# PROTOCOL of CONVERTIBLE CAMERA and PAN/TILT SYSTEM
Ver3.03(Apr./4 2019)

AW-E300A/AW-E600/AW-E800/AW-E800A/AW-E350
AW-E650/AW-E655/AW-E750/AW-E860/AW-HE100
AK-HC1500/AK-HC1800/AW-HE870
AW-PH100/AW-PH300A/AW-PH500/AW-PH600/AW-PH350
AW-PH400(with AW-RP400/IF400)/AW-PH360/AW-PH650/AW-PH405
AW-HE130/AW-HE60/AW-HE120/AW-HE50
AW-HE40/AW-HE65/AW-HE70/AW-UE70
AK-UB300/AW-HR140/AW-UE150

Specifications are subject to change without notice.

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# Camera Control Protocol

This is a program to control Panasonic Convertible Camera system from PC by serial communication.

| | |
|---|---|
| Method | Half Duplex |
| Commnunication Speed | 9600bps |
| Data bit | 8bit |
| Stop bit | 1bit |
| Prity | None |
| Flow contorol | None |

(Electrical Specification)
Compatible with RS422
2line system(TXD/send, RXD/Recieve)

(Process)
(1) PC —— Command ⟶ CAMERA
(2) CAMERA —— ACK(H'06) ⟶ PC
(3) CAMERA Processes "Command"
(4) CAMERA —— Command' ⟶ PC

Normally it is processed as mentioned above,but in case of error,it ends by replying error code(*1) in (4).
Command and Command' are not always the same.
Camera does not accept a command unless command process finishes and returns the return code

(*1)Error code

| Item | Error code | Contents |
|---|---|---|
| Unsupported | [STX]ER1:***[ETX] | The Command is not supported by CAMERA. |
| System busy | [STX]ER2:***[ETX] | CAMERA can not process the command for running the other processing. |
| Out of range | [STX]ER3:***[ETX] | Data is out of range. |

*** : Command name (maximum 3 letters.)

<Basic pattern of Command>

Header is [STX] (H'02) and Delimiter for [ETX] (H'03), and Command of ASCII and / or Data can be inserted in between. Division of Command and Data is ": (H'3A)".

There are 2 kinds of Commands , one is for letters and the other for numbers.
In total , there are 37 kinds of ASCII code code 0(H'30) to 9(H'39), A(H'41) to Z(H'5A),/(H'2F).
For Command of (1) to (6) and (10) PC -> Camera(To), Camera -> PC(From) are the same in both ways, but for (7),(8) and (11) it is different between (To) and (From).

(1)Pattern 1 (For the Camera Operation ) There is no Data , only Command.

| [STX] | O | ? | S | [ETX] |
|---|---|---|---|---|
| H'02 | H'4F | H'** | H'53 | H'03 |

(2)Pattern 2 (Camera mode setting )
In order of Command, ":", Data. Data length id different by each Command and maximum 3 letters.

| [STX] | O | ? | ? | : | ? | ( | ? | ? ) | [ETX] |
|---|---|---|---|---|---|---|---|---|---|
| H'02 | H'4F | H'** | H'** | H'3A | H'** | (H'** | H'**) | | H'03 |
| | Command | | | | Data | | | | |

Caution : Data length is fixed for each Command and not able to decrease.

(3)Pattern 3 (Selection of Scene) In order of Command, ":", Data. Data length=1 Byte

| [STX] | X | S | F | : | ? | [ETX] |
|---|---|---|---|---|---|---|
| H'02 | H'58 | H'53 | H'46 | H'3A | H'** | H'03 |

(4)Pattern 4 (Monitoring) In order of Command, ":", Data. Data length=1 Byte

| [STX] | D | ? | ? | : | ? | [ETX] |
|---|---|---|---|---|---|---|
| H'02 | H'44 | H'** | H'** | H'3A | H'** | H'03 |

(5)Pattern 5 (Other Menus)

In order of Command, ":", Number Command(2 Bytes), ":", Data. Data length=2 Bytes.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| [STX] | O | S | D | : | ? | ? | : | ? | ? | [ETX] |
| H'02 | H'4F | H'53 | H'44 | H'3A | H'** | H'** | H'3A | H'** | H'** | H'03 |

In this pattern, numbers at rear part of command (6th and 7th letters) are the command and Data follows by 2bytes (9th and 10th letters)

(6)Pattern 6 (Questions to Camera)

There is only Command, not Data

| | | | | |
|---|---|---|---|---|
| [STX] | Q | ? | ? | [ETX] |
| H'02 | H'51 | H'** | H'** | H'03 |

This Command requires the programmed number of the Camera and Camera returns adding Data.

Data is 2 Bytes but there are same exceptions. It is specified as Q(H'51) -> O(H'4F).

(7)Pattern 7 (Questions to Camera 2)

In order of Command, ":", number of Command. No Data. Command from Camera is with Data.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| [STX] | Q | S | D | : | ? | ? | [ETX] |
| H'02 | H'51 | H'53 | H'44 | H'3A | H'** | H'** | H'03 |

This Command also requires the programmed number of the Camera and the Command is converted into numbers. It can be programmed only by Camera User Mode and is Data length , which Camera returns is 2 Bytes.(There are same exceptions.) It is Q(H'51) -> O(H'4F) same as (7) . When Camera receives unprocessable number Command, it returns as Data = number Command.

a) PC -> CAMERA

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| [STX] | Q | S | D | : | 1 | 4 | [ETX] |
| H'02 | H'51 | H'53 | H'44 | H'3A | H'31 | H'34 | H'03 |

b) CAMERA -> PC

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| [STX] | O | S | D | : | 1 | 4 | : | 1 | 4 | [ETX] |
| H'02 | H'4F | H'53 | H'44 | H'3A | H'31 | H'34 | H'3A | H'31 | H'34 | H'03 |

(8)Pattern 8 (Related to Contact Closer P/T)

There is only Command, not Data

| | | | | |
|---|---|---|---|---|
| [STX] | H | ? | ? | [ETX] |
| H'02 | H'48 | H'** | H'** | H'03 |

Command for Lens I/F Card (AW-PB308) and control of lens for AW-E655. Camera repeats the same Command.

| ITEM | Control Command | Reply for Control Command | Confirmation Command | Reply for Confirmation Command | Data | Data Contents | | Remarks | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Control and Response to contol | Response to Confirmation | | E300/A | E600 | E800 | E800A | E350 | E650 | E655 | E750 | E860 | HE100 | HC1500 | HC1800 | HE870 | HE50 | HE60 | HE120 | HE130 | HE40/HE65/HE70 | UE70 | UB300 | HR140 | UE150 |
| MODEL NUMBER | ---- | | QID | OID:[Data] | 00<br><br>01<br><br>02<br>03 | ---- | AW-E300<br>AW-E300P<br>AW-E300E<br>AW-E600<br>AW-E600P<br>AW-E600E<br>AW-E800<br>AW-E800P<br>AW-E800E | | to Ver.187 | | to Ver.055 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | | | | | | ---- | Returns model No. by ASCII | Ex. OID:AW-E800P | from Ver.188 | | from Ver.056 | Ver.001 | | | | | | V1.00L01 | Ver.1.00 -00-0.00 | Ver.1.00 -00-0.00 | V1.00L01 | V1.00 | V3.00 | V1.00 | V1.00 | V1.00 | V1.00 | V7.00 | V1.00 | V1.00 |
| SOFTWARE VERSION | ---- | | QSV | OSV:[Data] | | ---- | Software Version | | Ver.001 | | | | | | | | | V1.00L01 | Ver.1.00 -00-0.00 | Ver.1.00 -00-0.00 | V1.00L01 | V1.00 | V3.00 | V1.00 | V1.00 | V1.00 | V1.00 | ---- | V1.00 | V1.00 |
| AWC/AWB SET | OWS | OWS<br>ER3:OWS<br>ER2:OWS | ---- | | ---- | AWC/AWB Start<br>AWC/AWC OK<br>AWC/AWB NG<br>AWC/AWB NG(busy) | ---- | Response Command returns when AWC/AWB finish | Ver.001 | | | | | | | | | V1.00L01 | Ver.1.00 -00-0.00 | Ver.1.00 -00-0.00 | V1.00L01 | V1.00 | V3.00 | V1.00 | V1.00 | V1.00 | V1.00 | V7.00 | V1.00 | V1.00 |
| ABC/ABB SET | OAS | OAS<br>ER3:OAS<br>ER2:OAS | ---- | | ---- | ABC/ABB Start<br>ABC/ABB OK<br>ABC/ABB NG<br>ABC/ABB NG(busy) | ---- | Response Command returns when ABC/ABB finish | Ver.001 | | | | | | | | | V1.00L01 | Ver.1.00 -00-0.00 | Ver.1.00 -00-0.00 | V1.00L01 | ---- | ---- | V1.00 | V1.00 | V1.00 | V1.00 | V7.00 | V1.00 | V1.00 |
| AWC MODE | OAW:[Data] | | QAW | OAW:[Data] | 0<br>1<br>2<br>3<br>4<br>5<br>6<br>7<br>8<br>9 | ATW<br>AWC A<br>AWC B<br>ATW<br>PRESET 3200K<br>PRESET 5600K<br>PRESET 4500K<br>PRESET 6000K<br>PRESET 2800K<br>VAR | ATW<br>----<br>AWC A<br>AWC B<br>PRESET 3200K<br>PRESET 5600K<br>PRESET 4500K<br>PRESET 6000K<br>PRESET 2800K<br>VAR | Be careful because Data of control and question is different. | Ver.001 | | | | | | | | | V1.00L01 | ---- | ---- | V1.00L01 | V1.00<br>supports only<br>ATW,AWC A,AWC B | V3.00<br>supports only<br>ATW,AWC A,AWC B | V1.00<br>supports only<br>ATW<br>AWC A<br>AWC B<br>PRESET 3200K<br>PRESET 5600K | V1.00<br>supports only<br>ATW<br>AWC A<br>AWC B<br>PRESET 3200K<br>PRESET 5600K<br>VAR | V1.00<br>supports only<br>ATW<br>AWC A<br>AWC B<br>PRESET 3200K<br>PRESET 5600K<br>VAR | V1.00<br>supports only<br>ATW<br>AWC A<br>AWC B<br>PRESET 3200K<br>PRESET 5600K<br>VAR | ---- | V1.00<br>supports only<br>ATW<br>AWC A<br>AWC B<br>PRESET 3200K<br>PRESET 5600K<br>VAR | V1.00<br>supports only<br>ATW<br>AWC A<br>AWC B<br>PRESET 3200K<br>PRESET 5600K<br>VAR |
| DETAIL | ODT:[Data] | | QDT | ODT:[Data] | 0<br>1<br>2<br><br>0<br>1<br>2 | OFF<br>LOW<br>HIGH<br><br><u>HC1500, HC1800, HE130, UB300, HR140, UE150</u><br>OFF<br>ON<br>ON | | | Ver.001 | | | | | | | | | V1.00L01 | Ver.1.00 -00-0.00 | Ver.1.00 -00-0.00 | V1.00L01 | V1.00 | V3.00 | V1.00 | V1.00 | V1.00 | V1.00 | V7.00 | V1.00 | V1.00 |
| HD DETAIL | OHD:[Data] | | QHD | OHD:[Data] | 0<br>1<br>2 | <u>AW-HE870</u><br>OFF<br>LOW<br>HIGH | | | ---- | | | | | | | | | ---- | ---- | ---- | V1.00L01<br>Only User mode | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| GAIN UP | OGU:[Data] | | QGU | OGU:[Data] | 00h<br>01h<br>08h<br>-<br>11h<br>-<br>1Ah<br>-<br>26h<br>27h<br><br>28h<br>80h<br><br><u>AW-HE130,HE40,HE70,HR140,UE150</u><br>08h<br>-<br>11h<br>-<br>1Ah<br>-<br>38h<br>80h<br><br><u>AW-HE870</u><br>02h<br>-<br>1Ah<br>80h<br><br><u>AW-HE100</u><br>08<br>-<br>14<br>15<br>16<br>17<br>18<br>19<br>1A<br>80 | AGC Low<br>AGC High<br>0dB<br>-<br>9dB<br>-<br>18dB<br>-<br>30dB<br>N/Eye Low<br>N/Eye<br>N/Eye High<br>AGC ON<br><br>0dB<br>-<br>9dB<br>-<br>18dB<br>-<br>48dB<br>AGC ON<br><br>-6dB<br>-<br>18dB<br>AGC ON<br><br>0dB<br>-<br>12dB<br>ER3<br>ER3<br>15dB<br>ER3<br>ER3<br>18dB<br>AGC ON | | above 18dB, from Ver.188 | above 18dB, from Ver.188 | above 18dB, from Ver.056 | Ver.001 | Ver.001<br><br>AGC Low -> Max Gain=18dB<br>AGC High -> Max Gain=30dB<br><br>if use AGC ON, Max Gain of AGC is set up by the AGC MAX command(OSD:69). | V1.00L01 | ---- | ---- | V1.00L01 | V1.00<br>supports only<br>08(0dB)-1A(18dB),<br>80(AGC ON) | V3.00<br>supports only<br>08(0dB)-1A(18dB),<br>80(AGC ON) | V1.00<br>supports only<br>08(0dB)-1A(18dB),<br>80(AGC ON) | V1.00<br>supports only<br>08(0dB)-2C(36dB),<br>80(AGC ON) | V1.00<br>supports only<br>08h:0dB-38h:48dB<br>80h:AGC ON<br><br>Use only 3dB Step. | V1.00<br>supports only<br>08h:0dB-38h:48dB<br>80h:AGC ON<br><br>Use only 3dB Step. | ---- | V1.00<br>supports only<br>08(0dB)-32(42dB),<br>80(AGC ON) | V1.00<br>supports only<br>08(0dB)-32(42dB),<br>80(AGC ON) |

| ITEM | Control Command | Reply for Control Command | Confirmation Command | Reply for Confirmation Command | Data | Data Contents: Control and Response to contol | Data Contents: Response to Confirmation | Remarks | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | E300/A | E600 | E800 | E800A | E350 | E650 | E655 | E750 | E860 | HE100 | HC1500 | HC1800 | HE870 | HE50 | HE60 | HE120 | HE130 | HE40/HE65/HE70 | UE70 | UB300 | HR140 | UE150 |
| SHUTTER | OSH:[Data] | | QSH | OSH:[Data] | 0h<br>1h<br>2h<br>3h<br>4h<br>5h<br>6h<br>7h<br>8h<br>9h<br>Ah<br>Bh<br>Ch<br>Dh<br>Eh<br>Fh | OFF<br>1/50<br>1/60<br>1/100(NSTC)、1/120(PAL)<br>1/120 (NTSC) 、1/100 (PAL)<br>1/250<br>1/500<br>1/1000<br>1/2000<br>1/4000<br>1/10000<br>Synchro-Scan<br>ELC(AUTO ND)<br>1/24<br>1/25<br>1/30 | | Ver.001 | | | | | | | | | V1.00L01 | ---- | ---- | V1.00L01 | V1.00<br>supports only<br>0(OFF),<br>3(1/100 NTSC)<br>(1/120 PAL),<br>5(1/250)<br>-<br>B(Synchro-Scan) | V3.00<br>supports only<br>0(OFF),<br>3(1/100 NTSC)<br>(1/120 PAL),<br>5(1/250)<br>-<br>B(Synchro-Scan) | V1.00<br>supports only<br>0(OFF),<br>3(1/100 NTSC)<br>(1/120 PAL),<br>5(1/250)<br>-<br>C(ELC) | V1.00<br>(59.94p/59.94i)<br>0(OFF)<br>3(1/100)<br>4(1/120)<br>5(1/250)<br>-<br>C(ELC)<br>(29.97p)<br>0(OFF)<br>2(1/60)<br>4(1/120)<br>5(1/250)<br>-<br>C(ELC)<br>F(1/30)<br>(23.98p)<br>0(OFF)<br>2(1/60)<br>4(1/120)<br>5(1/250)<br>-<br>D(1/24)<br>(50p/50i)<br>0(OFF)<br>2(1/60)<br>3(1/120)<br>5(1/250)<br>-<br>C(ELC)<br>(25p)<br>0(OFF)<br>2(1/60)<br>3(1/120)<br>5(1/250)<br>-<br>C(ELC)<br>E(1/25) | V1.00<br>supports only<br>0(OFF),<br>3(1/100 NTSC)<br>(1/120 PAL),<br>5(1/250)<br>-<br>B(Synchro-Scan) | V1.00<br>supports only<br>0(OFF),<br>3(1/100 NTSC)<br>(1/120 PAL),<br>5(1/250)<br>-<br>B(Synchro-Scan) | ---- | V1.00<br>(59.94p/59.94i)<br>0(OFF)<br>3(1/100)<br>4(1/120)<br>5(1/250)<br>-<br>C(ELC)<br>(29.97p)<br>0(OFF)<br>2(1/60)<br>4(1/120)<br>5(1/250)<br>-<br>C(ELC)<br>F(1/30)<br>(23.98p)<br>0(OFF)<br>2(1/60)<br>4(1/120)<br>5(1/250)<br>-<br>D(1/24)<br>(50p/50i)<br>0(OFF)<br>2(1/60)<br>3(1/120)<br>5(1/250)<br>-<br>C(ELC)<br>(25p)<br>0(OFF)<br>2(1/60)<br>3(1/120)<br>5(1/250)<br>-<br>C(ELC)<br>E(1/25) | ---- |
| SYNCHRO SCAN | OMS:[Data] | | QMS | OMS:[Data] | 001h<br>-<br>105h<br><br>001h<br>-<br>137h<br><br>721h<br>-<br>8DFh<br><br>721h<br>-<br>8DFh<br><br>721h<br>-<br>8DFh<br><br>001h<br>-<br>1ABh<br><br>001h<br>-<br>1C2h | N Model(59Hz)<br>60.34Hz<br>-<br>15.75kHz<br><br>E,MC Model(50Hz)<br>50.24Hz<br>-<br>15.63kHz<br><br>AK-HC1500/HC1800(60Hz)<br>60.32Hz/60.32Hz<br>-<br>150.0Hz/149.2Hz<br><br>AK-HC1500/HC1800(50Hz)<br>50.27Hz/50.27Hz<br>-<br>125.0Hz/124.3Hz<br><br>AK-HC1500, HC1800(FILM MENU)<br>358.1deg<br>-<br>144.0deg<br><br>HE-100N<br>60Hz<br>-<br>248.8Hz<br><br>HE-100E,MC<br>50.0Hz<br>-<br>250.0Hz | | Ver.001 | | | | | | | | | V1.00L01<br>Only User mode | Ver.1.00<br>-00-0.00 | Ver.1.00<br>-00-0.00 | V1.00L01 | V1.00<br>(N Model)<br>001h(60.17Hz)<br>-<br>0FFh(644.25Hz)<br><br>(E,MC Model)<br>001h(50.16Hz)<br>-<br>0FFh(542.42Hz) | V3.00<br>(50Hz)<br>001h(60.17Hz)<br>-<br>0FFh(644.25Hz)<br><br>(50Hz)<br>001h(50.16Hz)<br>-<br>0FFh(542.42Hz) | V1.00<br>(59Hz)<br>001h(60.17Hz)<br>-<br>0FFh(646.21Hz)<br><br>(50Hz)<br>001h(50.19Hz)<br>-<br>0FFh(537.13Hz) | V1.00<br>(59Hz)<br>001h(60.15Hz)<br>-<br>0FFh(642.21Hz)<br><br>(50Hz)<br>001h(50.15Hz)<br>-<br>0FFh(535.71Hz) | V1.00<br>(59.94Hz)<br>001h(59.94Hz)<br>-<br>0FFh(660.09Hz)<br><br>(50Hz<br>001h(50.00Hz)<br>-<br>0FFh(570.12Hz) | V1.00<br>(59.94Hz)<br>001h(59.94Hz)<br>-<br>0FFh(660.09Hz)<br><br>(50Hz<br>001h(50.00Hz)<br>-<br>0FFh(570.12Hz) | ---- | V1.00<br>(59Hz)<br>001h(60.15Hz)<br>-<br>0FFh(642.21Hz)<br><br>(50Hz)<br>001h(50.15Hz)<br>-<br>0FFh(535.71Hz) | ---- |
| FIELD/FRAME | OFR:[Data] | QFF | OFF:[Data] | | 0<br>1<br>2 | Field<br>Frame1<br>Frame2 | | Only User Mode | Ver.001 | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| V.RESOLUTION | | | | | 0<br>1<br>2 | Normal<br>(Fine)<br>Fine | Normal<br>----<br>FIne | Only Halogen,Fluorescent,Outdoor mode | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| IRIS AUTO/MANUAL | ORS:[Data] | QRS | ORS:[Data] | | 0<br>1 | Manual<br>Auto | | | Ver.001 | | | | | | | | | V1.00L01 | Ver.1.00<br>-00-0.00 | Ver.1.00<br>-00-0.00 | V1.00L01 | V1.00 | V3.00 | V1.00 | V1.00 | V1.00 | V1.00 | V7.00 | V1.00 | V1.00 |
| MANUAL IRIS VOLUME | ORV:[Data] | QRV | ORV:[Data] | | 000h<br>-<br>3FFh | close<br>-<br>open | | | Ver.001 | | | | | | | | | V1.00L01 | Ver.1.00<br>-00-0.00 | Ver.1.00<br>-00-0.00 | V1.00L01 | V1.00 | V3.00 | V1.00 | V1.00 | V1.00 | V1.00 | V7.00 | V1.00 | V1.00 |
| PICTURE LEVEL<br>A.IRIS LEVEL<br>IRIS OFFSET | OSD:48:[Data] | QSD:48 | OSD:48:[Data] | | 00h<br>-<br>31h<br>32h<br>33h<br>-<br>64h<br><br>00h<br>-<br>64h<br><br>00-2Eh<br>-<br>31h<br>32h<br>33h<br>-<br>36-64h | -50<br>-<br>-1<br>0<br>+1<br>-<br>+50<br><br>AK-HC1500, HC1800, UB300<br>0<br>-<br>100<br><br>AW-HE100<br>-4<br>-<br>-1<br>0<br>+1<br>-<br>+4 | | | from Ver.188 | | from<br>Ver.056 | Ver.001 | | | | | V1.00L01 | Ver.1.00<br>-00-0.00 | Ver.1.00<br>-00-0.00 | V1.00L01 | V1.00<br>Data/10 | V3.00<br>Data/10 | V1.00<br>Data/5 | V1.00 | V1.00<br>Data/5 | V1.00<br>Data/5 | V7.00 | V1.00 | V1.00 |
| LIGHT PEAK/AVG<br>A.IRIS PEAK/AVG | OPV:[Data] | QPA | OPA:[Data] | | 00h<br>-<br>31h<br>32h<br>33h<br>-<br>64h<br><br>00h<br>-<br>64h | P50<br>-<br>P1<br>0<br>A1<br>-<br>A50<br><br>AK-HC1500, HC1800<br>0<br>-<br>100 | | | from Ver.188 | | from<br>Ver.056 | Ver.001 | | | | | | ---- | Ver.1.00<br>-00-0.00 | Ver.1.00<br>-00-0.00 | V1.00L01 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| LIGHT AREA<br>A.IRIS AREA | ORA:[Data] | QAR | OAR:[Data] | | 0<br>1<br>5<br>6<br>7 | ALL<br>Center<br>Top Cut<br>Bottom Cut<br>R/L Cut | | | Ver.001 | | | | | | | | | ---- | ---- | ---- | V1.00L01 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

| ITEM | Control Command | Reply for Control Command | Confirmation Command | Reply for Confirmation Command | Data | Data Contents | | Remarks | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Control and Response to contol | Response to Confirmation | | E300/A | E600 | E800 | E800A | E350 | E650 | E655 | E750 | E860 | HE100 | HC1500 | HC1800 | HE870 | HE50 | HE60 | HE120 | HE130 | HE40/HE65/HE70 | UE70 | UB300 | HR140 | UE150 |
| NEGA/POSI | ONP:[Data] | | QNP | ONP:[Data] | 0<br>1 | Positive<br>Negative | | | Ver.001 | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| R PEDESTAL | ORD:[Data] | | QRD | ORD:[Data] | 00h<br>~<br>1Eh<br>~<br>3Ch | -30<br>~<br>0<br>~<br>+30 | | | Ver.001 | | | | Ver.001<br>Data x 5 | | | | | ---- | Ver.1.00-<br>00-0.00<br><br>Data x 3 | Ver.1.00-<br>00-0.00<br><br>Data x 3 | V1.00L01<br>Data x 5 | ---- | ---- | V1.00<br>Data*5 | V1.00<br>Data*5<br>supports only<br>0A(-100)<br>~<br>32(+100) | ---- | ---- | ---- | V1.00<br>Data*5<br>supports only<br>0A(-100)<br>~<br>32(+100) | ---- |
| B PEDESTAL | OBD:[Data] | | QBD | OBD:[Data] | 00h<br>~<br>1Eh<br>~<br>3Ch | -30<br>~<br>0<br>~<br>+30 | | | Ver.001 | | | | Ver.001<br>Data x 5 | | | | | ---- | Ver.1.00-<br>00-0.00<br><br>Data x 3 | Ver.1.00-<br>00-0.00<br><br>Data x 3 | V1.00L01<br>Data x 5 | ---- | ---- | V1.00<br>Data*5 | V1.00<br>Data*5<br>supports only<br>0A(-100)<br>~<br>32(+100) | ---- | ---- | ---- | V1.00<br>Data*5<br>supports only<br>0A(-100)<br>~<br>32(+100) | ---- |
| R GAIN | ORG:[Data] | | QGR | OGR:[Data] | 00h<br>~<br>1Eh<br>~<br>3Ch | -30<br>~<br>0<br>~<br>+30 | | | Ver.001 | | | | Ver.001<br>Data x 5 | | | | | V1.00L01 | Ver.1.00-<br>00-0.00<br><br>Data x 3 | Ver.1.00-<br>00-0.00<br><br>Data x 3 | V1.00L01<br>Data x 5 | V2.00 | V3.00 | V1.00<br>Data*5 | V1.00<br>Data*5 | V1.00 | V1.00 | ---- | V1.00<br>Data*5 | ---- |
| B GAIN | OBG:[Data] | | QGB | OGB:[Data] | 00h<br>~<br>1Eh<br>~<br>3Ch | -30<br>~<br>0<br>~<br>+30 | | | Ver.001 | | | | Ver.001<br>Data x 5 | | | | | V1.00L01 | Ver.1.00-<br>00-0.00<br><br>Data x 3 | Ver.1.00-<br>00-0.00<br><br>Data x 3 | V1.00L01<br>Data x 5 | V 2.00 | V3.00 | V1.00<br>Data*5 | V1.00<br>Data*5 | V1.00 | V1.00 | ---- | V1.00<br>Data*5 | ---- |
| T PEDESTAL | OTD:[Data] | | QTD | OTD:[Data] | 00h<br>~<br>1Eh<br>~<br>3Ch | -30<br>~<br>0<br>~<br>+30 | | | Ver.001 | | | | Ver.001<br>Data x 5 | | | | | V1.00L01 | Ver.1.00-<br>00-0.00<br><br>Data x 6 | Ver.1.00-<br>00-0.00<br><br>Data x 6 | V1.00L01<br>Data x 5 | V1.00<br>Data/3 | V3.00<br>Data/3 | V1.00<br>Data*5 | V1.00<br>Data*5 | V1.00<br>Data/3 | V1.00<br>Data/3 | ---- | V1.00<br>Data*5 | ---- |
| H PHASE | OHP:[Data] | | QHP | OHP:[Data] | 000h<br>~<br>3FFh | -206<br>~<br>+49 | | | Ver.001 | | | | | | | | | V1.00L01 | ---- | ---- | V1.00L01 | V1.00 | V3.00 | V1.00 | V1.00 | ---- | V1.00 | ---- | V1.00 | V1.00 |
| SC COARSE | OSC:[Data] | | QSC | OSC:[Data] | 0<br>1<br>2<br>3<br>4<br><br>AW-HE870<br>5<br>6<br>7<br>8 | 2( 90deg)<br>3(180deg)<br>4(270deg)<br>1( 0deg)<br>----<br><br>AW-HE870<br>45deg(HE870)<br>135deg(HE870)<br>225deg(HE870)<br>315deg(HE870) | ----<br>1( 0deg)<br>2( 90deg)<br>3(180deg)<br>4(270deg)<br><br>AW-HE870<br>45deg<br>135deg<br>225deg<br>315deg | Be careful because Data of control and question is different. | Ver.001 | | | | | | | | | V1.00L01<br>supports only<br>Control<br>Command | ---- | ---- | V1.00L01 | V1.00 | V3.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| SC FINE | OSN:[Data] | | QSN | OSN:[Data] | 000h<br>001h<br>002h<br>~<br>200h<br>~<br>3FFh<br><br>AW-HE870<br>000h<br>~<br>007h<br>008h<br>~<br>200h<br>~<br>3F8h<br>3F0h<br>~<br>3FFh | -511<br>-511<br>-511<br>~<br>0<br>~<br>+511<br><br>AW-HE100/HE870<br>-127<br>~<br>-127<br>-126<br>~<br>0<br>~<br>+126<br>+127<br>~<br>+127 | | (AW-HE870)<br>One value of "Data Contents" is added by four "Data" counts. | Ver.001 | | | | | | | | | V1.00L01 | ---- | ---- | V1.00L01 | V1.00 | V3.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| CHROMA LEVEL | OCG:[Data] | | QCG | OCG:[Data] | 00<br>~<br>03<br>~<br>06 | -3<br>~<br>0<br>~<br>+3 | | | Ver.001 | | | | | | | | | V1.00L01 | ---- | ---- | V1.00L01 | V1.00 | V3.00 | V1.00 | ---- | V1.00 | V1.00 | ---- | ---- | ---- |
| SCENE FILE | XSF:[Data] | | QSF | OSF:[Data] | 0<br>1<br>2<br>3<br>4<br>5<br>6<br>7<br><br><br>0<br>1<br>2<br>3<br>4<br><br><br>0<br>1<br>2<br>3<br>4<br>5<br>6<br>7<br>8<br>9 | Halogen<br>Fluorescent<br>Outdoor<br>User<br><br>HC1500, HC1800<br><br>PRESET<br>USER1<br>USER2<br>CURRENT<br><br>AK-UB300<br>-<br>CURRENT<br>SCENE1<br>SCENE2<br>SCENE3<br>SCENE4<br>SCENE5<br>SCENE6<br>SCENE7<br>SCENE8 | Halogen<br>Fluorescent<br>Outdoor<br>User<br>Halogen<br>Fluorescent<br>Outdoor<br>User<br><br>HC1500, HC1800<br>PRESET<br>USER1<br>USER2<br>CURRENT<br><br>AK-UB300<br>CURRENT<br>SCENE1<br>SCENE2<br>SCENE3<br>SCENE4<br>SCENE5<br>SCENE6<br>SCENE7<br>SCENE8<br>- | Be careful because Data of control and question is different. | Ver.001 | | | | | | | | | V1.00L01 | Ver.1.00<br>-00-0.00 | Ver.1.00<br>-00-0.00 | V1.00L01 | V1.00<br>supports only<br>Halogen=MANUAL1,<br>Fluorescent=MANUAL2,<br>Outdoor=MANUAL3,<br>User=FULLAUTO, | V3.00<br>supports only<br>Halogen=MANUAL1,<br>Fluorescent=MANUAL2,<br>Outdoor=MANUAL3,<br>User=FULLAUTO, | V1.00<br>supports only<br>Halogen=Scene1,<br>Fluorescent=Scene2,<br>Outdoor=Scene3,<br>User=Scene4, | V1.00<br>supports only<br>Halogen=Scene1,<br>Fluorescent=Scene2,<br>Outdoor=Scene3,<br>User=Scene4, | V1.00<br>supports only<br>Halogen=MANUAL1,<br>Fluorescent=MANUAL2<br>,<br>Outdoor=MANUAL3,<br>User=FULLAUTO, | V1.00<br>supports only<br>Halogen=MANUAL1,<br>Fluorescent=MANUAL2<br>,<br>Outdoor=MANUAL3,<br>User=FULLAUTO, | V7.00 | V1.00<br>supports only<br>Halogen=Scene1,<br>Fluorescent=Scene2,<br>Outdoor=Scene3,<br>User=Scene4, | V1.00<br>supports only<br>Halogen=Scene1,<br>Fluorescent=Scene2,<br>Outdoor=Scene3,<br>User=Scene4, |
| GAMMA | OSD:00:[Data] | | QSD:00 | OSD:00:[Data] | 00h<br>~<br>0Ah<br>~<br>14h | 0.35<br>~<br>0.45<br>~<br>0.55 | | | Ver.001<br>Only User mode | | | | | | | | | ---- | ---- | ---- | V1.00L01<br>Only User<br>mode | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| KNEE POINT | OSD:08:[Data] | | QSD:08 | OSD:08[Data] | FFh<br>00h<br>~<br>0Ah<br>0Bh | ----<br>Dynamic<br>88%<br>~<br>98%<br>~~~~ | Dynamic<br>88%<br>~<br>98%<br>~~~~ | Be careful because Data of control and question is different. | from Ver.188<br>Only User mode | | from<br>Ver.056<br>Only User<br>mode | | Ver.001<br>Only User mode | | | | | ---- | ---- | ---- | V1.00L01<br>Only User<br>mode | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| WHITE CLIP | OSD:09:[Data] | | QSD:09 | OSD:09:[Data] | 00h<br>~<br>0Fh | 95%<br>~<br>110% | | | from Ver.188<br>Only User mode | | from<br>Ver.056<br>Only User<br>mode | | Ver.001<br>Only User mode | | | | | ---- | ---- | ---- | V1.00L01<br>Only User<br>mode | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| H.DTL LEVEL H | OSD:0A:[Data] | | QSD:0A | OSD:0A:[Data] | 01h<br>~<br>3Fh | 1<br>~<br>63 | | | from Ver.188<br>Only User mode | | from<br>Ver.056<br>Only User<br>mode | | Ver.001<br>Only User mode | | | | | ---- | ---- | ---- | V1.00L01<br>Only User<br>mode | ---- | ---- | V1.00<br>Support Only<br>02(0)-3F(63) | ---- | ---- | ---- | ---- | ---- | ---- |
| HD H.DTL LEVEL H | OSD:0B:[Data] | | QSD:0B | OSD:0B:[Data] | 01h<br>~<br>3Fh | 1<br>~<br>63 | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00L01<br>Only User<br>mode | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| V DTL LEVEL H | OSD:0E:[Data] | | QSD:0E | OSD:0E:[Data] | 01h<br>~<br>1Fh | 1<br>~<br>31 | | | from Ver.188<br>Only User mode | | from<br>Ver.056<br>Only User<br>mode | | Ver.001<br>Only User mode | | | | | ---- | ---- | ---- | V1.00L01<br>Only User<br>mode | ---- | ---- | V1.00<br>Support Only<br>02(0)-1F(32) | ---- | ---- | ---- | ---- | ---- | ---- |

