data2]V Position 0%	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Preset Speed Unit	OSJ: 29: [Data] OSJ: 29	0	Speed Table	○	---	○	---	○	---	---	---	---	---	---	---	---	---	---		
		1	Time	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
Preset Crop	OSJ: 2A: [Data] OSJ: 2A	0	Off	---	---	○	---	○ (UE150) --- (HE145)	---	---	---	---	---	---	---	---	---	---		
		1	On	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
Preset Thumbnail Update	OSJ: 2B: [Data] OSJ: 2B	0	Off	○	---	○	---	○	---	---	---	---	---	---	---	---	---	---		
		1	On	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
Preset Name	OSJ: 2C: [Data] OSJ: 2C	0	Reset	○	---	○	---	○	---	---	---	---	---	---	---	---	---	---		
		1	Hold	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
P/T Speed Mode	OSJ: 2D: [Data] OSJ: 2D	0	UE100	○	---	○	---	○	---	---	---	---	---	---	---	---	---	---		
		1	Normal	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
		2	Fast1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
			Fast2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
		0	UE150	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
		1	Normal	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
UHD Crop	OSJ: 2E: [Data] OSJ: 2E	0	Off	---	---	○	---	○ (UE150) --- (HE145)	---	---	---	---	---	---	---	---	---	---		
		1	Crop(1080)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
		2	Crop(720)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
Crop H Position (Y)	OSJ: 2F: [Data] OSJ: 2F	000h	0	---	---	○	---	UE150 supports only	---	---	---	---	---	---	---	---	---	---		
		780h	1920	---	---	---	---	000h (0)	---	---	---	---	---	---	---	---	---	---		
		A00h	2560	---	---	---	---	A00h (2560)	---	---	---	---	---	---	---	---	---	---		
		C00	3072	---	---	---	---	(1step=2pix)	---	---	---	---	---	---	---	---	---	---		
Crop V Position (Y)	OSJ: 30: [Data] OSJ: 30	000h	0	---	---	○	---	UE150 supports only	---	---	---	---	---	---	---	---	---	---		
		438h	1080	---	---	---	---	000h (0)	---	---	---	---	---	---	---	---	---	---		
		5A0h	1440	---	---	---	---	5A0h (1440)	---	---	---	---	---	---	---	---	---	---		
				---	---	---	---		---	---	---	---	---	---	---	---	---	---		
		6C0	1728	---	---	---	---	HE145 doesn't support	---	---	---	---	---	---	---	---	---	---		

ITEM	Command Control / Response / Confirmation	Data	Data Contents															
			Control and Response to control	UE80/UE50/UE40	UE20/HE20	UE100	UE4	UE150/HE145	HR140	UB300	UE70series	HE42series	HE40series	HE130	HE120	HE60	HE50	
Crop H Position (G)	OSJ: 31: [Data] OSJ: 31	000h	0	---	---	○	---	UE150 supports only 000h (0)	---	---	---	---	---	---	---	---		
		780h	1920	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
		A00h	2560	---	---	---	---	A00h (2560) (1step=2pix)	---	---	---	---	---	---	---	---	---	
		C00	3072	---	---	---	---	HE145 doesn't support	---	---	---	---	---	---	---	---	---	
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Crop V Position (G)	OSJ: 32: [Data] OSJ: 32	000h	0	---	---	○	---	UE150 supports only 000h (0)	---	---	---	---	---	---	---	---		
		438h	1080	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
		5A0h	1440	---	---	---	---	5A0h (1440)	---	---	---	---	---	---	---	---	---	
		6C0	1728	---	---	---	---	HE145 doesn't support	---	---	---	---	---	---	---	---	---	
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Crop H Position (Mg)	OSJ: 33: [Data] OSJ: 33	000h	0	---	---	○	---	UE150 supports only 000h (0)	---	---	---	---	---	---	---	---		
		780h	1920	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
		A00h	2560	---	---	---	---	A00h (2560) (1step=2pix)	---	---	---	---	---	---	---	---	---	
		C00	3072	---	---	---	---	HE145 doesn't support	---	---	---	---	---	---	---	---	---	
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Crop V Position (Mg)	OSJ: 34: [Data] OSJ: 34	000h	0	---	---	○	---	UE150 supports only 000h (0)	---	---	---	---	---	---	---	---		
		438h	1080	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
		5A0h	1440	---	---	---	---	6C0h (1728)	---	---	---	---	---	---	---	---	---	
		6C0	1728	---	---	---	---	HE145 doesn't support	---	---	---	---	---	---	---	---	---	
		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Save Preset Name	OSJ: 35: [Data1]: [Data2] OSJ: 35: [Data1]	[Data1] 00	[Data1] Preset001	[Data2] use only follow characters A-Z, a-z, 1-9, _ Half-Width Space	---	[Data2] use only follow characters A-Z, a-z, 1-9, _ Half-Width Space	---	[Data2] use only follow characters A-Z, a-z, 1-9, _ Half-Width Space	---	---	---	---	---	---	---	---	---	
		99 [Data2] xxxxxxxxxxxxxxx	Presets100 [Data2] Preset Name (Fixed 15 Characters)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Delete Preset Name (Single)	OSJ: 36: [Data]	[Data] 00	[Data] Preset001	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
		99	Presets100	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Delete Preset Name (All)	OSJ: 37	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Update Preset Thumbnail	OSJ: 39: [Data]	[Data] 00	[Data] Preset001	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
		99	Presets100	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Delete Preset Thumbnail (Single)	OSJ: 3A: [Data]	[Data] 00	[Data] Preset001	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
		99	Presets100	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Delete Preset Thumbnail (All)	OSJ: 3B	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Preset Name / Preset Thumbnail Counter	OSJ: 3C: [Data1] OSJ: 3C: [Data1]: [Data2]	[Data1] 00h	[Data1] Preset 001-009	---	---	---	---	---	---	---	---	---	---	---	---	---		
		01h	Preset 010-018	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
		02h	Preset 019-027	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		03h	Preset 028-036	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		04h	Preset 037-045	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		05h	Preset 046-054	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		06h	Preset 055-063	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		07h	Preset 064-072	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		08h	Preset 073-081	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		09h	Preset 082-090	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		0A	Preset 091-099	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		0B	Preset 100	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		[Data2] 00000000h	[Data2] 00000000h	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		FFFFFFFFh	FFFFFFFFh	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		Zoom Scale	OSJ: 3D OSJ: 3D: [Data]	000h	0	---	---	---	---	---	---	---	---	---	---	---	---	---
3E7h	999			---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Operation Lock	OSJ: 3E: [Data]	xxxxxxx	Any Information (40 Characters)	---	---	---	---	---	---	---	---	---	---	---	---	---		
Release Operation Lock	OSJ: 3F	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		

ITEM	Command Control / Response / Confirmation	Data	Data Contents														
			Control and Response to control	UE80/UE50/UE40	UE20/HE20	UE100	UE4	UE150/HE145	HR140	UB300	UE70series	HE42series	HE40series	HE130	HE120	HE60	HE50
Operation Lock Status	OSJ: 40 OSJ: 40: [Data1]: [Data2]	[Data1] 0 1 [Data2] xxxxxxx	[Data1] Unlock Lock [Data2] Any Information (40 Characters)	○	---	○	---	○	---	---	---	---	---	---	---	---	---
External Output 1	OSJ: 41: [Data] OSJ: 41	0 1 2	Off R-Tally G-Tally	○ (UE80, UE50) --- (UE40)	---	○	---	○	---	---	---	---	---	---	---	---	---
External Output 2	OSJ: 42: [Data] OSJ: 42	0 1 2	Off R-Tally G-Tally	○ (UE80, UE50) --- (UE40)	---	○	---	○	---	---	---	---	---	---	---	---	---
Power On Position	OSJ: 45: [Data] OSJ: 45	0 1 2 3	None Standby Home Preset	supports only 1 (Standby) 2 (Home) 3 (Preset)	---	supports only 1 (Standby) 2 (Home) 3 (Preset)	---	○	---	---	---	---	---	---	---	---	---
Power On Preset Number	OSJ: 46: [Data] OSJ: 46	00 99	Preset001 Preset100	○	---	○	---	○	---	---	---	---	---	---	---	---	---
AWB Color Temperature Inc	OSJ: 48: [Data]	1h -	1 -	---	---	○	---	○	---	---	---	---	---	---	---	---	---
AWB Color Temperature Dec	OSJ: 49: [Data]	1h Ah	1 10	---	---	○	---	○	---	---	---	---	---	---	---	---	---
AWB Color Temperature	OSJ: 4A: [Data1]: [Data2] OSJ: 4A	[Data1] 007D0h 03A98h [Data2] 0 1 2	[Data1] 2000K 15000K [Data2] Valid Under Over	○ (Query Only)	---	○	---	○	---	---	---	---	---	---	---	---	---
AWB R Gain	OSJ: 4B: [Data] OSJ: 4B	670h - 800h - 990h	-400 - 0 - 400	---	---	○	---	○	---	---	---	---	---	---	---	---	---
AWB B Gain	OSJ: 4C: [Data] OSJ: 4C	670h - 800h - 990h	-400 - 0 - 400	---	---	○	---	○	---	---	---	---	---	---	---	---	---
AWB G Axis	OSJ: 4D: [Data] OSJ: 4D	670h - 800h - 990h	-400 - 0 - 400	---	---	○	---	○	---	---	---	---	---	---	---	---	---
Digital Extender	OSJ: 4E: [Data] OSJ: 4E	0 1 2	Off x1.4 x2.0	○	○	○	---	○	---	---	---	---	---	---	---	---	---
Adaptive Matrix	OSJ: 4F: [Data] OSJ: 4F	0 1	Off On	○	---	○	---	○	---	---	---	---	---	---	---	---	---
Tracking Data Output Serial Out	OSJ: 54: [Data] OSJ: 54	0 1	Off On	○ (UE80) --- (UE50, UE40)	---	○	---	○ (UE150) --- (HE145)	---	---	---	---	---	---	---	---	---
Tracking Data Output IP Out	OSJ: 55: [Data] OSJ: 55	0 1	Off On	○ (UE80) --- (UE50, UE40)	---	○	---	○ (UE150) --- (HE145)	---	---	---	---	---	---	---	---	---
Color Setting	OSJ: 56: [Data] OSJ: 56	0 1	Normal V-Log	---	---	---	---	○ (UE150) --- (HE145)	---	---	---	---	---	---	---	---	---
12G SDI/Optical Out V-Log Output Select	OSJ: 57: [Data] OSJ: 57	0 1	V-Log V-709	---	---	---	---	○ (UE150) --- (HE145)	---	---	---	---	---	---	---	---	---
3G SDI Out V-Log Output Select	OSJ: 58: [Data] OSJ: 58	0 1	V-Log V-709	---	---	---	---	○ (UE150) --- (HE145)	---	---	---	---	---	---	---	---	---
MONI Out V-Log Output Select	OSJ: 59: [Data] OSJ: 59	0 1	V-Log V-709	---	---	---	---	○ (UE150) --- (HE145)	---	---	---	---	---	---	---	---	---
HDMI Out V-Log Output Select	OSJ: 5A: [Data] OSJ: 5A	0 1	V-Log V-709	---	---	---	---	○ (UE150) --- (HE145)	---	---	---	---	---	---	---	---	---
Preset Iris	OSJ: 5B: [Data] OSJ: 5B	0 1	Off On	○	---	○	---	○	---	---	---	---	---	---	---	---	---
Camera Title	OSJ: 5C: [Data] OSJ: 5C	xxxxxxx	Camera Title (Fixed 40 Characters : ASCII CODE)	○	---	○	---	○	---	---	---	---	---	---	---	---	---
Crop H/V Position Speed Control (V)	OSJ: 5D: [Data1]: [Data2]	[Data1] 01 - 50 - 99 [Data2] 01 - 50 - 99	Left Max. Speed - Stop Right Max. Speed [Data2] Down Max. Speed - Stop - UP Max. Speed	---	---	○	---	○ (UE150) --- (HE145)	---	---	---	---	---	---	---	---	---