| ITEM | Control Command | Reply for Control Command | Confirmation Command | Reply for Confirmation Command | Data | Data Contents | | Remarks | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Control and Response to contol | Response to Confirmation | | E300/A | E600 | E800 | E800A | E350 | E650 | E655 | E750 | E860 | HE100 | HC1500 | HC1800 | HE870 | HE50 | HE60 | HE120 | HE130 | HE40/HE65/HE70 | UE70 | UB300 | HR140 | UE150 |
| HD V DTL LEVEL H | OSD:0F:[Data] | | QSD:0F | OSD:0F:[Data] | 01h<br>~<br>1Fh | 1<br>~<br>31 | | | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | V1.00L01<br>Only User mode | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| H.DTL LEVEL L | OSD:12:[Data] | | QSD:12 | OSD:12:[Data] | 00h<br>~<br>3Eh | 0<br>~<br>62 | | | from Ver.188<br>Only User mode | | from<br>Ver.056<br>Only User mode | Ver.001<br>Only User mode | | | | | | ----- | ----- | ----- | V1.00L01<br>Only User mode | ----- | ----- | V1.00<br>Support Only<br>01(0)-3E(62) | ----- | ----- | ----- | ----- | ----- | ----- |
| HD H.DTL LEVEL L | OSD:13:[Data] | | QSD:13 | OSD:13:[Data] | 00h<br>~<br>3Eh | 0<br>~<br>62 | | | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | V1.00L01<br>Only User mode | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| V DTL LEVEL L | OSD:16:[Data] | | QSD:16 | OSD:16:[Data] | 00h<br>~<br>1Eh<br><br>00h<br>~<br>07h<br>~<br>0Eh | 0<br>~<br>30<br><br>AW-HE100<br>-7<br>~<br>0<br>~<br>+7 | | | from Ver.188<br>Only User mode | | from<br>Ver.056<br>Only User mode | Ver.001<br>Only User mode | | | | | | V1.00L01 | ----- | ----- | V1.00L01<br>Only User mode | ----- | ----- | V1.00<br>Support Only<br>01(0)-1E(30) | ----- | ----- | ----- | ----- | ----- | ----- |
| HD V DTL LEVEL L | OSD:17:[Data] | | QSD:17 | OSD:17:[Data] | 00h<br>~<br>1Eh | 0<br>~<br>30 | | | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | V1.00L01<br>Only User mode | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| DETAIL BAND | OSD:1E:[Data] | | QSD:1E | OSD:1E[Data] | 01<br>~<br>05 | 01<br>~<br>05 | | | from Ver.188<br>Only User mode | | from<br>Ver.056<br>Only User mode | Ver.001<br>Only User mode | | | | | | ----- | ----- | ----- | V1.00L01<br>Only User mode | ----- | ----- | V1.00 | ----- | ----- | ----- | ----- | ----- | ----- |
| HD DETAIL BAND | OSD:1F:[Data] | | QSD:1F | OSD:1F[Data] | 01<br>~<br>05 | 01<br>~<br>05 | | | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | V1.00L01<br>Only User mode | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| NOISE SUPPRESS<br>/CRISP | OSD:22:[Data] | | QSD:22 | OSD:22:[Data] | 00h<br>~<br>3Ch<br><br>00h<br>~<br>1Fh<br><br>AK-UB300<br>00h<br>~<br>3Fh | 0<br>~<br>60<br><br>AK-HC1500, HC1800<br>0<br>~<br>31<br><br>AK-UB300<br>0<br>~<br>63 | | | from Ver.188<br>Only User mode | | from<br>Ver.056<br>Only User mode | Ver.001<br>Only User mode | | | | | | V1.00L01<br>Only User mode | ----- | ----- | V1.00L01<br>Only User mode | ----- | ----- | V1.00<br>Support Only<br>00(0)-07(7) | V1.00 | ----- | ----- | V7.00 | V1.00 | ----- |
| HD NOISE SUPPRESS<br>/CRISP | OSD:23:[Data] | | QSD:23 | OSD:23:[Data] | 00h<br>~<br>0Ah | AW-HE870<br>0<br>~<br>10 | | | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | V1.00L01<br>Only User mode | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| LEVEL DEPENDENT | OSD:26:[Data] | | QSD:26 | OSD:26:[Data] | 00h<br>~<br>19h<br><br>AK-HC1500, HC1800<br>00h<br>~<br>0Fh<br><br>AK-HC3800<br>00<br>~<br>1E<br><br>AK-UB300<br>00h<br>~<br>0Fh | 00%<br>~<br>25%<br><br>AK-HC1500, HC1800<br>0%<br>~<br>15%<br><br>AK-HC3800<br>0%<br>~<br>30%<br><br>AK-UB300<br>00<br>~<br>15 | | | from Ver.188<br>Only User mode | | from<br>Ver.056<br>Only User mode | Ver.001<br>Only User mode | | | | | | ----- | ----- | ----- | V1.00L01<br>Only User mode | ----- | ----- | ----- | ----- | ----- | ----- | V7.00 | ----- | ----- |
| HD LEVEL DEPENDENT | OSD:27:[Data] | | QSD:27 | OSD:27:[Data] | 00h<br>~<br>19h | AW-HE870<br>00%<br>~<br>25% | | | ----- | ----- | ----- | ----- | | | | | | ----- | ----- | ----- | V1.00L01<br>Only User mode | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| CHROMA DETAIL | OSD:2A:[Data] | | QSD:2A | OSD:2A:[Data] | 00h<br>~<br>0Fh | 00<br>~<br>15 | | | from Ver.188<br>Only User mode | | from<br>Ver.056<br>Only User mode | Ver.001<br>Only User mode | | | | | | ----- | ----- | ----- | V1.00L01<br>Only User mode | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| HD CHROMA DETAIL | OSD:2B:[Data] | | QSD:2B | OSD:2B:[Data] | 00h<br>~<br>0Fh | 00<br>~<br>15 | | | ----- | ----- | ----- | ----- | | | | | | ----- | ----- | ----- | V1.00L01<br>Only User mode | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| HD DARK DETAIL | OSD:2D:[Data] | | QSD:2D | OSD:2D:[Data] | 00<br>~<br>05<br><br>AK-HC3800<br>00<br>~<br>07 | 0<br>~<br>5<br><br>AK-HC3800<br>0<br>~<br>7 | | | ----- | ----- | ----- | ----- | | | | | | ----- | ----- | ----- | V1.00L01<br>Only User mode | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| DARK DETAIL | OSD:2E:[Data] | | QSD:2E | OSD:2E:[Data] | 00<br>~<br>05 | 0<br>~<br>5 | | | from Ver.188<br>Only User mode | | from<br>Ver.056<br>Only User mode | Ver.001<br>Only User mode | | | | | | ----- | ----- | ----- | V1.00L01<br>Only User mode | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| MATRIX(R-G) | OSD:2F:[Data] | | QSD:2F | OSD:2F:[Data] | 00h<br>~<br>1Fh<br>~<br>3Eh | -31<br>~<br>0<br>~<br>+31 | | | from Ver.188<br>Only User mode | | from<br>Ver.056<br>Only User mode | Ver.001<br>Only User mode | | | | | | ----- | Ver.1.00<br>-00-0.00 | Ver.1.00<br>-00-0.00 | V1.00L01<br>Only User mode | ----- | ----- | V1.00 | ----- | ----- | ----- | ----- | ----- | ----- |
| MATRIX(R-B) | OSD:30:[Data] | | QSD:30 | OSD:30:[Data] | 00h<br>~<br>1Fh<br>~<br>3Eh | -31<br>~<br>0<br>~<br>+31 | | | from Ver.188<br>Only User mode | | from<br>Ver.056<br>Only User mode | Ver.001<br>Only User mode | | | | | | ----- | Ver.1.00<br>-00-0.00 | Ver.1.00<br>-00-0.00 | V1.00L01<br>Only User mode | ----- | ----- | V1.00 | ----- | ----- | ----- | ----- | ----- | ----- |
| MATRIX(G-R) | OSD:31:[Data] | | QSD:31 | OSD:31:[Data] | 00h<br>~<br>1Fh<br>~<br>3Eh | -31<br>~<br>0<br>~<br>+31 | | | from Ver.188<br>Only User mode | | from<br>Ver.056<br>Only User mode | Ver.001<br>Only User mode | | | | | | ----- | Ver.1.00<br>-00-0.00 | Ver.1.00<br>-00-0.00 | V1.00L01<br>Only User mode | ----- | ----- | V1.00 | ----- | ----- | ----- | ----- | ----- | ----- |
| MATRIX(G-B) | OSD:32:[Data] | | QSD:32 | OSD:32:[Data] | 00h<br>~<br>1Fh<br>~<br>3Eh | -31<br>~<br>0<br>~<br>+31 | | | from Ver.188<br>Only User mode | | from<br>Ver.056<br>Only User mode | Ver.001<br>Only User mode | | | | | | ----- | Ver.1.00<br>-00-0.00 | Ver.1.00<br>-00-0.00 | V1.00L01<br>Only User mode | ----- | ----- | V1.00 | ----- | ----- | ----- | ----- | ----- | ----- |
| MATRIX(B-R) | OSD:33:[Data] | | QSD:33 | OSD:33:[Data] | 00h<br>~<br>1Fh<br>~<br>3Eh | -31<br>~<br>0<br>~<br>+31 | | | from Ver.188<br>Only User mode | | from<br>Ver.056<br>Only User mode | Ver.001<br>Only User mode | | | | | | ----- | Ver.1.00<br>-00-0.00 | Ver.1.00<br>-00-0.00 | V1.00L01<br>Only User mode | ----- | ----- | V1.00 | ----- | ----- | ----- | ----- | ----- | ----- |
| MATRIX(B-G) | OSD:34:[Data] | | QSD:34 | OSD:34:[Data] | 00h<br>~<br>1Fh<br>~<br>3Eh | -31<br>~<br>0<br>~<br>+31 | | | from Ver.188<br>Only User mode | | from<br>Ver.056<br>Only User mode | Ver.001<br>Only User mode | | | | | | ----- | Ver.1.00<br>-00-0.00 | Ver.1.00<br>-00-0.00 | V1.00L01<br>Only User mode | ----- | ----- | V1.00 | ----- | ----- | ----- | ----- | ----- | ----- |

| ITEM | Control Command | Reply for Control Command | Confirmation Command | Reply for Confirmation Command | Data | Data Contents: Control and Response to contol | Data Contents: Response to Confirmation | Remarks | E300/A | E600 | E800 | E800A | E350 | E650 | E655 | E750 | E860 | HE100 | HC1500 | HC1800 | HE870 | HE50 | HE60 | HE120 | HE130 | HE40/HE65/HE70 | UE70 | UB300 | HR140 | UE150 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FLARE R | OSD:35:[Data] | | QSD:35 | OSD:35:[Data] | 00h<br>-<br>64h<br><br>AK-HC3500<br>9C<br>~<br>FF<br>00<br>01<br>~<br>64 | 0<br>-<br>100<br><br>AK-HC3500, AK-UB300<br>-100<br>~<br>-1<br>0<br>+1<br>~<br>+100 | | | from Ver.188<br>Only User mode | | from<br>Ver.056<br>Only User<br>mode | Ver.001<br>Only User mode | | | | | | ---- | Ver.1.00<br>-00-0.00 | Ver.1.00<br>-00-0.00 | V1.00L01<br>Only User<br>mode | ---- | ---- | ---- | ---- | ---- | ---- | V7.30 | ---- | ---- |
| FLARE G | OSD:36:[Data] | | QSD:36 | OSD:36:[Data] | 00h<br>-<br>64h<br><br>AK-HC3500<br>9C<br>~<br>FF<br>00<br>01<br>~<br>64 | 0<br>-<br>100<br><br>AK-HC3500, AK-UB300<br>-100<br>~<br>-1<br>0<br>+1<br>~<br>+100 | | | from Ver.188<br>Only User mode | | from<br>Ver.056<br>Only User<br>mode | Ver.001<br>Only User mode | | | | | | ---- | Ver.1.00<br>-00-0.00 | Ver.1.00<br>-00-0.00 | V1.00L01<br>Only User<br>mode | ---- | ---- | ---- | ---- | ---- | ---- | V7.30 | ---- | ---- |
| FLARE B | OSD:37:[Data] | | QSD:37 | OSD:37:[Data] | 00h<br>-<br>64h<br><br>AK-HC3500<br>9C<br>~<br>FF<br>00<br>01<br>~<br>64 | 0<br>-<br>100<br><br>AK-HC3500, AK-UB300<br>-100<br>~<br>-1<br>0<br>+1<br>~<br>+100 | | | from Ver.188<br>Only User mode | | from<br>Ver.056<br>Only User<br>mode | Ver.001<br>Only User mode | | | | | | ---- | Ver.1.00<br>-00-0.00 | Ver.1.00<br>-00-0.00 | V1.00L01<br>Only User<br>mode | ---- | ---- | ---- | ---- | ---- | ---- | V7.30 | ---- | ---- |
| FLARE SW | OSA:11:[Data] | | QSA:11 | OSA:11:[Data] | 0<br>1 | OFF<br>ON | | | ---- | | | | | | | | | | Ver.1.00<br>-00-0.00 | Ver.1.00<br>-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V7.30 | ---- | ---- |
| CLEAN DNR | OSD:3A:[Data] | | QSD:3A | OSD:3A:[Data] | 00<br>01<br>02<br><br>AK-UB300<br>00<br>01<br>02 | OFF<br>LOW<br>HIGH<br><br>AK-UB300<br>OFF<br>ON<br>ON | | | from Ver.188<br>Only User mode | | from<br>Ver.056<br>Only User<br>mode | Ver.001<br>Only User mode | | | | | V001 | ---- | ---- | ---- | V1.00L01 | V1.00 | V3.00 | V1.00 | V1.00 | V1.00 | V1.00 | V7.00 | V1.00 | V1.00 |
| HD CLEAN DNR | OSD:3B:[Data] | | QSD:3B | OSD:3B:[Data] | 00<br>01<br>02 | OFF<br>LOW<br>HIGH | | | ---- | | ---- | ---- | | | | | ---- | ---- | ---- | ---- | V1.00L01<br>Only User<br>mode | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 2D LPF | OSD:3F:[Data] | | QSD:3F | OSD:3F:[Data] | 00<br>01<br>02 | OFF<br>LOW<br>HIGH | | | from Ver.188<br>Only User mode | | from<br>Ver.056<br>Only User<br>mode | Ver.001<br>Only User mode | | | | | V001 | ---- | ---- | ---- | V1.00L01 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| CORNER DETAIL | OSD:43:[Data] | | QSD:43 | OSD:43:[Data] | 00<br>01 | OFF<br>ON | | | from Ver.188<br>Only User mode | | from<br>Ver.056<br>Only User<br>mode | Ver.001<br>Only User mode | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| PRECISION DETAIL<br>/SLIM DETAIL | OSD:44:[Data] | | QSD:44 | OSD:44:[Data] | 00<br>01<br>02<br><br>00<br>01<br>02 | OFF<br>LOW<br>HIGH<br><br>AK-HC1500, HC1800<br>OFF<br>ON<br>ON | | | from Ver.188<br>Only User mode | | from<br>Ver.056<br>Only User<br>mode | Ver.001<br>Only User mode | | | | | | ---- | Ver.1.00<br>-00-0.00 | Ver.1.00<br>-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| HD PRECISION DETAIL<br>/HD SLIM DETAIL | OSD:45:[Data] | | QSD:45 | OSD:45:[Data] | 00<br>01<br>02 | AW-HE870<br>OFF<br>LOW<br>HIGH | | | ---- | | ---- | ---- | | | | | | ---- | ---- | ---- | V1.00L01<br>Only User<br>mode | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| BLACK STRETCH | OSD:46:[Data] | | QSD:46 | OSD:46:[Data] | 00<br>01 | OFF<br>ON | | | from Ver.188<br>Only User mode | | from<br>Ver.056<br>Only User<br>mode | Ver.001<br>Only User mode | | | | | | ---- | ---- | ---- | V1.00L01<br>Only User<br>mode | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| HIGH LIGHT CHROMA | OSD:49:[Data] | | QSD:49 | OSD:49:[Data] | 00<br>01<br>02 | OFF<br>LOW<br>HIGH | | | from Ver.188<br>Only User mode | | from<br>Ver.056<br>Only User<br>mode | Ver.001<br>Only User<br>mode | ---- | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| FLESH NOISE SUPPRESS | OSD:4B:[Data] | | QSD:4B | OSD:4B:[Data] | 00<br>01<br>02 | OFF<br>LOW<br>HIGH | | | ---- | | from<br>Ver.056<br>Only User<br>mode | Ver.001<br>Only User<br>mode | ---- | | | | Ver.001 | ---- | ---- | ---- | V1.00L01<br>Only User<br>mode | ---- | ---- | V1.00 | ---- | ---- | ---- | ---- | ---- | ---- |
| FLESH DETAIL<br>FLESH DTL LEVEL | | | | | 00<br>01<br>02 | LOW<br>MID<br>HIGH | | | from Ver.188<br>Only User mode | | ---- | | Ver.001 | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| HD FLESH NOISE SUPPRESS | OSD:4C:[Data] | | QSD:4C | OSD:4C:[Data] | 00<br>01<br>02 | OFF<br>LOW<br>HIGH | | | ---- | | ---- | ---- | ---- | | | | ---- | ---- | ---- | ---- | V1.00L01<br>Only User<br>mode | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| IRIS FOLLOW | ---- | | QSD:4F | OSD:4F:[Data] | 00h<br>-<br>FFh | ---- | Close<br>-<br>Open | This Command can't be used through AW-RP400. | from Ver.188 | | from<br>Ver.056 | Ver.001 | | | | | | V1.00L01 | Ver.1.00<br>-00-0.00 | Ver.1.00<br>-00-0.00 | V1.00L01 | V1.00 | V3.00 | V1.00 | V1.00 | V1.00 | V1.00 | ---- | V1.00 | V1.00 | ---- |
| CONTRAST(GAMMA) | OSD:50:[Data] | | QSD:50 | OSD:50:[Data] | 00<br>01<br>02 | LOW<br>MID<br>HIGH | | | from Ver.188<br>Only<br>Halogen,Fluorescent,O<br>utdoor mode | | from<br>Ver.056<br>Only<br>Halogen,Fl<br>uorescent,<br>Outdoor<br>mode | Ver.001<br>Only Halogen,Fluorescent,Outdoor mode | | | | | | V1.00L01<br>Only User<br>mode | ---- | ---- | V1.00L01<br>Only<br>Halogen,Fl<br>uorescent,<br>Outdoor<br>mode | V1.00 | V3.00 | V1.00 | ---- | V1.00 | V1.00 | ---- | ---- | ---- |
| FLESH TONE | OSD:52:[Data] | | QSD:52 | OSD:52:[Data] | 00<br>-<br>03<br>-<br>06 | -3<br>-<br>0<br>-<br>+3 | | | from Ver.188<br>Only<br>Halogen,Fluorescent,O<br>utdoor mode | | from<br>Ver.056<br>Only<br>Halogen,Fl<br>uorescent,<br>Outdoor<br>mode | Ver.001<br>Only Halogen,Fluorescent,Outdoor mode | | | | | | ---- | ---- | ---- | V1.00L01<br>Only<br>Halogen,Fl<br>uorescent,<br>Outdoor<br>mode | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| DETAIL SELECT | OSD:54:[Data] | | QSD:54 | OSD:54:[Data] | 00<br>01 | Normal<br>Super DTL | | | from Ver.188<br>Only<br>Halogen,Fluorescent,O<br>utdoor mode | | from<br>Ver.056<br>Only<br>Halogen,Fl<br>uorescent,<br>Outdoor<br>mode | Ver.001<br>Only Halogen,Fluorescent,Outdoor mode | | | | | | ---- | ---- | ---- | V1.00L01<br>Only<br>Halogen,Fl<br>uorescent,<br>Outdoor<br>mode | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| NOISE SUPPRESS | OSD:55:[Data] | | QSD:55 | OSD:55:[Data] | 00<br>01<br>02 | OFF<br>LOW<br>HIGH | | | from Ver.188<br>Only<br>Halogen,Fluorescent,O<br>utdoor mode | | from<br>Ver.056<br>Only<br>Halogen,Fl<br>uorescent,<br>Outdoor<br>mode | Ver.001<br>Only Halogen,Fluorescent,Outdoor mode | | | | | | ---- | ---- | ---- | V1.00L01<br>Only<br>Halogen,Fl<br>uorescent,<br>Outdoor<br>mode | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

| ITEM | Control Command | Reply for Control Command | Confirmation Command | Reply for Confirmation Command | Data | Data Contents: Control and Response to contol | Data Contents: Response to Confirmation | Remarks: | E300/A | E600 | E800 | E800A | E350 | E650 | E655 | E750 | E860 | HE100 | HC1500 | HC1800 | HE870 | HE50 | HE60 | HE120 | HE130 | HE40/HE65/HE70 | UE70 | UB300 | HR140 | UE150 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FLESH NOSE SUPPRESS | OSD:56:[Data] | | QSD:56 | OSD:56:[Data] | 00<br>01<br>02 | OFF<br>LOW<br>HIGH | | | ---- | | from Ver.056 Only Halogen,Fluorescent,Outdoor mode | Ver.001 Only Halogen,Fluorescent,Outdoor mode | ---- | | | | ----<br>OSD:4B | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| DTL FLESH SUPPRESS | | | | | 00<br>01<br>02 | LOW<br>MID<br>HIGH | | | from Ver.188 Only Halogen,Fluorescent,Outdoor mode | | ---- | | ---- | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| ZEBRA INDICATER | OSD:60:[Data] | | QSD:60 | OSD:60:[Data] | 00<br>01 | OFF<br>ON | | with studio card | from Ver.188 | | from Ver.056 | Ver.001 | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| ZEBRA1 LEVEL | OSD:61:[Data] | | QSD:61 | OSD:61:[Data] | 00h<br>-<br>27h | 70%<br>-<br>109% | | with studio card | from Ver.188 | | from Ver.056 | Ver.001 | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| ZEBRA2 LEVEL | OSD:62:[Data] | | QSD:62 | OSD:62:[Data] | 01h<br>-<br>28h | 71%<br>-<br>110% | | with studio card | from Ver.188 | | from Ver.056 | ---- | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| SAFETY ZONE | OSD:63:[Data] | | QSD:63 | OSD:63:[Data] | 01<br>02<br>03<br>04<br>05<br>06 | 1<br>2<br>3<br>4<br>5<br>OFF | | with studio card | from Ver.188 | | from Ver.056 | Ver.001 | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| EVF OUTPUT | OSD:64:[Data] | | QSD:64 | OSD:64:[Data] | 00<br>01 | Y<br>VBS | | with studio card | from Ver.188 | | from Ver.056 | Ver.001 | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| OUTPUT SELECT | OSD:65:[Data] | | QSD:65 | OSD:65:[Data] | 00<br>01<br>02 | RGB<br>YPbPr<br>Y/C | | Y/C is Valid With SD(480i/576i) format | from Ver.188 with component Card | | from Ver.056 with component Card | Ver.001 with component Card | Ver.001 | | | | | V1.00L01 supports only 01(Y/Pb/Pr),02(Y/C) | ---- | ---- | V1.00L01 | ---- | ---- | V1.00<br>Y/C is Valid | ---- | ---- | ---- | ---- | ---- | ---- |
| CHARGE TIME | OSD:68:[Data] | | QSD:68 | OSD:68:[Data] | 00<br>01<br>02<br>03<br>04<br>05<br>06<br>07<br>08<br><br>00<br>01<br>02<br>03<br>04<br>05<br>06<br>07<br>08 | NTSC<br>2s<br>1s<br>1/2s<br>1/4s<br>1/8s<br>1/15s<br>1/30s<br>OFF<br>AUTO<br><br>PAL<br>2s<br>1s<br>1/2s<br>1/3s<br>1/6s<br>1/12s<br>1/25s<br>OFF<br>AUTO | | from Ver.188<br><br>with High Sensitivity Card | | from Ver.056 | Ver.001 | Ver.001 | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| AGC MAX | OSD:69:[Data] | | QSD:69 | OSD:69:[Data] | 00<br>01<br>02<br>03<br>04<br>05<br>06<br>07<br><br>00<br>01<br>02<br>03<br>04<br>05<br>06<br>07<br>08 | (OFF)<br>6dB<br>12dB<br>18dB<br>24dB<br>30dB<br>33dB(HBK50),N/Eye(E300/A)<br>N/Eye L(E600, E750, E655, E860)<br>N/Eye H(E600, E750, E655, E860)<br><br>AW-HE40/HE65/HE70<br>(OFF)<br>6dB<br>12dB<br>18dB<br>24dB<br>30dB<br>36dB<br>42dB<br>48dB | | from Ver.188<br><br>with High Sensitivity Card | | from Ver.056 | Ver.001 | Ver.001 | | | | | V1.00L01 supports only 01(6dB) - 03(18dB) | ---- | ---- | V1.00L01 supports only 01(6dB) - 03(18dB) | V1.00 supports only 01(6dB) - 03(18dB) | V3.00 supports only 01(6dB) - 03(18dB) | V1.00 supports only 01(6dB) - 03(18dB) | V1.00 supports only 01(6dB) - 03(18dB) | V1.00 supports only 01(6dB) - 08(48dB) | V1.00 supports only 01(6dB) - 08(48dB) | ---- | V1.00 supports only 01(6dB) - 03(18dB) | V1.00 supports only 01(6dB) - 03(18dB) |
| ASPECT RATIO | OSD:70:[Data] | | QSD:70 | OSD:70:[Data] | 00<br>01 | 16:9<br>4:3 | | | ---- | | from Ver.056 | Ver.001 | ---- | | | | Ver.001 | V1.00L01 | ---- | ---- | V1.00L01 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| FAN | OSD:71:[Data] | | QSD:71 | OSD:71:[Data] | 00<br>01<br>02<br><br>00<br>01<br>02 | OFF<br>ON<br>AUTO(E750,E655,E860,HE100)<br><br>AK-HC1500, HC1800<br>OFF<br>AUTO<br>ON | | | ---- | | from Ver.056 | ---- | ---- | | Ver.001 | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| ATW SPEED | OSD:72:[Data] | | QSD:72 | OSD:72:[Data] | 00<br>01<br>02<br>03<br>04 | Slow2<br>Slow1<br>Middle<br>Fast1<br>Fast2 | | | ---- | | | Ver.001 | | | | | | ---- | ---- | ---- | V1.00L01 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| COLOR BAR/CAMERA | DCB:[Data] | | QBR | OBR:[Data] | 0<br>1<br>2<br><br>3 | Camera<br>Color Bar<br>Test<br><br>Close(Camera) | | | supports only 0(Camera),1(Color Bar) | | | | | | | | | V1.00L01 supports only 0(Camera),1(Color Bar) | Ver.1.00 -00-0.00 | Ver.1.00 -00-0.00 | V1.00L01 supports only 0(Camera),1(Color Bar) | V1.00 supports only 0(Camera),1(Color Bar) | V3.00 supports only 0(Camera),1(Color Bar) | V1.00 supports only 0(Camera),1(Color Bar) | V1.00 supports only 0(Camera),1(Color Bar) | V1.00 supports only 0(Camera),1(Color Bar) | V1.00 supports only 0(Camera),1(Color Bar) | V7.00 supports only 0(Camera),1(Color Bar) | V1.00 supports only 0(Camera),1(Color Bar) | V1.00 supports only 0(Camera),1(Color Bar) |
| MENU | DUS:[Data] | | QUS | OUS:[Data] | 0<br>1<br>2 | OFF<br>ON<br>ON ByBrowser | | | Ver.001 | | | | | | | | | V1.00L01 | Ver.1.00 -00-0.00 | Ver.1.00 -00-0.00 | V1.00L01 | V1.00 supports only 0(OFF),1(ON) | V3.00 supports only 0(OFF),1(ON) | V1.00 supports only 0(OFF),1(ON) | V1.00 supports only 0(OFF),1(ON) | V1.00 supports only 0(OFF),1(ON) | V1.00 supports only 0(OFF),1(ON) | V7.00 supports only 0(OFF),1(ON) | V1.00 supports only 0(OFF),1(ON) | V1.00 supports only 0(OFF),1(ON) |
| BAR SETUP | DCS:[Data] | | QCS | OCS:[Data] | 0<br>1 | 0.0%<br>7.5% | | | ---- | | | | Ver.001 | | | | | ---- | ---- | ---- | V1.00L01 | ---- | ---- | V1.00 | V1.00 | ---- | ---- | ---- | ---- | ---- |
| MENU SW | DPG:[Data] | ---- | | | 1 | | | "DPG" is equal to "DPG:1". | Ver.001 | | | | | | | | | V1.00L01 | ---- | ---- | V1.00L01 | V1.00 | V3.00 | V1.00 | V1.00 | V1.00 | V1.00 | V7.00 | V1.00 | V1.00 |
| ITEM SW | DIT:[data] | ---- | | | 1 | | | "DIT" is equal to "DIT:1". | Ver.001 | | | | | | | | | V1.00L01 | Ver.1.00 -00-0.00 | Ver.1.00 -00-0.00 | V1.00L01 | V1.00 | V3.00 | V1.00 | V1.00 | V1.00 | V1.00 | V7.00 | V1.00 | V1.00 |
| YES SW | DUP:[Data] | ---- | | | 1h<br>Ah | 1Step<br>10Step | | "DUP" is equal to "DUP:1". | Ver.001 supports only DUP,DUP:1 | | | | | | | | | V1.00L01 supports only DUP,DUP:1 | Ver.1.00 -00-0.00 supports only DUP,DUP:1 | Ver.1.00 -00-0.00 supports only DUP,DUP:1 | V1.00L01 | V1.00 | V3.00 | V1.00 | V1.00 | V1.00 | V1.00 | V7.00 supports only 1h(1Step) | V1.00 | V1.00 supports only 1h(1Step) |
| NO SW | DDW:[Data] | ---- | | | 1h<br>Ah | 1Step<br>10Step | | "DDW" is equal to "DDW:1". | Ver.001 supports only DDW,DDW:1 | | | | | | | | | V1.00L01 supports only DDW,DDW:1 | Ver.1.00 -00-0.00 supports only DDW,DDW:1 | Ver.1.00 -00-0.00 supports only DDW,DDW:1 | V1.00L01 | V1.00 | V3.00 | V1.00 | V1.00 | V1.00 | V1.00 | V7.00 supports only 1h(1Step) | V1.00 | V1.00 supports only 1h(1Step) |
| PAN(LEFT) | HPL | ---- | | | ---- | move to left | | | from Ver.177<br><br>with Lens I/F Card | | from Ver.046 | Ver.001 | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

| ITEM | Control Command | Reply for Control Command | Confirmation Command | Reply for Confirmation Command | Data | Data Contents: Control and Response to contol | Data Contents: Response to Confirmation | Remarks | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | E300/A | E600 | E800 | E800A | E350 | E650 | E655 | E750 | E860 | HE100 | HC1500 | HC1800 | HE870 | HE50 | HE60 | HE120 | HE130 | HE40/HE65/HE70 | UE70 | UB300 | HR140 | UE150 |
| PAN(RIGHT) | HPR | | ---- | | ---- | move to right | | | from Ver.177 | | from Ver.046 | Ver.001 | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | | | | | | | | | with Lens I/F Card | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| PAN(STOP) | HPS | | ---- | | ---- | stop pan | | | from Ver.177 | | from Ver.046 | Ver.001 | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | | | | | | | | | with Lens I/F Card | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| TILT(UP) | HTU | | ---- | | ---- | move to up | | | from Ver.177 | | from Ver.046 | Ver.001 | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | | | | | | | | | with Lens I/F Card | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| TILT(DOWN) | HTD | | ---- | | ---- | move to down | | | from Ver.177 | | from Ver.046 | Ver.001 | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | | | | | | | | | with Lens I/F Card | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| TILT(STOP) | HTS | | ---- | | ---- | stop tilit | | | from Ver.177 | | from Ver.046 | Ver.001 | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | | | | | | | | | with Lens I/F Card | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| ZOOM(TELE) | HZT | | ---- | | ---- | move to tele | | | from Ver.177 | | from Ver.046 | Ver.001 | | | | | | V1.00L01 | Ver.1.10-00-0.00 | Ver.1.00-00-0.00 | V1.00L01 | V1.00 | V3.00 | ---- | ---- | V1.00 | V1.00 | V7.00 | ---- | ---- |
| | | | | | | | | | with Lens I/F Card | | | | | | | with Lens I/F Card | | | | | with Lens I/F Card | | | | | | | | | ---- |
| ZOOM(WIDE) | HZW | | ---- | | ---- | move to wide | | | from Ver.177 | | from Ver.046 | Ver.001 | | | | | | V1.00L01 | Ver.1.10-00-0.00 | Ver.1.00-00-0.00 | V1.00L01 | V1.00 | V3.00 | ---- | ---- | V1.00 | V1.00 | V7.00 | ---- | ---- |
| | | | | | | | | | with Lens I/F Card | | | | | | | with Lens I/F Card | | V1.00L01 | | | with Lens I/F Card | | | | | | | | | ---- |
| ZOOM(STOP) | HZS | | ---- | | ---- | stop zoom | | | from Ver.177 | | from Ver.046 | Ver.001 | | | | | | V1.00L01 | Ver.1.10-00-0.00 | Ver.1.00-00-0.00 | V1.00L01 | V1.00 | V3.00 | ---- | ---- | V1.00 | V1.00 | V7.00 | ---- | ---- |
| | | | | | | | | | with Lens I/F Card | | | | | | | with Lens I/F Card | | V1.00L01 | | | with Lens I/F Card | | | | | | | | | ---- |
| ZOOM SPEED | LZS:[Data] | | ---- | | 0<br>-<br>9 | Slow<br>-<br>Fast | ---- | | ---- | | | | | | | | from Ver.077 | V1.00L01 | Ver.1.10-00-0.00 | Ver.1.00-00-0.00 | V1.00L01 | V1.00 | V3.00 | ---- | ---- | V1.00 | V1.00 | V7.00 | ---- | ---- |
| FOCUS(FAR) | HFF | | ---- | | ---- | move to far | | | from Ver.177 | | from Ver.046 | Ver.001 | | | | | | V1.00L01 | Ver.1.10-00-0.00 | Ver.1.00-00-0.00 | V1.00L01 | V1.00 | V3.00 | ---- | ---- | V1.00 | V1.00 | V7.00 | ---- | ---- |
| | | | | | | | | | with Lens I/F Card | | | | | | | with Lens I/F Card | | V1.00L01 | | | with Lens I/F Card | | | | | | | | | ---- |
| FOCUS(NEAR) | HFN | | ---- | | ---- | move to near | | | from Ver.177 | | from Ver.046 | Ver.001 | | | | | | V1.00L01 | Ver.1.10-00-0.00 | Ver.1.00-00-0.00 | V1.00L01 | V1.00 | V3.00 | ---- | ---- | V1.00 | V1.00 | V7.00 | ---- | ---- |
| | | | | | | | | | with Lens I/F Card | | | | | | | with Lens I/F Card | | V1.00L01 | | | with Lens I/F Card | | | | | | | | | ---- |
| FOCUS(STOP) | HFS | | ---- | | ---- | stop focus | | | from Ver.177 | | from Ver.046 | Ver.001 | | | | | | V1.00L01 | Ver.1.10-00-0.00 | Ver.1.00-00-0.00 | V1.00L01 | V1.00 | V3.00 | ---- | ---- | V1.00 | V1.00 | V7.00 | ---- | ---- |
| | | | | | | | | | with Lens I/F Card | | | | | | | with Lens I/F Card | | V1.00L01 | | | with Lens I/F Card | | | | | | | | | ---- |
| FOCUS SPEED | LFS:[Data] | | ---- | | 0<br>-<br>9 | Slow<br>-<br>Fast | ---- | | ---- | | | | | | | | from Ver.077 | V1.00L01 | Ver.1.10-00-0.00 | Ver.1.00-00-0.00 | V1.00L01 | V1.00 | V3.00 | ---- | ---- | V1.00 | V1.00 | V7.00 | ---- | ---- |
| SAVE LENS PSITION to PRESET | LPS:[Data] | | ---- | | 01<br>02<br>03<br>04<br>05 | Save to Preset1<br>Save to Preset2<br>Save to Preset3<br>Save to Preset4<br>Save to Preset5 | ---- | | ---- | | | | | | | | | ---- | Ver.1.10-00-0.00 | Ver.1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| Recall LENS PRESET | LPM:[Data] | | ---- | | 00<br>01<br>02<br>03<br>04<br>05 | Recall Current<br>Recall Preset1<br>Recall Preset2<br>Recall Preset3<br>Recall Preset4<br>Recall Preset5 | ---- | | ---- | | | | | | | | | ---- | Ver.1.10-00-0.00 | Ver.1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| COLOR MATRIX<br>R GAIN<br>/COLOR<br>CORRECTION<br>R SATURATION | OSD:86:[Data] | QSD:86 | OSD:86:[Data] | | 01h<br>-<br>80h<br>-<br>FFh | -127<br>-<br>0<br>-<br>+127 | | | ---- | | | | Ver001<br>Only User mode | | | | | ---- | Ver1.10-00-0.00<br><br>-63 <-><br>+63 | Ver1.00-00-0.00<br><br>-63 <-><br>+63 | V1.00L01<br>Only User mode | ---- | ---- | V1.00 | V1.00<br>supports only<br>41h(-63)<br>-<br>BFh(+63) | V1.00<br>supports only<br>61h(-31)<br>-<br>9Fh(+31) | V1.00<br>supports only<br>61h(-31)<br>-<br>9Fh(+31) | V7.00<br>supports only<br>01h(-127)<br>-<br>FEh(+126) | V1.00<br>supports only<br>41h(-63)<br>-<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>-<br>BFh(+63) |
| COLOR MATRIX<br>R PHASE<br>/COLOR CORRECTION<br>R PHASE | OSD:87:[Data] | QSD:87 | OSD:87:[Data] | | 01h<br>-<br>80h<br>-<br>FFh | -127<br>-<br>0<br>-<br>+127 | | | ---- | | | | Ver001<br>Only User mode | | | | | ---- | Ver1.10-00-0.00<br><br>-63 <-><br>+63 | Ver1.00-00-0.00<br><br>-63 <-><br>+63 | V1.00L01<br>Only User mode | ---- | ---- | V1.00 | V1.00<br>supports only<br>41h(-63)<br>-<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>-<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>-<br>BFh(+63) | V7.00 | V1.00<br>supports only<br>41h(-63)<br>-<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>-<br>BFh(+63) |
| COLOR MATRIX<br>R_YI GAIN<br>/COLOR<br>CORRECTION<br>R_YI SATURATION | OSD:88:[Data] | QSD:88 | OSD:88:[Data] | | 01h<br>-<br>80h<br>-<br>FFh | -127<br>-<br>0<br>-<br>+127 | | | ---- | | | | Ver001<br>Only User mode | | | | | ---- | Ver1.10-00-0.00<br><br>-63 <-><br>+63 | Ver1.00-00-0.00<br><br>-63 <-><br>+63 | V1.00L01<br>Only User mode | ---- | ---- | V1.00 | V1.00<br>supports only<br>41h(-63)<br>-<br>BFh(+63) | ---- | ---- | V7.00<br>supports only<br>01h(-127)<br>-<br>FEh(+126) | V1.00<br>supports only<br>41h(-63)<br>-<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>-<br>BFh(+63) |
| COLOR MATRIX<br>R_YI PHASE<br>/COLOR<br>CORRECTION<br>R_YI PHASE | OSD:89:[Data] | QSD:89 | OSD:89:[Data] | | 01h<br>-<br>80h<br>-<br>FFh | -127<br>-<br>0<br>-<br>+127 | | | ---- | | | | Ver001<br>Only User mode | | | | | ---- | Ver1.10-00-0.00<br><br>-63 <-><br>+63 | Ver1.00-00-0.00<br><br>-63 <-><br>+63 | V1.00L01<br>Only User mode | ---- | ---- | V1.00 | V1.00<br>supports only<br>41h(-63)<br>-<br>BFh(+63) | ---- | ---- | V7.00 | V1.00<br>supports only<br>41h(-63)<br>-<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>-<br>BFh(+63) |
| COLOR MATRIX<br>YI GAIN<br>/COLOR<br>CORRECTION<br>YI SATURATION | OSD:8A:[Data] | QSD:8A | OSD:8A:[Data] | | 01h<br>-<br>80h<br>-<br>FFh | -127<br>-<br>0<br>-<br>+127 | | | ---- | | | | Ver001<br>Only User mode | | | | | ---- | Ver1.10-00-0.00<br><br>-63 <-><br>+63 | Ver1.00-00-0.00<br><br>-63 <-><br>+63 | V1.00L01<br>Only User mode | ---- | ---- | V1.00 | V1.00<br>supports only<br>41h(-63)<br>-<br>BFh(+63) | V1.00<br>supports only<br>61h(-31)<br>-<br>9Fh(+31) | V1.00<br>supports only<br>61h(-31)<br>-<br>9Fh(+31) | V7.00<br>supports only<br>01h(-127)<br>-<br>FEh(+126) | V1.00<br>supports only<br>41h(-63)<br>-<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>-<br>BFh(+63) |
| COLOR MATRIX<br>YI PHASE<br>/COLOR<br>CORRECTION<br>YI PHASE | OSD:8B:[Data] | QSD:8B | OSD:8B:[Data] | | 01h<br>-<br>80h<br>-<br>FFh | -127<br>-<br>0<br>-<br>+127 | | | ---- | | | | Ver001<br>Only User mode | | | | | ---- | Ver1.10-00-0.00<br><br>-63 <-><br>+63 | Ver1.00-00-0.00<br><br>-63 <-><br>+63 | V1.00L01<br>Only User mode | ---- | ---- | V1.00 | V1.00<br>supports only<br>41h(-63)<br>-<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>-<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>-<br>BFh(+63) | V7.00 | V1.00<br>supports only<br>41h(-63)<br>-<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>-<br>BFh(+63) |
| COLOR MATRIX<br>YI_G GAIN<br>/COLOR<br>CORRECTION<br>YI_G SATURATION | OSD:8C:[Data] | QSD:8C | OSD:8C:[Data] | | 01h<br>-<br>80h<br>-<br>FFh | -127<br>-<br>0<br>-<br>+127 | | | ---- | | | | Ver001<br>Only User mode | | | | | ---- | Ver1.10-00-0.00<br><br>-63 <-><br>+63 | Ver1.00-00-0.00<br><br>-63 <-><br>+63 | V1.00L01<br>Only User mode | ---- | ---- | V1.00 | V1.00<br>supports only<br>41h(-63)<br>-<br>BFh(+63) | ---- | ---- | V7.00<br>supports only<br>01h(-127)<br>-<br>FEh(+126) | V1.00<br>supports only<br>41h(-63)<br>-<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>-<br>BFh(+63) |

| ITEM | Control Command | Reply for Control Command | Confirmation Command | Reply for Confirmation Command | Data | Data Contents: Control and Response to contol | Data Contents: Response to Confirmation | Remarks: | E300/A | E600 | E800 | E800A | E350 | E650 | E655 | E750 | E860 | HE100 | HC1500 | HC1800 | HE870 | HE50 | HE60 | HE120 | HE130 | HE40/HE65/HE70 | UE70 | UB300 | HR140 | UE150 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| COLOR MATRIX<br>Y1_G PHASE<br>/COLOR<br>CORRECTION<br>Y1_G PHASE | OSD:8D:[Data] | | QSD:8D | OSD:8D:[Data] | 01h<br>~<br>80h<br>~<br>FFh | -127<br>~<br>0<br>~<br>+127 | | | ---- | | | | Ver001<br>Only User mode | | | | | ---- | Ver1.10-00-0.00<br><br>-63 <->+63 | Ver1.00-00-0.00<br><br>-63 <->+63 | V1.00L01<br>Only User mode | ---- | ---- | V1.00 | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | ---- | ---- | V7.00 | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) |
| COLOR MATRIX<br>G GAIN<br>/COLOR<br>CORRECTION<br>G SATURATION | OSD:8E:[Data] | | QSD:8E | OSD:8E:[Data] | 01h<br>~<br>80h<br>~<br>FFh | -127<br>~<br>0<br>~<br>+127 | | | ---- | | | | Ver001<br>Only User mode | | | | | ---- | Ver1.10-00-0.00<br><br>-63 <->+63 | Ver1.00-00-0.00<br><br>-63 <->+63 | V1.00L01<br>Only User mode | ---- | ---- | V1.00 | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V1.00<br>supports only<br>61h(-31)<br>~<br>9Fh(+31) | V1.00<br>supports only<br>61h(-31)<br>~<br>9Fh(+31) | V7.00<br>supports only<br>01h(-127)<br>~<br>FEh(+126) | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) |
| COLOR MATRIX<br>G PHASE<br>/COLOR<br>CORRECTION<br>G PHASE | OSD:8F:[Data] | | QSD:8F | OSD:8F:[Data] | 01h<br>~<br>80h<br>~<br>FFh | -127<br>~<br>0<br>~<br>+127 | | | ---- | | | | Ver001<br>Only User mode | | | | | ---- | Ver1.10-00-0.00<br><br>-63 <->+63 | Ver1.00-00-0.00<br><br>-63 <->+63 | V1.00L01<br>Only User mode | ---- | ---- | V1.00 | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V7.00 | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) |
| COLOR MATRIX<br>G_Cy GAIN<br>/COLOR<br>CORRECTION<br>G_Cy SATURATION | OSD:90:[Data] | | QSD:90 | OSD:90:[Data] | 01h<br>~<br>80h<br>~<br>FFh | -127<br>~<br>0<br>~<br>+127 | | | ---- | | | | Ver001<br>Only User mode | | | | | ---- | Ver1.10-00-0.00<br><br>-63 <->+63 | Ver1.00-00-0.00<br><br>-63 <->+63 | V1.00L01<br>Only User mode | ---- | ---- | V1.00 | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V1.00<br>supports only<br>61h(-31)<br>~<br>9Fh(+31) | V1.00<br>supports only<br>61h(-31)<br>~<br>9Fh(+31) | V7.00<br>supports only<br>01h(-127)<br>~<br>FEh(+126) | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) |
| COLOR MATRIX<br>G_Cy PHASE<br>/COLOR<br>CORRECTION<br>G_Cy PHASE | OSD:91:[Data] | | QSD:91 | OSD:91:[Data] | 01h<br>~<br>80h<br>~<br>FFh | -127<br>~<br>0<br>~<br>+127 | | | ---- | | | | Ver001<br>Only User mode | | | | | ---- | Ver1.10-00-0.00<br><br>-63 <->+63 | Ver1.00-00-0.00<br><br>-63 <->+63 | V1.00L01<br>Only User mode | ---- | ---- | V1.00 | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V7.00 | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) |
| COLOR MATRIX<br>Cy GAIN<br>/COLOR<br>CORRECTION<br>Cy SATURATION | OSD:92:[Data] | | QSD:92 | OSD:92:[Data] | 01h<br>~<br>80h<br>~<br>FFh | -127<br>~<br>0<br>~<br>+127 | | | ---- | | | | Ver001<br>Only User mode | | | | | ---- | Ver1.10-00-0.00<br><br>-63 <->+63 | Ver1.00-00-0.00<br><br>-63 <->+63 | V1.00L01<br>Only User mode | ---- | ---- | V1.00 | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V1.00<br>supports only<br>61h(-31)<br>~<br>9Fh(+31) | V1.00<br>supports only<br>61h(-31)<br>~<br>9Fh(+31) | V7.00<br>supports only<br>01h(-127)<br>~<br>FEh(+126) | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) |
| COLOR MATRIX<br>Cy PHASE<br>/COLOR<br>CORRECTION<br>Cy PHASE | OSD:93:[Data] | | QSD:93 | OSD:93:[Data] | 01h<br>~<br>80h<br>~<br>FFh | -127<br>~<br>0<br>~<br>+127 | | | ---- | | | | Ver001<br>Only User mode | | | | | ---- | Ver1.10-00-0.00<br><br>-63 <->+63 | Ver1.00-00-0.00<br><br>-63 <->+63 | V1.00L01<br>Only User mode | ---- | ---- | V1.00 | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V7.00 | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) |
| COLOR MATRIX<br>Cy_B GAIN<br>/COLOR<br>CORRECTION<br>Cy_G SATURATION | OSD:94:[Data] | | QSD:94 | OSD:94:[Data] | 01h<br>~<br>80h<br>~<br>FFh | -127<br>~<br>0<br>~<br>+127 | | | ---- | | | | Ver001<br>Only User mode | | | | | ---- | Ver1.10-00-0.00<br><br>-63 <->+63 | Ver1.00-00-0.00<br><br>-63 <->+63 | V1.00L01<br>Only User mode | ---- | ---- | V1.00 | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | ---- | ---- | V7.00<br>supports only<br>01h(-127)<br>~<br>FEh(+126) | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) |
| COLOR MATRIX<br>Cy_B PHASE<br>/COLOR<br>CORRECTION<br>Cy_B PHASE | OSD:95:[Data] | | QSD:95 | OSD:95:[Data] | 01h<br>~<br>80h<br>~<br>FFh | -127<br>~<br>0<br>~<br>+127 | | | ---- | | | | Ver001<br>Only User mode | | | | | ---- | Ver1.10-00-0.00<br><br>-63 <->+63 | Ver1.00-00-0.00<br><br>-63 <->+63 | V1.00L01<br>Only User mode | ---- | ---- | V1.00 | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | ---- | ---- | V7.00 | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) |
| COLOR MATRIX<br>B GAIN<br>/COLOR<br>CORRECTION<br>B SATURATION | OSD:96:[Data] | | QSD:96 | OSD:96:[Data] | 01h<br>~<br>80h<br>~<br>FFh | -127<br>~<br>0<br>~<br>+127 | | | ---- | | | | Ver001<br>Only User mode | | | | | ---- | Ver1.10-00-0.00<br><br>-63 <->+63 | Ver1.00-00-0.00<br><br>-63 <->+63 | V1.00L01<br>Only User mode | ---- | ---- | V1.00 | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V1.00<br>supports only<br>61h(-31)<br>~<br>9Fh(+31) | V1.00<br>supports only<br>61h(-31)<br>~<br>9Fh(+31) | V7.00<br>supports only<br>01h(-127)<br>~<br>FEh(+126) | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) |
| COLOR MATRIX<br>B PHASE<br>/COLOR<br>CORRECTION<br>B PHASE | OSD:97:[Data] | | QSD97 | OSD:97:[Data] | 01h<br>~<br>80h<br>~<br>FFh | -127<br>~<br>0<br>~<br>+127 | | | ---- | | | | Ver001<br>Only User mode | | | | | ---- | Ver1.10-00-0.00<br><br>-63 <->+63 | Ver1.00-00-0.00<br><br>-63 <->+63 | V1.00L01<br>Only User mode | ---- | ---- | V1.00 | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V7.00 | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) |
| COLOR MATRIX<br>B_Mg GAIN<br>/COLOR<br>CORRECTION<br>B_Mg SATURATION | OSD:80:[Data] | | QSD:80 | OSD:80:[Data] | 01h<br>~<br>80h<br>~<br>FFh | -127<br>~<br>0<br>~<br>+127 | | | ---- | | | | Ver001<br>Only User mode | | | | | ---- | Ver1.10-00-0.00<br><br>-63 <->+63 | Ver1.00-00-0.00<br><br>-63 <->+63 | V1.00L01<br>Only User mode | ---- | ---- | V1.00 | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | ---- | ---- | V7.00<br>supports only<br>01h(-127)<br>~<br>FEh(+126) | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) |
| COLOR MATRIX<br>B_Mg PHASE<br>/COLOR<br>CORRECTION<br>B_Mg PHASE | OSD:81:[Data] | | QSD:81 | OSD:81:[Data] | 01h<br>~<br>80h<br>~<br>FFh | -127<br>~<br>0<br>~<br>+127 | | | ---- | | | | Ver001<br>Only User mode | | | | | ---- | Ver1.10-00-0.00<br><br>-63 <->+63 | Ver1.00-00-0.00<br><br>-63 <->+63 | V1.00L01<br>Only User mode | ---- | ---- | V1.00 | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | ---- | ---- | V7.00 | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) |
| COLOR MATRIX<br>Mg GAIN<br>/COLOR<br>CORRECTION<br>Mg SATURATION | OSD:82:[Data] | | QSD:82 | OSD:82:[Data] | 01h<br>~<br>80h<br>~<br>FFh | -127<br>~<br>0<br>~<br>+127 | | | ---- | | | | Ver001<br>Only User mode | | | | | ---- | Ver1.10-00-0.00<br><br>-63 <->+63 | Ver1.00-00-0.00<br><br>-63 <->+63 | V1.00L01<br>Only User mode | ---- | ---- | V1.00 | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V1.00<br>supports only<br>61h(-31)<br>~<br>9Fh(+31) | V1.00<br>supports only<br>61h(-31)<br>~<br>9Fh(+31) | V7.00<br>supports only<br>01h(-127)<br>~<br>FEh(+126) | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) |
| COLOR MATRIX<br>Mg PHASE<br>/COLOR<br>CORRECTION<br>Mg PHASE | OSD:83:[Data] | | QSD:83 | OSD:83:[Data] | 01h<br>~<br>80h<br>~<br>FFh | -127<br>~<br>0<br>~<br>+127 | | | ---- | | | | Ver001<br>Only User mode | | | | | ---- | Ver1.10-00-0.00<br><br>-63 <->+63 | Ver1.00-00-0.00<br><br>-63 <->+63 | V1.00L01<br>Only User mode | ---- | ---- | V1.00 | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V7.00 | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) |
| COLOR MATRIX<br>Mg_R GAIN<br>/COLOR<br>CORRECTION<br>Mg_R SATURATION | OSD:84:[Data] | | QSD:84 | OSD:84:[Data] | 01h<br>~<br>80h<br>~<br>FFh | -127<br>~<br>0<br>~<br>+127 | | | ---- | | | | Ver001<br>Only User mode | | | | | ---- | Ver1.10-00-0.00<br><br>-63 <->+63 | Ver1.00-00-0.00<br><br>-63 <->+63 | V1.00L01<br>Only User mode | ---- | ---- | V1.00 | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V1.00<br>supports only<br>61h(-31)<br>~<br>9Fh(+31) | V1.00<br>supports only<br>61h(-31)<br>~<br>9Fh(+31) | V7.00<br>supports only<br>01h(-127)<br>~<br>FEh(+126) | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) |
| COLOR MATRIX<br>Mg_R PHASE<br>/COLOR<br>CORRECTION<br>Mg_R PHASE | OSD:85:[Data] | | QSD:85 | OSD:85:[Data] | 01h<br>~<br>80h<br>~<br>FFh | -127<br>~<br>0<br>~<br>+127 | | | ---- | | | | Ver001<br>Only User mode | | | | | ---- | Ver1.10-00-0.00<br><br>-63 <->+63 | Ver1.00-00-0.00<br><br>-63 <->+63 | V1.00L01<br>Only User mode | ---- | ---- | V1.00 | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V7.00 | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) |
| T PEDESTAL | OTP:[Data] | | QTP | OTP:[Data] | 000h<br>~<br>096h<br>~<br>12Ch | -150<br>~<br>0<br>~<br>+150 | | | ---- | | | | Ver001 | | | | | ---- | Ver1.00-00-0.00 | Ver1.00-00-0.00 | V1.00L01 | V1.00<br>Data/15 | V3.00<br>Data/15 | V1.00 | V1.00 | V1.00<br>Data/15 | V1.00<br>Data/15 | ---- | V1.00 | ---- |
| R GAIN | ORI:[Data] | | QRI | ORI:[Data] | 000h<br>~<br>096h<br>~<br>12Ch | -150<br>~<br>0<br>~<br>+150 | | | ---- | | | | Ver001 | | | | | V1.00L01<br>Data / 5 | Ver1.00-00-0.00 | Ver1.00-00-0.00 | V1.00L01 | V2.00<br>Data/5 | V3.00<br>Data/5 | V1.00 | V1.00 | V1.00<br>Data/5 | V1.00<br>Data/5 | ---- | V1.00 | ---- |
| B GAIN | OBI:[Data] | | QBI | OBI:[Data] | 000h<br>~<br>096h<br>~<br>12Ch | -150<br>~<br>0<br>~<br>+150 | | | ---- | | | | Ver001 | | | | | V1.00L01<br>Data / 5 | Ver1.00-00-0.00 | Ver1.00-00-0.00 | V1.00L01 | V2.00<br>Data/5 | V3.00<br>Data/5 | V1.00 | V1.00 | V1.00<br>Data/5 | V1.00<br>Data/5 | ---- | V1.00 | ---- |
| R PEDESTAL | ORP:[Data] | | QRP | ORP:[Data] | 000h<br>~<br>096h<br>~<br>12Ch | -150<br>~<br>0<br>~<br>+150 | | | ---- | | | | Ver001 | | | | | ---- | Ver1.00-00-0.00<br><br>-100 to +100 | Ver1.00-00-0.00<br><br>-100 to +100 | V1.00L01 | ---- | ---- | V1.00 | V1.00<br>supports only<br>-100~+100 | ---- | ---- | ---- | V1.00<br>supports only<br>-100~+100 | V1.00<br>supports only<br>-100~+100 |
| B PEDESTAL | OBP:[Data] | | QBP | OBP:[Data] | 000h<br>~<br>096h<br>~<br>12Ch | -150<br>~<br>0<br>~<br>+150 | | | ---- | | | | Ver001 | | | | | ---- | Ver1.00-00-0.00<br><br>-100 to +100 | Ver1.00-00-0.00<br><br>-100 to +100 | V1.00L01 | ---- | ---- | V1.00 | V1.00<br>supports only<br>-100~+100 | ---- | ---- | ---- | V1.00<br>supports only<br>-100~+100 | V1.00<br>supports only<br>-100~+100 |
| 3D-DNR | ODD:[Data] | | QDD | ODD:[Data] | 00<br>01<br>02 | OFF<br>LOW<br>HIGH | | | ---- | | | | Ver001 | | ---- | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| AUTO FOCUS | OAF:[Data] | | QAF | OAF:[Data] | 0<br>1 | Manual FOCUS<br>AUTO FOCUS | | | ---- | | | | | Ver.001<br>with AF<br>LENS | ---- | ---- | V1.00L01 | ---- | ---- | ---- | V1.00 | V3.00 | V1.00 | V1.00 | V1.00 | V1.00 | ---- | V1.00 | V1.00 |

| ITEM | Control Command | Reply for Control Command | Confirmation Command | Reply for Confirmation Command | Data | Data Contents | | Remarks | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Control and Response to contol | Response to Confirmation | | E300/A | E600 | E800 | E800A | E350 | E650 | E655 | E750 | E860 | HE100 | HC1500 | HC1800 | HE870 | HE50 | HE60 | HE120 | HE130 | HE40/HE65/HE70 | UE70 | UB300 | HR140 | UE150 |
| DIGITAL GAIN UP | ODG:[Data] | | QDG | ODG:[Data] | 0<br>1<br>2<br>3<br>4<br>5 | 0dB<br>6dB<br>12dB<br>18dB<br>24dB<br>30dB | | | ---- | | | | Ver001 | | | | ---- | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| DIGITAL EXTENDER | ODE:[Data] | | QDE | ODE:[Data] | 0<br>1 | OFF<br>ON | | | ---- | | | | Ver001 | | | | ---- | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | V1.00 | V1.00 | V1.00 | V7.40 | V1.00 | V1.00<br>On mean x1.4 |
| FILTER | OFT:[Data] | | QFT | OFT:[Data] | 0<br>1<br>2<br>3<br><br><br>0<br>1<br>2<br>3<br>4 | IR Through<br>Normal<br>1/16 ND<br>1/64 ND<br><br><u>AW-HE130,HE40,HE70,HR140,UE150</u><br><u>AW-HE120,AK-HC1500, HC1800, UB300</u><br>Clear<br>1/4 ND<br>1/16 ND<br>1/64 ND<br>1/8 ND | | | ---- | | | | | | Ver.001 | ---- | | ---- | Ver1.00-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | V1.00<br>supports only<br>Clear<br>1/4 ND<br>1/16 ND<br>1/64 ND | V1.00<br>supports only<br>Clear<br>1/64 ND<br>1/8 ND | --- | V1.00<br>0h: Clear<br>1h: 1/4 ND<br>2h: 1/16 ND<br>3h: 1/64 ND<br>8h: Auto ND | V7.00<br>supports only<br>Clear<br>1/4 ND<br>1/16 ND<br>1/64 ND | V1.00<br>supports only<br>Clear<br>1/64 ND<br>1/8 ND | V1.00<br>supports only<br>Clear(Through)<br>1/4 ND<br>1/16 ND<br>1/64 ND |
| RED TALLY | TLR:[Data] | | QLR | OLR:[Data] | 0<br>1 | OFF<br>ON | | | ---- | | | | | | | | | ---- | Ver1.00-00-0.00<br>supports only<br>Control Command | Ver1.00-00-0.00<br>supports only<br>Control Command | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V7.00 | ---- | V1.00 |
| GREEN TALLY | TLG:[Data] | | QLG | OLG:[Data] | 0<br>1 | OFF<br>ON | | | ---- | | | | | | | | | ---- | Ver1.00-00-0.00<br>supports only<br>Control Command | Ver1.00-00-0.00<br>supports only<br>Control Command | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V7.00 | ---- | V1.00 |
| BLACK SHADING CORRECT(DIG) | OSA:C0:[Data] | | QSA:C0 | OSA:C0:[Data] | 0<br>1 | OFF<br>ON | | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| M GAMMA@DRS OFF | OSA:01:[Data] | | QSA:01 | OSA:01:[Data] | 6Ah<br>-<br>79h<br>-<br>97h | 0.30<br>-<br>0.45<br>-<br>0.75 | | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| M GAMMA@DRS ON | OSA:02:[Data] | | QSA:02 | OSA:02:[Data] | 76h<br>-<br>80h<br>-<br>8Ah | -10<br>-<br>0<br>-<br>+10 | | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| R GAMMA@DRS OFF | OSA:03:[Data] | | QSA:03 | OSA:03:[Data] | 71h<br>-<br>80h<br>-<br>8Fh | -15<br>-<br>0<br>-<br>+15 | | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| R GAMMA@DRS ON | OSA:04:[Data] | | QSA:04 | OSA:04:[Data] | 76h<br>-<br>80h<br>-<br>8Ah | -10<br>-<br>0<br>-<br>+10 | | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| B GAMMA@DRS OFF | OSA:05:[Data] | | QSA:05 | OSA:05:[Data] | 71h<br>-<br>80h<br>-<br>8Fh | -15<br>-<br>0<br>-<br>+15 | | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| B GAMMA@DRS ON | OSA:06:[Data] | | QSA:06 | OSA:06:[Data] | 76h<br>-<br>80h<br>-<br>8Ah | -10<br>-<br>0<br>-<br>+10 | | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| M BLACK GAMMA | OSA:07:[Data] | | QSA:07 | OSA:07:[Data] | 50h<br>-<br>80h<br>-<br>B0h | -48<br>-<br>0<br>-<br>+48 | | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V7.30 | ---- | V1.00<br>supports only<br>78h(-8)<br>-<br>88h(+8) |
| R BLACK GAMMA | OSA:08:[Data] | | QSA:08 | OSA:08:[Data] | 6Ch<br>-<br>71h<br>-<br>80h<br>-<br>8Fh<br>-<br>94h | -20<br>-<br>-15<br>-<br>0<br>-<br>+15<br>-<br>+20 | | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00<br>support only<br>71h(-15) - 8Fh(+15) | Ver1.00-00-0.00<br>support only<br>71h(-15) - 8Fh(+15) | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V7.30 | ---- | ---- |
| B BLACK GAMMA | OSA:09:[Data] | | QSA:09 | OSA:09:[Data] | 6Ch<br>-<br>71h<br>-<br>80h<br>-<br>8Fh<br>-<br>94h | -20<br>-<br>-15<br>-<br>0<br>-<br>+15<br>-<br>+20 | | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00<br>support only<br>71h(-15) - 8Fh(+15) | Ver1.00-00-0.00<br>support only<br>71h(-15) - 8Fh(+15) | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V7.30 | ---- | ---- |
| GAMMA SW | OSA:0A:[Data] | | QSA:0A | OSA:0A:[Data] | 0<br>1 | OFF<br>ON | | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V7.30 | ---- | ---- |
| BLACK GAMMA SW | OSA:0B:[Data] | | QSA:0B | OSA:0B:[Data] | 0<br>1 | OFF<br>ON | | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V7.30 | ---- | ---- |
| EFFECT DEPTH | OSA:0C:[Data] | | QSA:0C | OSA:0C:[Data] | 1<br>-<br>5 | 1<br>-<br>5 | | | ---- | | | | | | | | | V2.01L01<br>1<->3 | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| DRS SW | OSA:0D:[Data] | | QSA:0D | OSA:0D:[Data] | 0<br>1 | OFF<br>ON | | | ---- | | | | | | | | | V2.01L01 | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V7.30 | ---- | ---- |
| CINE GAMMA SELECT | OSA:0E:[Data] | | QSA:0E | OSA:0E:[Data] | 0<br>1 | FILM REC<br>VIDEO REC | | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| BLACK STRETCH LEVEL(@FILM MENU & FILM REC) | OSA:0F:[Data] | | QSA:0F | OSA:0F:[Data] | 00h<br>-<br>1Eh | 0<br>-<br>30 | | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V7.30 | ---- | V1.00 |
| DYNAMIC LEVEL (@FILM MENU & FILM REC) | OSA:10:[Data] | | QSA:10 | OSA:10:[Data] | 0<br>1<br>2<br>3<br>4 | 200%<br>300%<br>400%<br>500%<br>600% | | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00<br>support only<br>0(200%)<br>-<br>3(500%) | Ver1.00-00-0.00<br>support only<br>0(200%)<br>-<br>3(500%) | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V7.30<br>supperts only<br>0(200%)<br>-<br>3(500%) | ---- | V1.00 |
| M KNEE POINT (@VIDEO MENU) | OSA:20:[Data] | | QSA:20 | OSA:20:[Data] | 22h<br>-<br>80h<br>-<br>B6h<br>-<br>C2h | 70.00%<br>-<br>93.50%<br>-<br>107.00%<br>-<br>110.00%<br>(1step=0.25%) | | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00<br>support only<br>22h(70.00%) - B6h(107.00%) | Ver1.00-00-0.00<br>support only<br>22h(70.00%) - B6h(107.00%) | ---- | ---- | ---- | ---- | V1.00<br>support only<br>22h(70.00%) - B6h(107.00%)<br>(1step=0.5%) | ---- | ---- | V7.30<br>support only<br>44h(80.00%) - C2h(110.00%) | V1.00<br>support only<br>22h(70.00%) - B6h(107.00%)<br>(1step=0.5%) | V1.00<br>support only<br>22h(70.00%) - B6h(107.00%)<br>(1step=0.5%) |

| ITEM | Control Command | Reply for Control Command | Confirmation Command | Reply for Confirmation Command | Data | Data Contents | | Remarks | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Control and Response to contol | Response to Confirmation | | E300/A | E600 | E800 | E800A | E350 | E650 | E655 | E750 | E860 | HE100 | HC1500 | HC1800 | HE870 | HE50 | HE60 | HE120 | HE130 | HE40/HE65/HE70 | UE70 | UB300 | HR140 | UE150 |
| M KNEE POINT<br>(#FILM MENU & VIDEO REC) | OSA:21:[Data] | | QSA:21 | OSA:21:[Data] | 62h<br>~<br>80h<br>~<br>9Eh<br>~<br>AFh | 30%<br>~<br>60%<br>~<br>90%<br>~<br>107% | | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00 support only 62(30%) ~ 9E(90%) | Ver1.00-00-0.00 support only 62(30%) ~ 9E(90%) | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V7.30 support only 62(30%) ~ 9E(90%) | ---- | V1.00 |
| R KNEE POINT | OSA:22:[Data] | | QSA:22 | OSA:22:[Data] | 1Ch<br>~<br>80h<br>~<br>E4h | -25.00%<br>~<br>0.00%<br>~<br>+25.00%<br>(1step=0.25%) | | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V7.30 | ---- | ---- |
| B KNEE POINT | OSA:23:[Data] | | QSA:23 | OSA:23:[Data] | 1Ch<br>~<br>80h<br>~<br>E4h | -25.00%<br>~<br>0.00%<br>~<br>+25.00%<br>(1step=0.25%) | | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V7.30 | ---- | ---- |
| M KNEE SLOPE<br>(#VIDEO MENU) | OSA:24:[Data] | | QSA:24 | OSA:24:[Data] | 00h<br>~<br>63h<br>~<br>C7h | 0<br>~<br>99<br>~<br>199 | | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00 support only 00h(0) - 63h(99) | Ver1.00-00-0.00 support only 00h(0) - 63h(99) | ---- | ---- | ---- | ---- | V1.00 support only 00h(0) - 63h(99) | ---- | ---- | V7.30 | V1.00 support only 00h(0) - 63h(99) | V1.00 support only 00h(0) - 63h(99) |
| M KNEE SLOPE<br>(#FILM MENU & VIDEO REC) | OSA:25:[Data] | | QSA:25 | OSA:25:[Data] | 7Ch<br>~<br>80h<br>~<br>85h | 150%<br>~<br>350%<br>~<br>600%<br>(1step=50%) | | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V7.30 | ---- | V1.00 supports only 7Ch(150%) - 83h(500%) |
| R KNEE SLOPE<br>(#VIDEO MENU) | OSA:26:[Data] | | QSA:26 | OSA:26:[Data] | 1Dh<br>~<br>80h<br>~<br>E3h | -99<br>~<br>0<br>~<br>+99 | | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V7.30 | ---- | ---- |
| B KNEE SLOPE<br>(#VIDEO MENU) | OSA:27:[Data] | | QSA:27 | OSA:27:[Data] | 1Dh<br>~<br>80h<br>~<br>E3h | -99<br>~<br>0<br>~<br>+99 | | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V7.30 | ---- | ---- |
| A.KNEE POINT<br>(#VIDEO MENU) | OSA:28:[Data] | | QSA:28 | OSA:28:[Data] | 4Ah<br>~<br>80h<br>~<br>B6h | 80.00%<br>~<br>93.50%<br>~<br>107.00%<br>(1step=0.25%) | | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V7.30 | ---- | ---- |
| A.KNEE LEVEL<br>(#VIDEO MENU) | OSA:29:[Data] | | QSA:29 | OSA:29:[Data] | 7Ch<br>~<br>85h | 100%<br>~<br>109%<br>(1step=1%) | | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V7.30 | ---- | ---- |
| M WHITE CLIP LEVEL | OSA:2A:[Data] | | QSA:2A | OSA:2A:[Data] | 00h<br>~<br>13h | 90%<br>~<br>109% | | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | V1.00 | ---- | ---- | ---- | V1.00 | V1.00 |
| R WHITE CLIP LEVEL | OSA:2B:[Data] | | QSA:2B | OSA:2B:[Data] | 71h<br>~<br>80h<br>~<br>8Fh | -15%<br>~<br>0%<br>~<br>+15% | | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| B WHITE CLIP LEVEL | OSA:2C:[Data] | | QSA:2C | OSA:2C:[Data] | 71h<br>~<br>80h<br>~<br>8Fh | -15%<br>~<br>0%<br>~<br>+15% | | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| KNEE SW | OSA:2D:[Data] | | QSA:2D | OSA:2D:[Data] | 0<br>1<br>2 | OFF<br>MANUAL<br>AUTO | | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | V1.00 | ---- | ---- | V7.30 | V1.00 | V1.00 |
| WHITE CLIP | OSA:2E:[Data] | | QSA:2E | OSA:2E:[Data] | 0<br>1 | OFF<br>ON | | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | V1.00 | ---- | ---- | ---- | V1.00 | V1.00 |
| HIGH COLOR | OSA:2F:[Data] | | QSA:2F | OSA:2F:[Data] | 0<br>1 | OFF<br>ON | | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| TOTAL DTL LEVEL | OSA:30:[Data] | | QSA:30 | OSA:30:[Data] | 61h<br>~<br>80h<br>~<br>9Fh<br><br>61h<br>~<br>80h<br>~<br>9Fh<br><br>80h<br>~<br>8Eh | -31<br>~<br>0<br>~<br>+31<br><br>AW-HE130,AW-HR140<br>0<br>~<br>+31<br>~<br>+62<br><br>AW-HE100<br>0<br>~<br>14 | | | ---- | | | | | | | | | V1.00L01 | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | Camera Main V3.05 supports only 81h(1)-91h(17) for TOTAL DTL LEVEL (LOW) | ---- | V1.00 | V1.00 supports only 81h(1)-91h(17) for TOTAL DTL LEVEL (LOW) | V1.00 supports only 81h(1)-91h(17) for TOTAL DTL LEVEL (LOW) | V7.00 | V1.00 | V1.00 |
| H DTL LEVEL | OSA:31:[Data] | | QSA:31 | OSA:31:[Data] | 00h<br>~<br>3Fh | 0<br>~<br>63 | | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V7.00 | ---- | ---- |
| PEAK FREQUENCY | OSA:34:[Data] | | QSA:34 | OSA:34:[Data] | 00h<br>~<br>1Fh | 0<br>~<br>31 | | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| KNEE APERTURE | OSA:35:[Data] | | QSA:35 | OSA:35:[Data] | 0<br>1 | OFF<br>ON | | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| KNEE APE LEVEL | OSA:36:[Data] | | QSA:36 | OSA:36:[Data] | 0<br>~<br>5 | 0<br>~<br>5 | | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| DETAIL(+) | OSA:38:[Data] | | QSA:38 | OSA:38:[Data] | 61h<br>~<br>80h<br>~<br>9Fh | -31<br>~<br>0<br>~<br>+31 | | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V7.00 | ---- | V1.00 |
| DETAIL(-) | OSA:39:[Data] | | QSA:39 | OSA:39:[Data] | 61h<br>~<br>80h<br>~<br>9Fh | -31<br>~<br>0<br>~<br>+31 | | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V7.00 | ---- | V1.00 |
| DETAIL CLIP | OSA:3A:[Data] | | QSA:3A | OSA:3A:[Data] | 00h<br>~<br>3Fh | 0<br>~<br>63 | | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