ITEM	Command Control / Response / Confirmation	Data	Data Contents Control and Response to control	Data Contents														
				UE60/UE50/UE40	UE20/HE20	UE100	UE4	UE150/HE145	HR140	UB300	UE70series	HE42series	HE40series	HE130	HE120	HE60	HE50	
Crop H/V Position Speed Control (G)	OSJ:5E:[Data1]:[Data2]	[Data1] 01 - 50 - 99 [Data2] 01 - 50 - 99	[Data1] Left Max. Speed - Stop - Right Max. Speed [Data2] Down Max. Speed - Stop - UP Max. Speed	---	---	○	---	---	○ (UE150) --- (HE145)	---	---	---	---	---	---	---	---	
Crop H/V Position Speed Control (Mg)	OSJ:5F:[Data1]:[Data2]	[Data1] 01 - 50 - 99 [Data2] 01 - 50 - 99	[Data1] Left Max. Speed - Stop - Right Max. Speed [Data2] Down Max. Speed - Stop - UP Max. Speed	---	---	○	---	---	○ (UE150) --- (HE145)	---	---	---	---	---	---	---	---	
Get Crop H/V Position (Y1, G, Mg)	OSJ:60:[Data1]:[Data2]:[Data3]:[Data4]:[Data5]:[Data6] OSJ:60	[Data1] 000h - C00h [Data2] 000h - 6C0h [Data3] 000h - C00h [Data4] 000h - 6C0h [Data5] 000h - C00h [Data6] 000h - 6C0h	[Data1] H Position (Y1) 0 - 3072 [Data2] V Position (Y1) 0 - 1728 [Data3] H Position (G) 0 - 3072 [Data4] V Position (G) 0 - 1728 [Data5] H Position (Mg) 0 - 3072 [Data6] V Position (Mg) 0 - 1728	---	---	○	---	UE150 [Data1, 3, 5] H Position (Y1, G, Mg) supports only 000h(0) - A00(2560) [Data2, 4, 6] V Position (Y1, G, Mg) supports only 000h(0) - 5A0(1440) HE145 doesn't support	---	---	---	---	---	---	---	---	---	
Slow Shutter	OSJ:80:[Data] OSJ:80	0 1	Off On	---	○	---	○	---	---	---	---	---	---	---	---	---	---	---
Mirror	OSJ:81:[Data] OSJ:81	0 1	Off On	---	---	---	○	---	---	---	---	---	---	---	---	---	---	---
Language	OSJ:82:[Data] OSJ:82	0 1 2	English Japanese Chinese	---	○	---	○	---	---	---	---	---	---	---	---	---	---	---
LDC	OSJ:84:[Data] OSJ:84	0 1	Off On	---	---	---	○	---	---	---	---	---	---	---	---	---	---	---
Manual Iris Close Limit	OSJ:90:[Data] OSJ:90	0 1	Off On	○	---	---	○	---	---	---	---	---	---	---	---	---	---	---
Crop AF	OSJ:91:[Data] OSJ:91	0 1	Off On	---	---	---	○	---	---	---	---	---	---	---	---	---	---	---
Crop Zoom	OSJ:92:[Data] OSJ:92	0 1	Off On	---	---	---	○	---	---	---	---	---	---	---	---	---	---	---
Crop NDI Out	OSJ:93:[Data] OSJ:93	0 1	Full Crop	---	---	---	○	---	---	---	---	---	---	---	---	---	---	---
Crop IP Out2	OSJ:94:[Data] OSJ:94	0 1	Full Crop	---	---	---	○	---	---	---	---	---	---	---	---	---	---	---
Crop Zoom Ratio (Y1)	OSJ:98:[Data] OSJ:98	02EE0h - 0C350h	120.00% - 500.00%	---	---	---	○	---	---	---	---	---	---	---	---	---	---	---
Crop Zoom Ratio (G)	OSJ:99:[Data] OSJ:99	02EE0h - 0C350h	120.00% - 500.00%	---	---	---	○	---	---	---	---	---	---	---	---	---	---	---
Crop Zoom Ratio (Mg)	OSJ:9A:[Data] OSJ:9A	02EE0h - 0C350h	120.00% - 500.00%	---	---	---	○	---	---	---	---	---	---	---	---	---	---	---
Crop Zoom Ratio (Y1/G/Mg)	OSJ:9B:[Data1]:[Data2]:[Data3] OSJ:9B	[Data1] 02EE0h - 0C350h [Data2] 02EE0h - 0C350h [Data3] 02EE0h - 0C350h	[Data1] Zoom Ratio (Y1) 120.00% - 500.00% [Data2] Zoom Ratio (G) 120.00% - 500.00% [Data3] Zoom Ratio (Mg) 120.00% - 500.00%	---	---	---	○	---	---	---	---	---	---	---	---	---	---	---
Crop Zoom Ratio Speed Control	OSJ:9C:[Data] OSJ:9C	01 - 49 50 51 - 99	Wide Max. Speed - Wide Min. Speed Stop Tele Min. Speed - Tele Max. Speed	---	---	○	---	---	---	---	---	---	---	---	---	---	---	---