| ITEM | Control Command | Reply for Control Command | Confirmation Command | Reply for Confirmation Command | Data | Data Contents | | Remarks | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Control and Response to contol | Response to Confirmation | | E300/A | E600 | E800 | E800A | E350 | E650 | E655 | E750 | E860 | HE100 | HC1500 | HC1800 | HE870 | HE50 | HE60 | HE120 | HE130 | HE40/HE65/HE70 | UE70 | UB300 | HR140 | UE150 |
| DETAIL SOURCE | OSA:3B:[Data] | | QSA:3B | OSA:3B:[Data] | 0<br>1<br>2<br>3<br>4<br>5<br><br><u>AK-UB300</u><br>0<br>1<br>2<br>3<br>4<br>5 | (G+R)/2<br>(G+B)/2<br>(2G+B+R)/4<br>(3G+B)/4<br>R<br>G<br><br><u>AK-UB300</u><br>(G+R)/2<br>(G+B)/2<br>(2G+B+R)/4<br>(3G+R)/4<br>R<br>G | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V7.00 | ---- | ---- |
| SKIN TONE DETAIL (HD) | OSA:40:[Data] | | QSA:40 | OSA:40:[Data] | 0<br>1 | OFF<br>ON | | ---- | | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V7.00 | ---- | V1.00 |
| SKIN GET | OSA:41:[Data] | | QSA:41 | OSA:41:[Data] | 0<br>1<br>2 | OFF<br>ON<br>GET | OFF:Wipe out the rectangle.<br>ON:Display the rectangle.<br>GET:Get Flesh Noise Suppress(SKIN) Color standard. | ---- | | | | | | | | | | ---- | Ver1.10-00-0.00 supports only 0(OFF),1(ON) | Ver1.00-00-0.00 supports only 0(OFF),1(ON) | V1.00L01 | ---- | ---- | ---- | ---- | ---- | ---- | V7.00 | ---- | ---- |
| SKIN DTL CORING (HD) | OSA:42:[Data] | | QSA:42 | OSA:42:[Data] | 0<br>~<br>7 | 0<br>~<br>7 | | ---- | | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| SKIN TONE DTL Y MAX (HD) | OSA:43:[Data] | | QSA:43 | OSA:43:[Data] | 00h<br>~<br>FFh | 0<br>~<br>255 | | ---- | | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| SKIN TONE DTL Y MIN (HD) | OSA:44:[Data] | | QSA:44 | OSA:44:[Data] | 00h<br>~<br>FFh | 0<br>~<br>255 | | ---- | | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| SKIN TONE DTL I CENTER (HD) | OSA:45:[Data] | | QSA:45 | OSA:45:[Data] | 00h<br>~<br>FFh | 0<br>~<br>255 | | ---- | | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V7.00 | ---- | ---- |
| SKIN TONE DTL I WIDTH (HD) | OSA:46:[Data] | | QSA:46 | OSA:46:[Data] | 00h<br>~<br>FFh | 0<br>~<br>255 | | ---- | | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V7.00 | ---- | ---- |
| SKIN TONE DTL Q WIDTH (HD) | OSA:47:[Data] | | QSA:47 | OSA:47:[Data] | 00h<br>~<br>FFh | 0<br>~<br>255 | | ---- | | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V7.00 | ---- | ---- |
| SKIN TONE DTL Q PHASE (HD) | OSA:48:[Data] | | QSA:48 | OSA:48:[Data] | 00h<br>~<br>80h<br>~<br>FFh | -127<br>~<br>0<br>~<br>128 | | ---- | | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| SKIN TONE ZEBRA | OSA:49:[Data] | | QSA:49 | OSA:49:[Data] | 0<br>1 | OFF<br>ON | | ---- | | | | | | | | | | ---- | Ver1.40-00-0.00 with HD SDI BOARD | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V7.00 | ---- | ---- |
| LOW GAIN | OSA:50:[Data] | | QSA:50 | OSA:50:[Data] | 7Ah<br>~<br>7Ch<br>~<br>80h<br>~<br>86h<br>~<br>88h | -6dB<br>~<br>0dB<br>~<br>12dB<br>~<br>30dB<br>~<br>36dB | | ---- | | | | | | | | | | ---- | Ver1.10-00-0.00 support only 7Ah(-6dB)<br>~<br>86h(30dB) | Ver1.00-00-0.00 support only 7Ah(-6dB)<br>~<br>86h(30dB) | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V7.00 | ---- | ---- |
| MID GAIN | OSA:51:[Data] | | QSA:51 | OSA:51:[Data] | 7Ah<br>~<br>7Ch<br>~<br>80h<br>~<br>86h<br>~<br>88h | -6dB<br>~<br>0dB<br>~<br>12dB<br>~<br>30dB<br>~<br>36dB | | ---- | | | | | | | | | | ---- | Ver1.10-00-0.00 support only 7Ah(-6dB)<br>~<br>86h(30dB) | Ver1.00-00-0.00 support only 7Ah(-6dB)<br>~<br>86h(30dB) | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V7.00 | ---- | ---- |
| HIGH GAIN | OSA:52:[Data] | | QSA:52 | OSA:52:[Data] | 7Ah<br>~<br>7Ch<br>~<br>80h<br>~<br>86h<br>~<br>88h | -6dB<br>~<br>0dB<br>~<br>12dB<br>~<br>30dB<br>~<br>36dB | | ---- | | | | | | | | | | ---- | Ver1.10-00-0.00 support only 7Ah(-6dB)<br>~<br>86h(30dB) | Ver1.00-00-0.00 support only 7Ah(-6dB)<br>~<br>86h(30dB) | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V7.00 | ---- | ---- |
| A.IRIS WINDOW | OSA:53:[Data] | | QSA:53 | OSA:53:[Data] | 0<br>1<br>2 | NORM1<br>NORM2<br>CENTER | | ---- | | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| IRIS MODE | OSA:54:[Data] | | QSA:54 | OSA:54:[Data] | 0<br>1 | LENS<br>CAM | | ---- | | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| IRIS GAIN @IRIS MODE = CAM | OSA:55:[Data] | | QSA:55 | OSA:55:[Data] | 01h<br>~<br>0Ah | 1(A. IRIS SLOW)<br>~<br>10(A. IRIS FAST) | | ---- | | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| MODE @S.GAIN | OSA:60:[Data] | | QSA:60 | OSA:60:[Data] | 0<br>1<br>2 | S.GAIN1<br>S.GAIN2<br>S.GAIN3 | | ---- | | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V7.00 | ---- | ---- |
| TOTAL GAIN@S.GAIN | ---- | | QSA:61 | OSA:61:[Data] | 00h<br>~<br>48h | ---- | 0dB<br>~<br>72dB | ---- | | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| GAIN@S.GAIN | OSA:62:[Data] | | QSA:62 | OSA:62:[Data] | 00h<br>03h<br>06h<br>~<br>1Eh<br>21h<br>24h | 0dB<br>3dB<br>6dB<br>~<br>30dB<br>33dB<br>36dB | | ---- | | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| PIX MIX@S.GAIN | OSA:63:[Data] | | QSA:63 | OSA:63:[Data] | 0<br>1 | OFF<br>+6dB | | ---- | | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| V MIX@S.GAIN | OSA:64:[Data] | | QSA:64 | OSA:64:[Data] | 0<br>1 | OFF<br>+6dB | | ---- | | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| FRAME MIX@S.GAIN | OSA:65:[Data] | | QSA:65 | OSA:65:[Data] | 00h<br>06h<br>0Ch<br>12h<br>18h<br>1Eh<br>80h | OFF<br>+6dB<br>+12dB<br>+18dB<br>+24dB<br>+30dB<br>AUTO | if use AUTO ,Max Gain of AUTO is set up by the FRAME MIX MAX command (OSE:74:[Data]) | ---- | | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | V1.00 Support Only 00h(OFF)-12h(+18dB), 80h(AUTO) | V3.00 Support Only 00h(OFF)-12h(+18dB), 80h(AUTO) | V1.00 Support Only 00h(OFF)-18h(+24dB) | V1.00 Support Only 00h(OFF)-18h(+24dB) | V1.00 Support Only 00h(OFF)-18h(+24dB), 80h(AUTO) | V1.00 Support Only 00h(OFF)-18h(+24dB), 80h(AUTO) | V7.00 Support Only 00h(OFF)-18h(+24dB) | V1.00 Support Only 00h(OFF)-18h(+24dB) | V1.00 Support Only 00h(OFF)-18h(+24dB) |
| H DETAIL LEVEL @S.GAIN | OSA:66:[Data] | | QSA:66 | OSA:66:[Data] | 00h<br>~<br>3Fh | 0<br>~<br>63 | | ---- | | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| CRISP @S.GAIN | OSA:67:[Data] | | QSA:67 | OSA:67:[Data] | 00h<br>~<br>1Fh | 0<br>~<br>31 | | ---- | | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| LEVEL DEPENDENT @S.GAIN | OSA:68:[Data] | | QSA:68 | OSA:68:[Data] | 00h<br>~<br>0Fh | 0<br>~<br>15 | | ---- | | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

| ITEM | Control Command | Reply for Control Command | Confirmation Command | Reply for Confirmation Command | Data | Data Contents | | Remarks | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Control and Response to contol | Response to Confirmation | | E300/A | E600 | E800 | E800A | E350 | E650 | E655 | E750 | E860 | HE100 | HC1500 | HC1800 | HE870 | HE50 | HE60 | HE120 | HE130 | HE40/HE65/HE70 | UE70 | UB300 | HR140 | UE150 |
| PEAK FREQUENCY<br>@S.GAIN | OSA:69:[Data] | | QSA:69 | OSA:69:[Data] | 00h<br>~<br>1Fh | 0<br>~<br>31 | | ---- | | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| M GAMMA<br>@S.GAIN<br>& DRS OFF | OSA:6A:[Data] | | QSA:6A | OSA:6A:[Data] | 67h<br>~<br>80h<br>~<br>94h | 0.30<br>~<br>0.55<br>~<br>0.75 | | ---- | | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | V1.00 | ---- | ---- | ---- | V1.00 | V1.00 |
| M GAMMA<br>@S.GAIN<br>& DRS ON | OSA:6B:[Data] | | QSA:6B | OSA:6B:[Data] | 76h<br>~<br>80h<br>~<br>8Ah | -10<br>~<br>0<br>~<br>+10 | | ---- | | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| M PED OFFSET<br>@S.GAIN | OSA:6C:[Data] | | QSA:6C | OSA:6C:[Data] | 738h<br>~<br>800h<br>~<br>8C8h | -200<br>~<br>0<br>~<br>+200 | | ---- | | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| R PED OFFSET<br>@S.GAIN | OSA:6D:[Data] | | QSA:6D | OSA:6D:[Data] | 738h<br>~<br>800h<br>~<br>8C8h | -200<br>~<br>0<br>~<br>+200 | | ---- | | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| B PED OFFSET<br>@S.GAIN | OSA:6E:[Data] | | QSA:6E | OSA:6E:[Data] | 738h<br>~<br>800h<br>~<br>8C8h | -200<br>~<br>0<br>~<br>+200 | | ---- | | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| SCAN REVERSE | OSA:70:[Data] | | QSA:70 | OSA:70:[Data] | 0<br>1<br>2<br>3 | OFF<br>REVERSE1(L/R REVERSE)<br>REVERSE2(U/D REVERSE)<br>REVERSE3(L/R & U/D REVERSE) | | ---- | | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| FRAME RATE RANGE<br>@VARIABLE FRAME | OSA:71:[Data] | | QSA:71 | OSA:71:[Data] | 0<br>1 | 60-4<br>60-6 | | ---- | | | | | | | | | | ---- | Ver1.10-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| FRAME RATE<br>@VARIABLE FRAME | OSA:72:[Data] | | QSA:72 | OSA:72:[Data] | 04h<br>~<br>3Ch | 4fps<br>~<br>60fps | | ---- | | | | | | | | | | ---- | Ver1.10-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| MATRIX TABLE | OSA:00:[Data] | | QSA:00 | OSA:00:[Data] | 0<br>1 | TABLE A<br>TABLE B | | ---- | | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V7.00 | ---- | ---- |
| D5600<br>@VIDEO MENU | OSA:80:[Data] | | QSA:80 | OSA:80:[Data] | 0<br>1 | OFF<br>ON | | ---- | | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| LIGHTING<br>@FILM MENU | OSA:81:[Data] | | QSA:81 | OSA:81:[Data] | 0<br>1 | DAYLIGHT<br>TUNGSTEN | | ---- | | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| GAIN SELECT | OGS:[Data] | | QGS | OGS:[Data] | 01h<br>04h<br>08h<br>06h<br>0Ch<br>0Eh | LOW<br>MID<br>HIGH<br>S.GAIN1<br>S.GAIN2<br>S.GAIN3 | | ---- | | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V7.00 | ---- | ---- |
| CAM ID | OSA:82:[Data] | | QSA:82 | OSA:82:[Data] | 0<br>1<br>2 | OFF<br>BAR<br>ON | | ---- | | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| CAM ID POSI | OSA:83:[Data] | | QSA:83 | OSA:83:[Data] | 0<br>1<br>2<br>3 | 0(Upper left)<br>1(Upper right)<br>2(Lower left)<br>3(Lower right) | | ---- | | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| MATRIX TABLE | OSA:84:[Data] | | QSA:84 | OSA:84:[Data] | 0<br>1<br>2<br><br><u>AK-UB300</u><br>0<br>1<br>2 | OFF<br>A<br>B<br><br><u>AK-UB300</u><br>OFF<br>ON<br>ON | | ---- | | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V7.00 | ---- | ---- |
| COLOR CORRECTION | OSA:85:[Data] | | QSA:85 | OSA:85:[Data] | 0<br>1 | OFF<br>ON | | ---- | | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V7.00 | ---- | ---- |
| BAR SELECT | OSA:86:[Data] | | QSA:86 | OSA:86:[Data] | 0<br>1<br>2<br>3<br>4<br>5<br>6 | FULL(16:9)<br>FULL(4:3)<br>SMPTE(16:9)<br>SMPTE(4:3)<br>ARIB<br>EIAJ<br>SPRIT | | ---- | | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| FORMAT | OSA:87:[Data] | | QSA:87 | OSA:87:[Data] | 0h<br>1h<br>2h<br>3h<br>4h<br>5h<br>6h<br>7h<br>8h<br>9h<br>Ah<br>Bh<br>Ch<br>Dh<br>Eh<br>10h<br>11h<br>12h<br>13h<br>14h<br>15h<br>16h<br>17h<br>18h<br>19h<br>1Ah<br>1Bh<br>1Ch<br>1Dh<br>1Eh<br>1Fh<br>20h<br>21h<br>22h<br>23h<br>44h<br>45h<br>50h<br>51h<br>80h | 720/60p<br>720/59.94p<br>720/50p<br>1080/60i<br>1080/59.94i<br>1080/50i<br>1080/30psF<br>1080/29.97psF<br>1080/25psF<br>1080/24psF<br>1080/23.98psF<br>480/59.94i<br>480/29.97psF<br>576/50i<br>576/25psF<br>1080/59.94p<br>1080/50p<br>480/59.94p<br>576/50p<br>1080/29.97p<br>1080/25p<br>1080/23.98p (over 59.94i/p)<br>2160/29.97p<br>2160/25p<br>2160/59.94p<br>2160/50p<br>2160/23.98p<br>2160/29.97psF<br>2160/25psF<br>2160/23.98psF<br>2160/60p<br>1080/60p<br>2160/24p<br>1080/24p<br>1080/23.98p<br>1080/59.94i CROP<br>1080/50i CROP<br>1080/59.94p CROP<br>1080/50p CROP<br>Auto | | ---- | | | | | | | | | | V1.00L01<br>(N Model)<br>supports<br>only<br>1(720/59.94p),4(1080/59.94i),B(480/59.94),C(480/29.97psF).<br><br>(E,MC<br>Model)<br>supports<br>only<br>2(720/50p),5(1080/50i),D(576/50i),E(576/25psF). | Ver1.10-00-0.00<br>supports<br>only<br>0(720/60p),1(720/59.94p),2(720/50p),3(1080/60i),4(1080/59.94i),5(1080/50i),6(1080/30p),7(1080/29.97p),8(1080/24p),A(1080/23.98p). | Ver1.00-00-0.00<br>supports<br>only<br>4(1080/59.94i),5(1080/50i). | V1.00L01<br>(N Model)<br>supports<br>only<br>1(720/59.94p),4(1080/59.94i),B(480/59.94),<br><br>(E,MC<br>Model)<br>supports<br>only<br>2(720/50p),5(1080/50i),D(576/50i). | V1.00L01<br>[N Model]<br>supports only<br>1h(720/59.94p),4h(1080/59.94i),Bh(480/59.94i)<br>[E,MC Model]<br>supports only<br>2h(720/50p),5h(1080/50i),Dh(576/50i)<br><br>V2.00<br>[H Model/59.94Hz]<br>supports only<br>1h(720/59.94p),4h(1080/59.94i),Bh(480/59.94i),10h(1080/59.94i),7h(1080/29.97psF)<br>[H Model/50Hz]<br>supports only<br>2h(720/50p),5h(1080/50i),Dh(576/50i),11h(1808/50p),8h(1080/25psF)<br>[S Model/59.94Hz]<br>supports only<br>1h(720/59.94p),4h(1080/59.94i),Bh(480/59.94i),7h(1080/29.97psF)<br>[S Model/50Hz]<br>supports only<br>2h(720/50p),5h(1080/50i),Dh(576/50i),8h(1080/25psf) | V3.00<br>[H Model/59.94Hz]<br>supports only<br>1h(720/59.94p),4h(1080/59.94i),Bh(480/59.94i),10h(1080/59.94p),12h(480/59.94p)<br>[H Model/50Hz]<br>supports only<br>2h(720/50p),5h(1080/50i),Dh(576/50i),11h(1808/50p),8h(1080/25psf),13h(576/50p)<br>[S Model/59.94Hz]<br>supports only<br>1h(720/59.94p),4h(1080/59.94i),Bh(480/59.94i)<br>[S Model/50Hz]<br>supports only<br>2h(720/50p),5h(1080/50i),Dh(576/50i) | V1.00L01<br>[59.94Hz]<br>supports only<br>1h(720/59.94p),4h(1080/59.94i),Bh(480/59.94i),10h(1080/59.94p),12h(480/59.94p)<br>[50Hz]<br>supports only<br>2h(720/50p),5h(1080/50i),Dh(576/50i),11h(1808/50p),13h(576/50p) | V1.00<br>[59.94Hz]<br>supports only<br>1h(720/59.94p)<br>4h(1080/59.94i)<br>7h(1080/29.97psF)<br>10h(1080/59.94p)<br>12h(480/59.94p)<br>14h(1080/29.97p)<br>16h(1080/23.98p)<br>[50Hz]<br>supports only<br>2h(720/50p)<br>5h(1080/50i)<br>8h(1080/25psF)<br>11h(1080/50p)<br>13h(576/50p)<br>15h(1080/25p) | V1.00<br>=== HDMI Model ===<br>[59.94Hz]<br>supports only<br>1h(720/59.94p)<br>4h(1080/59.94i)<br>7h(1080/29.97psF)<br>10h(1080/59.95p)<br>14h(1080/29.97p)<br>80h(Auto)<br>[50Hz]<br>supports only<br>2h(720/50p)<br>5h(1080/50i)<br>8h(1080/25psF)<br>11h(1080/50p)<br>15h(1080/25p)<br>80h(Auto)<br><br>=== SDI Model ===<br>[59.94Hz]<br>supports only<br>1h(720/59.94p)<br>4h(1080/59.94i)<br>7h(1080/29.97psF)<br>14h(1080/29.97p)<br>[50Hz]<br>supports only<br>2h(720/50p)<br>5h(1080/50i)<br>8h(1080/25psF)<br>15h(1080/25p) | v1.00<br>[59.94Hz]<br>supports only<br>1h(720/59.94p)<br>4h(1080/59.94i)<br>7h(1080/29.97psF)<br>10h(1080/59.94p)<br>14h(1080/29.97p)<br>17h(2160/29.97p)<br>80h(Auto)<br><br>[50Hz]<br>supports only<br>2h(720/50p)<br>5h(1080/50i)<br>8h(1080/25psF)<br>11h(1080/50p)<br>15h(1080/25p)<br>18h(2160/25p)<br>80h(Auto) | V7.30<br>[59.94Hz]<br>supports only<br>00h(720/60p)<br>01h(720/59.94p)<br>04h(1080/59.94i)<br>07h(1080/29.97psF)<br>0Ah(1080/23.98psF)<br>10h(1080/59.95p)<br>10h(1080/59.94p)<br>16h(1080/23.98p)<br>17h(2160/29.97p)<br>19h(2160/59.94p)<br>1Bh(2160/23.98p)<br>1Ch(2160/29.97psF)<br>1Eh(2160/23.98psF)<br>1Fh(2160/60p)<br>20h(1080/60p)<br>44h(1080/59.94i CROP)<br>50h(1080/59.94p CROP)<br>[50Hz]<br>supports only<br>02h(720/50p)<br>05h(1080/50i)<br>08h(1080/25psF)<br>11h(1080/50p)<br>18h(2160/25p)<br>1Ah(2160/50p)<br>1Dh(2160/25psF)<br>45h(1080/50i CROP)<br>51h(1080/50p CROP) | V1.00<br>[59.94Hz]<br>supports only<br>1h(720/59.94p)<br>4h(1080/59.94i)<br>7h(1080/29.97psF)<br>10h(1080/59.94p)<br>14h(1080/29.97p)<br>16h(1080/23.98p)<br>[50Hz]<br>supports only<br>2h(720/50p)<br>5h(1080/50i)<br>8h(1080/25psF)<br>11h(1080/50p)<br>15h(1080/25p) | V1.00<br>[59.94Hz]<br>supports only<br>01h(720/59.94p)<br>04h(1080/59.94i)<br>07h(1080/29.97psF)<br>10h(1080/59.94p)<br>14h(1080/29.97p)<br>16h(1080/23.98p<br>(over 59.94i/p) )<br>17h(2160/29.97p)<br>19h(2160/59.94p)<br><br>[50Hz]<br>supports only<br>02h(720/50p)<br>05h(1080/50i)<br>08h(1080/25psF)<br>11h(1080/50p)<br>15h(1080/25p)<br>18h(2160/25p)<br>1Ah(2160/50p)<br><br>[24Hz]<br>supports only<br>21h(2160/24p)<br>22h(1080/24p)<br><br>[23.98Hz]<br>supports only<br>0Ah(1080/23.98psF)<br>1Bh(2160/23.98p)<br>23h(1080/23.98p) |

| ITEM | Control Command | Reply for Control Command | Confirmation Command | Reply for Confirmation Command | Data | Data Contents | | Remarks | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Control and Response to contol | Response to Confirmation | | E300/A | E600 | E800 | E800A | E350 | E650 | E655 | E750 | E860 | HE100 | HC1500 | HC1800 | HE870 | HE50 | HE60 | HE120 | HE130 | HE40/HE65/HE70 | UE70 | UB300 | HR140 | UE150 |
| STATUS | OSA:88:[Data] | | QSA:88 | OSA:88:[Data] | 0<br>1 | OFF<br>ON | | | ---- | | | | | | | | | V1.00L01 | Ver1.10-00-0.00 | Ver1.00-00-0.00 | V1.00L01 | V1.00 | V3.00 | V1.00 | V1.00 | V1.00 | V1.00 | V7.20 | V1.00 | V1.00 |
| MENU ON BAR | OSA:89:[Data] | | QSA:89 | OSA:89:[Data] | 0<br>1 | OFF<br>ON | | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| MENU SEL | ---- | | QSA:8A | OSA:8A:[Data] | 0<br>1 | ---- | VIDEO MENU<br>FILM MENU | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| SHUTTER MODE | OSA:90:[Data] | | QSA:90 | OSA:90:[Data] | 1<br>2<br>3 | OFF<br>ON<br>SYNCHRO SCAN | | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| SHUTTER SPEED | OSA:91:[Data] | | QSA:91 | OSA:91:[Data] | 0<br>1<br>2<br>3<br>4<br>5<br><br>0<br>1<br>2<br>3<br>4<br>5 | VIDEO MENU<br>1/100s<br>1/120s<br>1/250s<br>1/500s<br>1/1000s<br>1/2000s<br><br>FILM MENU<br>180.0deg<br>172.8deg<br>144.0deg<br>120.0deg<br>90.0deg<br>45.0deg | | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| GEN-LOCK INPUT | OSA:A0:[Data] | | QSA:A0 | OSA:A0:[Data] | 0<br>1 | OFF<br>ON | | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| H PHASE-COARSE<br>@HD SYNC & 720 | OSA:A1:[Data] | | QSA:A1 | OSA:A1:[Data] | 58h<br>~<br>80h<br>~<br>A8h | -40<br>~<br>0<br>~<br>+40 | | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| H PHASE-COARSE<br>@HD SYNC & 1080 | OSA:A2:[Data] | | QSA:A2 | OSA:A2:[Data] | 44h<br>~<br>80h<br>~<br>BCh | -60<br>~<br>0<br>~<br>+60 | | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| H PHASE-COARSE<br>@SD SYNC | OSA:A3:[Data] | | QSA:A3 | OSA:A3:[Data] | 08h<br>~<br>80h<br>~<br>F8h | -120<br>~<br>0<br>~<br>+120 | | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| H PHASE-FINE<br>@HD SYNC & 720 | OSA:A4:[Data] | | QSA:A4 | OSA:A4:[Data] | 53h<br>~<br>80h<br>~<br>ADh | -45<br>~<br>0<br>~<br>+45 | | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| H PHASE-FINE<br>@HD SYNC & 1080 | OSA:A5:[Data] | | QSA:A5 | OSA:A5:[Data] | 53h<br>~<br>80h<br>~<br>ADh | -45<br>~<br>0<br>~<br>+45 | | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| H PHASE-FINE<br>@SD SYNC | OSA:A6:[Data] | | QSA:A6 | OSA:A6:[Data] | 53h<br>~<br>80h<br>~<br>ADh | -45<br>~<br>0<br>~<br>+45 | | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| HD-SD PHASE CRS<br>@HD SYNC | OSA:A7:[Data] | | QSA:A7 | OSA:A7:[Data] | 79h<br>~<br>80h<br>~<br>88h | -7<br>~<br>0<br>~<br>+7 | | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| HD-SD PHASE FINE<br>@HD SYNC | OSA:A8:[Data] | | QSA:A8 | OSA:A8:[Data] | 1Dh<br>~<br>80h<br>~<br>E3h | -99<br>~<br>0<br>~<br>+99 | | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| SD-HD PHASE CRS<br>@SD SYNC | OSA:A9:[Data] | | QSA:A9 | OSA:A9:[Data] | 7Ch<br>~<br>80h<br>~<br>84h | -4<br>~<br>0<br>~<br>+4 | | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| SD-HD PHASE FINE<br>@SD SYNC<br>(D/C BOARD) | OSA:AA:[Data] | | QSA:AA | OSA:AA:[Data] | 1Dh<br>~<br>80h<br>~<br>E3h | -99<br>~<br>0<br>~<br>+99 | | | ---- | | | | | | | | | ---- | Ver1.30-00-0.00 with D/C BOARD | Ver1.00-00-0.00 with D/C BOARD | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| HD/SD V PHASE<br>@SD SYNC<br>(D/C BOARD) | OSA:AB:[Data] | | QSA:AB | OSA:AB:[Data] | 0<br>1 | HD<br>SD | | | ---- | | | | | | | | | ---- | Ver1.30-00-0.00 with D/C BOARD | Ver1.00-00-0.00 with D/C BOARD | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| SC COARSE<br>@SD SYNC<br>(D/C BOARD) | OSA:AC:[Data] | | QSA:AC | OSA:AC:[Data] | 1<br>~<br>8 | 1<br>~<br>8 | | | ---- | | | | | | | | | ---- | Ver1.30-00-0.00 with D/C BOARD | Ver1.00-00-0.00 with D/C BOARD | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| SC FINE<br>@SD SYNC<br>(D/C BOARD) | OSA:AD:[Data] | | QSA:AD | OSA:AD:[Data] | 19Ch<br>~<br>200h<br>~<br>264h | -100<br>~<br>0<br>~<br>+100 | | | ---- | | | | | | | | | ---- | Ver1.30-00-0.00 with D/C BOARD | Ver1.00-00-0.00 with D/C BOARD | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| SC-H COARSE<br>@HD SYNC or NO SYNC<br>(D/C BOARD) | OSA:AE:[Data] | | QSA:AE | OSA:AE:[Data] | 1<br>~<br>8 | 1<br>~<br>8 | | | ---- | | | | | | | | | ---- | Ver1.30-00-0.00 with D/C BOARD | Ver1.00-00-0.00 with D/C BOARD | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| SC-H FINE<br>@HD SYNC or NO SYNC | OSA:AF:[Data] | | QSA:AF | OSA:AF:[Data] | 19Ch<br>~<br>200h<br>~<br>264h | -100<br>~<br>0<br>~<br>+100 | | | ---- | | | | | | | | | ---- | Ver1.10-00-0.00 | Ver1.00-00-0.00 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| TOTAL DTL LEVEL<br>HIGH | OSA:B1:[Data] | | QSA:B1 | OSA:B1:[Data] | 61h<br>~<br>80h<br>~<br>9Fh | -31<br>~<br>0<br>~<br>+31 | | | ---- | | | | | | | | | | | | | ---- | Camera Main V3.05 supports only 82h(2)-92h(18) for TOTAL DTL LEVEL (HIGH) | ---- | ---- | V1.00 supports only 82h(2)-92h(18) for TOTAL DTL LEVEL (HIGH) | V1.00 supports only 82h(2)-92h(18) for TOTAL DTL LEVEL (HIGH) | ---- | ---- | ---- |
| TOTAL DTL LEVEL<br>(D/C BOARD) | OSE:00:[Data] | | QSE:00 | OSE:00:[Data] | 00h<br>~<br>3Fh | 0<br>~<br>63 | | | ---- | | | | | | | | | ---- | Ver1.30-00-0.00 with D/C BOARD | Ver1.00-00-0.00 with D/C BOARD | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| H DTL LEVEL<br>(D/C BOARD) | OSE:01:[Data] | | QSE:01 | OSE:01:[Data] | 00h<br>~<br>3Fh | 0<br>~<br>63 | | | ---- | | | | | | | | | ---- | Ver1.30-00-0.00 with D/C BOARD | Ver1.00-00-0.00 with D/C BOARD | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| CRISP<br>(D/C BOARD) | OSE:02:[Data] | | QSE:02 | OSE:02:[Data] | 00h<br>~<br>3Fh | 0<br>~<br>63 | | | ---- | | | | | | | | | ---- | Ver1.30-00-0.00 with D/C BOARD | Ver1.00-00-0.00 with D/C BOARD | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| PEAK FREQUENCY<br>(D/C BOARD) | OSE:03:[Data] | | QSE:03 | OSE:03:[Data] | 1<br>2<br>3<br>4<br>5<br>6<br>7 | 1.89MHz<br>2.18MHz<br>2.56MHz<br>3.17MHz<br>4.00MHz<br>5.28MHz<br>6.75MHz | | | ---- | | | | | | | | | ---- | Ver1.30-00-0.00 with D/C BOARD | Ver1.00-00-0.00 with D/C BOARD | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| LEVEL DEPENDENT<br>(D/C BOARD) | OSE:04:[Data] | | QSE:04 | OSE:04:[Data] | 00h<br>~<br>1Eh | 0%<br>~<br>30% | | | ---- | | | | | | | | | ---- | Ver1.30-00-0.00 with D/C BOARD | Ver1.00-00-0.00 with D/C BOARD | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| DARK DETAIL<br>(D/C BOARD) | OSE:05:[Data] | | QSE:05 | OSE:05:[Data] | 0<br>~<br>7 | 0(OFF)<br>~<br>7 | | | ---- | | | | | | | | | ---- | Ver1.30-00-0.00 with D/C BOARD | Ver1.00-00-0.00 with D/C BOARD | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

| ITEM | Control Command | Reply for Control Command | Confirmation Command | Reply for Confirmation Command | Data | Data Contents | | Remarks | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Control and Response to contol | Response to Confirmation | | E300/A | E600 | E800 | E800A | E350 | E650 | E655 | E750 | E860 | HE100 | HC1500 | HC1800 | HE870 | HE50 | HE60 | HE120 | HE130 | HE40/HE65/HE70 | UE70 | UB300 | HR140 | UE150 |
| KNEE APERTURE<br>(D/C BOARD) | OSE:06:[Data] | | QSE:06 | OSE:06:[Data] | 00h<br>~<br>3Fh | 0<br>~<br>63 | | | ---- | | | | | | | | | ---- | Ver1.30-00-0.00 with D/C BOARD | Ver1.00-00-0.00 with D/C BOARD | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| +CLIP<br>(D/C BOARD) | OSE:07:[Data] | | QSE:07 | OSE:07:[Data] | 00h<br>~<br>3Fh | 0<br>~<br>63 | | | ---- | | | | | | | | | ---- | Ver1.30-00-0.00 with D/C BOARD | Ver1.00-00-0.00 with D/C BOARD | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| -CLIP<br>(D/C BOARD) | OSE:08:[Data] | | QSE:08 | OSE:08:[Data] | 00h<br>~<br>3Fh | 0<br>~<br>63 | | | ---- | | | | | | | | | ---- | Ver1.30-00-0.00 with D/C BOARD | Ver1.00-00-0.00 with D/C BOARD | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| CORNER DETAIL<br>(D/C BOARD) | OSE:09:[Data] | | QSE:09 | OSE:09:[Data] | 00h<br>~<br>1Fh | 0<br>~<br>31 | | | ---- | | | | | | | | | ---- | Ver1.30-00-0.00 with D/C BOARD | Ver1.00-00-0.00 with D/C BOARD | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| CHROMA DETAIL<br>(D/C BOARD) | OSE:0A:[Data] | | QSE:0A | OSE:0A:[Data] | 00h<br>~<br>3Fh | 0<br>~<br>63 | | | ---- | | | | | | | | | ---- | Ver1.30-00-0.00 with D/C BOARD | Ver1.00-00-0.00 with D/C BOARD | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| CHROMA DTL CRISP<br>(D/C BOARD) | OSE:0B:[Data] | | QSE:0B | OSE:0B:[Data] | 00h<br>~<br>3Fh | 0<br>~<br>63 | | | ---- | | | | | | | | | ---- | Ver1.30-00-0.00 with D/C BOARD | Ver1.00-00-0.00 with D/C BOARD | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| DETAIL SOURCE<br>(D/C BOARD) | OSE:0C:[Data] | | QSE:0C | OSE:0C:[Data] | 0<br>1<br>2<br>3<br>4 | (G+R)/2<br>(G+B)/2<br>(2G+B+R)/4<br>(3G+B)/4<br>R | | | ---- | | | | | | | | | ---- | Ver1.30-00-0.00 with D/C BOARD | Ver1.00-00-0.00 with D/C BOARD | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| SKIN TONE DETAIL<br>(D/C BOARD) | OSE:10:[Data] | | QSE:10 | OSE:10:[Data] | 0<br>1 | OFF<br>ON | | | ---- | | | | | | | | | ---- | Ver1.30-00-0.00 with D/C BOARD | Ver1.00-00-0.00 with D/C BOARD | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| SKIN TONE LEVEL<br>(D/C BOARD) | OSE:11:[Data] | | QSE:11 | OSE:11:[Data] | 0<br>1<br>2 | LOW<br>MID<br>HIGH | | | ---- | | | | | | | | | ---- | Ver1.30-00-0.00 with D/C BOARD | Ver1.00-00-0.00 with D/C BOARD | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| SKIN TONE ZEBRA<br>(D/C BOARD) | OSE:12:[Data] | | QSE:12 | OSE:12:[Data] | 0<br>1 | OFF<br>ON | | | ---- | | | | | | | | | ---- | Ver1.30-00-0.00 with D/C BOARD | Ver1.00-00-0.00 with D/C BOARD | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| SKIN TONE PHASE<br>(D/C BOARD) | OSE:13:[Data] | | QSE:13 | OSE:13:[Data] | 50h<br>~<br>7Bh<br>~<br>99h | 93<br>~<br>123<br>~<br>153 | | | ---- | | | | | | | | | ---- | Ver1.30-00-0.00 with D/C BOARD | Ver1.00-00-0.00 with D/C BOARD | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| SKIN TONE WIDTH<br>(D/C BOARD) | OSE:14:[Data] | | QSE:14 | OSE:14:[Data] | 01h<br>~<br>14h | 1<br>~<br>20 | | | ---- | | | | | | | | | ---- | Ver1.30-00-0.00 with D/C BOARD | Ver1.00-00-0.00 with D/C BOARD | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| SKIN TONE CRISP<br>(D/C BOARD) | OSE:15:[Data] | | QSE:15 | OSE:15:[Data] | 0<br>~<br>7 | 0<br>~<br>7 | | | ---- | | | | | | | | | ---- | Ver1.30-00-0.00 with D/C BOARD | Ver1.00-00-0.00 with D/C BOARD | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| D/C MODE<br>(D/C BOARD) | OSE:20:[Data] | | QSE:20 | OSE:20:[Data] | 0<br>1<br>2<br>3 | SIDE CUT<br>SQUEEZE<br>LetterBOX<br>Link | | | ---- | | | | | | | | | ---- | Ver1.30-00-0.00 with D/C BOARD | Ver1.00-00-0.00 with D/C BOARD | ---- | V1.00 | V3.00 | V1.00 | V1.00 | ---- | ---- | ---- | ---- | ---- | ---- |
| VBS SETUP<br>(D/C BOARD) | OSE:21:[Data] | | QSE:21 | OSE:21:[Data] | 0<br>1 | 0.0%<br>7.5% | | | ---- | | | | | | | | | V1.00L01 | Ver1.30-00-0.00 with D/C BOARD | Ver1.00-00-0.00 with D/C BOARD | V1.00L01 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| CHARACTER MIX<br>(D/C BOARD) | OSE:22:[Data] | | QSE:22 | OSE:22:[Data] | 0<br>1<br>2<br>3 | ALL<br>SD(VBS + SD-SDI)<br>VBS<br>SD-SDI | | | ---- | | | | | | | | | ---- | Ver1.30-00-0.00 with D/C BOARD | Ver1.00-00-0.00 with D/C BOARD | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 2D LPF<br>(D/C BOARD) | OSE:23:[Data] | | QSE:23 | OSE:23:[Data] | 0<br>1<br>2<br>3 | OFF<br>LOW<br>MID<br>HIGH | | | ---- | | | | | | | | | ---- | Ver1.30-00-0.00 with D/C BOARD | Ver1.00-00-0.00 with D/C BOARD | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| CHARACTER MIX<br>(HD SDI BOARD) | OSE:30:[Data] | | QSE:30 | OSE:30:[Data] | 0<br>1 | ALL<br>OPTION | | | ---- | | | | | | | | | ---- | Ver1.40-00-0.00 with HD SDI BOARD | Ver1.00-00-0.00 with HD SDI BOARD | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| CHARACTER MIX<br>SELECT | OSD:98:[Data1]:[Data2] | | QSD:98:[Data1] | OSD:98:<br>[Data1]:[Data2] | Data1<br>0<br>1<br>2<br><br>Data2<br>0<br>1<br>2 | Output<br>Browser/Video<br>SDI/HDMI,Component<br>OPTION<br><br>Character Mix Select<br>Off<br>On<br>Off By Browser | | | ---- | | | | | | | | | ---- | ---- | ---- | V1.00L01 | ---- | V3.00<br>suports only<br>Output<br>0(Browser/Video),<br>1(SDI/HDMI,Component<br>)<br><br>Character Mix Select<br>2(Off By Browser) is<br>Valid When Output is<br>1(SDI/HDMI,Component<br>) | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| ERROR NOTICE | ---- | | QER | OER:[Data] | 0<br>1<br>2 | ---- | Normal<br>Fan Error<br>Other Error | If the Camera made trouble,Camera sent "OER:[Data]" periodically. | ---- | | | | | | | | | | | | V1.00L01<br>supports only<br>0(Normal)<br>1(Fan Error) | ---- | ---- | V1.00<br>supports only<br>0(Normal)<br>1(Fan Error) | ---- | ---- | ---- | V7.00<br>supports only<br>0(Normal)<br>1(Fan Error) | V1.00<br>supports only<br>0(Normal)<br>1(Fan Error) | V1.00 |
| PRESET MATRIX SELECT | OSE:31:[Data] | | QSE:31 | OSE:31:[Data] | 0<br>1<br>2<br>3 | NORMAL<br>EBU MATRIX<br>NTSC MATRIX<br>USER | | | ---- | | | | | | | | | | | | | V1.00<br>suports only<br>0(NORMAL),<br>1(EBU MATRIX),<br>2(NTSC MATRIX)<br><br>V2.00 | V3.00 | V1.00 | V1.00 | V1.00 | V1.00 | ---- | V1.00 | V1.00 |
| SOFT SKIN | OSE:32:[Data] | | QSE:32 | OSE:32:[Data] | 0<br>1<br>2<br>3 | OFF<br>LOW<br>MID<br>HIGH | | | ---- | | | | | | | | | | | | | V1.00<br>supports only<br>0(OFF),1(LOW),3(HIGH<br>) | V3.00<br>supports only<br>0(OFF),1(LOW),3(HIGH<br>) | ---- | ---- | V1.00<br>supports only<br>0(OFF),1(LOW),3(HIG<br>H) | V1.00<br>supports only<br>0(OFF),1(LOW),3(HIG<br>H) | ---- | ---- | ---- |
| DRS SELECT | OSE:33:[Data] | | QSE:33 | OSE:33:[Data] | 0<br>1<br>2<br>3 | OFF<br>LOW<br>MID<br>HIGH | | | ---- | | | | | | | | | | | | | V1.00<br>supports only<br>0(OFF),1(LOW),3(HIGH<br>) | V3.00<br>supports only<br>0(OFF),1(LOW),3(HIGH<br>) | V1.00 | V1.00 | V1.00<br>supports only<br>0(OFF),1(LOW),3(HIG<br>H) | V1.00<br>supports only<br>0(OFF),1(LOW),3(HIG<br>H) | ---- | V1.00 | V1.00 |
| HDMI COLOR<br>VideoSampling | OSE:68:[Data] | | QSE:68 | OSE:68:[Data] | 0<br>1<br>2<br>3<br>4 | RGB(NOR)<br>RGB(ENH)<br>YPbPr(422)<br>YPbPr(444)<br>YPbPr(420) | | | ---- | | | | | | | | | | | | | V1.00<br>supports only<br>0(RGB(NOR))<br>1(RGB(ENH))<br>2(YPbPr(422))<br>3(YPbPr(444)) | V3.00<br>supports only<br>0(RGB(NOR))<br>1(RGB(ENH))<br>2(YPbPr(422))<br>3(YPbPr(444)) | V1.00<br>supports only<br>0(RGB(NOR))<br>1(RGB(ENH))<br>2(YPbPr(422))<br>3(YPbPr(444)) | ---- | ---- | ---- | ---- | ---- | V1.00<br>supports only<br>2(YPbPr(422))<br>4(YPbPr(420)) |
| PUSH AUTO FOCUS | OSE:69:[Data] | | ---- | ---- | 1 | PUSH AUTO | ---- | | ---- | | | | | | | | | | | | | V1.00 | V3.00 | V1.00 | V1.00 | V1.00 | V1.00 | ---- | V1.00 | V1.00 |
| DIGITAL ZOOM ENABLE | OSE:70:[Data] | | QSE:70 | OSE:70:[Data] | 0<br>1 | DISABLE<br>ENABLE | | | ---- | | | | | | | | | | | | | V1.00 | V3.00 | V1.00 | V1.00 | V1.00 | V1.00 | ---- | V1.00 | V1.00<br>[Zoom Mode]<br>-Opt Zoom<br>OSE:70:0<br>OSD:B3:0<br>-i Zoom<br>OSE:70:0<br>OSD:B3:1<br>-D Zoom<br>OSE:70:1<br>OSD:B3:0 |

| ITEM | Control Command | Reply for Control Command | Confirmation Command | Reply for Confirmation Command | Data | Data Contents | | Remarks | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Control and Response to contol | Response to Confirmation | | E300/A | E600 | E800 | E800A | E350 | E650 | E655 | E750 | E860 | HE100 | HC1500 | HC1800 | HE870 | HE50 | HE60 | HE120 | HE130 | HE40/HE65/HE70 | UE70 | UB300 | HR140 | UE150 |
| PRESET SCOPE | OSE:71:[Data] | | QSE:71 | OSE:71:[Data] | 0<br>1<br>2 | MODE A<br>MODE B<br>MODE C | | | ---- | | | | | | | | | | | | | V1.00 | V3.00 | V1.00 | V1.00 | V1.00 | V1.00 | ---- | V1.00 | V1.00 |
| GAMMA TYPE | OSE:72:[Data] | | QSE:72 | OSE:72:[Data] | 0<br>1<br>2<br><br>0<br>1<br>2<br>3<br>4<br>5<br>6<br>7 | OFF<br>NORMAL<br>CINEMA<br><br>AW-HE130, AW-HR140, AW-UE150<br>HD<br>SD<br>FILMLIKE1<br>FILMLIKE2<br>FILMLIKE3<br>FILM REC<br>VIDEO REC<br>HLG | | | ---- | | | | | | | | | | | | | | V1.00 | V3.00 | V1.00 | V1.00<br>supports only<br>0(HD)<br>1(SD)<br>2(FILMLIKE1)<br>3(FILMLIKE2)<br>4(FILMLIKE3) | V1.00 | V1.00 | ---- | V1.00<br>supports only<br>0(HD)<br>2(FILMLIKE1)<br>3(FILMLIKE2)<br>4(FILMLIKE3) | V1.00 |
| BACK LIGHT COMPENSATION | OSE:73:[Data] | | QSE:73 | OSE:73:[Data] | 0<br>1 | OFF<br>ON | | | ---- | | | | | | | | | | | | | V1.00 | V3.00 | ---- | ---- | V1.00 | V1.00 | ---- | ---- | ---- |
| AUTO F.MIX MAX GAIN | OSE:74:[Data] | | QSE:74 | OSE:74:[Data] | 00<br>01<br>02<br>03<br>04<br>05<br>06 | (OFF)<br>6dB<br>12dB<br>18dB<br>24dB<br>30dB<br>36dB (HBK50:33dB) | | | ---- | | | | | | | | | | | | | V1.00<br>supports only<br>00(OFF)-03(18dB) | V3.00<br>supports only<br>00(OFF)-03(18dB) | ---- | ---- | V1.00<br>supports only<br>00(OFF)-03(18dB) | V1.00<br>supports only<br>00(OFF)-03(18dB) | ---- | ---- | ---- |
| OSD Off With TALLY | OSE:75:[Data] | | QSE:75 | OSE:75:[Data] | 0<br>1 | OFF<br>ON | | | ---- | | | | | | | | | | | | | V1.00 | V3.00 | V1.00 | V1.00 | V1.00 | V1.00 | ---- | V1.00 | V1.00 |
| DIGITAL ZOOM MAGNIFICATION | OSE:76:[Data] | | QSE:76 | OSE:76:[Data] | 0100<br>~<br>9999 | *1.00<br>~<br>*99.99 | | | ---- | | | | | | | | | | | | | V1.00<br>supports only<br>0100(*1.00)<br>~<br>1000(*10.00) | V3.00<br>supports only<br>0100(*1.00)<br>~<br>1000(*10.00) | V1.00<br>supports only<br>0100(*1.00)<br>~<br>1000(*10.00) | V1.00<br>supports only<br>0100(*1.00)<br>~<br>1000(*10.00) | V1.00<br>supports only<br>0100(*1.00)<br>~<br>1600(*16.00) | V1.00<br>supports only<br>0100(*1.00)<br>~<br>1200(*12.00) | ---- | V1.00<br>supports only<br>0100(*1.00)<br>~<br>1000(*10.00) | V1.00<br>supports only<br>0100(*1.00)<br>~<br>1000(*10.00) |
| BASE FREQUENCY SELECT | OSE:77:[Data] | | QSE:77 | OSE:77:[Data] | 0<br>1<br>2<br>3 | 59.94Hz<br>50.00Hz<br>24.00Hz<br>23.98Hz | | | ---- | | | | | | | | | | | | | V2.00<br>supports only<br>0(59.94Hz),<br>1(50.00Hz) | V1.00<br>supports only<br>0(59.94Hz),<br>1(50.00Hz) | V1.00<br>supports only<br>0(59.94Hz),<br>1(50.00Hz) | V1.00<br>supports only<br>0(59.94Hz),<br>1(50.00Hz) | V1.00<br>supports only<br>0(59.94Hz),<br>1(50.00Hz) | V1.00<br>supports only<br>0(59.94Hz),<br>1(50.00Hz) | ---- | V1.00<br>supports only<br>0(59.94Hz),<br>1(50.00Hz) | V1.00 |
| MAXIMUM DIGITAL ZOOM | OSE:7A:[Data] | | QSE:7A | OSE:7A:[Data] | 02<br>~<br>18 | x2<br>~<br>x18 | | | ---- | | | | | | | | | | | | | ---- | ---- | V1.00<br>supports only<br>02(x2)<br>~<br>10(x10) | V1.00<br>supports only<br>02(x2)<br>~<br>10(x10) | V1.00<br>supports only<br>02(x2)<br>~<br>16(x16) | V1.00<br>supports only<br>02:(x2)<br>~<br>12(x12) | ---- | V1.00<br>supports only<br>02(x2)<br>~<br>10(x10) | V1.00<br>supports only<br>02(x2)<br>~<br>10(x10) |
| RIGHT SW | DRT:[Data] | | ---- | ---- | 1h<br>Ah | 1Step<br>10Step | ---- | | ---- | | | | | | | | | | | | | ---- | ---- | V1.00 | V1.00 | ---- | ---- | V7.00<br>supports only<br>1h(1Step) | V1.00 | V1.00 |
| LEFT SW | DLT:[Data] | | ---- | ---- | 1h<br>Ah | 1Step<br>10Step | ---- | | ---- | | | | | | | | | | | | | ---- | ---- | V1.00 | V1.00 | ---- | ---- | V7.00<br>supports only<br>1h(1Step) | V1.00 | V1.00 |
| DAY-NIGHT | OSE:80:[Data] | | QSE:80 | OSE:80:[Data] | 0<br>1 | Day<br>Night | | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| OIS(Optical Image Stabilizer) | OIS:[Data] | | QIS | OIS:[Data] | 0<br>1<br><br>[AW-HR140]<br>0<br>1<br>2 | Off<br>On<br><br>[AW-HR140]<br>Off<br>OIS<br>Dynamic I.S. System | | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | V1.00 | V1.00 | V1.00 | ---- | V1.00 | V1.00 |
| Flash Band Comp | OFB:[Data] | | QFB | OFB:[Data] | 0<br>1 | Off<br>On | | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| OSD Mix | OSE:7B:[Data] | | QSE:7B | OSE:7B:[Data] | 00h<br>01h<br>02h<br>04h<br>08h<br>10h<br>20h<br>40h | OSD Mix Off<br>SDI On<br>HDMI On<br>Analog On<br>Video On<br>IP On<br>12G SDI/OPTICAL On<br>MONI On<br>※bit0:SDI, bit1:HDMI, bit2:Analog,<br>bit3:Video, bit4 : IP, bit5:12G SDI/OPTICAL,<br>bit6: MONI | | | ---- | | | | | | | | | | | | | ---- | ---- | V1.00<br>supports only<br>00(OSD Mix Off)<br>01(SDI On)<br>02(HDMI On)<br>04(Analog On)<br>08(Video On) | V1.00<br>supports only<br>00(OSD Mix Off)<br>01(SDI On)<br>02(HDMI On)<br>08(Video On)<br>10(IP On) | ---- | ---- | V7.20<br>supports only<br>00(OSD Mix Off)<br>01(SDI On)<br>10(IP On) | V1.00<br>supports only<br>00(OSD Mix Off)<br>01(SDI On)<br>10(IP On) | V1.00<br>supports only<br>00(OSD Mix Off)<br>01(SDI On)<br>02(HDMI On)<br>10(IP On)<br>20(12G SDI/OPTICAL ON)<br>40(MONI On) |
| Flip Status | ---- | | QFS | OFS:[Data] | 0<br>1 | ---- | Normal<br>Flip | | ---- | | | | | | | | | | | | | ---- | ---- | V1.00 | V1.00 | ---- | ---- | ---- | V1.00 | V1.00 |
| Focus ADJ With Zoom Mode | OAZ:[Data] | | QAZ | OAZ:[Data] | 0<br>1 | OFF<br>ON | | | ---- | | | | | | | | | | | | | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 | ---- | V1.00 | V1.00 |
| PinP CTRL | OP:[Data] | | QP | OP:[Data] | 0<br>1 | OFF<br>ON | | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| CHROMA LEVEL | OSD:B0:[Data] | | QSD:B0 | OSD:B0:[Data] | 00h<br>1Dh<br>~<br>80h<br>~<br>A8h<br>~<br>E3h<br><br>AK-UB300<br>00h<br>1Dh<br>~<br>80h<br>~<br>A8h | OFF<br>-99%<br>~<br>0<br>~<br>40%<br>~<br>99%<br><br>AK-UB300<br>-100%<br>-99%<br>~<br>0<br>~<br>40% | | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | V1.00<br>supports only<br>00(Off),<br>1D(-99%) - A8(40%) | ---- | ---- | V7.00 | V1.00<br>supports only<br>00(Off),<br>1D(-99%) - A8(40%) | V1.00 |

| ITEM | Control Command | Reply for Control Command | Confirmation Command | Reply for Confirmation Command | Data | Data Contents | | Remarks | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Control and Response to contol | Response to Confirmation | | E300/A | E600 | E800 | E800A | E350 | E650 | E655 | E750 | E860 | HE100 | HC1500 | HC1800 | HE870 | HE50 | HE60 | HE120 | HE130 | HE40/HE65/HE70 | UE70 | UB300 | HR140 | UE150 |
| COLOR TEMPERATURE | OSD:B1:[Data] | | QSD:B1 | OSD:B1:[Data] | 000h, 001h, 002h, 003h, 004h,<br>005h, 006h, 007h, 008h, 009h,<br>~<br>~<br>~<br>~<br>~<br>~<br>~<br>~<br>~<br>~<br>~<br>~<br>~<br>~<br>~<br>~<br>~<br>~<br>~<br>~<br>~<br>~<br>~<br>~<br>~<br>06Eh, 06Fh, 070h, 071h, 072h,<br>073h, 074h, 075h, 076h, 077h,<br>078h | AW-HE130,AW-HR140<br>2000K, 2010K, 2020K, 2040K, 2050K,<br>2070K, 2080K, 2090K, 2110K, 2120K,<br>2140K, 2150K, 2170K, 2180K, 2200K,<br>2210K, 2230K, 2240K, 2260K, 2280K,<br>2300K, 2310K, 2330K, 2340K, 2360K,<br>2380K, 2400K, 2420K, 2440K, 2460K,<br>2480K, 2500K, 2520K, 2540K, 2560K,<br>2600K, 2620K, 2640K, 2680K, 2700K,<br>2720K, 2740K, 2780K, 2800K, 2820K,<br>2850K, 2870K, 2920K, 2950K, 2970K,<br>3000K, 3020K, 3070K, 3100K, 3120K,<br>3150K, 3200K, 3250K, 3270K, 3330K,<br>3360K, 3420K, 3450K, 3510K, 3570K,<br>3600K, 3660K, 3720K, 3780K, 3840K,<br>3870K, 3930K, 3990K, 4050K, 4110K,<br>4170K, 4240K, 4320K, 4360K, 4440K,<br>4520K, 4600K, 4680K, 4760K, 4840K,<br>4920K, 5000K, 5100K, 5200K, 5300K,<br>5400K, 5500K, 5600K, 5750K, 5850K,<br>6000K, 6150K, 6300K, 6450K, 6650K,<br>6800K, 7000K, 7150K, 7400K, 7600K,<br>7800K, 8100K, 8300K, 8600K, 8900K,<br>9200K, 9600K, 10000K, 10500K, 11000K,<br>11500K, 12000K, 12500K, 13000K, 14000K,<br>15000K<br><br>[AW-HE40/HE65/HE70]<br>000h 2400K<br>001h 2500K<br>~<br>04A 9800K<br>04B 9900K<br>(100K step) | | ---- | | | | | | | | | | | ---- | ---- | ---- | V1.00 | V1.00 | V1.00 | ---- | V1.00 | ---- |
| V DTL LEVEL | OSD:A1:[Data] | | QSD:A1 | OSD:A1:[Data] | 79h<br>~<br>80h<br>~<br>87h | -7<br>~<br>0<br>~<br>7 | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | V1.0 | ---- | ---- | ---- | V1.0 | V1.0 |
| DETAIL BAND<br>DETAIL FREQUENCY | OSD:A2:[Data] | | QSD:A2 | OSD:A2:[Data] | 79h<br>~<br>80h<br>~<br>87h | -7<br>~<br>0<br>~<br>7 | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | V1.0 | ---- | ---- | ---- | V1.0 | V1.0 |
| FLESH NOISE SUPPRESS | OSD:A3:[Data] | | QSD:A3 | OSD:A3:[Data] | 80h<br>~<br>9Fh | 0<br>~<br>31 | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | V1.0 | ---- | ---- | ---- | V1.0 | V1.0 |
| MATRIX(R-G) | OSD:A4:[Data] | | QSD:A4 | OSD:A4:[Data] | 41h<br>~<br>80h<br>~<br>BFh | -63<br>~<br>0<br>~<br>63 | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | V1.0 | ---- | ---- | ---- | V1.0 | V1.0 |
| MATRIX(R-B) | OSD:A5:[Data] | | QSD:A5 | OSD:A5:[Data] | 41h<br>~<br>80h<br>~<br>BFh | -63<br>~<br>0<br>~<br>63 | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | V1.0 | ---- | ---- | ---- | V1.0 | V1.0 |
| MATRIX(G-R) | OSD:A6:[Data] | | QSD:A6 | OSD:A6:[Data] | 41h<br>~<br>80h<br>~<br>BFh | -63<br>~<br>0<br>~<br>63 | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | V1.0 | ---- | ---- | ---- | V1.0 | V1.0 |
| MATRIX(G-B) | OSD:A7:[Data] | | QSD:A7 | OSD:A7:[Data] | 41h<br>~<br>80h<br>~<br>BFh | -63<br>~<br>0<br>~<br>63 | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | V1.0 | ---- | ---- | ---- | V1.0 | V1.0 |
| MATRIX(B-R) | OSD:A8:[Data] | | QSD:A8 | OSD:A8:[Data] | 41h<br>~<br>80h<br>~<br>BFh | -63<br>~<br>0<br>~<br>63 | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | V1.0 | ---- | ---- | ---- | V1.0 | V1.0 |
| MATRIX(B-G) | OSD:A9:[Data] | | QSD:A9 | OSD:A9:[Data] | 41h<br>~<br>80h<br>~<br>BFh | -63<br>~<br>0<br>~<br>63 | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | V1.0 | ---- | ---- | ---- | V1.0 | V1.0 |
| COLOR MATRIX<br>Mg_R_R GAIN<br>/COLOR<br>CORRECTION<br>Mg_R_R SATURATION | OSD:9A:[Data] | | QSD:9A | OSD:9A:[Data] | 01h<br>~<br>80h<br>~<br>FFh | -127<br>~<br>0<br>~<br>+127 | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | V1.0<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | ---- | ---- | ---- | V1.0<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V1.0<br>supports only<br>41h(-63)<br>~<br>BFh(+63) |
| COLOR MATRIX<br>Mg_R_R PHASE<br>/COLOR<br>CORRECTION<br>Mg_R_R PHASE | OSD:9B:[Data] | | QSD:9B | OSD:9B:[Data] | 01h<br>~<br>80h<br>~<br>FFh | -127<br>~<br>0<br>~<br>+127 | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | V1.0<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | ---- | ---- | ---- | V1.0<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V1.0<br>supports only<br>41h(-63)<br>~<br>BFh(+63) |
| COLOR MATRIX<br>R_R_Yl GAIN<br>/COLOR<br>CORRECTION<br>R_R_Yl SATURATION | OSD:9C:[Data] | | QSD:9C | OSD:9C:[Data] | 01h<br>~<br>80h<br>~<br>FFh | -127<br>~<br>0<br>~<br>+127 | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | V1.0<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V1.00<br>supports only<br>61h(-31)<br>~<br>9Fh(+31) | V1.00<br>supports only<br>61h(-31)<br>~<br>9Fh(+31) | ---- | V1.0<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) |
| COLOR MATRIX<br>R_R_Yl PHASE<br>/COLOR<br>CORRECTION<br>R_R_Yl PHASE | OSD:9D:[Data] | | QSD:9D | OSD:9D:[Data] | 01h<br>~<br>80h<br>~<br>FFh | -127<br>~<br>0<br>~<br>+127 | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | V1.0<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | ---- | V1.0<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) |
| COLOR MATRIX<br>R_Yl_Yl GAIN<br>/COLOR<br>CORRECTION<br>R_Yl_Yl SATURATION | OSD:9E:[Data] | | QSD:9E | OSD:9E:[Data] | 01h<br>~<br>80h<br>~<br>FFh | -127<br>~<br>0<br>~<br>+127 | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | V1.0<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V1.00<br>supports only<br>61h(-31)<br>~<br>9Fh(+31) | V1.00<br>supports only<br>61h(-31)<br>~<br>9Fh(+31) | ---- | V1.0<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) |
| COLOR MATRIX<br>R_Yl_Yl PHASE<br>/COLOR<br>CORRECTION<br>R_Yl_Yl PHASE | OSD:9F:[Data] | | QSD:9F | OSD:9F:[Data] | 01h<br>~<br>80h<br>~<br>FFh | -127<br>~<br>0<br>~<br>+127 | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | V1.0<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | ---- | V1.0<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) |
| AUDIO | OSA:D0:[Data] | | QSA:D0 | OSA:D0:[Data] | 0<br>1 | OFF<br>ON | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | V1.0 | V1.00 | V1.00 | ---- | V1.0 | V1.0 |
| AUDIO INPUT VOLUME | OSA:D1:[Data] | | QSA:D1 | OSA:D1:[Data] | 0<br>1<br>2<br>3<br>4<br>5 | Mic High<br>Mic Middle<br>Mic Low<br>Line High<br>Line Middle<br>Line Low | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | V1.0 | V1.00 | V1.00 | ---- | ---- | V1.00<br>supports only<br>0(Mic)<br>3(Line) |
| AUDIO PLUGIN POWER | OSA:D2:[Data] | | QSA:D2 | OSA:D2:[Data] | 0<br>1 | OFF<br>ON | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | V1.0 | V1.00 | V1.00 | ---- | ---- | V1.00 |
| TALLY BRIGHTNESS | OSA:D3:[Data] | | QSA:D3 | OSA:D3:[Data] | 0<br>1<br>2 | LOW<br>MID<br>HIGH | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | V1.0 | ---- | ---- | ---- | ---- | V1.00 |
| NIGHT MODE SEL | OSD:B2:[Data] | | QSD:B2 | OSD:B2:[Data] | 0<br>1 | Manual<br>Auto | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | V1.00 | V1.00 | ---- | ---- | ---- |

| ITEM | Control Command | Reply for Control Command | Confirmation Command | Reply for Confirmation Command | Data | Data Contents | | Remarks | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Control and Response to contol | Response to Confirmation | | E300/A | E600 | E800 | E800A | E350 | E650 | E655 | E750 | E860 | HE100 | HC1500 | HC1800 | HE870 | HE50 | HE60 | HE120 | HE130 | HE40/HE65/HE70 | UE70 | UB300 | HR140 | UE150 |
| i. ZOOM | OSD:B3:[Data] | | QSD:B3 | OSD:B3:[Data] | 0<br>1 | DISABLE<br>ENABLE | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | V1.00 | V1.00 | ---- | ---- | V1.00<br>[Zoom Mode]<br>-Opt Zoom<br>OSE:70:0<br>OSD:B3:0<br>-i Zoom<br>OSE:70:0<br>OSD:B3:1<br>-D Zoom<br>OSE:70:1<br>OSD:B3:0 |
| HDR | OSD:B4:[Data] | | QSD:B4 | OSD:B4:[Data] | 0<br>1<br>2<br>3 | Off<br>Low<br>Mid<br>High | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | V1.00<br>supports only<br>0(OFF),1(LOW),3(HIGH) | V1.00<br>supports only<br>0(OFF),1(LOW),3(HIGH) | ---- | ---- | ---- |
| COLOR MATRIX<br>Cy_Cy_B GAIN<br>/COLOR<br>CORRECTION<br>Cy_Cy_B SATURATION | OSD:AA:[Data] | | QSD:AA | OSD:AA:[Data] | 01h<br>~<br>80h<br>~<br>FFh | -127<br>~<br>0<br>~<br>+127 | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | V1.00<br>supports only<br>61h(-31)<br>~<br>9Fh(+31) | V1.00<br>supports only<br>61h(-31)<br>~<br>9Fh(+31) | ---- | ---- | ---- |
| COLOR MATRIX<br>Cy_Cy_B PHASE<br>/COLOR<br>CORRECTION<br>Cy_Cy_B PHASE | OSD:AB:[Data] | | QSD:AB | OSD:AB:[Data] | 01h<br>~<br>80h<br>~<br>FFh | -127<br>~<br>0<br>~<br>+127 | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | ---- | ---- | ---- |
| COLOR MATRIX<br>Cy_B_B GAIN<br>/COLOR<br>CORRECTION<br>Cy_B_B SATURATION | OSD:AC:[Data] | | QSD:AC | OSD:AC:[Data] | 01h<br>~<br>80h<br>~<br>FFh | -127<br>~<br>0<br>~<br>+127 | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | V1.00<br>supports only<br>61h(-31)<br>~<br>9Fh(+31) | V1.00<br>supports only<br>61h(-31)<br>~<br>9Fh(+31) | ---- | ---- | ---- |
| COLOR MATRIX<br>Cy_B_B PHASE<br>/COLOR<br>CORRECTION<br>Cy_B_B PHASE | OSD:AD:[Data] | | QSD:AD | OSD:AD:[Data] | 01h<br>~<br>80h<br>~<br>FFh | -127<br>~<br>0<br>~<br>+127 | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | ---- | ---- | ---- |
| COLOR MATRIX<br>B_B_Mg GAIN<br>/COLOR<br>CORRECTION<br>B_B_Mg SATURATION | OSD:C0:[Data] | | QSD:C0 | OSD:C0:[Data] | 01h<br>~<br>80h<br>~<br>FFh | -127<br>~<br>0<br>~<br>+127 | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | V1.00<br>supports only<br>61h(-31)<br>~<br>9Fh(+31) | V1.00<br>supports only<br>61h(-31)<br>~<br>9Fh(+31) | ---- | ---- | ---- |
| COLOR MATRIX<br>B_B_Mg PHASE<br>/COLOR<br>CORRECTION<br>B_B_Mg PHASE | OSD:C1:[Data] | | QSD:C1 | OSD:C1:[Data] | 01h<br>~<br>80h<br>~<br>FFh | -127<br>~<br>0<br>~<br>+127 | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | ---- | ---- | ---- |
| COLOR MATRIX<br>B_Mg_Mg GAIN<br>/COLOR<br>CORRECTION<br>B_Mg_Mg SATURATION | OSD:C2:[Data] | | QSD:C2 | OSD:C2:[Data] | 01h<br>~<br>80h<br>~<br>FFh | -127<br>~<br>0<br>~<br>+127 | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | V1.00<br>supports only<br>61h(-31)<br>~<br>9Fh(+31) | V1.00<br>supports only<br>61h(-31)<br>~<br>9Fh(+31) | ---- | ---- | ---- |
| COLOR MATRIX<br>B_Mg_Mg PHASE<br>/COLOR<br>CORRECTION<br>B_Mg_Mg PHASE | OSD:C3:[Data] | | QSD:C3 | OSD:C3:[Data] | 01h<br>~<br>80h<br>~<br>FFh | -127<br>~<br>0<br>~<br>+127 | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | ---- | ---- | ---- |
| COLOR MATRIX<br>Yl_Yl_G GAIN<br>/COLOR<br>CORRECTION<br>Yl_Yl_G SATURATION | OSD:C4:[Data] | | QSD:C4 | OSD:C4:[Data] | 01h<br>~<br>80h<br>~<br>FFh | -127<br>~<br>0<br>~<br>+127 | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | V1.00<br>supports only<br>61h(-31)<br>~<br>9Fh(+31) | V1.00<br>supports only<br>61h(-31)<br>~<br>9Fh(+31) | ---- | ---- | ---- |
| COLOR MATRIX<br>Yl_Yl_G PHASE<br>/COLOR<br>CORRECTION<br>Yl_Yl_G PHASE | OSD:C5:[Data] | | QSD:C5 | OSD:C5:[Data] | 01h<br>~<br>80h<br>~<br>FFh | -127<br>~<br>0<br>~<br>+127 | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | ---- | ---- | ---- |
| COLOR MATRIX<br>Yl_G_G GAIN<br>/COLOR<br>CORRECTION<br>Yl_G_G SATURATION | OSD:C6:[Data] | | QSD:C6 | OSD:C6:[Data] | 01h<br>~<br>80h<br>~<br>FFh | -127<br>~<br>0<br>~<br>+127 | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | V1.00<br>supports only<br>61h(-31)<br>~<br>9Fh(+31) | V1.00<br>supports only<br>61h(-31)<br>~<br>9Fh(+31) | ---- | ---- | ---- |
| COLOR MATRIX<br>Yl_G_G PHASE<br>/COLOR<br>CORRECTION<br>Yl_G_G PHASE | OSD:C7:[Data] | | QSD:C7 | OSD:C7:[Data] | 01h<br>~<br>80h<br>~<br>FFh | -127<br>~<br>0<br>~<br>+127 | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | V1.00<br>supports only<br>41h(-63)<br>~<br>BFh(+63) | ---- | ---- | ---- |
| NIGHT-DAY LEVEL | OSD:B7:[Data] | | QSD:B7 | OSD:B7:[Data] | 0<br>1<br>2 | Low<br>Mid<br>High | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | V1.00 | V1.00 | ---- | ---- | ---- |
| Digital Extender<br>Magnification | OSD:B8:[Data] | | QSD:B8 | OSD:B8:[Data] | 0<br>1<br>2<br>3<br>4 | x1.4<br>x2.0<br>x4.0<br>x6.0<br>x8.0 | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | V1.00 | ---- | ---- | ---- |
| Format_SDI | OSD:B9:[Data] | | QSD:B9 | OSD:B9:[Data] | 0h<br>1h<br>2h<br>3h<br>4h<br>5h<br>6h<br>7h<br>8h<br>9h<br>Ah<br>Bh<br>Ch<br>Dh<br>Eh<br>10h<br>11h<br>12h<br>13h<br>14h<br>15h<br>16h | 720/60p<br>720/59.94p<br>720/50p<br>1080/60i<br>1080/59.94i<br>1080/50i<br>1080/30psF<br>1080/29.97psF<br>1080/25psF<br>1080/24psF<br>1080/23.98psF<br>480/59.94i<br>480/29.97psF<br>576/50i<br>576/25psF<br>1080/59.94p<br>1080/50p<br>480/59.94p<br>576/50p<br>1080/29.97p<br>1080/25p<br>1080/23.98p | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | V1.00<br>[59.94Hz]<br>supports only<br>1h(720/59.94p)<br>4h(1080/59.94i)<br>7h(1080/29.97psF)<br>10h(1080/59.94p)<br>14h(1080/29.97p)<br>~<br><br>[50Hz]<br>supports only<br>2h(720/50p)<br>5h(1080/50i)<br>8h(1080/25psF)<br>11h(1080/50p)<br>15h(1080/25p) | ---- | ---- | ---- |
| Color Bars Type | OSD:BA:[Data] | | QSD:BA | OSD:BA:[Data] | 0<br>1 | TYPE2(Full BAR/EBU)<br>TYPE1(SMPTE) | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | V1.21+AW-SFU01 | V1.00 | ---- | ---- | V1.00 |
| ALC | OSD:BB:[Data] | | QSD:BB | OSD:BB:[Data] | 0<br>1 | OFF<br>ON | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | V1.21+AW-SFU01 | V1.00 | ---- | ---- | ---- |
| Equalize | OSD:BC:[Data] | | QSD:BC | OSD:BC:[Data] | 0<br>1<br>2 | OFF<br>LowCUT<br>VOICE | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | V1.21+AW-SFU01 | V1.00 | ---- | ---- | ---- |
| Bars Title | OSD:BE:[Data] | | QSD:BE | OSD:BE:[Data] | 0<br>1 | OFF<br>ON | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | V1.21+AW-SFU01 | V1.00 | ---- | ---- | ---- |
| AutoShutterLimit | OSD:BF:[Data] | | QSD:BF | OSD:BF:[Data] | 0<br>1<br>2<br>3<br>4<br><br><br>2<br>3<br>4 | [59.94Hz] [50Hz]<br>Off Off<br>1/60 1/50<br>1/100 1/100<br>1/120 1/125<br>1/250 1/250<br><br><u>AW-UE150</u><br>1/100<br>1/120<br>1/250 | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | V1.00 | ---- | ---- | V1.00 |