ITEM	Command Control / Response / Confirmation	Data	Data Contents														
			Control and Response to control	UE80/UE50/UE40	UE20/HE20	UE100	UE4	UE150/HE145	HR140	UB300	UE70series	HE42series	HE40series	HE130	HE120	HE60	HE50
Crop Zoom Ratio Speed Control (Y1)	OSJ:9D:[Data] OSJ:9D	01	Wide Max. Speed	---	---	○	---	---	---	---	---	---	---	---	---	---	
		-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	
		49	Wide Min. Speed	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		50	Stop	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		51	Tele Min. Speed	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Crop Zoom Ratio Speed Control (G)	OSJ:9E:[Data] OSJ:9E	-	Tele Max. Speed	---	---	---	---	---	---	---	---	---	---	---	---	---	
		01	Wide Max. Speed	---	---	○	---	---	---	---	---	---	---	---	---	---	
		-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	
		49	Wide Min. Speed	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		50	Stop	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Crop Zoom Ratio Speed Control (Mg)	OSJ:9F:[Data] OSJ:9F	51	Tele Min. Speed	---	---	---	---	---	---	---	---	---	---	---	---	---	
		-	Tele Max. Speed	---	---	---	---	---	---	---	---	---	---	---	---	---	
		01	Wide Max. Speed	---	---	○	---	---	---	---	---	---	---	---	---	---	
		-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	
		49	Wide Min. Speed	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Crop H/V Position Speed Control (Y1/G/Mg)	OSJ:A0:[Data1]:[Data 2]:[Data3]:[Data4]:[ Data5]:[Data6]	01 - 50 - 99	Left Max. Speed - Stop	---	---	○	---	---	○ (UE150) --- (HE145)	---	---	---	---	---	---	---	
		[Data2]	Right Max. Speed	---	---	---	---	---	---	---	---	---	---	---	---	---	
		01 - 50 - 99	Down Max. Speed - Stop	---	---	---	---	---	---	---	---	---	---	---	---	---	
		[Data3]	UP Max. Speed	---	---	---	---	---	---	---	---	---	---	---	---	---	
		01 - 50 - 99	Left Max. Speed - Stop	---	---	○	---	---	---	---	---	---	---	---	---	---	
		[Data4]	Right Max. Speed	---	---	---	---	---	---	---	---	---	---	---	---	---	
		01 - 50 - 99	Down Max. Speed - Stop	---	---	---	---	---	---	---	---	---	---	---	---	---	
		[Data5]	UP Max. Speed	---	---	---	---	---	---	---	---	---	---	---	---	---	
		01 - 50 - 99	Left Max. Speed - Stop	---	---	○	---	---	---	---	---	---	---	---	---	---	
		[Data6]	Right Max. Speed	---	---	---	---	---	---	---	---	---	---	---	---	---	
Crop Zoom Ratio Speed Control (Y1/G/Mg)	OSJ:A1:[Data1]:[Data 2]:[Data3]	01	Wide Max. Speed	---	---	○	---	---	---	---	---	---	---	---	---	---	
		-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	
		49	Wide Min. Speed	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		50	Stop	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		51	Tele Min. Speed	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		-	Tele Max. Speed	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		[Data2]	[Data2] (G)	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		01	Wide Max. Speed	---	---	○	---	---	---	---	---	---	---	---	---	---	---
		-	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		49	Wide Min. Speed	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P/T Acceleration	OSJ:A2:[Data] OSJ:A2	0	Manual	○ (UE80)	---	○	---	---	---	---	---	---	---	---	---	---	
		1	Auto	--- (UE50, UE40)	---	---	---	---	---	---	---	---	---	---	---	---	
P/T Rise S-Curve	OSJ:A3:[Data] OSJ:A3	00h	0	○ (UE80)	---	○	---	---	---	---	---	---	---	---	---	---	
		1Eh	30	--- (UE50, UE40)	---	---	---	---	---	---	---	---	---	---	---	---	
P/T Fall S-Curve	OSJ:A4:[Data] OSJ:A4	00h	0	○ (UE80)	---	○	---	---	---	---	---	---	---	---	---	---	
		1Eh	30	--- (UE50, UE40)	---	---	---	---	---	---	---	---	---	---	---	---	
P/T Rise Acceleration	OSJ:A5:[Data] OSJ:A5	01h	1	○ (UE80)	---	○	---	---	---	---	---	---	---	---	---	---	
		FFh	255	--- (UE50, UE40)	---	---	---	---	---	---	---	---	---	---	---	---	
P/T Fall Acceleration	OSJ:A6:[Data] OSJ:A6	01h	1	○ (UE80)	---	○	---	---	---	---	---	---	---	---	---	---	
		FFh	255	--- (UE50, UE40)	---	---	---	---	---	---	---	---	---	---	---	---	
Privacy Mode	OSJ:A7:[Data] OSJ:A7	0	Off	○	---	---	---	---	---	---	---	---	---	---	---	---	
Preset Acceleration	OSJ:A8:[Data] OSJ:A8	0	On	○ (UE80)	---	○	---	○	---	---	---	---	---	---	---	---	
		1	Manual	--- (UE50, UE40)	---	---	---	---	---	---	---	---	---	---	---	---	
Preset Rise S-Curve	OSJ:A9:[Data] OSJ:A9	00h	0	○ (UE80)	---	○	---	---	---	---	---	---	---	---	---	---	
		1Eh	30	--- (UE50, UE40)	---	---	---	---	---	---	---	---	---	---	---	---	
Preset Fall S-Curve	OSJ:AA:[Data] OSJ:AA	00h	0	○ (UE80)	---	○	---	---	---	---	---	---	---	---	---	---	
		1Eh	30	--- (UE50, UE40)	---	---	---	---	---	---	---	---	---	---	---	---	
Preset Rise Acceleration	OSJ:AB:[Data] OSJ:AB	01h	1	○ (UE80)	---	○	---	---	---	---	---	---	---	---	---	---	
		FFh	255	--- (UE50, UE40)	---	---	---	---	supports only 01h (1)-06h (6)	---	---	---	---	---	---	---	

ITEM	Command Control / Response / Confirmation	Data	Data Contents														
			Control and Response to control	UE80/UE50/UE40	UE20/HE20	UE100	UE4	UE150/HE145	HR140	UB300	UE70series	HE42series	HE40series	HE130	HE120	HE60	HE50
Presets	OSJ:AC:[Data]	01h	---	○ (UE80)	---	○	---	---	---	---	---	---	---	---	---	---	---
Fail Acceleration	OSJ:AC	FFh	255	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Presets	OSJ:AD:[Data]	01h	0.1s	○ (UE80)	---	○	---	---	---	---	---	---	---	---	---	---	---
Rise Ramp Time	OSJ:AD	64h	10.0s	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Presets	OSJ:AE:[Data]	01h	0.1s	○ (UE80)	---	○	---	---	---	---	---	---	---	---	---	---	---
Fail Ramp Time	OSJ:AE	64h	10.0s	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Crop H Position	OSJ:AF:[Data]	000h	0	---	---	○	---	---	---	---	---	---	---	---	---	---	---
	OSJ:AF	000h	3072	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Crop V Position	OSJ:BD:[Data]	000h	0	---	---	○	---	---	---	---	---	---	---	---	---	---	---
	OSJ:BD	600h	1728	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Crop Zoom Ratio	OSJ:B1:[Data]	02EE0h	120.00%	---	---	○	---	---	---	---	---	---	---	---	---	---	---
	OSJ:B1	0C350h	500.00%	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Auto Iris Close Limit	OSJ:C0:[Data]	0	Off	---	---	---	---	○	---	---	---	---	---	---	---	---	---
	OSJ:C0	1	F8	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		2	F7	---	---	---	---	---	---	---	---	---	---	---	---	---	---
		3	F5,6	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Tracking Data Output	OSJ:C1:[Data]	0	Off	○ (UE80)	---	○	---	○ (UE150)	---	---	---	---	---	---	---	---	---
Invert Pan/Tilt Axis	OSJ:C1	1	On	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Crop Position/Crop Zoom Position Speed Control (YL/G/MG)	OSJ:C2:[Data1]:[Data2]:[Data3]:[Data4]:[Data5]:[Data6]:[Data7]:[Data8]:[Data9]	[Data1] 01 - 50 - 99 [Data2] 01 - 50 - 99 [Data3] 01 - 50 - 99 [Data4] 01 - 50 - 99 [Data5] 01 - 50 - 99 [Data6] 01 - 50 - 99 [Data7] 01 - 50 - 99 [Data8] 01 - 50 - 99 [Data9] 01 - 50 - 99	[Data1]YL H Crop Position Left Max. speed - Stop - Right Max. speed [Data2]YL V Crop Position Down Max. speed - Stop - UP Max. speed [Data3]G H Crop Position Left Max. speed - Stop - Right Max. speed [Data4]G V Crop Position Down Max. speed - Stop - UP Max. speed [Data5]MG H Crop Position Left Max. speed - Stop - Right Max. speed [Data6]MG V Crop Position Down Max. speed - Stop - UP Max. speed [Data7]YL Crop Zoom Position Wide Max. speed - Stop - Tele Max. speed [Data8] G Crop Zoom Position Wide Max. speed - Stop - Tele Max. speed [Data9] MG Crop Zoom Position Wide Max. speed - Stop - Tele Max. speed	---	---	○	---	---	---	---	---	---	---	---	---	---	---
Request Crop Position/Crop Zoom Position	OSJ:C3:[Data] OSJ:C3	[Data1] 000h - 000h [Data2] 000h - 600h [Data3] 000h - 000h [Data4] 000h - 600h [Data5] 000h - 000h [Data6] 000h - 600h [Data7] 02EE0h - 0C350h [Data8] 02EE0h - 0C350h [Data9] 02EE0h - 0C350h	[Data1] H Position (YL) 0 - 3072 [Data2] V Position (YL) 0 - 1728 [Data3] H Position (G) 0 - 3072 [Data4] V Position (G) 0 - 1728 [Data5] H Position (MG) 0 - 3072 [Data6] V Position (MG) 0 - 1728 [Data7] Zoom Ratio (YL) 120.00% - 500.00% [Data8] Zoom Ratio (G) 120.00% - 500.00% [Data9] Zoom Ratio (MG) 120.00% - 500.00%	---	---	○	---	---	---	---	---	---	---	---	---	---	---
Spotlight COMP.	OSJ:D0:[Data] OSJ:D0	0 1	Off On	○	---	---	---	---	---	---	---	---	---	---	---	---	---
Flicker Suppression	OSJ:D1:[Data] OSJ:D1	0 1	Off On	○	---	---	---	---	---	---	---	---	---	---	---	---	---
ND Filter Status	OSJ:D2:[Data] OSJ:D2	0 1 2 3	Through 1/4 ND 1/16 ND 1/64 ND	○ (UE80) ---	---	---	---	---	---	---	---	---	---	---	---	---	---
USB Mode	OSJ:D3:[Data] OSJ:D3	0 1	Off On	---	---	---	---	---	---	---	---	---	---	---	---	---	---
USB Auto Active	OSJ:D4:[Data] OSJ:D4	0 1	Off On	○ (UE80) ---	---	---	---	---	---	---	---	---	---	---	---	---	---
Presets	OSJ:D5:[Data] OSJ:D5	0 1	Off On	○ (UE80) ---	---	---	---	---	---	---	---	---	---	---	---	---	---