| ITEM | Control Command | Reply for Control Command | Confirmation Command | Reply for Confirmation Command | Data | Data Contents | | Remarks | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Control and Response to contol | Response to Confirmation | | E300/A | E600 | E800 | E800A | E350 | E650 | E655 | E750 | E860 | HE100 | HC1500 | HC1800 | HE870 | HE50 | HE60 | HE120 | HE130 | HE40/HE65/HE70 | UE70 | UB300 | HR140 | UE150 |
| E.DRS<br>SELECT | OSD:C8:[Data] | | QSD:C8 | OSD:C8:[Data] | 0<br>1<br>2<br>3 | OFF<br>LOW<br>MID<br>HIGH | | | ---- | | | | | | | | | | | | ---- | ---- | ---- | ---- | V1.48<br>supports only<br>0(OFF),<br>1(LOW),<br>3(HIGH) | V1.17<br>supports only<br>0(OFF),<br>1(LOW),<br>3(HIGH) | ---- | ---- | ---- |
| SOFTWARE VERSION | - | | QSI:19:[Data1] | OSI:19:[Data1]:[Data2] | [Data1]<br>0<br>1<br>2<br>3<br>4<br>5<br>6<br>[Data2]<br>(Ver.String) | ---- | [Data1]<br>SYSTEM VERSION<br>CAM MAIN<br>NETWORK<br>ROM TABLE<br>CAM FPGA<br>AVIO FPGA<br>OPTION FPGA<br>[Data2]<br>(ex) 01.00-000-00.00 | | ---- | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | V7.00 | ---- | ---- |
| Request Zoom/Focus/Iris<br>Position<br>(Output D/A Data) | - | | QSI:18 | OSI:18:[Data1]:[Data2]:[Data3] | [Data1]<br>555h<br>~<br>FFFh<br>[Data2]<br>555h<br>~<br>FFFh<br>[Data3]<br>555h<br>~<br>FFFh | ---- | [Data1]Zoom Position<br>Wide<br>~<br>Tele<br>[Data2]Focus Position<br>Near<br>~<br>Far<br>[Data3]Iris Position<br>Close<br>~<br>Open | | ---- | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | V7.00 | ---- | ---- |
| A.IRIS LEVEL | OSI:1D:[Data] | | QSI:1D | OSI:1D:[Data] | 00h<br>~<br>64h | 0<br>~<br>100 | | | ---- | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | V7.00 | ---- | ---- |
| Request IRIS F No. | - | | QIF | OIF:[Data] | 0Eh(=14)<br>~<br>1Ch(=28)<br>~<br>38h(=56)<br>~<br>A0h(=160)<br>~<br>FFh | ---- | F1.4<br>~<br>F2.8<br>~<br>F5.6<br>~<br>F16<br>~<br>CLOSE | | ---- | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | V7.00 | ---- | V1.00 |
| SHUTTER SW | OSG:59:[Data] | | QSG:59 | OSG:59:[Data] | 0<br>1 | OFF<br>ON | | | ---- | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | V7.00 | ---- | ---- |
| SHUTTER MODE | OSG:5A:[Data] | | QSG:5A | OSG:5A:[Data] | 0<br>1 | SHUTTER<br>SYNC | | | ---- | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | V7.00 | ---- | ---- |
| SHUTTER SPEED | OSG:5D:[Data] | | QSG:5D | OSG:5D:[Data] | 00h<br>01h<br>02h<br>03h<br>04h<br>05h<br>06h<br>07h<br>08h<br>09h<br>0Ah<br>0Bh<br>0Ch<br>0Dh<br>0Eh<br>0Fh<br>10h<br>11h | 1/48<br>1/50<br>1/60<br>1/96<br>1/100<br>1/120<br>1/125<br>1/250<br>1/500<br>1/1000<br>1/1500<br>1/2000<br>180.0deg<br>172.8deg<br>144.0deg<br>120.0deg<br>90.0deg<br>45.0deg | | | ---- | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | V7.00<br>(59.94p/59.94i)<br>04h(1/100)<br>05h(1/120)<br>06h(1/125)<br>07h(1/250)<br>08h(1/500)<br>09h(1/1000)<br>0Ah(1/1500)<br>0Bh(1/2000)<br>0Ch(1/180.0deg)<br>0Dh(1/172.8deg)<br>0Eh(1/144.0deg)<br>0Fh(1/120.0deg)<br>10h(1/90.0deg)<br>11h(1/45.0deg)<br>(50p/50i)<br>02h(1/60)<br>04h(1/100)<br>06h(1/125)<br>07h(1/250)<br>08h(1/500)<br>09h(1/1000)<br>0Ah(1/1500)<br>0Bh(1/2000)<br>0Ch(1/180.0deg)<br>0Dh(1/172.8deg)<br>0Eh(1/144.0deg)<br>0Fh(1/120.0deg)<br>10h(1/90.0deg)<br>11h(1/45.0deg)<br>(29.97p/23.98p)<br>00h(1/48)<br>01h(1/50)<br>02h(1/60)<br>03h(1/96)<br>04h(1/100)<br>05h(1/120)<br>06h(1/125)<br>07h(1/250)<br>08h(1/500)<br>09h(1/1000)<br>0Ah(1/1500)<br>0Bh(1/2000)<br>0Ch(1/180.0deg)<br>0Dh(1/172.8deg)<br>0Eh(1/144.0deg)<br>0Fh(1/120.0deg)<br>10h(1/90.0deg)<br>11h(1/45.0deg)<br>(25p)<br>00h(1/48)<br>01h(1/50)<br>02h(1/60)<br>03h(1/96)<br>04h(1/100)<br>06h(1/125)<br>07h(1/250)<br>08h(1/500)<br>09h(1/1000)<br>0Ah(1/1500)<br>0Bh(1/2000)<br>0Ch(1/180.0deg)<br>0Dh(1/172.8deg)<br>0Eh(1/144.0deg)<br>0Fh(1/120.0deg)<br>10h(1/90.0deg)<br>11h(1/45.0deg) | ---- | ---- |
| R GAIN | OSG:39:[Data] | | QSG:39 | OSG:39:[Data] | 418h<br>~<br>800h<br>~<br>BE8h | -1000<br>~<br>0<br>~<br>1000 | | | ---- | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | V7.00 | ---- | V1.00<br>support only<br>738h(-200)<br>~<br>8C8h(200) |
| B GAIN | OSG:3A:[Data] | | QSG:3A | OSG:3A:[Data] | 418h<br>~<br>800h<br>~<br>BE8h | -1000<br>~<br>0<br>~<br>1000 | | | ---- | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | V7.00 | ---- | V1.00<br>support only<br>738h(-200)<br>~<br>8C8h(200) |
| M-PED | OSG:4A:[Data] | | QSG:4A | OSG:4A:[Data] | 1Dh<br>~<br>80h<br>~<br>E3h | -99<br>~<br>0<br>~<br>99 | | | ---- | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | V7.00 | ---- | ---- |
| R PEDESTAL | OSG:4C:[Data] | | QSG:4C | OSG:4C:[Data] | 4E0h<br>~<br>800h<br>~<br>B20h | -800<br>~<br>0<br>~<br>800 | | | ---- | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | V7.00 | ---- | ---- |

| ITEM | Control Command | Reply for Control Command | Confirmation Command | Reply for Confirmation Command | Data | Data Contents | | Remarks | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Control and Response to contol | Response to Confirmation | | E300/A | E600 | E800 | E800A | E350 | E650 | E655 | E750 | E860 | HE100 | HC1500 | HC1800 | HE870 | HE50 | HE60 | HE120 | HE130 | HE40/HE65/HE70 | UE70 | UB300 | HR140 | UE150 |
| B PEDESTAL | OSG:4E:[Data] | | QSG:4E | OSG:4E:[Data] | 4E0h<br>~<br>800h<br>~<br>B20h | | -800<br>~<br>0<br>~<br>800 | | ------ | | | | | | | | | | | | | ------ | ------ | ------ | ------ | ------ | ------ | V7.00 | ------ | ------ |
| MATRIX | OSG:A0:[Data] | | QSG:A0 | OSG:A0:[Data] | 0<br>1 | | OFF<br>ON | | ------ | | | | | | | | | | | | | ------ | ------ | ------ | ------ | ------ | ------ | V7.00 | ------ | ------ |
| MATRIX (R-G)_N | OSG:A5:N:[Data] | | QSG:A5:N | OSG:A5:N:[Data] | 00h<br>~<br>1Fh<br>~<br>3Eh | | -31<br>~<br>0<br>~<br>+31 | | ------ | | | | | | | | | | | | | ------ | ------ | ------ | ------ | ------ | ------ | V7.00 | ------ | ------ |
| MATRIX (R-G)_P | OSG:A5:P:[Data] | | QSG:A5:P | OSG:A5:P:[Data] | 00h<br>~<br>1Fh<br>~<br>3Eh | | -31<br>~<br>0<br>~<br>+31 | | ------ | | | | | | | | | | | | | ------ | ------ | ------ | ------ | ------ | ------ | V7.00 | ------ | ------ |
| MATRIX (R-B)_N | OSG:A6:N:[Data] | | QSG:A6:N | OSG:A6:N:[Data] | 00h<br>~<br>1Fh<br>~<br>3Eh | | -31<br>~<br>0<br>~<br>+31 | | ------ | | | | | | | | | | | | | ------ | ------ | ------ | ------ | ------ | ------ | V7.00 | ------ | ------ |
| MATRIX (R-B)_P | OSG:A6:P:[Data] | | QSG:A6:P | OSG:A6:P:[Data] | 00h<br>~<br>1Fh<br>~<br>3Eh | | -31<br>~<br>0<br>~<br>+31 | | ------ | | | | | | | | | | | | | ------ | ------ | ------ | ------ | ------ | ------ | V7.00 | ------ | ------ |
| MATRIX (G-R)_N | OSG:A7:N:[Data] | | QSG:A7:N | OSG:A7:N:[Data] | 00h<br>~<br>1Fh<br>~<br>3Eh | | -31<br>~<br>0<br>~<br>+31 | | ------ | | | | | | | | | | | | | ------ | ------ | ------ | ------ | ------ | ------ | V7.00 | ------ | ------ |
| MATRIX (G-R)_P | OSG:A7:P:[Data] | | QSG:A7:P | OSG:A7:P:[Data] | 00h<br>~<br>1Fh<br>~<br>3Eh | | -31<br>~<br>0<br>~<br>+31 | | ------ | | | | | | | | | | | | | ------ | ------ | ------ | ------ | ------ | ------ | V7.00 | ------ | ------ |
| MATRIX (G-B)_N | OSG:A8:N:[Data] | | QSG:A8:N | OSG:A8:N:[Data] | 00h<br>~<br>1Fh<br>~<br>3Eh | | -31<br>~<br>0<br>~<br>+31 | | ------ | | | | | | | | | | | | | ------ | ------ | ------ | ------ | ------ | ------ | V7.00 | ------ | ------ |
| MATRIX (G-B)_P | OSG:A8:P:[Data] | | QSG:A8:P | OSG:A8:P:[Data] | 00h<br>~<br>1Fh<br>~<br>3Eh | | -31<br>~<br>0<br>~<br>+31 | | ------ | | | | | | | | | | | | | ------ | ------ | ------ | ------ | ------ | ------ | V7.00 | ------ | ------ |
| MATRIX (B-R)_N | OSG:A9:N:[Data] | | QSG:A9:N | OSG:A9:N:[Data] | 00h<br>~<br>1Fh<br>~<br>3Eh | | -31<br>~<br>0<br>~<br>+31 | | ------ | | | | | | | | | | | | | ------ | ------ | ------ | ------ | ------ | ------ | V7.00 | ------ | ------ |
| MATRIX (B-R)_P | OSG:A9:P:[Data] | | QSG:A9:P | OSG:A9:P:[Data] | 00h<br>~<br>1Fh<br>~<br>3Eh | | -31<br>~<br>0<br>~<br>+31 | | ------ | | | | | | | | | | | | | ------ | ------ | ------ | ------ | ------ | ------ | V7.00 | ------ | ------ |
| MATRIX (B-G)_N | OSG:AA:N:[Data] | | QSG:AA:N | OSG:AA:N:[Data] | 00h<br>~<br>1Fh<br>~<br>3Eh | | -31<br>~<br>0<br>~<br>+31 | | ------ | | | | | | | | | | | | | ------ | ------ | ------ | ------ | ------ | ------ | V7.00 | ------ | ------ |
| MATRIX (B-G)_P | OSG:AA:P:[Data] | | QSG:AA:P | OSG:AA:P:[Data] | 00h<br>~<br>1Fh<br>~<br>3Eh | | -31<br>~<br>0<br>~<br>+31 | | ------ | | | | | | | | | | | | | ------ | ------ | ------ | ------ | ------ | ------ | V7.00 | ------ | ------ |
| COLOR CORRECT TABLE | OSG:A4:[Data] | | QSG:A4 | OSG:A4:[Data] | 0<br>1 | | A<br>B | | ------ | | | | | | | | | | | | | ------ | ------ | ------ | ------ | ------ | ------ | V7.00 | ------ | ------ |
| SKIN AREA SW | OSG:B0:[Data] | | QSG:B0 | OSG:B0:[Data] | 0<br>1 | | OFF<br>ON | | ------ | | | | | | | | | | | | | ------ | ------ | ------ | ------ | ------ | ------ | V7.00 | ------ | ------ |
| SKIN AREA TABLE | OSG:B1:[Data] | | QSG:B1 | OSG:B1:[Data] | 0<br>1 | | A<br>B | | ------ | | | | | | | | | | | | | ------ | ------ | ------ | ------ | ------ | ------ | V7.00 | ------ | ------ |
| SKIN AREA HUE | OSG:B2:[Data] | | QSG:B2 | OSG:B2:[Data] | 01h<br>~<br>80h<br>~<br>FFh | | -127<br>~<br>0<br>~<br>+127 | | ------ | | | | | | | | | | | | | ------ | ------ | ------ | ------ | ------ | ------ | V7.00 | ------ | ------ |
| SKIN AREA TONE | OSG:B3:[Data] | | QSG:B3 | OSG:B3:[Data] | 01h<br>~<br>80h<br>~<br>FEh | | -127<br>~<br>0<br>~<br>+126 | | ------ | | | | | | | | | | | | | ------ | ------ | ------ | ------ | ------ | ------ | V7.00 | ------ | ------ |
| CHROMA LEVEL SWITCH | OSG:93:[Data] | | QSG:93 | OSG:93:[Data] | 0<br>1 | | OFF<br>ON | | ------ | | | | | | | | | | | | | ------ | ------ | ------ | ------ | ------ | ------ | V7.00 | ------ | ------ |
| COLOR TEMPERATURE INC | OSI:1E:[Data] | - | - | | 1h<br>~<br>Ah | INC 1<br>~<br>INC 10 | ------ | | ------ | | | | | | | | | | | | | ------ | ------ | ------ | ------ | ------ | ------ | V7.00<br>supports only<br>1h(INC 1) | ------ | V1.00 |
| COLOR TEMPERATURE DEC | OSI:1F:[Data] | - | - | | 1h<br>~<br>Ah | DEC 1<br>~<br>DEC 10 | ------ | | ------ | | | | | | | | | | | | | ------ | ------ | ------ | ------ | ------ | ------ | V7.00<br>supports only<br>1h(DEC 1) | ------ | V1.00 |
| COLOR TEMPERATURE | OSI:20:[Data1]:[Data2] | | QSI:20 | OSI:20:[Data1]:[Data2] | [Data1]<br>00000h<br>~<br>FFFFFh<br>[Data2]<br>0h<br>1h<br>2h | [Data1]<br>OK<br>~<br>1048575K<br>[Data2]<br>Valid<br>Under<br>Over | | | ------ | | | | | | | | | | | | | ------ | ------ | ------ | ------ | ------ | ------ | V7.00<br>supports only<br>Confirmation<br>Command | ------ | V1.00<br>[Data1] supports only<br>007D0h(2000K)<br>~<br>03A98h(15000K)<br>[Data2] supports only<br>0(valid) |
| V DETAIL LEVEL | OSG:32:[Data] | | QSG:32 | OSG:32:[Data] | 00h<br>~<br>3Fh | | 00<br>~<br>63 | | ------ | | | | | | | | | | | | | ------ | ------ | ------ | ------ | ------ | ------ | V7.00 | ------ | ------ |
| PEAK FREQUENCY | OSG:30:[Data] | | QSG:30 | OSG:30:[Data] | 00h<br>~<br>04h<br>~<br>1Fh | | 0<br>~<br>4<br>~<br>31 | | ------ | | | | | | | | | | | | | ------ | ------ | ------ | ------ | ------ | ------ | V7.00<br>[In case HD format]<br>00h(0) - 1Fh(31)<br>[In case 4K format]<br>00h(0) - 04h(4) | ------ | ------ |
| V DETAIL FREQUENCY | OSG:35:[Data] | | QSG:35 | OSG:35:[Data] | 00h<br>~<br>04h<br>~<br>1Fh | | 0<br>~<br>4<br>~<br>31 | | ------ | | | | | | | | | | | | | ------ | ------ | ------ | ------ | ------ | ------ | V7.00<br>[In case HD format]<br>00h(0) - 1Fh(31)<br>[In case 4K format]<br>00h(0) - 04h(4) | ------ | ------ |
| DETAIL +CLIP | OSG:40:[Data] | | QSG:40 | OSG:40:[Data] | 00h<br>~<br>3Fh | | 0<br>~<br>63 | | ------ | | | | | | | | | | | | | ------ | ------ | ------ | ------ | ------ | ------ | V7.00 | ------ | ------ |
| DETAIL -CLIP | OSG:41:[Data] | | QSG:41 | OSG:41:[Data] | 00h<br>~<br>3Fh | | 0<br>~<br>63 | | ------ | | | | | | | | | | | | | ------ | ------ | ------ | ------ | ------ | ------ | V7.00 | ------ | ------ |
| KNEE APERTURE LEVEL | OSG:3F:[Data] | | QSG:3F | OSG:3F:[Data] | 00h<br>~<br>27h | | 0<br>~<br>39 | | ------ | | | | | | | | | | | | | ------ | ------ | ------ | ------ | ------ | ------ | V7.00 | ------ | V1.00<br>supports only<br>00h(0) - 05h(5) |
| LEVEL DEPENDENT SWITCH | OSG:3E:[Data] | | QSG:3E | OSG:3E:[Data] | 0<br>1 | | OFF<br>ON | | ------ | | | | | | | | | | | | | ------ | ------ | ------ | ------ | ------ | ------ | V7.00 | ------ | ------ |

| ITEM | Control Command | Reply for Control Command | Confirmation Command | Reply for Confirmation Command | Data | Data Contents | | | Remarks | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Control and Response to contol | Response to Confirmation | | | E300/A | E600 | E800 | E800A | E350 | E650 | E655 | E750 | E860 | HE100 | HC1500 | HC1800 | HE870 | HE50 | HE60 | HE120 | HE130 | HE40/HE65/HE70 | UE70 | UB300 | HR140 | UE150 |
| MEMORY SELECT | OSG:42:[Data] | | QSG:42 | OSG:42:[Data] | 0<br>1<br>2 | | A<br>B<br>C | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | V7.00 | ---- | ---- |
| H POSITION | OSG:44:[Data] | | QSG:44 | OSG:44:[Data] | 000h<br>~<br>190h | | 0<br>~<br>100.00%<br>(0.25% Step) | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | V7.00 | ---- | ---- |
| V POSITION | OSG:45:[Data] | | QSG:45 | OSG:45:[Data] | 000h<br>~<br>190h | | 0<br>~<br>100.00%<br>(0.25% Step) | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | V7.00 | ---- | ---- |
| ZEBRA EFFECT MEMORY | OSG:47:[Data] | | QSG:47 | OSG:47:[Data] | 0<br>1<br>2<br>3<br>4<br>5<br>6 | | A<br>B<br>C<br>A+B<br>A+C<br>B+C<br>A+B+C | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | V7.00 | ---- | ---- |
| SKIN TONE EFFECT MEMORY | OSG:48:[Data] | | QSG:48 | OSG:48:[Data] | 0<br>1<br>2<br>3<br>4<br>5<br>6 | | A<br>B<br>C<br>A+B<br>A+C<br>B+C<br>A+B+C | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | V7.00 | ---- | ---- |
| SKIN TONE CRISP | OSG:49:[Data] | | QSG:49 | OSG:49:[Data] | 41h<br>~<br>80h<br>~<br>BFh | | -63<br>~<br>0<br>~<br>+63 | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | V7.00 | ---- | ---- |
| SKIN TONE<br>Q PHASE | OSG:4F:[Data] | | QSG:4F | OSG:4F:[Data] | 000h<br>~<br>167h | | 0<br>~<br>359 | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | V7.00 | ---- | ---- |
| DNR LEVEL | OSG:B5:[Data] | | QSG:B5 | OSG:B5:[Data] | 1<br>~<br>5 | | 1<br>~<br>5 | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | V7.00 | ---- | ---- |
| HAZE REDUCTION | OSG:B6:[Data] | | QSG:B6 | OSG:B6:[Data] | 0<br>1 | | OFF<br>ON | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | V7.00 | V1.00 | ---- |
| HAZE REDUCTION LEVEL | OSG:B7:[Data] | | QSG:B7 | OSG:B7:[Data] | 1<br>~<br>3 | | 1<br>~<br>3 | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | V7.00 | V1.00 | ---- |
| GEN-LOCK INPUT | OSG:CA:[Data] | | QSG:CA | OSG:CA:[Data] | 0<br>1 | | BNC<br>DSUB | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | V7.00 | ---- | ---- |
| H PHASE-COARSE | OSG:CB:[Data] | | QSG:CB | OSG:CB:[Data] | 3h<br>~<br>8h<br>~<br>Dh | | -5<br>~<br>0<br>~<br>+5 | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | V7.00 | ---- | ---- |
| H PHASE-FINE | OSG:CC:[Data] | | QSG:CC | OSG:CC:[Data] | 1Ch<br>~<br>80h<br>~<br>E4h | | -100<br>~<br>0<br>~<br>+100 | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | V7.00 | ---- | ---- |
| CROP OUT SEL | OSI:16:[Data] | | QSI:16 | OSI:16:[Data] | 1<br>2<br>3 | | YL<br>G<br>MG | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | V7.00 | ---- | V1.00 |
| CROP ADJ SEL | OSI:17:[Data] | | QSI:17 | OSI:17:[Data] | 1<br>2<br>3 | | YL<br>G<br>MG | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | V7.00 | ---- | V1.00 |
| CROP H/V POSITION<br>Speed Control | OSI:15:[Data]:[Data2] | | ---- | ---- | [Data1]<br>01<br>~<br>50<br>~<br>99<br><br>[Data2]<br>01<br>~<br>50<br>~<br>99 | [Data1]<br>Left Max. Speed<br>~<br>Stop<br>~<br>Right Max. Speed<br><br>[Data2]<br>Down Max. Speed<br>~<br>Stop<br>~<br>UP Max. Speed | ---- | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | V7.00 | ---- | V1.00 |
| CROP MARKER SEL | OSI:1A:[Data] | | QSI:1A | OSI:1A:[Data] | 0<br>1<br>2<br>3<br>4<br>5<br>6<br>7 | | OFF<br>YL<br>G<br>MG<br>YL+G<br>YL+MG<br>G+MG<br>YL+G+MG | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | V7.00<br>supports only<br>1(YL)<br>2(G)<br>3(MG)<br>4(YL+G)<br>5(YL+MG)<br>6(G+MG)<br>7(YL+G+MG) | ---- | V1.00 |
| CROP H POSITION | OSI:1B:[Data] | | QSI:1B | OSI:1B:[Data] | 738h<br>~<br>800h<br>~<br>8C8h | | -50%<br>~<br>0%<br>~<br>+50%<br>(0.25% Step) | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | V7.00 | ---- | ---- |
| CROP V POSITION | OSI:1C:[Data] | | QSI:1C | OSI:1C:[Data] | 738h<br>~<br>800h<br>~<br>8C8h | | -50%<br>~<br>0%<br>~<br>+50%<br>(0.25% Step) | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | V7.00 | ---- | ---- |
| Preset Digital Extender Enable | OSE:7C:[Data] | | QSE:7C | OSE:7C:[Data] | 0<br>1 | | OFF<br>ON | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | V2.00 | ---- | ---- | ---- | V1.00 | V1.00 |
| Preset Zoom Mode | OSE:7D:[Data] | | QSE:7D | OSE:7D:[Data] | 0<br>1 | | Mode A<br>Mode B | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | V1.00 |
| Super Gain | OSI:28:[Data] | | QSI:28 | OSI:28:[Data] | 0<br>1 | | OFF<br>ON | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | V1.00 |
| ATW Speed | OSI:25:[Data] | | QSI:25 | OSI:25:[Data] | 0<br>1<br>2 | | Normal<br>Slow<br>Fast | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | V1.00 |
| ATW Width | OSI:26:[Data] | | QSI:26 | OSI:26:[Data] | 1<br>2<br>3<br>4<br>5 | | 1<br>2<br>3<br>4<br>5 | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | ---- |

| ITEM | Control Command | Reply for Control Command | Confirmation Command | Reply for Confirmation Command | Data | Data Contents | | Remarks | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Control and Response to contol | Response to Confirmation | | E300/A | E600 | E800 | E800A | E350 | E650 | E655 | E750 | E860 | HE100 | HC1500 | HC1800 | HE870 | HE50 | HE60 | HE120 | HE130 | HE40/HE65/HE70 | UE70 | UB300 | HR140 | UE150 |
| Intelligent | OSI:21:[Data] | | QSI:21 | OSI:21:[Data] | 0<br>1<br>2 | | Off<br>On<br>Lock | | ———— | | | | | | | | | | | | | ———— | ———— | ———— | ———— | ———— | ———— | ———— | V1.00 | ———— |
| Intelligent Mode | OSI:22:[Data] | | QSI:22 | OSI:22:[Data] | 0<br>1 | | AE<br>AE+ATW | | ———— | | | | | | | | | | | | | ———— | ———— | ———— | ———— | ———— | ———— | ———— | V1.00 | ———— |
| Intelligent<br>ND Filter | OSI:23:[Data] | | QSI:23 | OSI:23:[Data] | 0<br>1<br>2<br>3 | | Through<br>1/8<br>1/64<br>Auto | | ———— | | | | | | | | | | | | | ———— | ———— | ———— | ———— | ———— | ———— | ———— | V1.00 | ———— |
| Intelligent<br>AGC Mode | OSI:24:[Data] | | QSI:24 | OSI:24:[Data] | 0<br>1<br>2 | | Normal<br>Sports<br>SN | | ———— | | | | | | | | | | | | | ———— | ———— | ———— | ———— | ———— | ———— | ———— | V1.00 | ———— |
| 3G SDI Out | OSI:29:[Data] | | QSI:29 | OSI:29:[Data] | 0<br>1 | | Level A<br>Level B | | ———— | | | | | | | | | | | | | ———— | ———— | ———— | ———— | ———— | ———— | ———— | V1.00 | V1.00 |
| Option Device Type | - | | QSI:2A | OSI:2A:[Data] | [AK-UB300]<br>0<br>1<br>2<br>3 | | [AK-UB300]<br>no option<br>4K default<br>12G option<br>TICO option | | ———— | | | | | | | | | | | | | ———— | ———— | ———— | ———— | ———— | ———— | V7.40 | ———— | ———— |
| Audio Line Input Level | OSA:D4:[Data1]:[Data2] | | QSA:D4:[Data1] | OSA:D4:[Data1]:[Data2] | [Data1]<br>0<br>1<br>[Data2]<br>0<br>1<br>2 | | [Data1]<br>CH1/CH3<br>CH2/CH4<br>[Data2]<br>+4dB<br>0dB<br>-20dB | | ———— | | | | | | | | | | | | | ———— | ———— | ———— | ———— | ———— | ———— | ———— | V1.00 | ———— |
| Audio Output Volume | OSA:D5:[Data1]:[Data2] | | QSA:D5:[Data1] | OSA:D5:[Data1]:[Data2] | [Data1]<br>0<br>1<br>2<br>3<br>[Data2]<br>58h<br>~<br>80h<br>~<br>8Ch | | [Data1]<br>CH1<br>CH2<br>CH3<br>CH4<br>[Data2]<br>-40dB<br>~<br>0dB<br>~<br>12dB | | ———— | | | | | | | | | | | | | ———— | ———— | ———— | ———— | ———— | ———— | ———— | V1.00 | V1.00<br>[Data1]<br>supports only<br>0(CH1)<br>[Data2]<br>supports only<br>5Ch(-36dB)<br>~<br>8C(12dB) |
| Audio Head Room | OSA:D6:[Data] | | QSA:D6 | OSA:D6:[Data] | 0<br>1<br>2 | | FS-12dB<br>FS-18dB<br>FS-20dB | | ———— | | | | | | | | | | | | | ———— | ———— | ———— | ———— | ———— | ———— | ———— | V1.00 | ———— |
| Audio Line CH Select | OSA:D7:[Data] | | QSA:D7 | OSA:D7:[Data] | 0<br>1<br>2<br>3 | | All<br>CH1/CH2<br>CH3/CH4<br>None | | ———— | | | | | | | | | | | | | ———— | ———— | ———— | ———— | ———— | ———— | ———— | V1.00 | ———— |
| DC Out | OSI:2B:[Data] | | QSI:2B | OSI:2B:[Data] | 0<br>1 | | OFF<br>ON | | ———— | | | | | | | | | | | | | ———— | ———— | ———— | ———— | ———— | ———— | ———— | V1.00 | ———— |
| HDR SW (MAIN) | OSI:2C:[Data] | | QSI:2C | OSI:2C:[Data] | 0<br>1 | | OFF<br>ON | | ———— | | | | | | | | | | | | | ———— | ———— | ———— | ———— | ———— | ———— | V7.30 | ———— | ———— |
| COLORIMETRY | OSI:2D:[Data] | | QSI:2D | OSI:2D:[Data] | 00h<br>01h | | no effect<br>BT.709 | | ———— | | | | | | | | | | | | | ———— | ———— | ———— | ———— | ———— | ———— | V7.30 | ———— | ———— |
| HDR SW (SDI1) | OSI:2E:[Data] | | QSI:2E | OSI:2E:[Data] | 0<br>1 | | OFF<br>ON | | ———— | | | | | | | | | | | | | ———— | ———— | ———— | ———— | ———— | ———— | V7.30 | ———— | ———— |
| HDR SW (LAN) | OSI:2F:[Data] | | QSI:2F | OSI:2F:[Data] | 0<br>1 | | OFF<br>ON | | ———— | | | | | | | | | | | | | ———— | ———— | ———— | ———— | ———— | ———— | V7.30 | ———— | ———— |
| SHOOTING MODE | OSI:30:[Data] | | QSI:30 | OSI:30:[Data] | 0<br>1 | | NORMAL<br>HIGH SENS. | | ———— | | | | | | | | | | | | | ———— | ———— | ———— | ———— | ———— | ———— | V7.30 | ———— | V1.00 |
| HDR SW (SDI2) | OSI:31:[Data] | | QSI:31 | OSI:31:[Data] | 0<br>1 | | OFF<br>ON | | ———— | | | | | | | | | | | | | ———— | ———— | ———— | ———— | ———— | ———— | V7.30 | ———— | ———— |
| HD-SDI2 OUT SEL | OSI:32:[Data] | | QSI:32 | OSI:32:[Data] | 0<br>1 | | FULL<br>CROP | | ———— | | | | | | | | | | | | | ———— | ———— | ———— | ———— | ———— | ———— | V7.30 | ———— | V1.00 |
| LAN OUT SEL | OSI:33:[Data] | | QSI:33 | OSI:33:[Data] | 0<br>1 | | FULL<br>CROP | | ———— | | | | | | | | | | | | | ———— | ———— | ———— | ———— | ———— | ———— | V7.30 | ———— | V2.00 |
| MASTER FLARE | OSG:96:[Data] | | QSG:96 | OSG:96:[Data] | 1Ch<br>~<br>80h<br>~<br>E4h | | -100<br>~<br>0<br>~<br>100 | | ———— | | | | | | | | | | | | | ———— | ———— | ———— | ———— | ———— | ———— | V7.30 | ———— | ———— |
| GAMMA MODE SELECT | OSG:86:[Data] | | QSG:86 | OSG:86:[Data] | 0<br>1<br>2<br>3<br>4<br>5 | | HD<br>FILMLIKE1<br>FILMLIKE2<br>FILMLIKE3<br>FILM REC<br>VIDEO REC | | ———— | | | | | | | | | | | | | ———— | ———— | ———— | ———— | ———— | ———— | V7.30 | ———— | ———— |
| MASTER GAMMA INC | OSI:37:[Data] | | - | - | 1 | INC | ———— | | ———— | | | | | | | | | | | | | ———— | ———— | ———— | ———— | ———— | ———— | V7.30 | ———— | ———— |

| ITEM | Control Command | Reply for Control Command | Confirmation Command | Reply for Confirmation Command | Data | Data Contents | | Remarks | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Control and Response to contol | Response to Confirmation | | E300/A | E600 | E800 | E800A | E350 | E650 | E655 | E750 | E860 | HE100 | HC1500 | HC1800 | HE870 | HE50 | HE60 | HE120 | HE130 | HE40/HE65/HE70 | UE70 | UB300 | HR140 | UE150 |
| MASTER GAMMA DEC | OSI:38:[Data] | | - | - | 1 | DEC | ---- | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | V7.30 | ---- | ---- |
| MASTER GAMMA | - | | QSI:34 | OSI:34:[Data] | 05DCh<br>~<br>1194h<br>~<br>1D4Ch | 0.1500<br>~<br>0.4500<br>~<br>0.7500 | | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | V7.30 | ---- | ---- |
| R GAMMA | OSI:35:[Data] | | QSI:35 | OSI:35:[Data] | 35h<br>~<br>80h<br>~<br>CBh | -75<br>~<br>0<br>~<br>+75 | | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | V7.30 | ---- | ---- |
| B GAMMA | OSI:36:[Data] | | QSI:36 | OSI:36:[Data] | 35h<br>~<br>80h<br>~<br>CBh | -75<br>~<br>0<br>~<br>+75 | | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | V7.30 | ---- | ---- |
| A.KNEE RESPONSE | OSG:97:[Data] | | QSG:97 | OSG:97:[Data] | 1<br>~<br>8 | 1<br>~<br>8 | | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | V7.30 | ---- | V1.00 |
| HLG MODE<br>(HDR PAINT) | OSI:39:[Data] | | QSI:39 | OSI:39:[Data] | 0<br>1 | FIX<br>VAR | | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | V7.30 | ---- | ---- |
| SDR CONVERT MODE<br>(HDR PAINT) | OSI:3A:[Data] | | QSI:3A | OSI:3A:[Data] | 0<br>1 | FIX<br>VAR | | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | V7.30 | ---- | ---- |
| HLG TYPE SELECT<br>(HDR PAINT) | OSI:3B:[Data] | | QSI:3B | OSI:3B:[Data] | 0<br>1 | NORMAL<br>STRETCH | | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | V7.30 | ---- | ---- |
| BLACK GAMMA SW<br>(HDR PAINT) | OSI:3C:[Data] | | QSI:3C | OSI:3C:[Data] | 0<br>1 | OFF<br>ON | | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | V7.30 | ---- | ---- |
| MASTER BLACK GAMMA<br>(HDR PAINT) | OSI:3D:[Data] | | QSI:3D | OSI:3D:[Data] | 60h<br>~<br>80h<br>~<br>A0h | -32<br>~<br>0<br>~<br>+32 | | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | V7.30 | ---- | ---- |
| R BLACK GAMMA<br>(HDR PAINT) | OSI:3E:[Data] | | QSI:3E | OSI:3E:[Data] | 60h<br>~<br>80h<br>~<br>A0h | -32<br>~<br>0<br>~<br>+32 | | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | V7.30 | ---- | ---- |
| B BLACK GAMMA<br>(HDR PAINT) | OSI:3F:[Data] | | QSI:3F | OSI:3F:[Data] | 60h<br>~<br>80h<br>~<br>A0h | -32<br>~<br>0<br>~<br>+32 | | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | V7.30 | ---- | ---- |
| KNEE SW<br>(HDR PAINT) | OSI:40:[Data] | | QSI:40 | OSI:40:[Data] | 0<br>1 | OFF<br>ON | | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | V7.30 | ---- | V1.00 |
| KNEE POINT<br>(HDR PAINT) | OSI:41:[Data] | | QSI:41 | OSI:41:[Data] | 1Ch<br>~<br>30h<br>~<br>80h<br>~<br>D0h<br>~<br>F4h | 55.00%<br>~<br>60.00%<br>~<br>80.00%<br>~<br>100.00%<br>~<br>109.00%<br>(1step=0.25%) | | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | V7.30<br>suppurt only<br>30h(60%) - D0(100%) | ---- | V1.00<br>suppurt only<br>1Ch(55%) - D0(100%)<br>(1step=1%) |
| KNEE SLOPE<br>(HDR PAINT) | OSI:42:[Data] | | QSI:42 | OSI:42:[Data] | 00h<br>~<br>C7h | 0<br>~<br>199 | | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | V7.30 | ---- | V1.00<br>supports only<br>00h - 64h |
| SDR CONVERT GAIN<br>(HDR PAINT) | OSI:43:[Data] | | QSI:43 | OSI:43:[Data] | 74h<br>77h<br>7Ah<br>7Dh<br>80h | -12<br>-9<br>-6<br>-3<br>0 | | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | V7.30 | ---- | ---- |
| SDR CONVERT CLIP<br>(HDR PAINT) | OSI:44:[Data] | | QSI:44 | OSI:44:[Data] | 0<br>1<br>2 | LOW<br>MID<br>HIGH | | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | V7.30 | ---- | ---- |
| GAMUT | OSI:45:[Data] | | QSI:45 | OSI:45:[Data] | 0<br>1 | NORMAL<br>WIDE_G | | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| ERROR INFORMATION | - | | QSI:46 | OSI:46:[Data] | 00000000h<br>00000001h<br>00000002h<br>00000004h<br>00000008h<br>00000010h | ---- | No Error<br>Fan Error<br>High Temperature<br>Lens Error<br>Pan/Tilt Error<br>Sensor Error<br><br>※bit0:Fan Error, bit1:High Temperature,<br>bit2:Lens Error, bit3:Pan/Tilt Error, bit4:Sensor Error | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 |
| Auto Iris Speed | OSJ:01:[Data] | | QSJ:01 | OSJ:01:[Data] | 0h<br>1h<br>2h | Slow<br>Normal<br>Fast | | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 |
| Auto Iris Window | OSJ:02:[Data] | | QSJ:02 | OSJ:02:[Data] | 0h<br>1h<br>2h | Normal1<br>Normal2<br>Center | | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 |
| Shutter Mode | OSJ:03:[Data] | | QSJ:03 | OSJ:03:[Data] | 0h<br>1h<br>2h<br>3h | Off<br>Step<br>Synchro<br>ELC | | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 |
| Step INC | OSJ:04:[Data] | - | - | - | 01h<br>~<br>64h | 1<br>~<br>100 | ---- | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 |
| Step DEC | OSJ:05:[Data] | - | - | - | 01h<br>~<br>64h | 1<br>~<br>100 | ---- | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 |
| Step VAL | OSJ:06:[Data] | | QSJ:06 | OSJ:06:[Data] | 0001h<br>~<br>2710 h | 1/1<br>~<br>1/10000 | | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 |
| Synchro INC | OSJ:07:[Data] | - | - | - | 01h<br>~<br>64h | 1<br>~<br>100 | ---- | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 |
| Synchro DEC | OSJ:08:[Data] | - | - | - | 01h<br>~<br>64h | 1<br>~<br>100 | ---- | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 |
| Synchro VAL | OSJ:09:[Data] | | QSJ:09 | OSJ:09:[Data] | 00000h<br>~<br>186A0h | 0.0 [Hz]<br>~<br>10000.0[Hz] | | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00<br>supports only<br>[59.94p/59.94i]<br>60.0Hz - 7200.0Hz<br>[29.97p]<br>30.0Hz - 7200.0Hz<br>[23.98p/24p]<br>24.0Hz - 7200.0Hz<br>[50p/50i]<br>50.0Hz～7200.0Hz<br>[25p]<br>25.0Hz～7200.0Hz |

| ITEM | Control Command | Reply for Control Command | Confirmation Command | Reply for Confirmation Command | Data | Data Contents | | Remarks | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Control and Response to contol | Response to Confirmation | | E300/A | E600 | E800 | E800A | E350 | E650 | E655 | E750 | E860 | HE100 | HC1500 | HC1800 | HE870 | HE50 | HE60 | HE120 | HE130 | HE40/HE65/HE70 | UE70 | UB300 | HR140 | UE150 |
| Chroma Phase | OSJ:0B:[Data] | | QSJ:0B | OSJ:0B:[Data] | 61h<br>~<br>80h<br>~<br>9Fh | -31<br>~<br>0<br>~<br>+31 | | | | | | | | | | | | | | | | | | | | | | | | V1.00 |
| AWB Gain Offset | OSJ:0C:[Data] | | QSJ:0C | OSJ:0C:[Data] | 0h<br>1h | Off<br>On | | | | | | | | | | | | | | | | | | | | | | | | V1.00 |
| ATW Target R | OSJ:0D:[Data] | | QSJ:0D | OSJ:0D:[Data] | 76h<br>~<br>80h<br>~<br>8Ah | -10<br>~<br>0<br>~<br>+10 | | | | | | | | | | | | | | | | | | | | | | | | V1.00 |
| ATW Target B | OSJ:0E:[Data] | | QSJ:0E | OSJ:0E:[Data] | 76h<br>~<br>80h<br>~<br>8Ah | -10<br>~<br>0<br>~<br>+10 | | | | | | | | | | | | | | | | | | | | | | | | V1.00 |
| Master Pedestal | OSJ:0F:[Data] | | QSJ:0F | OSJ:0F:[Data] | 738h<br>~<br>800h<br>~<br>8C8h | -200<br>~<br>0<br>~<br>+200 | | | | | | | | | | | | | | | | | | | | | | | | V1.00 |
| G Pedestal | OSJ:10:[Data] | | QSJ:10 | OSJ:10:[Data] | 032h<br>~<br>096h<br>~<br>0FAh | -100<br>~<br>0<br>~<br>+100 | | | | | | | | | | | | | | | | | | | | | | | | V1.00 |
| Pedestal Offset | OSJ:11:[Data] | | QSJ:11 | OSJ:11:[Data] | 0<br>1 | Off<br>On | | | | | | | | | | | | | | | | | | | | | | | | V1.00 |
| Detail Coring | OSJ:12:[Data] | | QSJ:12 | OSJ:12:[Data] | 00h<br>~<br>3Ch | 0<br>~<br>60 | | | | | | | | | | | | | | | | | | | | | | | | V1.00 |
| Level Depend. | OSJ:13:[Data] | | QSJ:13 | OSJ:13:[Data] | 79h<br>~<br>80h<br>~<br>87h | -7<br>~<br>0<br>~<br>7 | | | | | | | | | | | | | | | | | | | | | | | | V1.00 |
| DownCon Detail | OSJ:14:[Data] | | QSJ:14 | OSJ:14:[Data] | 0h<br>1h | OFF<br>ON | | | | | | | | | | | | | | | | | | | | | | | | V1.00 |
| DC. Master Detail | OSJ:15:[Data] | | QSJ:15 | OSJ:15:[Data] | 61h<br>~<br>80h<br>~<br>9Fh | -31<br>~<br>0<br>~<br>+31 | | | | | | | | | | | | | | | | | | | | | | | | V1.00 |
| DC. Detail Coring | OSJ:16:[Data] | | QSJ:16 | OSJ:16:[Data] | 00h<br>~<br>3Ch | 0<br>~<br>60 | | | | | | | | | | | | | | | | | | | | | | | | V1.00 |
| DC. V Detail Level | OSJ:17:[Data] | | QSJ:17 | OSJ:17:[Data] | 79h<br>~<br>80h<br>~<br>87h | -7<br>~<br>0<br>~<br>+7 | | | | | | | | | | | | | | | | | | | | | | | | V1.00 |
| DC. Detail Frequency | OSJ:18:[Data] | | QSJ:18 | OSJ:18:[Data] | 7Eh<br>~<br>80h<br>~<br>82h | -2<br>~<br>0<br>~<br>+2 | | | | | | | | | | | | | | | | | | | | | | | | V1.00 |
| DC. Level Depend. | OSJ:19:[Data] | | QSJ:19 | OSJ:19:[Data] | 79h<br>~<br>80h<br>~<br>87h | -7<br>~<br>0<br>~<br>+7 | | | | | | | | | | | | | | | | | | | | | | | | V1.00 |
| DC. Knee Ape Level | OSJ:1A:[Data] | | QSJ:1A | OSJ:1A:[Data] | 00h<br>01h<br>02h<br>03h<br>04h<br>05h | 0<br>1<br>2<br>3<br>4<br>5 | | | | | | | | | | | | | | | | | | | | | | | | V1.00 |
| B.Gamma Range | OSJ:1B:[Data] | | QSJ:1B | OSJ:1B:[Data] | 1h<br>2h<br>3h | 1<br>2<br>3 | | | | | | | | | | | | | | | | | | | | | | | | V1.00 |
| YI,YI,G Saturation | OSJ:1C:[Data] | | QSJ:1C | OSJ:1C:[Data] | 41h<br>~<br>80h<br>~<br>BFh | -63<br>~<br>0<br>~<br>63 | | | | | | | | | | | | | | | | | | | | | | | | V1.00 |
| YI,YI,G Phase | OSJ:1D:[Data] | | QSJ:1D | OSJ:1D:[Data] | 41h<br>~<br>80h<br>~<br>BFh | -63<br>~<br>0<br>~<br>63 | | | | | | | | | | | | | | | | | | | | | | | | V1.00 |
| 12G SDI/OPTICAL OUT Format | OSJ:1E:[Data] | | QSJ:1E | OSJ:1E:[Data] | 01h<br>02h<br>04h<br>05h<br>07h<br>08h<br>0Ah<br>10h<br>11h<br>14h<br>15h<br>16h<br>17h<br>18h<br>19h<br>1Ah<br>1Bh<br>21h<br>22h<br>23h | 720/59.94p<br>720/50p<br>1080/59.94i<br>1080/50i<br>1080/29.97PsF<br>1080/25PsF<br>1080/23.98PsF<br>1080/59.94p<br>1080/50p<br>1080/29.97p<br>1080/25p<br>1080/23.98p (over 59.94i/p)<br>2160/29.97p<br>2160/25p<br>2160/59.94p<br>2160/50p<br>2160/23.98p<br>2160/24p<br>1080/24p<br>1080/23.98p | | | | | | | | | | | | | | | | | | | | | | | | | | | | V1.00 |
| 12G SDI/OPTICAL OUT<br>3G SDI Out | OSJ:20:[Data] | | QSJ:20 | OSJ:20:[Data] | 0h<br>1h | Level A<br>Level B | | | | | | | | | | | | | | | | | | | | | | | | V1.00 |
| 3G SDI Out<br>Format | OSJ:21:[Data] | | QSJ:21 | OSJ:21:[Data] | 01h<br>02h<br>04h<br>05h<br>07h<br>08h<br>0Ah<br>10h<br>11h<br>14h<br>15h<br>16h<br>22h<br>23h | 720/59.94p<br>720/50p<br>1080/59.94i<br>1080/50i<br>1080/29.97PsF<br>1080/25PsF<br>1080/23.98PsF<br>1080/59.94p<br>1080/50p<br>1080/29.97p<br>1080/25p<br>1080/23.98p (over 59.94i/p)<br>1080/24p<br>1080/23.98p | | | | | | | | | | | | | | | | | | | | | | | | | | | | V1.00 |
| 3G SDI Out<br>HDR Output Select | OSJ:22:[Data] | | QSJ:22 | OSJ:22:[Data] | 0h<br>1h<br>2h | SDR<br>HDR(2020)<br>HDR(709) | | | | | | | | | | | | | | | | | | | | | | | | V1.00 |

| ITEM | Control Command | Reply for Control Command | Confirmation Command | Reply for Confirmation Command | Data | Data Contents | | | Remarks | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Control and Response to contol | Response to Confirmation | | | E300/A | E600 | E800 | E800A | E350 | E650 | E655 | E750 | E860 | HE100 | HC1500 | HC1800 | HE870 | HE50 | HE60 | HE120 | HE130 | HE40/HE65/HE70 | UE70 | UB300 | HR140 | UE150 |
| MONI Out<br>Format | OSJ:23:[Data] | | QSJ:23 | OSJ:23:[Data] | 01h<br>02h<br>04h<br>05h<br>07h<br>08h<br>0Ah<br>14h<br>15h<br>16h<br>22h<br>23h | 720/59.94p<br>720/50p<br>1080/59.94i<br>1080/50i<br>1080/29.97PsF<br>1080/25PsF<br>1080/23.98PsF<br>1080/29.97p<br>1080/25p<br>1080/23.98p (over 59.94i/p)<br>1080/24p<br>1080/23.98p | | ---- | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 |
| MONI Out<br>HDR Output Select | OSJ:24:[Data] | | QSJ:24 | OSJ:24:[Data] | 0h<br>1h<br>2h | SDR<br>HDR(2020)<br>HDR(709) | | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 |
| HDMI Out<br>Format | OSJ:25:[Data] | | QSJ:25 | OSJ:25:[Data] | 01h<br>02h<br>04h<br>05h<br>10h<br>11h<br>14h<br>15h<br>16h<br>17h<br>18h<br>19h<br>1Ah<br>1Bh<br>21h<br>22h<br>23h | 720/59.94p<br>720/50p<br>1080/59.94i<br>1080/50i<br>1080/59.94p<br>1080/50p<br>1080/29.97p<br>1080/25p<br>1080/23.98p( over 59.94i/p)<br>2160/29.97p<br>2160/25p<br>2160/59.94p<br>2160/50p<br>2160/23.98p<br>2160/24p<br>1080/24p<br>1080/23.98p | | ---- | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 |
| HDMI Out<br>HDR Output Select | OSJ:26:[Data] | | QSJ:26 | OSJ:26:[Data] | 0h<br>1h<br>2h | SDR<br>HDR(2020)<br>HDR(709) | | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 |
| Color Bar Tone | OSJ:27:[Data] | | QSJ:27 | OSJ:27:[Data] | 0h<br>1h<br>2h | Off<br>Low<br>Normal | | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 |
| TOUTCH AF | OSJ:28:[Data1]:[Data2] | | - | - | [Data1]<br>00h<br>-<br>64h<br>[Data2]<br>00h<br>-<br>64h | [Data1]H Pos.<br>0%<br>-<br>100%<br>[Data2]V Pos.<br>0%<br>-<br>100% | ---- | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 |
| Preset Speed Unit | OSJ:29:[Data] | | QSJ:29 | OSJ:29:[Data] | 0h<br>1h | Speed Table<br>Time | | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 |
| Preset Crop | OSJ:2A:[Data] | | QSJ:2A | OSJ:2A:[Data] | 0h<br>1h | Off<br>On | | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 |
| Preset Thumbnail Update | OSJ:2B:[Data] | | QSJ:2B | OSJ:2B:[Data] | 0h<br>1h | Off<br>On | | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 |
| Preset Name | OSJ:2C:[Data] | | QSJ:2C | OSJ:2C:[Data] | 0h<br>1h | Reset<br>Hold | | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 |
| PT. Speed Mode | OSJ:2D:[Data] | | QSJ:2D | OSJ:2D:[Data] | 0h<br>1h | Normal<br>Fast | | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 |
| UHD Crop | OSJ:2E:[Data] | | QSJ:2E | OSJ:2E:[Data] | 0h<br>1h | Off<br>On | | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 |
| Crop H POS.(YL) | OSJ:2F:[Data] | | QSJ:2F | OSJ:2F:[Data] | 000h<br>-<br>780h | 0<br>-<br>1920 | | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00<br>(1step=2pix) |
| Crop V POS.(YL) | OSJ:30:[Data] | | QSJ:30 | OSJ:30:[Data] | 000h<br>-<br>438h | 0<br>-<br>1080 | | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 |
| Crop H POS.(G) | OSJ:31:[Data] | | QSJ:31 | OSJ:31:[Data] | 000h<br>-<br>780h | 0<br>-<br>1920 | | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00<br>(1step=2pix) |
| Crop V POS.(G) | OSJ:32:[Data] | | QSJ:32 | OSJ:32:[Data] | 000h<br>-<br>438h | 0<br>-<br>1080 | | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 |
| Crop H POS.(MG) | OSJ:33:[Data] | | QSJ:33 | OSJ:33:[Data] | 000h<br>-<br>780h | 0<br>-<br>1920 | | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00<br>(1step=2pix) |
| Crop V POS.(MG) | OSJ:34:[Data] | | QSJ:34 | OSJ:34:[Data] | 000h<br>-<br>438h | 0<br>-<br>1080 | | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 |
| Save Preset Name (Single) | OSJ:35:[Data1]:[Data2] | | QSJ:35:[Data1] | OSJ:35:[Data1]:[Data2] | [Data1]<br>00<br>-<br>99<br>[Data2]<br>xxxxxxxxxxxxxx | [Data1]<br>Preset001<br>-<br>Preset100<br>[Data2]<br>Preset Name (Fixed 15 Charactors) | | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00<br>[Data2]<br>use only follow charactors<br>A - Z (Alphabet)<br>1 - 9 (Decimal Number) |
| Delete Preset Name (Single) | OSJ:36:[Data] | - | - | - | [Data]<br>00<br>-<br>99 | [Data]<br>Preset001<br>-<br>Preset100 | ---- | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 |
| Delete Preset Name (All) | OSJ:37 | - | - | - | - | ---- | ---- | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 |
| Update Preset Thumbnail | OSJ:39:[Data] | - | - | - | [Data]<br>00<br>-<br>99 | [Data]<br>Preset001<br>-<br>Preset100 | ---- | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 |
| Delete Preset Thumbnail (Single) | OSJ:3A:[Data] | - | - | - | [Data]<br>00<br>-<br>99 | [Data]<br>Preset001<br>-<br>Preset100 | ---- | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 |
| Delete Preset Thumbnail (All) | OSJ:3B | - | - | - | - | ---- | ---- | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 |
| Preset Name / Preset Thumbnail Counter | - | | QSJ:3C:[Data1] | OSJ:3C:[Data1]:[Data2] | [Data1]<br>00h<br>01h<br>02h<br>03h<br>04h<br>05h<br>06h<br>07h<br>08h<br>09h<br>0Ah<br>0Bh<br>[Data2]<br>000000000h<br>-<br>FFFFFFFFFh | ---- | [Data1]<br>Preset 001-009<br>Preset 010-018<br>Preset 019-027<br>Preset 028-036<br>Preset 037-045<br>Preset 046-054<br>Preset 055-063<br>Preset 064-072<br>Preset 073-081<br>Preset 082-090<br>Preset 091-099<br>Preset 100<br>[Data2]<br>000000000h<br>-<br>FFFFFFFFFh | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 |
| Zoom Scale | - | | QSJ:3D | OSJ:3D:[Data] | 000h<br>-<br>3E7h | ---- | 0<br>-<br>999 | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 |
| Operation Lock | OSJ:3E:[Data] | - | - | - | xxxxxxxx | Any Information (40 Charactors) | ---- | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 |
| Release Operation Lock | OSJ:3F | - | - | - | - | ---- | ---- | | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 |

| ITEM | Control Command | Reply for Control Command | Confirmation Command | Reply for Confirmation Command | Data | Data Contents | | Remarks | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Control and Response to contol | Response to Confirmation | | E300/A | E600 | E800 | E800A | E350 | E650 | E655 | E750 | E860 | HE100 | HC1500 | HC1800 | HE870 | HE50 | HE60 | HE120 | HE130 | HE40/HE65/HE70 | UE70 | UB300 | HR140 | UE150 |
| Operation Lock Status | - | | QSJ:40 | OSJ:40:[Data1]:[Data2] | [Data1]<br>0<br>1<br>[Data2]<br>xxxxxxxx | ---- | [Data1]<br>Unlock<br>Lock<br>[Data2]<br>Any Information (40 Charactors) | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 |
| External Output<br>Menu Setting 1 | OSJ:41:[Data] | | QSJ:41 | OSJ:41:[Data] | 0<br>1<br>2 | Off<br>R-Tally<br>G-Tally | | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 |
| External Output<br>Menu Setting 2 | OSJ:42:[Data] | | QSJ:42 | OSJ:42:[Data] | 0<br>1<br>2 | Off<br>R-Tally<br>G-Tally | | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 |
| Power On Position | OSJ:45:[Data] | | QSJ:45 | OSJ:45:[Data] | 0<br>1<br>2<br>3 | None<br>Standby<br>Home<br>Preset | | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 |
| Power On Preset Number | OSJ:46:[Data] | | QSJ:46 | OSJ:46:[Data] | 00<br>-<br>99 | Preset001<br>-<br>Preset100 | | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 |
| 12G SDI/Fiber Out<br>HDR Output Select | OSJ:1F:[Data] | | QSJ:1F | OSJ:1F:[Data] | 0h<br>1h<br>2h | SDR<br>HDR(2020)<br>HDR(709) | | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V2.00 |
| AWB COLOR TEMPERATURE IN | OSJ:48:[Data] | | - | - | 1h<br>-<br>Ah | 1<br>-<br>10 | | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V2.00 |
| AWB COLOR TEMPERATURE D | OSJ:49:[Data] | | - | - | 1h<br>-<br>Ah | 1<br>-<br>10 | | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V2.00 |
| AWB COLOR TEMPERATURE | OSJ:4A:[Data1]:[Data2] | | QSJ:4A | OSJ:4A:[Data1]:[Data2] | [Data1]<br>007D0h<br>-<br>03A98h<br>[Data2]<br>0h<br>1h<br>2h | [Data1]<br>2000K<br>-<br>15000K<br>[Data2]<br>Valid<br>Under<br>Over | | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V2.00 |
| AWB R Gain | OSJ:4B:[Data] | | QSJ:4B | OSJ:4B:[Data] | 670h<br>-<br>800h<br>-<br>990h | -400<br>-<br>0<br>-<br>400 | | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V2.00 |
| AWB B Gain | OSJ:4C:[Data] | | QSJ:4C | OSJ:4C:[Data] | 670h<br>-<br>800h<br>-<br>990h | -400<br>-<br>0<br>-<br>400 | | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V2.00 |
| AWB G Axis | OSJ:4D:[Data] | | QSJ:4D | OSJ:4D:[Data] | 670h<br>-<br>800h<br>-<br>990h | -400<br>-<br>0<br>-<br>400 | | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V2.00 |
| Digital Extender | OSJ:4E:[Data] | | QSJ:4E | OSJ:4E:[Data] | 0<br>1<br>2 | OFF<br>x1.4<br>x2.0 | | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V2.00 |
| Adaptive Matrix | OSJ:4F:[Data] | | QSJ:4F | OSJ:4F:[Data] | 0<br>1 | OFF<br>ON | | | ---- | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V2.00 |

# P/T Control Protocol

This is a program to control Panasonic PAN/TILT system from PC by serial communication.

| | |
|---|---|
| Method | Half Duplex |
| Commnunication Speed | 9600bps |
| Data bit | 8bit |
| Stop bit | 1bit |
| Prity | None |
| Flow contorol | None |

(Electrical Specification)
Connecter : Mojdular 8pin
Compatible with RS422
4line system(TX+,TX-/send, RX+,RX-/Recieve)

(Process)
(1) PC —— Command ⟶ CAMERA
(2) CAMERA —— Command ⟶ PC (In most P/T commands, there is no reply.)

Normally it is processed as mentioned above,but in case of error,it ends by replying error code(*1) in (2).

(*1)Error code

| Item | Error code | Contents |
|---|---|---|
| Unsupported | eR1[CR] | The Command is not supported by CAMERA. |
| System busy | eR2[CR] | CAMERA can not process the command for running the other processing. |
| Out of range | eR3[CR] | Data is out of range. |

ex)1 PAN Stop command

| # | P | 5 | 0 | [CR] |
|---|---|---|---|---|
| H'23 | H'50 | H'35 | H'30 | H'0D |

| ITEM | Control Command | Confirmation Command | Responce Command | Data | Data Contents | | Remarks | | | | | | | | | | | | Remarks | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Control and Response to control | Response to Confirmation | | PH300 | PH300A | PH500 | PH600 | PH350 | PH400 w/:TP400 or w/:TF400 | PH360 | PH650 | PH405 | PH370 | HE100 | | PH300 | PH300A | PH500 | PH600 | PH350 | PH400 w/:TP400 or w/:TF400 | PH360 | PH650 | PH405 | HE100 | HE50 | HE60 | HE120 | HE130 | HE40-HE65-HE70 | UE70 | HR140 | UE150 |
| Power | #O[Data] | #O | o[Data] | 0<br>f<br>1<br>n<br>2<br>3 | Power OFF<br>Power OFF<br>Power ON<br>Power ON<br>----<br>---- | Power OFF<br>Power OFF<br>Power ON(w/ Camera TX)<br>Power ON(w/o/ Camera TX)<br>Starting | Camera Power & P/T Control<br><br>"Starting" is supported only Responce Command. | without Camera TX -> Controller RX line | | | | with Camera TX -> Controller RX line | | | | | | | Camera Power & P/T Control | without Camera TX -> Controller RX line | | | | with Camera TX -> Controller RX line | | | | | | with Camera TX -> Controller RX line | with Camera TX -> Controller RX line | with Camera TX -> Controller RX line | with Camera TX -> Controller RX line | with Camera TX -> Controller RX line | with Camera TX -> Controller RX line | with Camera TX -> Controller RX line | with Camera TX -> Controller RX line | V1.00 |
| Pan Speed Control | #P[Data] | ---- | pS[Data] | 01<br>~<br>50<br>~<br>99 | Left Max. Speed<br>~<br>Stop<br>~<br>Right Max. Speed | ---- | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | V1.00 | V1.00L01 | | | | | | | | | | | V1.00L01 | V1.00 | V3.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 |
| Tilt Speed Control | #T[Data] | ---- | tS[Data] | 01<br>~<br>50<br>~<br>99 | Down Max. Speed<br>~<br>Stop<br>~<br>UP Max. Speed | ---- | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | V1.00 | V1.00L01 | | | | | | | | | | | V1.00L01 | V1.00 | V3.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 |
| Zoom Speed Control | #Z[Data] | ---- | zS[Data] | 01<br>~<br>49<br>50<br>51<br>~<br>99 | Wide Max. Speed<br>~<br>Wide Min. Speed<br>Stop<br>Tele Min. Speed<br>~<br>Tele Max. Speed | ---- | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | V1.00 | V1.00L01 | | | | | | | | | | | V1.00L01 | V1.00 | V3.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 |
| Zoom Position Control | #AXZ[Data] | #AXZ | axz[Data] | 555h<br>~<br>FFFh | Wide<br>~<br>Tele | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | V1.00 | V1.00L01 | | ---- | | | | | ---- | | | | V1.00L01 | V1.00 | V3.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 |
| Zoom Position Control | #AYZ[Data] | ---- | axz[Data] | [Response to control]<br>001<br>~<br>999<br>[Response to Confirmation]<br>555h<br>~<br>FFFh | Wide<br>~<br>Tele | Wide<br>~<br>Tele | | | | | | | | | | | | | | ---- | | | | | ---- | | | | V1.00L01 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| Focus Speed Control | #F[Data] | ---- | fS[Data] | 01<br>~<br>49<br>50<br>51<br>~<br>99 | Near Max. Speed<br>~<br>Near Min. Speed<br>Stop<br>Far Min. Speed<br>~<br>Far Max. Speed | ---- | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | V1.00 | V1.00L01 | | | | | | | | | | | V1.00L01 | V1.00 | V3.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 |
| Focus Position Control | #AXF[Data] | #AXF | axf[Data] | 555h<br>~<br>FFFh | Near<br>~<br>Far | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | V1.00 | V1.00L01 | | ---- | | | | | ---- | | | | V1.00L01 | V1.00 | V3.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 |
| Focus Position Control | #AYF[Data] | ---- | axf[Data] | [Response to control]<br>001<br>~<br>999<br>[Response to Confirmation]<br>555h<br>~<br>FFFh | Near<br>~<br>Far | Near<br>~<br>Far | | | | | | | | | | | | | | ---- | | | | | ---- | | | | V1.00L01 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| Roll Speed Control | #RO[Data] | ---- | rO[Data] | 01<br>~<br>49<br>50<br>51<br>~<br>99 | CCW Max. Speed<br>~<br>CCW Min. Speed<br>Stop<br>CW Min. Speed<br>~<br>CW Max. Speed | ---- | | ---- | ---- | ---- | ---- | ---- | with RL400 | ---- | ---- | ---- | ---- | ---- | | ---- | ---- | ---- | ---- | ---- | with RL400 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| Iris Control | #I[Data] | #I | iC[Data] | 01<br>~<br>99 | Iris Close<br>~<br>Iris Open | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | V1.00 | V1.00L01 | | | | | | | | | | | V1.00L01 | V1.00 | V3.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 |
| Iris Control | #AXI[Data] | #AXI | axi[Data] | 555h<br>~<br>FFFh | Iris Close<br>~<br>Iris Open | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | V1.00 | V1.00L01 | | | | | | | | | | | V1.00L01 | V1.00 | V3.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 |
| Iris Control | #AYI[Data] | ---- | axi[Data] | [Response to control]<br>001<br>~<br>999<br>[Response to Confirmation]<br>555h<br>~<br>FFFh | Iris Close<br>~<br>Iris Open | Iris Close<br>~<br>Iris Open | | | | | | | | | | | | | | | | | | | | | | | V1.00L01 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| Extender/AF Control | #D1[Data] | #D1 | d1[Data] | 0<br>1 | OFF<br>ON | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | V1.00 | V1.00L01 | | | | | | | | | | | V1.00L01 | V1.00 | V3.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 |
| ND Control | #D2[Data] | #D2 | d2[Data] | 0<br>1 | OFF<br>ON | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | ---- | ---- | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| Iris Auto/Manual | #D3[Data] | #D3 | d3[Data] | 0<br>1 | Manual Iris<br>Auto Iris | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | V1.00 | V1.00L01 | | | | | | | | | | | V1.00L01 | V1.00 | V3.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 |
| Lamp Control | #D4[Data] | #D4 | d4[Data] | 0<br>1 | OFF<br>ON | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | ---- | ---- | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| Lamp Alarm | #D5 | ---- | d5[Data] | 0<br>1 | Alarm OFF<br>Alarm ON | ---- | | with PS300 or PS300A | | | ---- | with PS300 or PS300A | ---- | with PS300 or PS300A | ---- | ---- | ---- | ---- | | with PS300 or PS300A | | | ---- | with PS300 or PS300A | ---- | with PS300 or PS300A | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| OPTION SW Control | #D6[Data] | #D6 | d6[Data] | 0<br>1 | OFF<br>ON | | | with PS300 or PS300A<br>Control Command Only | | | ---- | with PS300 or PS300A<br>Control Command Only | ---- | with PS300 or PS300A<br>Control Command Only | ---- | ---- | V1.00 | V1.00L01 | | with PS300 or PS300A<br>Control Command Only | | | ---- | with PS300 or PS300A<br>Control Command Only | ---- | with PS300 or PS300A<br>Control Command Only | ---- | ---- | V1.00L01 | V1.00<br>0: Day<br>1: Night | V3.00<br>0: Day<br>1: Night | ---- | V1.00<br>0: Day<br>1: Night | V1.00<br>0: Day<br>1: Night | V1.00<br>0: Day<br>1: Night | V1.00<br>0: Day<br>1: Night | V1.00<br>0: Day<br>1: Night |
| Defroster Control | #D7[Data] | ---- | d7[Data] | 0<br>1 | OFF<br>ON | ---- | | ---- | ---- | ---- | with CH600 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | ---- | ---- | ---- | with CH600 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00<br>0 : Auto<br>1 : On | ---- |
| Wiper Control | #D8[Data] | ---- | d8[Data] | 0<br>1 | OFF<br>ON | ---- | | ---- | ---- | ---- | with CH600 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | ---- | ---- | ---- | with CH600 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00<br>0 : Off<br>1 : Fast | ---- |
| Heater/Fan Control | #D9[Data] | ---- | d9[Data] | 0<br>1 | OFF<br>ON | ---- | | ---- | ---- | ---- | with CH600 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | ---- | ---- | ---- | with CH600 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00<br>(Heater)<br>0 : Auto<br>1 : On | ---- |
| Tally Control | #DA[Data] | #DA | dA[Data] | 0<br>1 | OFF<br>ON | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | V1.00 | V1.00L01 | | ---- | | | | | ---- | | | | V1.00L01 | V1.00 | V3.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 |
| Request Latest Recall Preset.No. | ---- | #S | s[Data] | 00<br>~<br>99<br><u>PH360,PH400,PH405,PH650</u><br>00<br>~<br>49 | ---- | Preset 1<br>~<br>Preset 100<br><u>PH360,PH400,PH405,PH650</u><br>Preset 01<br>~<br>Preset 50 | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | V1.00 | V1.00L01 | | ---- | | | | | ---- | | | | V1.00L01 | V1.00 | V3.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 |
| Save Preset Memory | #M[Data] | ---- | s[Data] | 00<br>~<br>99<br><u>PH360,PH400,PH405,PH650</u><br>00<br>~<br>49 | Preset001<br>~<br>Preset100<br><u>PH360,PH400,PH405,PH650</u><br>Preset 01<br>~<br>Preset 50 | ---- | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | V1.00 | V1.00L01 | | | | | | | | | | | V1.00L01 | V1.00 | V3.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 |
| Recall Preset Memory | #R[Data] | ---- | s[Data] | 00<br>~<br>99<br><u>PH360,PH400,PH405,PH650</u><br>00<br>~<br>49 | Preset001<br>~<br>Preset100<br><u>PH360,PH400,PH405,PH650</u><br>Preset 01<br>~<br>Preset 50 | ---- | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | V1.00 | V1.00L01 | | | | | | | | | | | V1.00L01 | V1.00 | V3.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 |
| Preset completion notification | ---- | ---- | s[Data] | 00<br>~<br>99<br><u>PH360,PH400,PH405,PH650</u><br>00<br>~<br>49 | <u>Preset001</u><br>~<br><u>Preset100</u><br><u>PH360,PH400,PH405,PH650</u><br><u>Preset 01</u><br>~<br><u>Preset 50</u> | ---- | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | V1.00 | V1.00L01 | | ---- | | | | | ---- | | | | V1.00L01 | V1.00 | V3.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 |
| Preset Mode Setting | #RT[Data] | #RT | rt[Data] | 0<br>1 | Normal<br>Diagonal | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | ---- | ---- | | ---- | ---- | ---- | ---- | | ---- | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