ITEM	Command Control / Response / Confirmation	Data	Data Contents															
			Control and Response to control	UE80/UE50/UE40	UE20/HE20	UE100	UE4	UE150/HE145	HR140	UB300	UE70series	HE42series	HE40series	HE130	HE120	HE60	HE50	
Scene Copy	OSJ:D6:[Data1][Data2]	[Data1]	[Data1]Scene (From)	○	---	---	---	---	---	---	---	---	---	---	---	---	---	
		1 2 3 4	Scene1 Scene2 Scene3 Full Auto															
Gamma Mode	OSJ:D7:[Data] OSJ:D7	[Data2]	[Data2]Scene (To)	○	---	---	---	---	---	---	---	---	---	---	---	---	---	
		1 2 3 4	Scene1 Scene2 Scene3 Full Auto															
AF Sensitivity	OSJ:D8:[Data] OSJ:D8	0	Normal	○	---	---	---	---	---	---	---	---	---	---	---	---	---	
		1	Stable															
Tally LED Limit R	OSJ:D9:[Data] OSJ:D9	0	Unlimited	○	---	○	---	---	---	---	---	---	---	---	---	---	---	
		1	Limited															
Tally LED Limit G	OSJ:DA:[Data] OSJ:DA	0	Unlimited	○	---	○	---	---	---	---	---	---	---	---	---	---	---	
		1	Limited															
Tally LED Limit B	OSJ:DB:[Data] OSJ:DB	0	Unlimited	---	(UE80)	---	---	---	---	---	---	---	---	---	---	---	---	
		1	Limited	○	(UE50, UE40)													
USB Auto Standby	OSJ:DC:[Data] OSJ:DC	0	Off	---	(UE80)	---	---	---	---	---	---	---	---	---	---	---	---	
		1	On	○	(UE50, UE40)													
Tracking Data Output Camera ID	OSJ:F4:[Data] OSJ:F4	00h	0x00	---	---	○	---	---	---	---	---	---	---	---	---	---	---	
		FFh	0xFF	---	---	○	(UE150) ---(HE145)											
SC Fine	OSN:[Data] OSN	000h	-511	---	---	---	---	---	---	---	---	---	---	---	---	○	○	
		001h	-511															
Software Version (System Version)	OSV:[Data] OSV:[Data]	00h	-10	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
		-	-															
T Pedestal	OTD:[Data] OTD	1Eh	0	---	---	---	---	---	○	---	○	○	○	○	○	○	○	
		3Ch	+10															
T Pedestal	OTP:[Data] OTP	00h	<u>HR140, HE130, HE120</u> -150	---	---	---	---	---	○	---	○	○	○	○	○	○	○	
		-	-															
Serial Com. Protocol	OVP:02:[Data] OVP:02	0	Panasonic Standard	---	○	---	---	---	---	---	---	---	---	---	---	---	---	
		1	RS422	---	○	---	---	---	---	---	---	---	---	---	---	---	---	
Serial Connector Select	OVP:03:[Data] OVP:03	0	RS422	---	○	---	---	---	---	---	---	---	---	---	---	---	---	
		1	RS232C	---	○	---	---	---	---	---	---	---	---	---	---	---	---	
Serial Baud Rate	OVP:04:[Data] OVP:04	0	9600bps	---	○	---	---	---	---	---	---	---	---	---	---	---	---	
		1	38400bps	---	○	---	---	---	---	---	---	---	---	---	---	---	---	
Serial Camera Address	OVP:05:[Data] OVP:05	1	Auto	---	○	---	---	---	---	---	---	---	---	---	---	---	---	
		2	2															
AWC/AMB SET	ONS	---	AWC/AMB Start	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
		0	Off	○	---	○	---	---	---	---	---	---	---	---	---	---	---	
R-Tally Control	TLR:[Data] OLR	0	Off	○	---	○	---	---	---	---	---	---	---	---	---	---	---	
		1	On															
G-Tally Control	TLG:[Data] QLG	0	Off	○	---	○	---	---	○	---	---	---	---	---	---	---	---	
		1	On															
Scene File	XSF:[Data] OSF	※	※	※	※	※	※	※	※	※	※	※	※	※	※	※	※	
		OSF:[Data]																

PT command

ITEM	Command Control Confirmation Response	Data	Data Contents	UE80/UE50/UE40	UE20/HE20	UE100	UE4	UE150/HE145	HR140	UE70series	HE42series	HE40series	HE130	HE120	HE60	HE50
P/T Absolute Position Control	#APC[Data1][Data2] #APC aPC[Data1][Data2]	[Data1] 0000h - 8000h - FFFFh [Data2] 0000h - 8000h - FFFFh	[Data1]Pan Position CCW Limit - Center - CW Limit [Data2]Tilt Position UP Limit - Center - DOWN Limit	supports only Pan 2D09(CCW Limit) -D2F5(CW Limit) Tilt 1C71(UP Limit) -8E38(DOWN Limit)	supports only Pan 2F69(CCW Limit) -D097(CW Limit) Tilt 5555(UP Limit) -8E38(DOWN Limit)	supports only Pan 2D09(CCW Limit) -D2F5(CW Limit) Tilt 1C71(UP Limit) -8E38(DOWN Limit)	supports only Pan 8000(Center) Tilt 8000(Center)	supports only Pan 2D09(CCW Limit) -D2F5(CW Limit) Tilt 1C71(UP Limit) -8E38(DOWN Limit)	supports only Pan 2D09(CCW Limit) -D2F5(CW Limit) Tilt 1C71(UP Limit) -8E38(DOWN Limit)	supports only Pan 2D09(CCW Limit) -D2F5(CW Limit) Tilt 5555(UP Limit) -8E38(DOWN Limit)	supports only Pan 2D09(CCW Limit) -D2F5(CW Limit) Tilt 5555(UP Limit) -8E38(DOWN Limit)	supports only Pan 2D09(CCW Limit) -D2F5(CW Limit) Tilt 5555(UP Limit) -8E38(DOWN Limit)	supports only Pan 2D09(CCW Limit) -D2F5(CW Limit) Tilt 1C71(UP Limit) -8E38(DOWN Limit)	supports only Pan 2D09(CCW Limit) -D2F5(CW Limit) Tilt 1C71(UP Limit) -8E38(DOWN Limit)	supports only Pan 2D09(CCW Limit) -D2F5(CW Limit) Tilt 5555(UP Limit) -8E38(DOWN Limit)	supports only Pan 2D09(CCW Limit) -D2F5(CW Limit) Tilt 5555(UP Limit) -8E38(DOWN Limit)
P/T Absolute Position Control with Speed	#APS[Data1][Data2][Data3] [Data4] aPS[Data1][Data2][Data3] [Data4]	[Data1] 0000h - 8000h - FFFFh [Data2] 0000h - 8000h - FFFFh [Data3] 00h - 1Dh [Data4] 0 1 2	[Data1]Pan Position CCW Limit - Center - CW Limit [Data2]Tilt Position UP Limit - Center - DOWN Limit [Data3]Preset Speed 1 - 30 [Data4]Preset Speed Table Slow Mid Fast	○	---	○	---	○	○	○	○	○	○	---	---	---
Focus Position Control	#AXF[Data] - #AXF axf[Data]	555h - FFFh	Near - Far	○	○	○	supports only 555	○	○	○	○	○	○	○	○	○
Iris Control	#AXI[Data] - #AXI axi[Data]	555h - FFFh	Iris Close - Iris Open	○	○	○	supports only 555	○	○	○	○	○	○	○	○	○
Zoom Position Control	#AXZ[Data] - #AXZ axz[Data]	555h - FFFh	Wide - Tele	○	○	○	supports only 555	○	○	○	○	○	○	○	○	○
Delete Preset Memory	#C[Data] - s[Data]	00 - 99	Preset001 - Preset100	○	○	○	○	○	○	○	○	○	○	○	○	○
Focus Mode	#D1[Data] - #D1 d1[Data]	0 - 1	Manual - Auto	○	○	○	---	○	○	○	○	○	○	○	○	○
Iris Mode	#D3[Data] - #D3 d3[Data]	0 - 1	Manual - Auto	○	○	○	---	○	○	○	○	○	○	○	○	○
Day/Night	#D6[Data] - #D6 d6[Data]	0 - 1	Day - Night	○ (UE80) --- (UE50, UE40)	---	○	---	○	○	○	○	○	○	---	○	○
Defroster Control	#D7[Data] - #D7 d7[Data]	0 - 1	Off - On	---	---	---	---	○ : Auto 1 : On	---	---	---	---	---	---	---	---
Wiper Control	#D8[Data] - #D8 d8[Data]	0 - 1	Off - On	---	---	---	---	○ : Off 1 : Fast (Heater)	---	---	---	---	---	---	---	---
Heater/Fan Control	#D9[Data] - #D9 d9[Data]	0 - 1	Off - On	---	---	---	---	○ : Auto 1 : On	---	---	---	---	---	---	---	---
R-Tally Control	#DA[Data] - #DA dA[Data]	0 - 1	Off - On	○	○	○	○	○	○	○	○	○	○	○	○	○
Defroster Status	#DS - dS[Data]	0 - 1	Off - On	---	---	---	---	○	---	---	---	---	---	---	---	---
Focus Speed Control	#F[Data] - #F fS[Data]	01 - 49 50 51 - 99	Near Max. Speed - Near Min. Speed Stop Far Min. Speed - Far Max. Speed	○	○	○	---	○	○	○	○	○	○	○	○	○
Fan	#FAN[Data] - #FAN fAN[Data]	0 - 1 2 - 3	Auto High Mid Low	○ (UE80) --- (UE50, UE40)	---	○	---	○	Supports only 0(Auto) 1(On)	---	---	---	---	---	---	---

ITEM	Command Control Confirmation Response	Data	Data Contents													
				UE80/UE50/UE40	UE20/HE20	UE100	UE4	UE150/HE145	HR140	UE70series	HE42series	HE40series	HE130	HE120	HE60	HE50
Fan2	#FA2[Data] #FA2 #A2[Data]	0 1 2 3	Auto High Mid Low	---	---	---	---	○	---	---	---	---	---	---	---	---
Flip Detect Angle	#FDA[Data] #FDA #DA[Data]	3Ch - 78h	60deg - 120deg	---	---	○	---	○	○	---	---	---	○	○	---	---
Fan Status1	#FS1 #S1 #S1[Data]	0 1 2	Off On Error	○ (UE80) --- (UE50, UE40)	---	○	---	○	Supports only 0(Off), 1(On)	---	---	---	---	---	---	---
Fan Status2	#FS2 #S2 #S2[Data]	0 1 2	Off On Error	---	---	---	---	○	Supports only 0(Off), 1(On)	---	---	---	---	---	---	---
Request Focus Position	#GF #g[Data]	555h - FFFh "----"	Near - Far @Power Off	○	○	○	---	○	○	○	○	○	○	○	○	○
Request Iris Position	#GI #g[Data1][Data2]	[Data1] 555h - FFFh "----" [Data2] 0 1	[Data1] Close - Open @Power Off [Data2] Manual Iris Auto Iris	○	○	○	---	○	○	○	○	○	○	○	○	○
Request Zoom Position	#GZ #gz[Data]	555h - FFFh "----"	Wide - Tele @Power Off	○	○	○	---	○	○	○	○	○	○	○	○	○
Heater Status	#HS #hS[Data]	0 1	Off On	---	---	---	---	---	○	---	---	---	---	---	---	---
Iris Control	#I #I[Data] #IC[Data]	01 #I 99	Iris Close Iris Open	○	○	○	---	○	○	○	○	○	○	○	○	○
Install Position	#INS[Data] #INS #INS[Data]	0 1	Desktop Hanging	○	○	○	○	○	○	○	○	○	○	○	○	○
Limitation Control (toggle)	#L #L[Data] #L[Data]	Controller -> P/T 1 2 3 4 P/T -> Controller 0	Tilt Up Tilt Down Pan Left Pan Right Release Set	○	---	○	---	○	○	○	○	○	○	○	○	○
Limitation Control	#LC[Data1][Data2] #LC[Data1] #IC[Data1][Data2]	[Data1] 1 2 3 4 [Data2] 0 1	[Data1] Tilt Up Tilt Down Pan Left Pan Right [Data2] Release Set	○	○	○	---	○	○	○	○	○	○	○	○	○
Status Lamp	#LMP[Data] #LMP #IMP[Data]	0 1	Disable Enable	○	○	○	---	○	---	---	---	---	○	---	---	---
Lens Position Information Control	#LPC[Data] #LPC #PC[Data]	0 1	Off On	○	○	○	○	○	○	○	○	○	○	○	○	○
Lens Position Information	#LPI #PI[Data1][Data2][Data3]	[Data1] 555h - FFFh [Data2] 555h - FFFh [Data3] 555h - FFFh	[Data1]Zoom Position Wide - Tele [Data2]Focus Position Near - Far [Data3]Iris Position Close - Open	○	○	○	---	○	○	○	○	○	○	○	○	○
Save Preset Memory	#M[Data] #s[Data]	00 - 99	Preset001 - Preset100	○	○	○	○	○	○	○	○	○	○	○	○	○

ITEM	Command Control Confirmation Response	Data	Data Contents													
				UE80/UE50/UE40	UE20/HE20	UE100	UE4	UE150/HE145	HR140	UE70series	HE42series	HE40series	HE130	HE120	HE60	HE50
Power On / Standby	#Op[Data]	0 1 3	Power Off Power On Starting(3%)	○	○	○	○	○	○	○	○	○	○	○	○	○
Pan Speed Control	#P[Data] pS[Data]	01 - 50 - 99	Left Max. Speed - Stop - Right Max. Speed	○	○	○	○	○	○	○	○	○	○	○	○	○
Preset Entry Confirmation	#PE[Data1] pE[Data1]	[Data1] 00h 01h 02h - [Data2] 0000000000h - FFFFFFFFh - (bit0) 0 1 - (bit1) 0 1 - (39bit) 0 1	[Data1] Preset 001~040 Preset 041~080 Preset 081~100 - [Data2] Preset No.(Data1*40 + 1) No Entry Entry Preset No.(Data1*40 + 2) No Entry Entry - Preset No.(Data1*40 + 40) No Entry Entry	○	○	○	○	○	○	○	○	○	○	○	○	○
Freeze During Preset	#PRF[Data] pRF[Data]	0 1	Off On	○	---	○	---	○	○	○	○	○	○	---	---	---
Preset Speed Table	#PST[Data] pST[Data]	0 1 2	Slow Mid Fast	supports only 0(Slow) 2(Fast)	supports only 0(Slow) 2(Fast)	supports only 0(Slow) 2(Fast)	---	supports only 0(Slow) 2(Fast)	supports only 0(Slow) 2(Fast)	supports only 0(Slow) 2(Fast)	supports only 0(Slow) 2(Fast)	supports only 0(Slow) 2(Fast)	supports only 0(Slow) 2(Fast)	---	---	---
Get Pan/Tilt/Zoom/Focus/Iris	#PTD[Data1][Data2][Data3][Data4][Data5]	[Data1] 0000h - FFFFh [Data2] 0000h - FFFFh [Data3] 000h - 3E7h [Data4] 00h - 63h [Data5] 00h - FEh FFh	[Data1] (Pan) 0000h - FFFFh [Data2] (Tilt) 0000h - FFFFh [Data3] (Zoom) 0 - 999 [Data4] (Focus) 0 - 99 [Data5] (Iris) F0.0 - F25.4 CLOSE	○	---	○	---	○	---	---	---	---	---	---	---	---

ITEM	Command Control Confirmation Response	Data	Data Contents													
				UE80/UE50/UE40	UE20/HE20	UE100	UE4	UE150/HE145	HR140	UE70series	HE42series	HE40series	HE130	HE120	HE60	HE50
Get Gain/ColorTemp/ Shutter/ND	#PTG pTG[Data1][Data2][Data3][Data4][Data5][Data6]	[Data1] 08h - 11h - 1Ah - 32h 80h [Data2] 00000h - 3A98h [Data3] 0h 1h 2h 3h [Data4] 0001h - 2710 h [Data5] 00000h - 186A0h [Data6] 0 1 2 3	[Data1] (Gain) 0dB - 9dB - 18dB - 42dB AGC On [Data2] 0K - 15000K [Data3] (Shutter Mode) Off Step Synchro ELC [Data4] (Shutter Step) 1/1 - 1/10000 [Data5] (Shutter Synchro) 0.0 [Hz] - 10000.0[Hz] [Data6] (ND) Throgh 1/4 ND 1/16 ND 1/64 ND	○	---	○	---	○	---	---	---	---	---	---	---	---
P/T Speed Control	#PTS[Data1][Data2] pTS[Data1][Data2]	[Data1] 01 - 50 - 99 [Data2] 01 - 50 - 99	[Data1] Left Max. Speed - Stop Right Max. Speed [Data2] Down Max. Speed - Stop - UP Max. Speed	○	○	○	○	○	○	○	○	○	○	○	○	○
Get Pan/Tilt/Zoom/Focus/Iris	#PTV pTV[Data1][Data2][Data3][Data4][Data5]	[Data1] 0000h - 8000h - FFFFh [Data2] 0000h - 8000h - FFFFh [Data3] 555h - FFFh [Data4] 555h - FFFh [Data5] 555h - FFFh	[Data1] (Pan) cwLimit - Center - cwLimit [Data2] (Tilt) UpLimit - Center - DownLimit [Data3] (Zoom) Wide - Tele [Data4] (Focus) Near - Far [Data5] (Iris) Close - Open	○	---	○	---	○	---	---	---	---	---	---	---	---
Preset completion notification	c[Data]	00 99	Presets001 Presets100	○	○	○	○	○	○	○	○	○	○	○	○	○
Software Version	#QSV[Data1] eSV[Data1]V[Data2][Data3] [Data4][Data5][Data6]	※	※	※	---	※	---	※	※	※	※	※	※	※	※	※
Recall Preset Memory	#R[Data] s[Data]	00 99	Preset001 Preset100	○	○	○	○	○	○	○	○	○	○	○	○	○
Latest Error Information	#RER rER[Data]	※	※	※	---	※	---	※	※	※	※	※	※	※	※	※
IR ID / Wireless ID	#RID[Data] #RID rID[Data]	0 1 2 3	CAM1 CAM2 CAM3 CAM4	---	○ (UE80) ○ (UE50, UE40)	---	○	---	---	○	○	○	---	---	---	---



ITEM	Command Control Confirmation Response	Data	Data Contents													
				UE80/UE50/UE40	UE20/HE20	UE100	UE4	UE150/HE145	HR140	UE70series	HE42series	HE40series	HE130	HE120	HE60	HE50
P/T Relative Position Control	#RPC[Data1][Data2] rPC[Data1][Data2]	[Data1] 0000h - 8000h - FFFFh [Data2] 0000h - 8000h - FFFFh	[Data1]Pan Position CCW Limit - Center - CW Limit [Data2]Tilt Position UP Limit - Center - DOWN Limit	○	---	○	---	○	○	○	○	○	○	---	---	---
P/T Relative Position Control with Speed	#RPS[Data1][Data2][Data3] [Data4] rPS[Data1][Data2][Data3] [Data4]	[Data1] 0000h - 8000h - FFFFh [Data2] 0000h - 8000h - FFFFh [Data3] 00h - 1Dh [Data4] 0 - 1 - 2	[Data1]Pan Position CCW Limit - Center - CW Limit [Data2]Tilt Position UP Limit - Center - DOWN Limit [Data3]Preset Speed 1 - 30 [Data4]Preset Speed Table Slow Mid Fast	○	---	○	---	○	○	○	○	○	○	---	---	---
Resolution Control	#RZL[Data] 1 #RZL rZL[Data] 2 3	0 1 2 3	640x360 320x180 1280x720 1920x1080	○	---	○	---	○	---	supports only 0(640x360) 1(320x180)	supports only 0(640x360) 1(320x180)	supports only 0(640x360) 1(320x180)	---	---	---	---
Request Latest Recall Preset No.	#S s[Data]	00 - 99	Preset 1 - Preset 100	○	○	○	○	○	○	○	○	○	○	○	○	○
Smart Picture Flip	#SPF[Data] #SPF sPF[Data]	0 1	Off Auto	---	---	○	---	○	○	---	---	---	○	○	---	---
Speed With Zoom Position	#SWZ[Data] #SWZ sWZ[Data]	0 1	Off On	○	○	○	---	○	○	○	○	○	○	○	○	○
Tilt Speed Control	#T[Data] tS[Data]	01 - 50 - 99	Down Max. Speed - Stop - UP Max. Speed	○	○	○	○	○	○	○	○	○	○	○	○	○

ITEM	Command Control Confirmation Response	Data	Data Contents													
				UE80/UE50/UE40	UE20/HE20	UE100	UE4	UE150/HE145	HR140	UE70series	HE42series	HE40series	HE130	HE120	HE60	HE50
Tally Information	#TAA #AA[Data1][Data2][Data3][Data4][Data5][Data6][Data7][Data8][Data9]	[Data1] 0 1 [Data2] 0 1 [Data3] 0 1 [Data4] 0 1 [Data5] 0 1 [Data6] 0 1 [Data7] 0 1 [Data8] 0 1 [Data9] 0 1	[Data1] Red Tally Off Red Tally On [Data2] Wired Red Tally In Off Wired Red Tally In On [Data3] Command Red Tally In Off Command Red Tally In On [Data4] Green Tally Off Green Tally On [Data5] Wired Green Tally In Off Wired Green Tally In On [Data6] Command Green Tally In Off Command Green Tally In On [Data7] (Reserved) Tally Off (Reserved) Tally On [Data8] Wired (Reserved) Tally In Off Wired (Reserved) Tally In On [Data9] Command (Reserved) Tally In Off Command (Reserved) Tally In On	[Data5][Data7][Data8][Data9];unused	[Data2][Data4][Data5][Data6][Data7][Data8][Data9];unused	[Data6][Data7][Data8][Data9];unused	[Data2][Data4][Data5][Data6][Data7][Data8][Data9];unused	[Data5][Data7][Data8][Data9];unused	---	---	---	---	---	---	---	---
Tally Enable	#TAE[Data] #TAE #AE[Data]	0 1	Disable Enable	○	○	○	○	○	---	○	○	○	○	○	○	○
Preset Speed	#UPVS[Data] #UPVS #PVS[Data]	[Preset Speed Unit : 0 (Speed Table)] 275h 300h 325h 350h 375h 400h 425h 450h 475h 500h 525h 550h 575h 600h 625h 650h 675h 700h 725h 750h 775h 800h 825h 850h 875h 900h 925h 950h 975h 999h [Preset Speed Unit : 1 (Time)] 001h -- 063h	[Preset Speed Unit : 0 (Speed Table)] 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 [Preset Speed Unit : 1 (Time)] 01 -- 99	○	○ Preset Speed Unit is fixed to 0(Speed Table)	○	---	○	○	○	○	○	○	○	○	○
Washer	#WAS[Data] #WAS #AS[Data]	0 1	Off On	---	---	---	---	---	○	---	---	---	---	---	---	---
Wiper	#WIP[Data] #WIP #IP[Data]	0 1 2	Off Fast Slow	---	---	---	---	---	○	---	---	---	---	---	---	---
Wireless Control	#WLC[Data1] #WLC #LC[Data1]	0 1	Disable Enable	○	○	○	○	○	---	○	○	○	○	○	○	○
Washer P/T Position Reset	#WPR #PR	---	---	---	---	---	---	---	○	---	---	---	---	---	---	---
Washer P/T Position	#WPT #PT	---	---	---	---	---	---	---	○	---	---	---	---	---	---	---

ITEM	Command	Data	Data Contents													
	Control Confirmation Response			UE80/UE50/UE40	UE20/HE20	UE100	UE4	UE150/HE145	HR140	UE70series	HE42series	HE40series	HE130	HE120	HE60	HE50
Zoom Speed Control		01	Wide Max. Speed	○	○	○	○	○	○	○	○	○	○	○	○	○
		-	-													
		49	Wide Min. Speed													
	#Z[Data]	50	Stop													
	zS[Data]	51	Tele Min. Speed													
	-	-	-													
		99	Tele Max. Speed													

## ※Details

### ▼OSH

Parameters vary depending on model and System Format

HR140, HE130		UE70series, HE42series, HE40series, HE60, HE50	HE120
(59.94p/59.94i)	F(1/30)	0(OFF),	0(OFF),
0(OFF)	(23.98p)	3(1/100 NTSC)	3(1/100 NTSC)
3(1/100)	0(OFF)	(1/120 PAL),	(1/120 PAL),
4(1/120)	2(1/60)	5(1/250)	5(1/250)
5(1/250)	4(1/120)	-	-
-	5(1/250)	B(Synchro-Scan)	C(ELC)
C(ELC)	-		
	D(1/24)		
(29.97p)	(50p/50i)		
0(OFF)	0(OFF)		
2(1/60)	2(1/60)		
4(1/120)	3(1/120)		
5(1/250)	5(1/250)		
-	-		
C(ELC)	C(ELC)		
	(25p)		
	0(OFF)		
	2(1/60)		
	3(1/120)		
	5(1/250)		
	-		
	C(ELC)		
	E(1/25)		

▼ OSA:87

Parameters vary depending on model

UE80, UE100, UE150	UE50	UE40	HE145	UE20	HE20	UE4
[59.94Hz] 01h (720/59.94p) 04h (1080/59.94i) 07h (1080/29.97psF) 10h (1080/59.94p) 14h (1080/29.97p) 16h (1080/23.98p (over 59.94i/p) ) 17h (2160/29.97p) 19h (2160/59.94p)	[59.94Hz] 01h (720/59.94p) 04h (1080/59.94i) 07h (1080/29.97psF) 10h (1080/59.94p) 14h (1080/29.97p) 16h (1080/23.98p (over 59.94i/p) ) 17h (2160/29.97p)	[59.94Hz] 01h (720/59.94p) 04h (1080/59.94i) 10h (1080/59.94p) 14h (1080/29.97p) 17h (2160/29.97p)	[59.94Hz] 01h (720/59.94p) 04h (1080/59.94i) 07h (1080/29.97psF) 10h (1080/59.94p) 14h (1080/29.97p) 16h (1080/23.98p (over 59.94i/p) )	[59.94Hz] 1h (720/59.94p) 4h (1080/59.94i) 10h (1080/59.94p) 14h (1080/29.97p) 17h (2160/29.97p)	[59.94Hz] 1h (720/59.94p) 4h (1080/59.94i) 10h (1080/59.94p) 14h (1080/29.97p)	[59.94Hz] 1h (720/59.94p) 10h (1080/59.94p) 14h (1080/29.97p) 17h (2160/29.97p)
[50Hz] 02h (720/50p) 05h (1080/50i) 08h (1080/25psF) 11h (1080/50p) 15h (1080/25p) 18h (2160/25p) 1Ah (2160/50p)	[50Hz] 02h (720/50p) 05h (1080/50i) 08h (1080/25psF) 11h (1080/50p) 15h (1080/25p) 18h (2160/25p)	[50Hz] 02h (720/50p) 05h (1080/50i) 11h (1080/50p) 15h (1080/25p) 18h (2160/25p)	[50Hz] 02h (720/50p) 05h (1080/50i) 08h (1080/25psF) 11h (1080/50p) 15h (1080/25p)	[50Hz] 2h (720/50p) 5h (1080/50i) 11h (1808/50p) 15h (1080/25p) 18h (2160/25p)	[50Hz] 2h (720/50p) 5h (1080/50i) 11h (1808/50p) 15h (1080/25p)	[50Hz] 2h (720/50p) 11h (1808/50p) 15h (1080/25p) 18h (2160/25p)
[24Hz] 21h (2160/24p) 22h (1080/24p)	[24Hz] 21h (2160/24p) 22h (1080/24p)	[24Hz] 21h (2160/24p) 22h (1080/24p)	[24Hz] 22h (1080/24p)	[60Hz] 0h (720/60p) 3h (1080/60i) 20h (1080/60p) 24h (2160/30p) 25h (1080/30p)	[60Hz] 0h (720/60p) 3h (1080/60i) 20h (1080/60p) 25h (1080/30p)	[60Hz] 0h (720/60p) 20h (1080/60p) 24h (2160/30p) 25h (1080/30p)
[23.98Hz] 0Ah (1080/23.98psF) 1Bh (2160/23.98p) 23h (1080/23.98p)	[23.98Hz] 0Ah (1080/23.98psF) 1Bh (2160/23.98p) 23h (1080/23.98p)	[23.98Hz] 1Bh (2160/23.98p) 23h (1080/23.98p)	[23.98Hz] 0Ah (1080/23.98psF) 23h (1080/23.98p)			

▼ OSA:87 (Continued)

Parameters vary depending on model

HR140	UB300	UE70series	HE40Series	HE120	HE60	HE50
[59.94Hz] 1h (720/59.94p) 4h (1080/59.94i) 7h (1080/29.97psF) Ah (1080/23.98psF) 10h (1080/59.95p) 14h (1080/29.97p) 16h (1080/23.98p)	[59.94Hz] 00h (720/60p) 01h (720/59.94p) 04h (1080/59.94i) 07h (1080/29.97psF) 0Ah (1080/23.98psF) 10h (1080/59.94p) 16h (1080/23.98p) 17h (2160/29.97p) 19h (2160/59.94p) 1Bh (2160/23.98p) 1Ch (2160/29.97psF) 1Eh (2160/23.98psF) 1Fh (2160/60p) 20h (1080/60p) 44h (1080/59.94i CROP) 50h (1080/59.94p CROP)	[59.94Hz] 1h (720/59.94p) 4h (1080/59.94i) 7h (1080/29.97psF) 10h (1080/59.94p) 14h (1080/29.97p) 17h (2160/29.97p) 80h (Auto)	=== HDMI Model === [59.94Hz] 1h (720/59.94p) 4h (1080/59.94i) 7h (1080/29.97psF) 10h (1080/59.95p) 14h (1080/29.97p) 80h (Auto)	[59.94Hz] 1h (720/59.94p) 4h (1080/59.94i) Bh (480/59.94i) 10h (1080/59.94p) 12h (480/59.94p)	[H Model/59.94Hz] 1h (720/59.94p) 4h (1080/59.94i) Bh (480/59.94i) 10h (1080/59.94p) 12h (480/59.94p)	[N Model] 1h (720/59.94p) 4h (1080/59.94i) Bh (480/59.94i)
[50Hz] 2h (720/50p) 5h (1080/50i) 8h (1080/25psF) 11h (1080/50p) 15h (1080/25p)	[50Hz] 02h (720/50p) 05h (1080/50i) 08h (1080/25psF) 11h (1080/50p) 18h (2160/25p) 1Ah (2160/50p) 1Dh (2160/25psF) 45h (1080/50i CROP) 51h (1080/50p CROP)	[50Hz] 2h (720/50p) 5h (1080/50i) 8h (1080/25psF) 11h (1080/50p) 15h (1080/25p) 80h (Auto)	[50Hz] 2h (720/50p) 5h (1080/50i) 8h (1080/25psF) 11h (1080/50p) 15h (1080/25p) 80h (Auto)	[50Hz] 2h (720/50p) 5h (1080/50i) Dh (576/50i) 11h (1808/50p) 13h (576/50p)	[H Model/50Hz] 2h (720/50p) 5h (1080/50i) Dh (576/50i) 11h (1808/50p) 8h (1080/25psf) 13h (576/50p)	[E, MC Model] 2h (720/50p) 5h (1080/50i) Dh (576/50i)
		HE42series	=== SDI Model ===	HE130	[S Model/59.94Hz] 1h (720/59.94p) 4h (1080/59.94i) Bh (480/59.94i)	[H Model/59.94Hz] 1h (720/59.94p) 4h (1080/59.94i) Bh (480/59.94i)
		[59.94Hz] 1h (720/59.94p) 4h (1080/59.94i) 7h (1080/29.97psF) 10h (1080/59.94p) 14h (1080/29.97p) 80h (Auto)	[59.94Hz] 1h (720/59.94p) 4h (1080/59.94i) 7h (1080/29.97psF) 14h (1080/29.97p)	[59.94Hz] 1h (720/59.94p) 4h (1080/59.94i) 7h (1080/29.97psF) Ah (1080/23.98psF) 10h (1080/59.95p) 12h (480/59.94p) 14h (1080/29.97p) 16h (1080/23.98p)	[S Model/59.94Hz] 1h (720/59.94p) 4h (1080/59.94i) Bh (480/59.94i)	[H Model/50Hz] 2h (720/50p) 5h (1080/50i) Dh (576/50i) 11h (1808/50p) 8h (1080/25psf)
		[50Hz] 2h (720/50p) 5h (1080/50i) 8h (1080/25psF) 11h (1080/50p) 15h (1080/25p) 80h (Auto)	[50Hz] 2h (720/50p) 5h (1080/50i) 8h (1080/25psF) 15h (1080/25p)	[50Hz] 2h (720/50p) 5h (1080/50i) 8h (1080/25psF) 11h (1080/50p) 13h (576/50p) 15h (1080/25p)	[S Model/50Hz] 2h (720/50p) 5h (1080/50i) Dh (576/50i)	[S Model/59.94Hz] 1h (720/59.94p) 4h (1080/59.94i) Bh (480/59.94i) 7h (1080/29.97psF)
						[S Model/50Hz] 2h (720/50p) 5h (1080/50i) Dh (576/50i) 8h (1080/25psf)

▼OSD:B1

Parameters vary depending on model

HR140, HE130		UE70series, HE42series, HE40series	
[Data]	Data Contents	[Data]	Data Contents
000h - 078h	2000K,2010K,2020K,2040K,2050K,2070K,2080K,2090K,2110K,2120K,2140K,2150K,2170K, 2180K,2200K,2210K,2230K,2240K,2260K,2280K,2300K,2310K,2330K,2340K,2360K,2380K, 2400K,2420K,2440K,2460K,2480K,2500K,2520K,2540K,2560K,2600K,2620K,2640K,2680K, 2700K,2720K,2740K,2780K,2800K,2820K,2850K,2870K,2920K,2950K,2970K,3000K,3020K, 3070K,3100K,3120K,3150K,3200K,3250K,3270K,3330K,3360K,3420K,3450K,3510K,3570K, 3600K,3660K,3720K,3780K,3840K,3870K,3930K,3990K,4050K,4110K,4170K,4240K,4320K, 4360K,4440K,4520K,4600K,4680K,4760K,4840K,4920K,5000K,5100K,5200K,5300K,5400K, 5500K,5600K,5750K,5850K,6000K,6150K,6300K,6450K,6650K,6800K,7000K,7150K,7400K, 7600K,7800K,8100K,8300K,8600K,8900K,9200K,9600K,10000K,10500K,11000K,11500K, 12000K,12500K,13000K,14000K,15000K	000h 001h - 04A 04B	2400K 2500K - 9800K 9900K (100K step)

▼OSG:5D

Parameters vary depending on System Frequency

UB300			
59.94p/59.94i	50p/50i	29.97p/23.98p	25p
04h(1/100)	02h(1/60)	00h(1/48)	00h(1/48)
05h(1/120)	04h(1/100)	01h(1/50)	01h(1/50)
06h(1/125)	06h(1/125)	02h(1/60)	02h(1/60)
07h(1/250)	07h(1/250)	03h(1/96)	03h(1/96)
08h(1/500)	08h(1/500)	04h(1/100)	04h(1/100)
09h(1/1000)	09h(1/1000)	05h(1/120)	06h(1/125)
0Ah(1/1500)	0Ah(1/1500)	06h(1/125)	07h(1/250)
0Bh(1/2000)	0Bh(1/2000)	07h(1/250)	08h(1/500)
0Ch(1/180.0deg)	0Ch(1/180.0deg)	08h(1/500)	09h(1/1000)
0Dh(1/172.8deg)	0Dh(1/172.8deg)	09h(1/1000)	0Ah(1/1500)
0Eh(1/144.0deg)	0Eh(1/144.0deg)	0Ah(1/1500)	0Bh(1/2000)
0Fh(1/120.0deg)	0Fh(1/120.0deg)	0Bh(1/2000)	0Ch(1/180.0deg)
10h(1/90.0deg)	10h(1/90.0deg)	0Ch(1/180.0deg)	0Dh(1/172.8deg)
11h(1/45.0deg)	11h(1/45.0deg)	0Dh(1/172.8deg)	0Eh(1/144.0deg)
		0Eh(1/144.0deg)	0Fh(1/120.0deg)
		0Fh(1/120.0deg)	10h(1/90.0deg)
		10h(1/90.0deg)	11h(1/45.0deg)
		11h(1/45.0deg)	

▼OAW

Parameter meaning var between control command and response for confirmation command

Control		Confirmation	
0	ATW	0	ATW
1	AWC A	1	---
2	AWC B	2	AWC A
3	ATW	3	AWC B
4	Preset 3200K	4	Preset 3200K
5	Preset 5600K	5	Preset 5600K
6	Preset 4500K	6	Preset 4500K
7	Preset 6000K	7	Preset 6000K
8	Preset 2800K	8	Preset 2800K
9	Var	9	Var

Parameters vary depending on model

		UE80, UE50, UE40, UE100, UE150, HE145, HR140, UE70series, HE42series, HE40series, HE130, HE120	UE20/HE20/UE4	HE60/HE50
Control	0	ATW	ATW	ATW
	1	AWC A	AWC A	AWC A
	2	AWC B	AWC B	AWC B
	3	ATW	ATW	ATW
	4	Preset 3200K	Preset 3200K	---
	5	Preset 5600K	Preset 5600K	---
	6	---	---	---
	7	---	---	---
	8	---	---	---
	9	Var	---	---
Confirmation	0	ATW	ATW	ATW
	1	---	---	---
	2	AWC A	AWC A	AWC A
	3	AWC B	AWC B	AWC B
	4	Preset 3200K	Preset 3200K	---
	5	Preset 5600K	Preset 5600K	---
	6	---	---	---
	7	---	---	---
	8	---	---	---
	9	Var	---	---



▼OSC

Parameter meaning var between control command and response for confirmation command

Control		Confirmation	
1	2( 90deg)	1	----
2	3(180deg)	2	1( 0deg)
3	4(270deg)	3	2( 90deg)
4	1( 0deg)	4	3(180deg)
5	----	5	4(270deg)

▼#QSV

Parameters vary depending on model

UE80	UE50	UE40	UE100	UE150, HE145	HR140	UE70, HE42, HE40series
[Data1] Servo CPU	[Data1] Servo CPU	[Data1] Servo CPU	[Data1] Servo CPU	[Data1] Servo CPU	[Data1] Servo CPU	[Data1] Servo CPU
Camera CPU	Camera CPU	Camera CPU	Camera CPU	Camera CPU	CameraMain CPU	Cam CPU
ZYNQ Network	reserve	reserve	ZYNQ Network	COM FPGA	COM FPGA	FPGA
Main/Network CPU	Main/Network CPU	Main/Network CPU	Main/Network CPU	Main/Network CPU	Network CPU	BE CPU
ZYNQ Logic	AVIO FPGA	reserve	ZYNQ Logic	AVIO FPGA	AVIO FPGA	reserve
reserve	reserve	reserve	ZYNQ R5T	Interface CPU	Interface CPU	Interface CPU
Lens CPU	Lens CPU	Lens CPU	Lens CPU	Lens CPU	Lens FPGA	reserve
reserve	reserve	reserve	ZYNQ R5R	Interface EEPROM	Interface EEPROM	Interface EEPROM
ZYNQ Enc	reserve	reserve	ZYNQ Enc	reserved	reserve	reserve
BE EEPROM	BE EEPROM	BE EEPROM	BE EEPROM	BE EEPROM	reserve	reserve
[Data2]	[Data2]	[Data2]	[Data2]	[Data2]	[Data2]	[Data2]
MAJOR VERSION	MAJOR VERSION	MAJOR VERSION	Major Version	Major Version	Major Version	00
[Data3]	[Data3]	[Data3]	[Data3]	[Data3]	[Data3]	[Data3]
MINOR VERSION	MINOR VERSION	MINOR VERSION	Minor Version	Minor Version	Minor Version	Version
[Data4]	[Data4]	[Data4]	[Data4]	[Data4]	[Data4]	[Data4]
(Debug Build)	(Debug Build)	(Debug Build)	(Debug Build)	(Debug Build)	(Debug Build)	L
(Release Build)	(Release Build)	(Release Build)	(Release Build)	(Release Build)	(Release Build)	
[Data5]	[Data5]	[Data5]	[Data5]	[Data5]	[Data5]	[Data5]
(REVISION)	(REVISION)	(REVISION)	(REVISION)	(REVISION)	(REVISION)	00
[data6]	[data6]	[data6]	[data6]	[data6]	[data6]	[data6]
NTSC	NTSC	NTSC	NTSC	NTSC	NTSC	NTSC
PAL	PAL	PAL	PAL	PAL	PAL	PAL

▼#QSV(Continued)

Parameters vary depending on model

HE130	HE120	HE60	HE50
[Data1]	[Data1]	[Data1]	[Data1]
Servo CPU	Servo CPU	Pan Tilt CPU	Pan Tilt CPU
CameraMain CPU	CameraMain CPU	Camera CPU	Camera CPU
COM FPGA	Frontend FPGA	Camera FPGA	Camera FPGA
Network CPU	Network CPU	Network CPU	Network CPU
AVIO FPGA	Backend FPGA	OUT FPGA	Out FPGA
Interface CPU	Interface CPU	reserve	reserve
Lens FPGA	Lens FPGA	reserve	reserve
Interface EEPROM	Interface EEPROM	reserve	reserve
reserve	Camera EEPROM	Camera EEPROM	reserve
reserve	Lens EEPROM	reserve	reserve
[Data2]	[Data2]	[Data2]	[Data2]
Major Version	Major Version	Major Version	Major Version
[Data3]	[Data3]	[Data3]	[Data3]
Minor Version	Minor Version	Minor Version	Minor Version
[Data4]	[Data4]	[Data4]	[Data4]
(Debug Build)	(Debug Build)	(Debug Build)	(Debug Build)
(Release Build)	(Release Build)	(Release Build)	(Release Build)
[Data5]	[Data5]	[Data5]	[Data5]
(Revision)	(Revision)	(Revision)	(Revision)
[data6]	[data6]	[data6]	[data6]
NTSC	NTSC	NTSC	NTSC
PAL	PAL	PAL	PAL
		Other	Other

▼#RER

The content of the error varies depending on the model

UE80, UE50, E40	UE100	UE150, HE145	HR140
00h No Error	03h Motor Driver Error	00h Normal	00h: Normal
03h Motor Driver Error	21h System Error	03h Motor Driver Error	03h: Motor Driver Error
21h System Error	22h Spec Limit Over	04h Pan Sensor Error	04h: Pan Sensor Error
22h Spec Limit Over	24h NET Life-monitoring Error	05h Tilt Sensor Error	05h: Tilt Sensor Error
24h NET Life-monitoring Error	29h CAM Life-monitoring Error	06h Controller RX Over run Error	06h: Controller RX Over run Error
25h BE Life-monitoring Error	31h Fan1 error	07h Controller RX Framing Error	07h: Controller RX Framing Error
29h CAM Life-monitoring Error	33h High Temp	08h Network RX Over run Error	08h: Network RX Over run Error
31h Fan1 error(UE80)	36h Low Temp	09h Network RX Framing Error	09h: Network RX Framing Error
33h High Temp	40h Temp Sensor Error	17h Controller RX Command Buffer Overflow	17h: Controller RX Command Buffer Overflow
36h Low Temp	41h Lens Initialize Error	19h Network RX Command Buffer Overflow	19h: Network RX Command Buffer Overflow
40h Temp Sensor Error	42h PT. Initialize Error	21h System Error	21h: System Error
41h Lens Initialize Error	43h PoE++ Software auth. Timeout	22h Spec Limit Over	22h: Spec Limit Over
42h PT. Initialize Error	50h MR Level Error	23h FPGA Config Error	23h: FPGA Config Error
43h PoE++ Software auth. Timeout (UE80)	52h MR Offset Error	24h NET Life-monitoring Error	25h: CAMERA communication Error
45h PoE+ Software auth. Timeout (UE50/UE40)	57h Gyro Error	25h BE Life-monitoring Error	26h: CAMERA RX Over run Error
47h USB Streaming Error (UE50/UE40)	58h PT. Initialize Error	26h IF/BE UART Buffer Overflow	27h: CAMERA RX Framing Error
50h MR Level Error		27h IF/BE UART Framing Error	28h: CAMERA RX Command Buffer Overflow
52h MR Offset Error		28h IF/BE UART Buffer Overflow	
57h Gyro Error		29h CAM Life-monitoring Error	31h: Fan1 Error
58h PT. Initialize Error		31h Fan1 error	32h: Fan2 Error
		32h Fan2 error	33h: High Temp
		33h High Temp	36h: Low Temp
		36h Low Temp	39h: Wiper Error
		40h Temp Sensor Error	40h: Temp Sensor Error
		41h Lens Initialize Error	41h Lens Initialize Error
		42h PT. Initialize Error	42h PT. Initialize Error
		50h: MR Level Error	50h: MR Level Error
		52h: MR Offset Error	51h: GYRO Initial Error
		53h: Origin Offset Error	52h: MR Offset Error
		54h: Angle MR Sensor Error	53h: Origin Offset Error
		55h: PT. Gear Error	
		56h: Motor Disconnect Error	

▼#RER(Continued)

The content of the error varies depending on the model

UE70series, HE42 Series, HE40 Series	HE120	HE50
00h Normal(No Error) 03h Motor Driver Error 04h Pan Sensor Error 05h Tilt Sensor Error 06h IF/FPGA UART Over run Error 07h IF/FPGA UART Framing Error 08h IF/NET UART Over run Error 09h IF/NET UART Framing Error 17h IF/FPGA UART Buffer Overflow 19h IF/NET UART Buffer Overflow 21h System Error(IF/SERVO Error) 22h PT Limit Over 24h NET Life-monitoring Error 25h BE Life-monitoring Error 26h IF/BE UART Buffer Overflow 27h IF/BE UART Framing Error 28h IF/BE UART Buffer Overflow 29h CAM Life-monitoring Error	00h: Normal 03h: Motor Driver Error 04h: Pan Sensor Error 05h: Tilt Sensor Error 06h: Controller RX Over run Error 07h: Controller RX Framing Error 08h: Network RX Over run Error 09h: Network RX Framing Error 17h: Controller RX Command Buffer Overflow 19h: Network RX Command Buffer Overflow 21h: System Error 22h: Spec Limit Over 23h: FPGA Config Error 24h: Network communication Error 25h: Lens Initialize Error	00h: Normal 03h: Motor Driver Error 04h: Pan Sensor Error 05h: Tilt Sensor Error 06h: Controller RX Over run Error 07h: Controller RX Framing Error 08h: Network RX Over run Error 09h: Network RX Framing Error 17h: Controller RX Command Buffer Overflow 19h: Network RX Command Buffer Overflow 21h: System Error 22h: Spec Limit Over 23h: FPGA Config Error 24h: Network communication Error 30h: Lvds_Adjustmet_NG 31h: Bar_Signal_Check_NG
	HE130	HE60
	00h: Normal 03h: Motor Driver Error 04h: Pan Sensor Error 05h: Tilt Sensor Error 06h: Controller RX Over run Error 07h: Controller RX Framing Error 08h: Network RX Over run Error 09h: Network RX Framing Error 17h: Controller RX Command Buffer Overflow 19h: Network RX Command Buffer Overflow 21h: System Error 22h: Spec Limit Over 23h: FPGA Config Error 25h: CAMERA communication Error 26h: CAMERA RX Over run Error 27h: CAMERA RX Framing Error 28h: CAMERA RX Command Buffer Overflow	00h: Normal 03h: Motor Driver Error 04h: Pan Sensor Error 05h: Tilt Sensor Error 06h: Controller RX Over run Error 07h: Controller RX Framing Error 08h: Network RX Over run Error 09h: Network RX Framing Error 17h: Controller RX Command Buffer Overflow 19h: Network RX Command Buffer Overflow 21h: System Error 22h: Spec Limit Over 23h: FPGA Config Error 24h: Network communication Error 30h: Lvds_Adjustmet_NG 31h: Bar_Signal_Check_NG 32h: H_Sync_Check_NG 33h: HDMI_Check_NG

▼XSF

Parameter meaning var between control command and response for confirmation command

UE80, UE50, UE40, UE100, UE150, HE145, HR140,  
UE70series, HE42series, HE40series, HE130, HE120,  
HE60, HE50

Control		Confirmation	
0	---	0	Scene1(Manual1)
1	Scene1(Manual1)	1	Scene2(Manual2)
2	Scene2(Manual2)	2	Scene3(Manual3)
3	Scene3(Manual3)	3	Scene4(FullAuto)
4	Scene4(FullAuto)	4	---

UE4

Control		Confirmation	
0	---	0	Full Auto
1	Full Auto	1	Shutter Priority
2	Shutter Priority	2	Manual
3	Manual	3	---

UE20/HE20

Control		Confirmation	
0	---	0	Scene1
1	Scene1	1	Scene2
2	Scene2	2	Full Auto
3	Full Auto	3	---

UB300

Control		Confirmation	
0	---	0	current
1	current	1	Scene1
2	Scene1	2	Scene2
3	Scene2	3	Scene3
4	Scene3	4	Scene4
5	Scene4	5	Scene5
6	Scene5	6	Scene6
7	Scene6	7	Scene7
8	Scene7	8	Scene8
9	Scene8	9	---

▼#0

Parameter meaning var between control command and response for confirmation command

Control		Confirmation	
0	Power Off	0	Power Off
1	Power On	1	Power On
3	---	3	Starting