| ITEM | Control Command | Confirmation Command | Responce Command | Data | Data Contents | | Remarks | | | | | | | | | | | | Remarks | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Control and Response to control | Response to Confirmation | | PH300 | PH300A | PH500 | PH600 | PH550 | PH400 w/ TP400 or w/ TF400 | PH360 | PH650 | PH405 | PH370 | HE100 | | PH300 | PH300A | PH500 | PH600 | PH550 | PH400 w/ TP400 or w/ TF400 | PH360 | PH650 | PH405 | HE100 | HE50 | HE60 | HE120 | HE130 | HE40-1/HE65-1/HE70 | UE70 | HR140 | UE150 |
| Limitation Setting | #L[Data] | ---- | [Data] | Controller -> P/T<br>1<br>2<br>3<br>4<br><br>P/T -> Controller<br>0<br>1 | Tilt Up<br>Tilt Down<br>Pan Left<br>Pan Right<br><br>Release<br>Set | ---- | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | V1.00 | V1.00L01 | | | | | | | | | | | V1.00L01 | V1.00 | V3.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 |
| Landing Setting | #R[Data] | ---- | r[Data] | 0<br>1 | Just Landing<br>Soft Landing | ---- | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | V1.00 | V1.00L01 | | | | | | | ---- | | | | V1.00L01 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| Request Zoom Position (Output D/A Data) | ---- | #GZ | gz[Data] | 555h<br>~<br>FFFh<br><br>"----" | ---- | Wide<br>~<br>Tele<br><br>@Power OFF | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | V1.00 | V1.00L01 | | | | | | | ---- | | | | V1.00L01 | V1.00 | V3.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 |
| Request Focus Position (Output D/A Data) | ---- | #GF | gf[Data] | 555h<br>~<br>FFFh<br><br>"----" | ---- | Near<br>~<br>Far<br><br>@Power OFF | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | V1.00 | V1.00L01 | | | | | | | ---- | | | | V1.00L01 | V1.00 | V3.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 |
| Request Iris Pisition (Output D/A Data) | ---- | #GI | gi[Data1][Data2] | [Data1]<br>555h<br>~<br>FFFh<br><br>"----"<br><br>[Data2]<br>0<br>1 | ---- | [Data1]<br>Close<br>~<br>Open<br><br>@Power OFF<br><br>[Data2]<br>Manual Iris<br>Auto Iris | #Iris Manual | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | V1.00 | V1.00L01 | | | | | | | ---- | | | | V1.00L01 | V1.00 | V3.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 |
| Tilt Range | #AGL[Data] | #AGL | aGL[Data] | 0<br>1 | Narrow(190deg)<br>Wide(300deg) | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| Request Software Vertion | ---- | #V? | \Version Data] | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | V1.00 | V1.00L01 | #Iris Manual | | | | | | ---- | | | | V1.00L01 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| TALLY Enable | #TAE[Data] | #TAE | tAE[Data] | 0<br>1 | Disable<br>Enable | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | ---- | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | V3.00 | V1.00 | V1.00 | V1.00 | V1.00 | ---- | V1.00 |
| Install Pisiton | #INS[Data] | #INS | iNS[Data] | 0<br>1 | Desktop<br>Hanging | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | ---- | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | V3.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 |
| Speed With Zoom POS | #SWZ[Data] | #SWZ | sWZ[Data] | 0<br>1 | OFF<br>ON | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | ---- | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | V3.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 |
| Pan/Tilt Absolute Position Control | #APC[Data1][Data2] | #APC | aPC[Data1][Data2] | [Data1]<br>0000h<br>~<br>8000h<br>~<br>FFFFh<br><br>[Data2]<br>0000h<br>~<br>8000h<br>~<br>FFFFh | [Data1]Pan Position<br>CCW Limit<br>~<br>Center<br>~<br>CW Limit<br><br>[Data2]Tilt Position<br>UP Limit<br>~<br>Center<br>~<br>DOWN Limit | [Data1]Pan Position<br>CCW Limit<br>~<br>Center<br>~<br>CW Limit<br><br>[Data2]Tilt Position<br>UP Limit<br>~<br>Center<br>~<br>DOWN Limit | 1 step is equivalent to 29.7 seconds | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | ---- | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00<br>supports only<br>Pan<br>(5069(CCW Limit)-D2F5(CW Limit)<br>Tilt<br>(5555(UP Limit)-8E38(DOWN Limit) | V3.00<br>supports only<br>Pan<br>(5069(CCW Limit)-D2F5(CW Limit)<br>Tilt<br>(5555(UP Limit)-8E38(DOWN Limit) | V1.00<br>supports only<br>Pan<br>(5069(CCW Limit)-D2F5(CW Limit)<br>Tilt<br>(C71(UP Limit)-8E38(DOWN Limit) | V1.00<br>supports only<br>Pan<br>(5069(CCW Limit)-D2F5(CW Limit)<br>Tilt<br>(C71(UP Limit)-8E38(DOWN Limit) | V1.00<br>supports only<br>Pan<br>(5069(CCW Limit)-D2F5(CW Limit)<br>Tilt<br>(5555(UP Limit)-8E38(DOWN Limit) | V1.00<br>supports only<br>Pan<br>(5069(CCW Limit)-D2F5(CW Limit)<br>Tilt<br>(5555(UP Limit)-8E38(DOWN Limit) | V1.00<br>supports only<br>Pan<br>(5069(CCW Limit)-D2F5(CW Limit)<br>Tilt<br>(C71(UP Limit)-8E38(DOWN Limit) | V1.00<br>supports only<br>Pan<br>(5069(CCW Limit)-D2F5(CW Limit)<br>Tilt<br>(C71(UP Limit)-8E38(DOWN Limit) |
| Limitation Control | #LC[Data1][Data2] | #LC[Data1] | lC[Data1][Data2] | [Data1]<br>1<br>2<br>3<br>4<br><br>[Data2]<br>0<br>1 | [Data1]<br>Tilt Up<br>Tilt Down<br>Pan Left<br>Pan Right<br><br>[Data2]<br>Release<br>Set | [Data1]<br>Tilt Up<br>Tilt Down<br>Pan Left<br>Pan Right<br><br>[Data2]<br>Release<br>Set | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | V3.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 |
| Pan Tilt Speed Control | #PTS[Data1][Data2] | ---- | pTS[Data1][Data2] | [Data1]<br>01<br>~<br>50<br>~<br>99<br><br>[Data2]<br>01<br>~<br>50<br>~<br>99 | [Data1]<br>Left Max. Speed<br>~<br>Stop<br>~<br>Right Max. Speed<br><br>[Data2]<br>Down Max. Speed<br>~<br>Stop<br>~<br>UP Max. Speed | ---- | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | V3.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 |
| Wireless Control | #WLC[Data1] | #WLC | wLC[Data1] | 0<br>1 | Disable<br>Enable | | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | V3.00 | V1.00 | V1.00 | V1.00 | V1.00 | ---- | V1.00 |
| SOFTWARE VERSION | #GSV[Data1]V[Data2].[Data3][Data4].[Data5][data6] | #GSV[Data1] | gSV[Data1]V[Data2].[Data3][Data4].[Data5][data6] | [Data1]<br>0<br>1<br>2<br>3<br>4<br>5<br>6<br>7<br>8<br>9<br>[Data2]<br>00~99<br>[Data3]<br>00~99<br>[Data4]<br>E<br>L<br>[Data5]<br>00~99<br>[data6]<br>0<br>1<br>2 | [Data1]<br>(Unit No.0)<br>(Unit No.1)<br>(Unit No.2)<br>(Unit No.3)<br>(Unit No.4)<br>(Unit No.5)<br>(Unit No.6)<br>(Unit No.7)<br>(Unit No.8)<br>(Unit No.9)<br><br>[Data2]<br>MAJOR VERSION<br>[Data3]<br>MINOR VERSION<br>[Data4]<br>Debug Build<br>Release Build<br>[Data5]<br>REVISION<br>[data6]<br>NTSC<br>PAL<br>Other | [Data1]<br>(Unit No.0)<br>(Unit No.1)<br>(Unit No.2)<br>(Unit No.3)<br>(Unit No.4)<br>(Unit No.5)<br>(Unit No.6)<br>(Unit No.7)<br>(Unit No.8)<br>(Unit No.9)<br><br>[Data2]<br>MAJOR VERSION<br>[Data3]<br>MINOR VERSION<br>[Data4]<br>Debug Build<br>Release Build<br>[Data5]<br>REVISION<br>[data6]<br>NTSC<br>PAL<br>Other | | | | | | | | | | | | | V1.00 | [Data1]<br>Pan Tilt<br>UNIT CPU<br>Pan Tilt<br>UNIT IR<br>Camera<br>Control<br>Unit CPU<br>Camera<br>Control<br>Unit FPGA<br>Camera<br>Process<br>Unit CPU<br>Camera<br>Process<br>Unit FPGA<br>reserve<br>[Data2]<br>MAJOR<br>VERSION<br>[Data3]<br>MINOR<br>VERSION | | | | | | | | | | | | | | | | | [Data1]<br>Pan Tilt CPU<br>Camera CPU<br>Camera FPGA<br>Network CPU<br>OUT FPGA<br>reserve<br>reserve<br>reserve<br>reserve<br>reserve<br>reserve<br>[Data2]<br>MAJOR VERSION<br>[Data3]<br>MINOR VERSION<br>[Data4]<br>(Debug Build)<br>(Release Build)<br>[Data5]<br>(REVISION)<br>[data6]<br>NTSC<br>PAL<br>Other | [Data1]<br>Pan Tilt CPU<br>Camera CPU<br>Camera FPGA<br>Network CPU<br>OUT FPGA<br>reserve<br>reserve<br>reserve<br>Camera EEPROM<br>reserve<br>[Data2]<br>MAJOR VERSION<br>[Data3]<br>MINOR VERSION<br>[Data4]<br>(Debug Build)<br>(Release Build)<br>[Data5]<br>(REVISION)<br>[data6]<br>NTSC<br>PAL<br>Other | [Data1]<br>Servo CPU<br>CameraMain CPU<br>Frontend FPGA<br>Network CPU<br>Backend FPGA<br>Interface CPU<br>Lens FPGA<br>Interface EEPROM<br>Camera EEPROM<br>Lens EEPROM<br>[Data2]<br>MAJOR VERSION<br>[Data3]<br>MINOR VERSION<br>[Data4]<br>(Debug Build)<br>(Release Build)<br>[Data5]<br>(REVISION)<br>[data6]<br>NTSC<br>PAL | [Data1]<br>Servo CPU<br>CameraMain CPU<br>COM FPGA<br>Network CPU<br>AVIO FPGA<br>Interface CPU<br>Lens FPGA<br>Interface EEPROM<br>reserve<br>reserve<br>[Data2]<br>MAJOR VERSION<br>[Data3]<br>MINOR VERSION<br>[Data4]<br>(Debug Build)<br>(Release Build)<br>[Data5]<br>(REVISION)<br>[data6]<br>NTSC<br>PAL | supports only #GSV[Data1]<br>[Data1]<br>Servo CPU<br>Cam CPU<br>FPGA<br>BE CPU<br>reserve<br>reserve<br>Interface CPU<br>reserve<br>Interface EEPROM<br>reserve<br>reserve<br>[Data2]<br>00<br>[Data3]<br>VERSION<br>[Data4]<br>L<br>[Data5]<br>00<br>[data6]<br>NTSC<br>PAL | supports only #GSV[Data1]<br>[Data1]<br>Servo CPU<br>Cam CPU<br>FPGA<br>BE CPU<br>reserve<br>Interface CPU<br>reserve<br>Interface EEPROM<br>reserve<br>reserve<br>[Data2]<br>00<br>[Data3]<br>VERSION<br>[Data4]<br>L<br>[Data5]<br>00<br>[data6]<br>NTSC<br>PAL | [Data1]<br>Servo CPU<br>CameraMain CPU<br>COM FPGA<br>Network CPU<br>AVIO FPGA<br>Interface CPU<br>Lens FPGA<br>Interface EEPROM<br>reserve<br>reserve<br>[Data2]<br>MAJOR VERSION<br>[Data3]<br>MINOR VERSION<br>[Data4]<br>(Debug Build)<br>(Release Build)<br>[Data5]<br>(REVISION)<br>[data6]<br>NTSC<br>PAL | supports only #GSV[Data1]<br>[Data1]<br>Servo CPU<br>Camera CPU<br>COM FPGA<br>Main Network CPU<br>AVIO FPGA<br>Interface CPU<br>Lens CPU<br>Interface EEPROM<br>reserved<br>BE EEPROM<br>[Data2]<br>MAJOR VERSION<br>[Data3]<br>MINOR VERSION<br>[Data4]<br>(Debug Build)<br>(Release Build)<br>[Data5]<br>(REVISION)<br>[data6]<br>NTSC<br>PAL |
| Error Status Info. | ---- | #RER | rER[Data] | 00h<br>01h<br>~<br>56h | ---- | Normal<br>(Error1)<br>~<br>(Error86) | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | V1.00L00 | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00<br>00h: Normal<br>03h: Motor Driver Error<br>04h: Pan Sensor Error<br>05h: Tilt Sensor Error<br>06h: Controller RX Over run Error<br>07h: Controller RX Framing Error<br>08h: Network RX Over run Error<br>09h: Network RX Framing Error<br>17h: Controller RX Command Buffer Overflow<br>19h: Network RX Command Buffer Overflow<br>21h: System Error<br>22h: Spec Limit Over<br>23h: FPGA Config Error<br>24h: Network communication Error<br>30h: Lvds_Adjustmet_NG<br>31h: Bar_Signal_Check_NG | V3.00<br>00h: Normal<br>03h: Motor Driver Error<br>04h: Pan Sensor Error<br>05h: Tilt Sensor Error<br>06h: Controller RX Over run Error<br>07h: Controller RX Framing Error<br>08h: Network RX Over run Error<br>09h: Network RX Framing Error<br>17h: Controller RX Command Buffer Overflow<br>19h: Network RX Command Buffer Overflow<br>21h: System Error<br>22h: Spec Limit Over<br>23h: FPGA Config Error<br>24h: Network communication Error<br>30h: Lvds_Adjustmet_NG<br>31h: Bar_Signal_Check_NG<br>32h: H_Sync_Check_NG<br>33h: HDMI_Check_NG | V1.00<br>00h: Normal<br>03h: Motor Driver Error<br>04h: Pan Sensor Error<br>05h: Tilt Sensor Error<br>06h: Controller RX Over run Error<br>07h: Controller RX Framing Error<br>08h: Network RX Over run Error<br>09h: Network RX Framing Error<br>17h: Controller RX Command Buffer Overflow<br>19h: Network RX Command Buffer Overflow<br>21h: System Error<br>22h: Spec Limit Over<br>23h: FPGA Config Error<br>24h: Network communication Error<br>25h: Lens Initialize Error | V1.00<br>00h: Normal<br>03h: Motor Driver Error<br>04h: Pan Sensor Error<br>05h: Tilt Sensor Error<br>06h: Controller RX Over run Error<br>07h: Controller RX Framing Error<br>08h: Network RX Over run Error<br>09h: Network RX Framing Error<br>17h: Controller RX Command Buffer Overflow<br>19h: Network RX Command Buffer Overflow<br>21h: System Error<br>22h: Spec Limit Over<br>23h: FPGA Config Error<br>25h: CAMERA communication Error<br>26h: CAMERA RX Over run Error<br>27h: CAMERA RX Framing Error<br>28h: CAMERA RX Command Buffer Overflow | V1.00<br>supports only<br>00h:Normal(No Error)<br>03h:Motor Driver Error<br>04h:Pan Sensor Error<br>05h:Tilt Sensor Error<br>06h:IF/FPGA UART Over run Error<br>07h:IF/FPGA UART Framing Error<br>08h:IF/.NET UART Over run Error<br>09h:IF/.NET UART Framing Error<br>17h:IF/FPGA UART Buffer Overflow<br>19h:IF/.NET UART Buffer Overflow<br>21h:System Error(IF/SERVO Error)<br>22h:PT Limit Over<br>24h:NET Life-monitoring Error<br>25h:BE Life-monitoring Error<br>26h:IF/BE UART Buffer Overflow<br>27h:IF/BE UART Framing Error<br>28h:IF/BE UART Buffer Overflow<br>29h:CAM Life-monitoring Error | V1.00<br>supports only<br>00h:Normal(No Error)<br>03h:Motor Driver Error<br>04h:Pan Sensor Error<br>05h:Tilt Sensor Error<br>06h:IF/FPGA UART Over run Error<br>07h:IF/FPGA UART Framing Error<br>08h:IF/.NET UART Over run Error<br>09h:IF/.NET UART Framing Error<br>17h:IF/FPGA UART Buffer Overflow<br>19h:IF/.NET UART Buffer Overflow<br>21h:System Error(IF/SERVO Error)<br>22h:PT Limit Over<br>24h:NET Life-monitoring Error<br>25h:BE Life-monitoring Error<br>26h:IF/BE UART Buffer Overflow<br>27h:IF/BE UART Framing Error<br>28h:IF/BE UART Buffer Overflow<br>29h:CAM Life-monitoring Error | V1.00<br>00h: Normal<br>03h: Motor Driver Error<br>04h: Pan Sensor Error<br>05h: Tilt Sensor Error<br>06h: Controller RX Over run Error<br>07h: Controller RX Framing Error<br>08h: Network RX Over run Error<br>09h: Network RX Framing Error<br>17h: Controller RX Command Buffer Overflow<br>19h: Network RX Command Buffer Overflow<br>21h: System Error<br>22h: Spec Limit Over<br>23h: FPGA Config Error<br>25h: CAMERA communication Error<br>26h: CAMERA RX Over run Error<br>27h: CAMERA RX Framing Error<br>28h: CAMERA RX Command Buffer Overflow<br>31h: Fan1 Error<br>32h: Fan2 Error<br>33h: High Temp<br>36h: Low Temp<br>38h: Wiper Error<br>40h: Temp Sensor Error<br>41h Lens Initialize Error<br>42h PT. Initialize Error<br>50h: MR Level Error<br>51h: GYRO Initial Error<br>52h: MR Offset Error<br>53h: Origin Offset Error | V1.00<br>00h: Normal<br>03h: Motor Driver Error<br>04h: Pan Sensor Error<br>05h: Tilt Sensor Error<br>06h: Controller RX Over run Error<br>07h: Controller RX Framing Error<br>08h: Network RX Over run Error<br>09h: Network RX Framing Error<br>17h: Controller RX Command Buffer Overflow<br>19h: Network RX Command Buffer Overflow<br>21h: System Error<br>22h: Spec Limit Over<br>23h: FPGA Config Error<br>24h: NET Life-monitoring Error<br>25h: BE Life-monitoring Error<br>26h: IF/BE UART Buffer Overflow<br>27h: IF/BE UART Framing Error<br>28h: IF/BE UART Buffer Overflow<br>29h: CAM Life-monitoring Error<br>31h: Fan1 error<br>32h: Fan2 error<br>33h: High Temp<br>36h: Low Temp<br>40h: Temp Sensor Error<br>41h Lens Initialize Error<br>42h PT. Initialize Error<br>50h: MR Level Error<br>52h: MR Offset Error<br>53h: Origin Offset Error<br>54h:Angle MR Sensor Error<br>55h:PT. Gear Error<br>56h:Motor Disconnect Error | V1.00<br>00h: Normal<br>03h: Motor Driver Error<br>04h: Pan Sensor Error<br>05h: Tilt Sensor Error<br>06h: Controller RX Over run Error<br>07h: Controller RX Framing Error<br>08h: Network RX Over run Error<br>09h: Network RX Framing Error<br>17h: Controller RX Command Buffer Overflow<br>19h: Network RX Command Buffer Overflow<br>21h: System Error<br>22h: Spec Limit Over<br>23h: FPGA Config Error<br>24h: NET Life-monitoring Error<br>25h: BE Life-monitoring Error<br>26h: IF/BE UART Buffer Overflow<br>27h: IF/BE UART Framing Error<br>28h: IF/BE UART Buffer Overflow<br>29h: CAM Life-monitoring Error<br>31h: Fan1 error<br>32h: Fan2 error<br>33h: High Temp<br>36h: Low Temp<br>40h: Temp Sensor Error<br>41h Lens Initialize Error<br>42h PT. Initialize Error<br>50h: MR Level Error<br>52h: MR Offset Error<br>53h: Origin Offset Error<br>54h:Angle MR Sensor Error<br>55h:PT. Gear Error<br>56h:Motor Disconnect Error |
| Lens Position Information | ---- | #LPI | lPI[Data1][Data2][Data3] | [Data1]<br>555h<br>~<br>FFFh<br>[Data2]<br>555h<br><br>FFFh<br>[Data3]<br>555h<br>~<br>FFFh | ---- | [Data1]Zoom Position<br>Wide<br>~<br>Tele<br>[Data2]Focus Position<br>Near<br>~<br>Far<br>[Data3]Iris Position<br>Close<br>~<br>Open | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | V3.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 |
| Lens Position Information Control | #LPC[Data] | #LPC | lPC[Data] | 0<br>1 | Off<br>On | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | V3.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 |
| Smart Picture Flip | #SPF[Data] | #SPF | sPF[Data] | 0<br>1 | Off<br>Auto | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | V1.00 | ---- | ---- | V1.00 | V1.00 |
| Flip Detect Angle | #FDA[Data] | #FDA | fDA[Data] | 3Ch<br>~<br>78h | 60deg<br>~<br>120deg | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | V1.00 | ---- | ---- | V1.00 | V1.00 |
| PinP Position | #PO[Data] | #PO | pO[Data] | 0<br>1<br>2<br>3 | Right Up<br>Right Down<br>Left Down<br>Left Up | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

| ITEM | Control Command | Confirmation Command | Responce Command | Data | Data Contents | | Remarks | | | | | | | | | | | | Remarks | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Control and Response to control | Response to Confirmation | | PH300 | PH300A | PH500 | PH600 | PH350 | PH400 w/IP400 or w/IF400 | PH360 | PH650 | PH405 | PH370 | HE100 | | PH300 | PH300A | PH500 | PH600 | PH350 | PH400 w/IP400 or w/IF400 | PH360 | PH650 | PH405 | HE100 | HE50 | HE60 | HE120 | HE130 | HE40/HE65/HE70 | UE70 | HR140 | UE150 |
| Camera/PinP Control | #CMP[Data] | #CMP | cMP[Data] | 0<br>1 | Camera Main<br>PinP | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| Guide Line Control | #GDL[Data] | #GDL | gDL[Data] | 0<br>1 | Off<br>On | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| IR Remote Controller ID | #RID[Data] | #RID | rID[Data] | 0<br>1<br>2<br>3 | 01<br>02<br>03<br>04 | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | V1.00 | ---- | ---- |
| Resolution Control | #RZL[Data] | #RZL | rZL[Data] | 0<br>1<br>2<br>3 | 640x360<br>320x180<br>1280x720<br>1920x1080 | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00<br>(supports only<br>0:640x360)<br>1:320x180) | V1.00<br>(supports only<br>0:640x360)<br>1:320x180) | ---- | V1.00 |
| P/T Relative Position Control | #RPO[Data1][Data2] | ---- | rPO[Data1][Data2] | [Data1]<br>0000h<br>~<br>8000h<br>~<br>FFFFh | [Data1]Pan Position<br>CCW Limit<br>~<br>Center<br>~<br>CW Limit | ---- | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 |
| Image Freeze During Preset | #PRF[Data] | #PRF | pRF[Data] | 0<br>1 | OFF<br>ON | | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 |
| Preset Speed Table | #PST[Data] | #PST | pST[Data] | 0<br>1<br>2 | SLOW<br>MID<br>FAST | | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00<br>(supports only<br>0:SLOW)<br>2:FAST) | V1.00 | V1.00 | V1.00<br>(supports only<br>0:SLOW)<br>2:FAST) | V1.00<br>(supports only<br>0:SLOW)<br>2:FAST) |
| P/T Absolute Position Control w/Speed | #APS[Data1][Data2][Data3][Data4] | ---- | aPS[Data1][Data2][Data3][Data4] | [Data1]<br>0000h<br>~<br>8000h<br>~<br>FFFFh<br><br>[Data2]<br>0000h<br>~<br>8000h<br>~<br>FFFFh<br><br>[Data3]<br>00h<br>~<br>10h<br><br>[Data4]<br>0<br>1<br>2 | [Data1]Pan Position<br>CCW Limit<br>~<br>Center<br>~<br>CW Limit<br><br>[Data2]Tilt Position<br>UP Limit<br>~<br>Center<br>~<br>DOWN Limit<br><br>[Data3]Preset Speed<br>1<br>~<br>30<br><br>[Data4]Preset Speed Table<br>SLOW<br>MID<br>FAST | ---- | | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 |
| P/T Relative Position Control w/Speed | #RPS[Data1][Data2][Data3][Data4] | ---- | rPS[Data1][Data2][Data3][Data4] | [Data1]<br>0000h<br>~<br>8000h<br>~<br>FFFFh<br><br>[Data2]<br>0000h<br>~<br>8000h<br><br>FFFFh<br><br>[Data3]<br>00h<br>~<br>10h<br><br>[Data4]<br>0<br>1<br>2 | [Data1]Pan Position<br>CCW Limit<br>~<br>Center<br>~<br>CW Limit<br><br>[Data2]Tilt Position<br>UP Limit<br>~<br>Center<br><br>DOWN Limit<br><br>[Data3]Preset Speed<br>1<br>~<br>30<br><br>[Data4]Preset Speed Table<br>SLOW<br>MID<br>FAST | ---- | | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 |
| Status Display Lamp | #LMP[Data] | #LMP | lMP[Data] | 0<br>1 | Disable<br>Enable | | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V2.00 | ---- | ---- | ---- | V1.00 |
| FAN | #FAN[Data] | #FAN | fAN[Data] | 0<br>1<br>2<br>3 | Auto<br>High<br>Mid<br>Low | | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00<br>Supports only<br>0(Auto)<br>1(On) | V1.00 |
| FAN2 | #FA2 | #FA2 | fA2[Data] | 0<br>1<br>2<br>3 | Auto<br>High<br>Mid<br>Low | | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 |
| Wiper | #WIP[Data] | #WIP | wIP[Data] | 0<br>1<br>2 | Off<br>Fast<br>Slow | | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | ---- |
| Washer | #WAS[Data] | #WAS | wAS[Data] | 0<br>1 | Off<br>On | | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | ---- |
| Fan Status1 | ---- | #FS1 | fS1[Data] | 0<br>1<br>2 | Off<br>On<br>Error | | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00<br>Supports only<br>0(Off), 1(On) | V1.00 |
| Fan Status2 | ---- | #FS2 | fS2[Data] | 0<br>1<br>2 | Off<br>On<br>Error | | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00<br>Supports only<br>0(Off), 1(On) | V1.00 |
| Heater Status | ---- | #HS | hS[Data] | 0<br>1 | Off<br>On | | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | ---- |
| Defroster Status | ---- | #DS | dS[Data] | 0<br>1 | Off<br>On | | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | ---- |
| Washer PT Position | #WPT | ---- | wPT | ---- | ---- | | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | ---- |
| Washer PT Position Reset | #WPR | ---- | wPR | ---- | ---- | | | | | | | | | | | | | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | ---- |
| Get Gain/ColorTemp /Shutter/ND | ---- | #PTG | pTG[Data1][Data2][Data3][Data4][Data5][Data6] | [Data1]<br>00h<br>~<br>11h<br>~<br>1An<br>~<br>32h<br>80h<br>[Data2]<br>000000h<br><br>3A98h<br>[Data3]<br>0h<br>1h<br>2h<br>3h<br>[Data4]<br>0001h<br>~<br>2710h<br>[Data5]<br>00000h<br>~<br>186A0h<br>[Data6]<br>0<br>1<br>2<br>3 | ---- | [Data1] (Gain)<br>0dB<br>~<br>9dB<br>~<br>18dB<br>~<br>42dB<br>AGC ON<br>[Data2]<br>0K<br><br>15000K<br>[Data3] (Shutter Mode)<br>Off<br>Step<br>Synchro<br>ELC<br>[Data4] (Shutter Step)<br>1/1<br>~<br>1/10000<br>[Data5] (Shutter Synchro)<br>0.0 [Hz]<br><br>10000.0[Hz]<br>[Data6] (ND)<br>Through<br>1/4 ND<br>1/16 ND<br>1/64 ND | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | V1.00 |
| Get Pan/Tilt/Zoom/ Focus/Iris | ---- | #PTV | pTV[Data1][Data2][Data3][Data4][Data5] | [Data1]<br>0000h<br>~<br>8000h<br>~<br>FFFFh<br>[Data2]<br>0000h<br>~<br>8000h<br><br>FFFFh<br>[Data3]<br>555h<br>~<br>FFFh<br>[Data4]<br>555h<br>~<br>FFFh<br>[Data5]<br>555h<br>~<br>FFFh | ---- | [Data1] (Pan)<br>ccwLimit<br><br>Center<br>~<br>cwLimit<br>[Data2] (Tilt)<br>UpLimit<br>~<br>Center<br><br>DownLimit<br>[Data3] (Zoom)<br>Wide<br>~<br>Tele<br>[Data4] (Focus)<br>Near<br>~<br>Far<br>[Data5] (Iris)<br>Close<br>~<br>Open | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | V1.00 |

| ITEM | Control Command | Confirmation Command | Responce Command | Data | Data Contents | | Remarks | | | | | | | | | | | Remarks | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Control and Response to control | Response to Confirmation | | PH300 | PH300A | PH500 | PH600 | PH550 | PH400<br>w/RP400<br>or w/IF400 | PH360 | PH650 | PH405 | PH370 | HE100 | | PH300 | PH300A | PH500 | PH600 | PH550 | PH400<br>w/RP400<br>or w/IF400 | PH360 | PH650 | PH405 | HE100 | HE50 | HE60 | HE120 | HE130 | HE40/HE65/HE70 | UE70 | HR140 | UE150 |
| Get<br>Pan/Tilt/Zoom/<br>Focus/Iris | ---- | #PTD | pTD[Data1][Data2][Data3][Data4][Data5] | [Data1]<br>0000h<br>~<br>FFFFh<br>[Data2]<br>0000h<br>~<br>FFFFh<br>[Data3]<br>000h<br>~<br>3E7h<br>[Data4]<br>00h<br>~<br>63h<br>[Data5]<br>00h<br>~<br>FEh<br>FFh | ---- | [Data1] (Pan)<br>0000h<br>~<br>FFFFh<br>[Data2] (Tilt)<br>0000h<br>~<br>FFFFh<br>[Data3] (Zoom)<br>0<br>~<br>999<br>[Data4] (Focus)<br>0<br>~<br>99<br>[Data5] (Iris)<br>F0.0<br>~<br>F25.4<br>CLOSE | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 |
| Tally Infomation | ---- | #TAA | tAA[Data1][Data2][Data3][Data4][Data5][Data6][Data7][Data8][Data9] | [Data1]<br>0<br>1<br>[Data2]<br>0<br>1<br>[Data3]<br>0<br>1<br>[Data4]<br>0<br>1<br>[Data5]<br>0<br>1<br>[Data6]<br>0<br>1<br>[Data7]<br>0<br>1<br>[Data8]<br>0<br>1<br>[Data9]<br>0<br>1 | ---- | [Data1]<br>Red Tally Off<br>Red Tally On<br>[Data2]<br>Wired Red Tally In Off<br>Wired Red Tally In On<br>[Data3]<br>Command Red Tally In Off<br>Commnad Red Tally In On<br>[Data4]<br>Green Tally Off<br>Tally Green On<br>[Data5]<br>Wired Green Tally In Off<br>Wired Green Tally In On<br>[Data6]<br>Command Green Tally In Off<br>Command Green Tally In On<br>[Data7]<br>(Reserved) Tally Off<br>(Reserved) Tally On<br>[Data8]<br>Wired (Reserved) Tally In Off<br>Wired (Reserved) Tally In On<br>[Data9]<br>Command (Reserved) Tally In Off<br>Command (Reserved) Tally In On | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00<br>[Data4],[Data5],[Data6],[Data8]:unused |
| Preset Speed Control | #UPVS[Data] | #UPVS | uPVS[Data] | [Preset Speed Unit : 0 (SpeedFade)]<br>275h<br>300h<br>325h<br>350h<br>375h<br>400h<br>425h<br>450h<br>475h<br>500h<br>525h<br>550h<br>575h<br>600h<br>625h<br>650h<br>675h<br>700h<br>725h<br>750h<br>775h<br>800h<br>825h<br>850h<br>875h<br>900h<br>925h<br>950h<br>975h<br>999h<br>[Preset Speed Unit : 1 (Time)]<br>001h<br>~<br>063h | [Preset Speed Unit : 0 (SpeedFade)]<br>1<br>2<br>3<br>4<br>5<br>6<br>7<br>8<br>9<br>10<br>11<br>12<br>13<br>14<br>15<br>16<br>17<br>18<br>19<br>20<br>21<br>22<br>23<br>24<br>25<br>26<br>27<br>28<br>29<br>30<br>[Preset Speed Unit : 1 (Time)]<br>01<br>~<br>99 | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 |
| Delete Preset Memory | #CE[Data] | ---- | s[Data] | [AW-PH300]<br>0<br>~<br>9<br><br>[other P/T]<br>00<br>~<br>49<br><br>[HE120/HE130/HE40/HE65/HE70/UE150]<br>00<br>~<br>99 | [AW-PH300]<br>Preset 1<br>~<br>Preset 10<br><br>[other P/T]<br>Preset 01<br>~<br>Preset 50<br><br>[HE120/HE130/HE40/HE65/HE70/UE150]<br>Preset001<br>~<br>Preset100 | ---- | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 | V1.00 |
| Option | #OPT[Data] | #OPT | aPT[Data] | 0<br>1 | Off<br>On | | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |