HD/4K Integrated Camera Interface Specifications

AW-UE150/AW-HE145

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Panasonic Connect Co., Ltd.

■目次

1.Introduction

This manual describes the external interface specifications which are applicable when the AW-UE150/AW-HE145 is operated.

2.Configuration outline

This manual has the following general configuration.

① Overview of the external interface
It is possible to control the pan, tilt and white balance adjustments.
It is also possible to acquire the gain and other camera information by initiating queries.
The various functions are employed for the operations with the camera using HTTP which is the host protocol of TCP.
For further details, refer to chapter 3 and chapter 4.

②Camera information update notification
The local terminal is notified of the values of the gain and other settings which have been changed at another terminal or other terminals
so that it can acquire the camera information.
This feature is useful when one camera is controlled by a multiple number of terminals, and when the setting for enabling update notifications
to be received has been established, the information which has been changed by other terminals can be acquired.
For further details, refer to chapter 5.

③Camera information batch acquisition
The camera information can be acquired in batch form. Since there is no need to query each and every camera information item when
this feature is used, the feature is useful when all the camera information is required such as at startup.
For further details, refer to chapter 6.

④Error return
An error whether ER1, ER2 or ER3 is returned when an error has been generated by a command in ① above or when the AWB result
contains an error.
For further details, refer to chapter 7.

⑤Menu list and command correspondence table
This table which summarizesAW-UE150/AW-HE145 menu list and commands related to each menu item.
For further details, refer to chapter 8.

⑥Control and request command
Describes the specifications of commands used in AW-UE150/AW-HE145.
For further details, refer to chapter 9.

3.Command type

There are two types of external interface command: Pan/Tilt control commands and camera control command.

3-1.Pan/Tilt control command

This interface controls the pan tilt head.
Starts with # (0x23), and ends with [CR](0x0d)
example)Pan stop command

```
    #    P    5    0    [CR]
  0x23  0x50  0x35  0x30  0x0D
```
   ※[CR] is not required for IP communication

Commands which command type is "ptz"(in chapter 9) are for Pan/Tilt control commands

3-2.Camera control command

This interface is for the camera lens control and image/color adjustments.
Starts with [STX] (0x02), and ends with [ETX] (0x03)
":" letter is required before [Data] for camera Control commands.
example)Auto Focus setting

```
  [STX]   O    A    F    :    1    [ETX]
  0x02  0x4F  0x41  0x46  0x3A  0x31  0x03
```
   ※[STX] and [ETX] are not required for IP communication

4.Communication method

The camera can be controled by serial communication and IP communication respectively

4-1.Serial communication

The camera communicates with RS422. The communication specifications are as follows

Method	Half Duplex
Commnunication Speed	9600bps
Data bit	8bit
Stop bit	1bit
Parity	None
Flow contorol	None

▼Sequence of serial communication
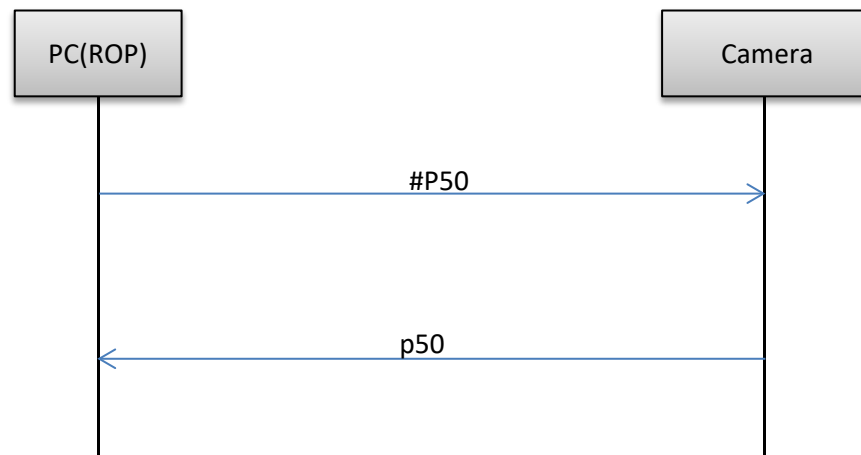
In case of Pan/Tilt Control command   In case of Camera Control command
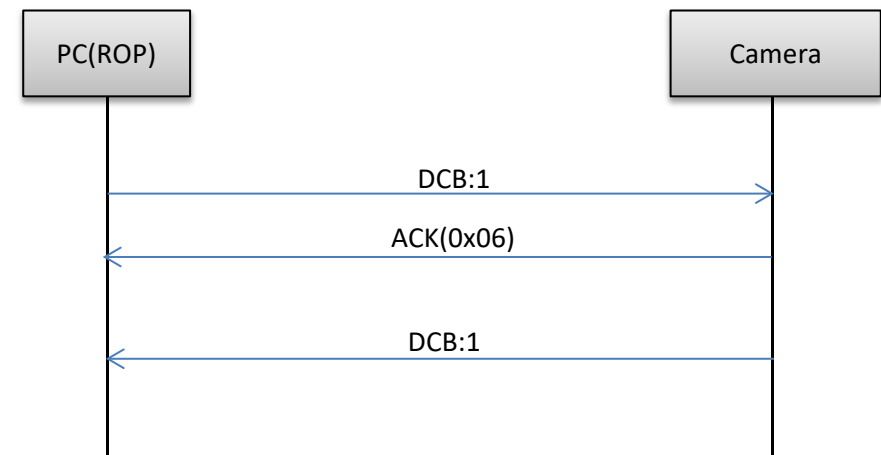
【Restrictions】

1. When using the pan-tilt head control commands, send the commands with a gap of 40 ms between each command. Given below is the sequence.

2. Some settings and conditions may restrict the effects of other settings (※ including those with exclusive control conditions).
   See more detail in Capter 8 for the exclusive control conditions

3. Send the commands which change the settings only at the point in time when the changes are required. (Do not send them at regular intervals.)

4-2.IP communication

<table>
<tr><td>

In case of Pan/Tilt Control command

▼Send format
  http://[IP Address]/cgi-bin/aw_ptz?cmd=[Command]&res=[Type]
  ※IP Address···IP address of camera at connection destination
  ※Command·····Details given in "Command" column in Chapter 9
  ※Type········Fixed at "1"

▼Receive format
  200 OK "Command"
        ※Command···Response value of each command;
                   set in the HTTP message body
  See more detail in Capter 7 for the error communication sequence
  for the transmitted command

</td><td>

In case of Camera Control command

▼Send format
  http://[IP Address]/cgi-bin/aw_cam?cmd=[Command]&res=[Type]
  ※IP Address···IP address of camera at connection destination
  ※Command·····Details given in "Command" column in Chapter 9
  ※Type········Fixed at "1"

▼Receive format
  200 OK "Command"
        ※Command···Response value of each command;
                   set in the HTTP message body
  See more detail in Capter 7 for the error communication sequence
  for the transmitted command

</td></tr>
</table>

▼Sequence
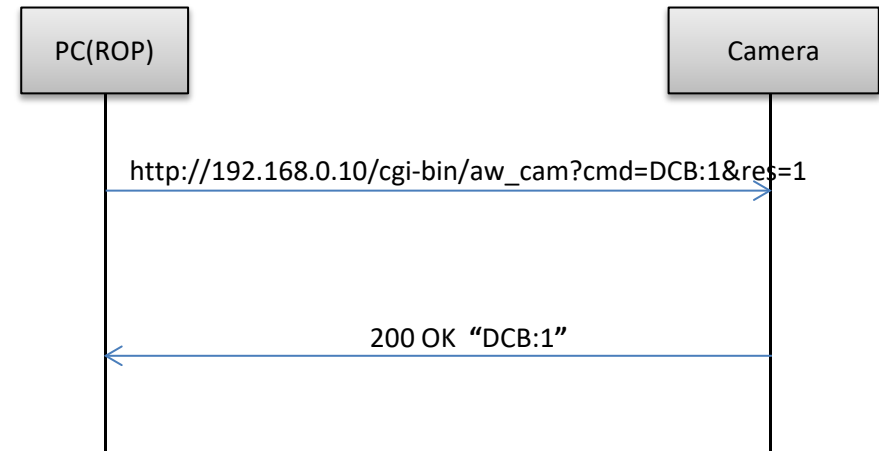
PC(ROP)		Camera
	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23P50&res=1 →	
	← 200 OK "p50"	

※Depending on the browser or middleware used, "#" may have
to be converted to "%23" by ASCII conversion.

▼Sequence

PC(ROP)		Camera
	http://192.168.0.10/cgi-bin/aw_cam?cmd=DCB:1&res=1 →	
	← 200 OK "DCB:1"	

【Restrictions】
　　1. When using the pan-tilt head control commands, send the commands with a gap of 40 ms between each command. Given below is the sequence.

　　2. Keep-Alive cannot be set with HTTP connections.
　　　 Connect and disconnect are performed each time a command is sent or received.

　　3. Some settings and conditions may restrict the effects of other settings (※ including those with exclusive control conditions).
　　　 See more detail in Capter 8 for the exclusive control conditions

　　4. Send the commands which change the settings only at the point in time when the changes are required. (Do not send them at regular intervals.)

5.Update notification

The following restrictions apply to camera operations that are performed using HTTP communication and
that have been described in the previous chapters:
A) Even when a camera setting is changed by one terminal, the other terminals will not know that the setting has been changed
  unless they send the query command to the camera.
B) In the case of a preset playback, AWB/ABB execution or other control commands that take time to be processed,
  it is necessary to wait until the processing is completed for the response.

By sending information autonomously from the camera to the terminals, it is possible to do the following:
A) When a camera setting is changed by one terminal, the other terminals are notified of the setting change immediately.
B) With a control command that takes time to be processed, the HTTP response is returned as soon as the command has been received,
  and separate notification of the processing result is given as soon as the processing is completed.
These functions are referred to as the camera information update notification function.
This chapter uses the term "update notification" to refer to this function

5-1.Update notification sequence

When the settings of the camera have been changed from the local terminal (PC1), the changes are also posted
by an update notification separately from the HTTP response to the command.

PC(ROP)	PC(ROP)	PC(ROP)	Camera

DCB:1 → Receive control command

DCB:1 ← Response

DCB:1 ←

DCB:1 ← Update notification

DCB:1 ←
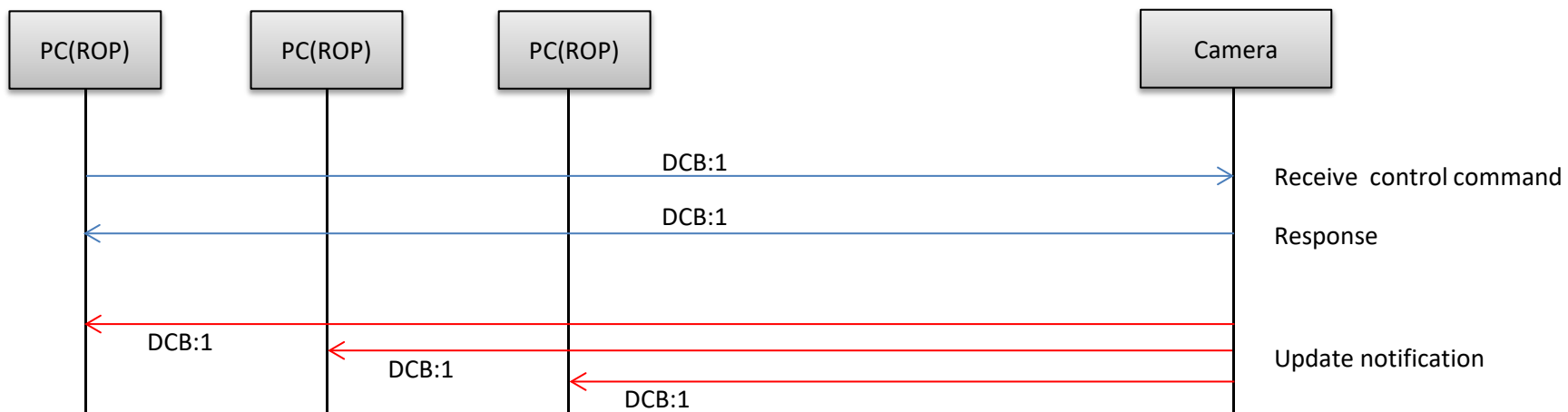
Some commands are not to be incicated as update notifications. See Chapter:9 for more detail

5-2.Data format for update notifications

▼Serial
In the case of Pan/Tilt control command, ends with [CR](0x0d)
In the case of Camera control command, starts with [STX] (0x02), and ends with [ETX] (0x03)

▼IP
The update notification is given to the TCP port on the terminal whose number was specified using the update notification start command by TCP protocol communication.
A breakdown of the data received is given below.
【Receive data】

Reserve （22Byte）	**Size （2Byte）**	Reserve （4Byte）	**Update notification information （Variable length: Max. 504 bytes）**	Reserve （24Byte）

The updated information is set in "Update notification information" of the receive data format.
The data received from the camera has a variable length.
The size of the update notification information is the value obtained by subtracting 8 bytes from the "Size" area setting.
・"Update notification information" data length ＝ "Size" － 8 bytes

【Update notification information format】
[CR][LF][Command response format][CR][LF]
※ [CR]:0x0d、[LF]:0x0a

ex1)Power: On
[CR][LF]p1[CR][LF]

ex2)Color bar: On
[CR][LF]DCB:1[CR][LF]

5-3.Procedure of start/end of the update notifications reception

To receive an update notification via IP, you must perform the update notification reception start process in advance.
At a time like this, the number of the TCP port on the terminal for receiving the update notification (having the update notification sent) is specified.

① Update notification receive start step
    example）When reception is to be started with "192.168.0.10" used as the IP address of the camera
    http://192.168.0.10/cgi-bin/event?connect=start&my_port=31004&uid=0
    ※ my_port ・・・ Number of the TCP port on the terminal (any port)

【Update notification receive start sequence】
    The update notification receive start command is sent from the terminal where the update notifications are to be received.
    "204 No Content" is returned from the camera which has received the command.

PC(ROP) → Camera : http://192.168.0.10/cgi-bin/event?connect=start&my_port=31004&uid=0

The port of PC1 where the update notifications are received is registered as port number 31004.

PC(ROP) ← Camera : **204 No Content**

【Caution】
Proceed with the update notification receive start step when communication has been cut off
because the LAN cable has been disconnected, for example.

② Update notification receive end step
    To close the application of the client, the update notification receive end step must be taken without fail.
    example) When reception is to be ended with "192.168.0.10" used as the IP address of the camera
    http://192.168.0.10/cgi-bin/event?connect=stop&my_port=31004&uid=0
    ※ my_port ・・・ Number of the TCP port on the terminal

【Update notification receive end sequence】
　　The update notification receive end command is sent from the terminal which has received the update notifications.
　　"204 No Content" is returned from the camera which received the command.

```
┌──────────┐                                                                    ┌──────────┐
│  PC(ROP) │                                                                    │  Camera  │
└────┬─────┘                                                                    └────┬─────┘
     │                                                                               │
     │  http://192.168.0.10/cgi-bin/event?connect=stop&my_port=31004&uid=0          │
     │ ────────────────────────────────────────────────────────────────────────────▶│
     │                                                                               │
     │                                                      The receiving of the update
     │                                                      notifications at PC is ended
     │                              204 No Content                                   │
     │ ◀──────────────────────────────────────────────────────────────────────────── │
     │                                                                               │
```
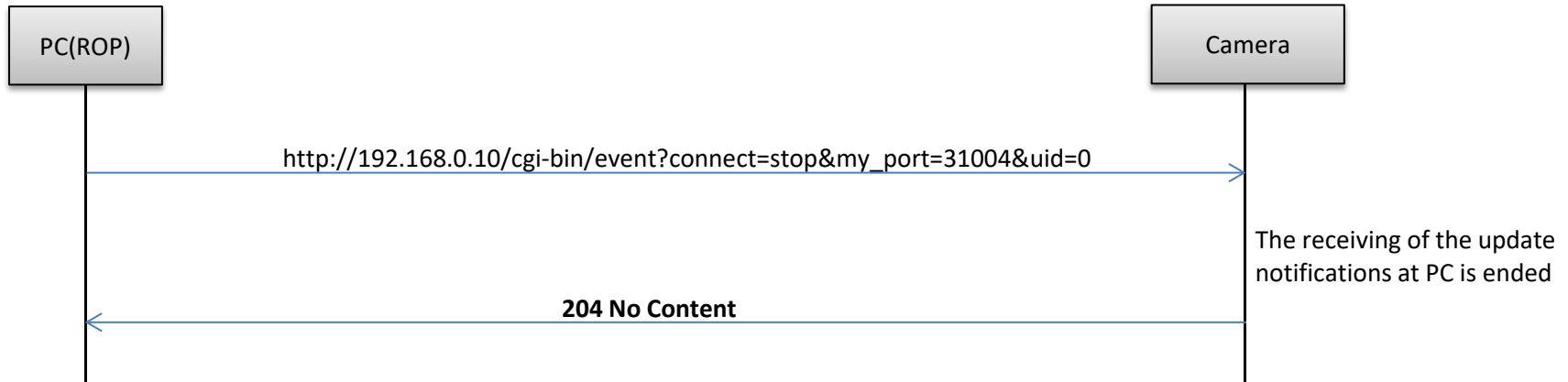
③　Registered number of update notifications
　　You can query the number of external devices (RP remote controller etc.) connected to the camera with the following command.
　　The number of connected device increases with the procedure to start receiving update notifications and decreases the procedure
　　to start receiving update notifications. The number of connected device also decreases when it can not communicate with the device.
　　Number of terminals which can receive update notifications at the same time: 5
　　When the remote camera controller is connected, it is counted as one unit.
　　example) When the IP address of the camera is "192.168.0.10" and you want to request registered number.
　　http://192.168.0.10/cgi-bin/man_session?command=get

```
┌──────────┐                                                                    ┌──────────┐
│  PC(ROP) │                                                                    │  Camera  │
└────┬─────┘                                                                    └────┬─────┘
     │                                                                               │
     │           http://192.168.0.10/cgi-bin/man_session?command=get                 │
     │ ────────────────────────────────────────────────────────────────────────────▶│
     │                                                                               │
     │                         200 OK "Event session:1"                              │
     │ ◀──────────────────────────────────────────────────────────────────────────── │
     │                                                                               │
```
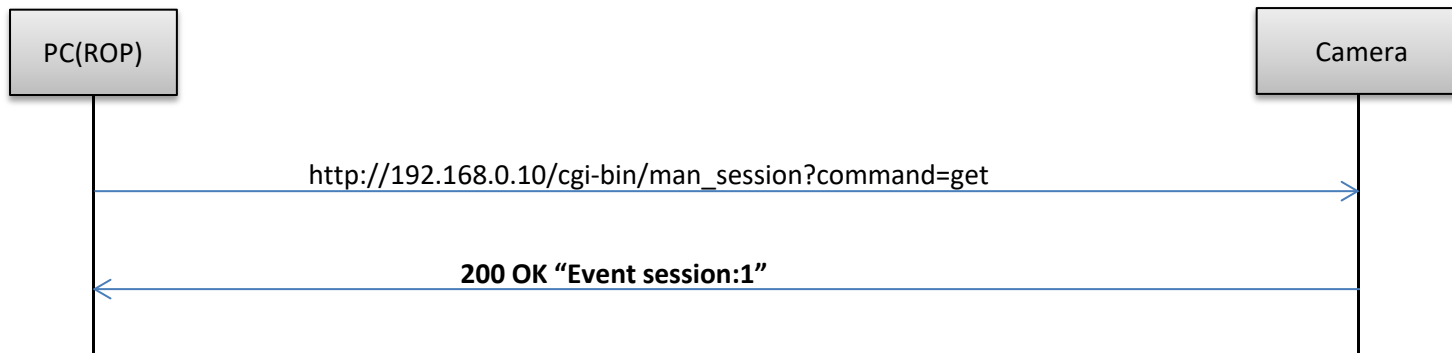
6.Special sequences

Update notifications are sometimes sent at times other than when the settings or statuses of the camera have been changed.
Some cases are presented below.
It is assumed that the update notification start command has been sent to all the terminals in the sequence
and that the terminals can receive the update notifications from the camera.

6-1.Version information notification

The version information is posted in 60-second cycles.
See QSV in Chapter 9 for notification content

【Sequence when the version information is received】
The camera sends the version information in 60-second cycles, and this information is received by terminals PC1 and PC2.

| PC(ROP) | PC(ROP) | | Camera |

qSV3V01.00L.002
qSV3V01.00L.002

Notification posted in
60-second cycles

qSV3V01.00L.002
qSV3V01.00L.002
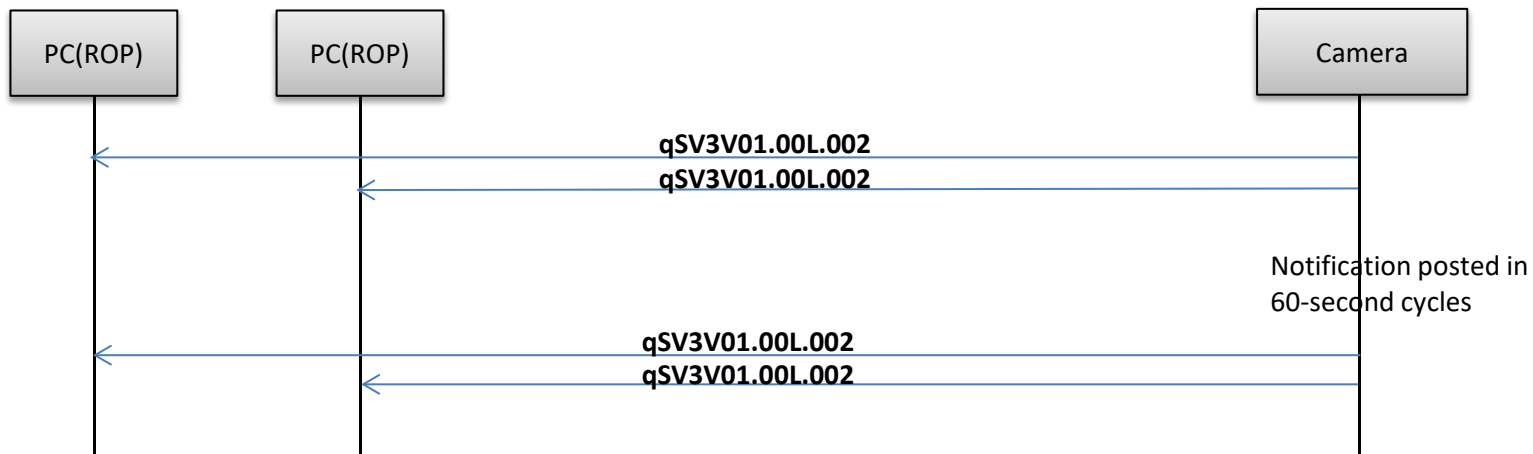
6-2.Error information

In cases where the camera has detected error information, the error information is posted in 30-second cycles.
When operation has been restored from an error condition, [Error Code　00:Normal] is posted only once.
If the error has not been detected, the error information is not posted.
See #RER in Chapter 9 for notification content

【Error information receive sequence】
When the camera detects an error, it sends the error information to the terminals, and terminals PC1 and PC2 receive this information.

PC(ROP)　　　　PC(ROP)　　　　　　　　　　　　　　　　Camera

Error generated

rER03

rER03
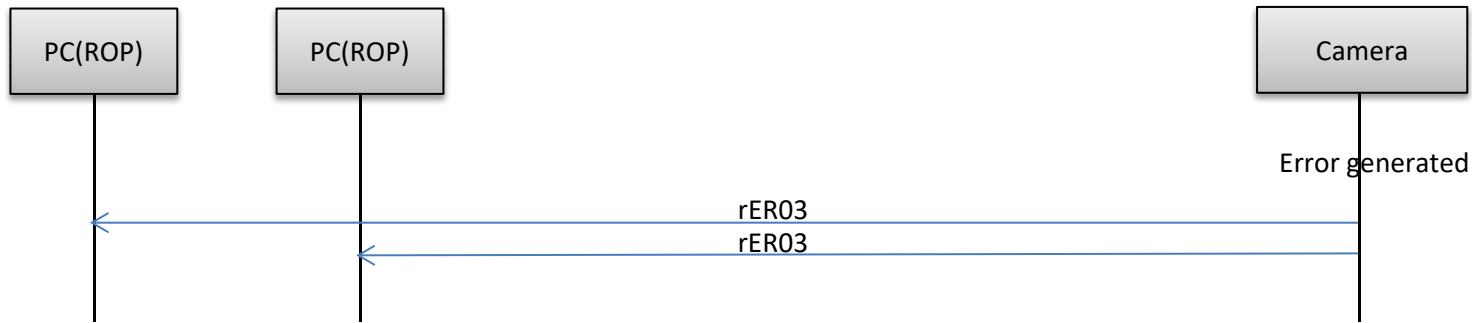
6-3.Lens Information

Notification is sent in a 300ms cycle when "On: Information is posted" has been set for the lens information notification On/Off control command

Notification	Lens information
LPI[ZZZ][FFF][III]	ZZZ Zoom position FFF Focus position III Iris position (Expressed in 3 digits each)

【Sequence when lens information is changed】
Start lens information notification when the camera receive lens information On command (#LPC1).
When the camera detects changes in the lens information, the changed lens information is sent to the terminals,
and terminals PC1 and PC2 receive this information.
Stop lens information notification when the camera receive lens information Off command (#LPC0).

```
  PC(ROP)        PC(ROP)                              Camera

     |              |                                    |
     |              |              #LPC1                 |
     |--------------|----------------------------------->|
     |              |                                    |
     |              |                 Start lens information notification
     |              |                                    |
     |              |           lPI555666777             |
     |<-------------|------------------------------------|
     |              |           lPI555666777             |
     |              |<-----------------------------------|
     |              |                          Notification posted in
     |              |           lPI555666777            300ms cycles
     |<-------------|------------------------------------|
     |              |           lPI555666777             |
     |              |<-----------------------------------|
     |              |                                    |
     |              |              #LPC0                 |
     |--------------|----------------------------------->|
     |              |                                    |
     |              |                 Stop lens information notification
     |              |                                    |
```
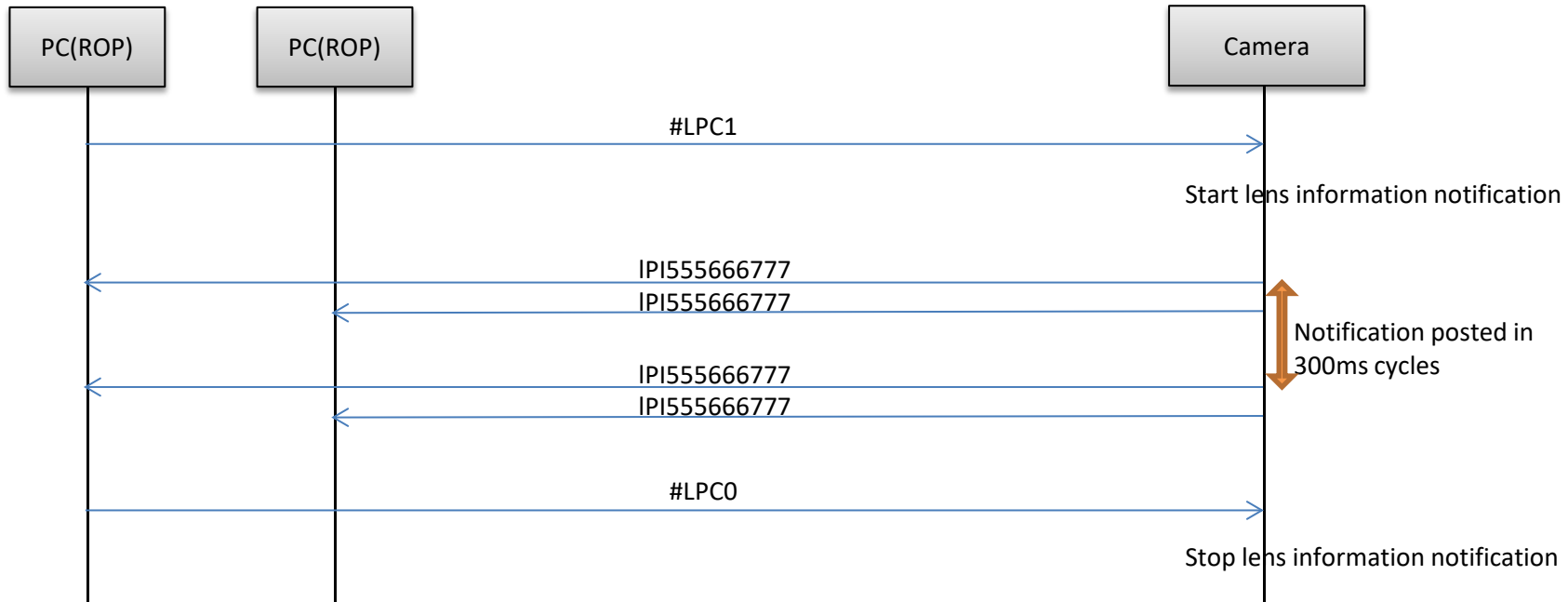
6-4.Preset playback

This command sends the preset playback completion notification as an update notification when preset playback in the camera has been completed.

Notification	Remarks
q[Data]	Number of the preset which was played back － 1

【Preset playback sequence】
This is the sequence in which preset number 08 is played back.
As soon as the preset playback command is received, "s07" is returned as the HTTP response,
and as soon as the playback is completed after this, "q07" is posted separately as the update notification.
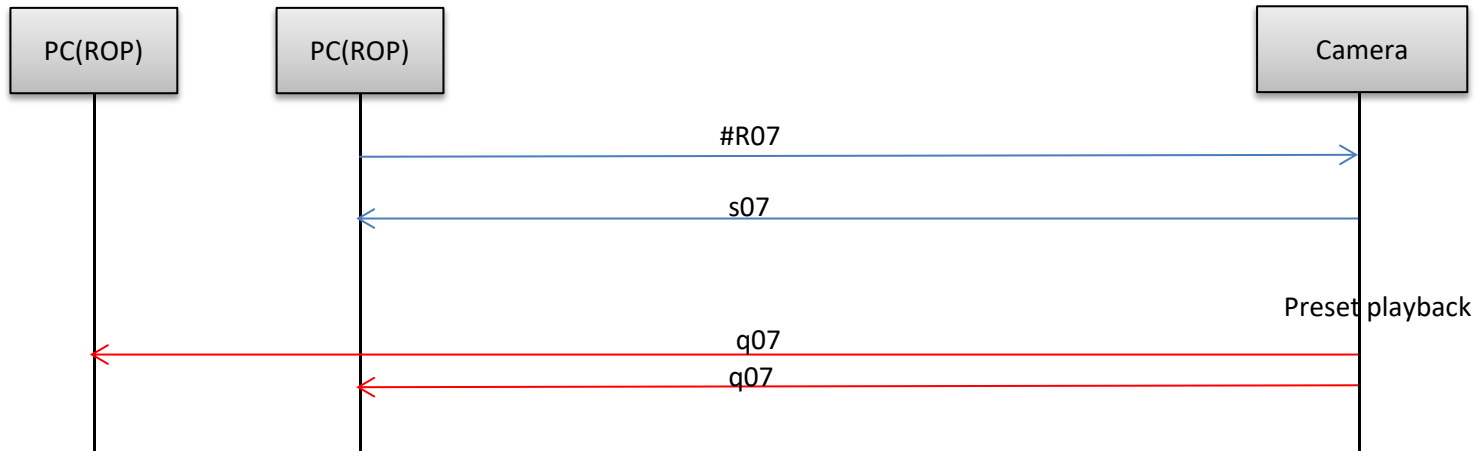
6-5.AWB/ABB execution

This command sends the execution results as an update notification when execution of AWB/ABB has been completed by the camera.

Notification	Remarks
OWS	AWB execution successful
OAS	ABB execution successful

【AWB execution sequence】
As soon as the AWB/ABB execution command is received, return response,
and as soon as the AWB execution is completed, "OWS" is posted separately as the update notification.

Serial   IP

| PC(ROP) | PC(ROP) | Camera | | PC(ROP) | PC(ROP) | Camera |

OWS →

OWS →

OWS ←

AWB execute   AWB execute

OWS ←
OWS ←

OWS ←
OWS ←

17
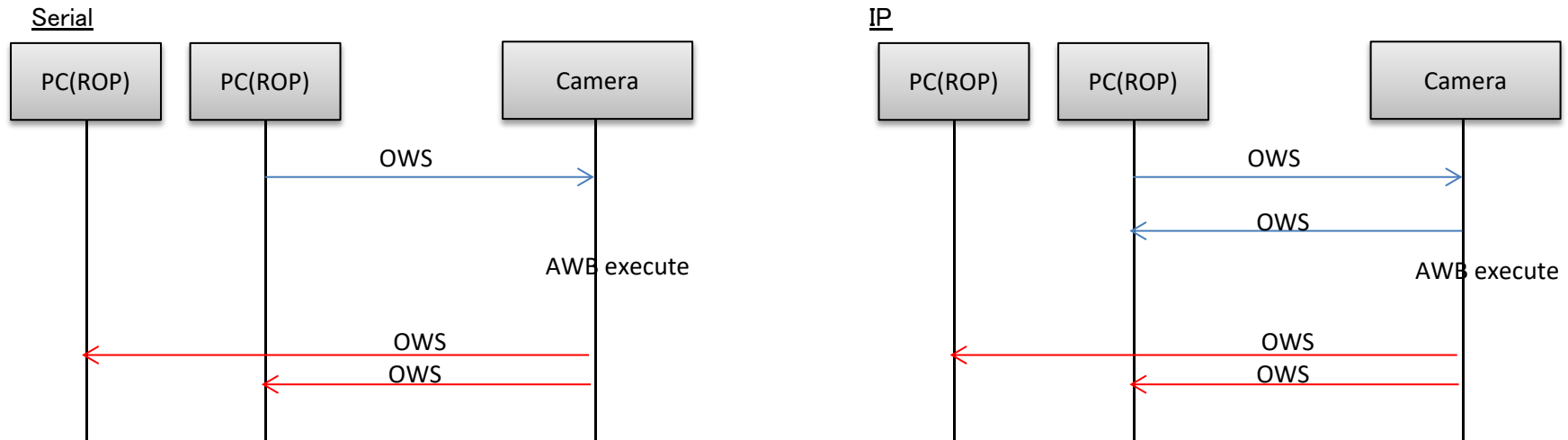
6-6.Camera information batch acquisition

All the information of the camera can be acquired together as a batch.

【Command format】
[send]
http://[IP Address]/live/camdata.html

[receive]
200 OK "Camera information"
　　See chapter 9　for detail of camera information

【Sequence】
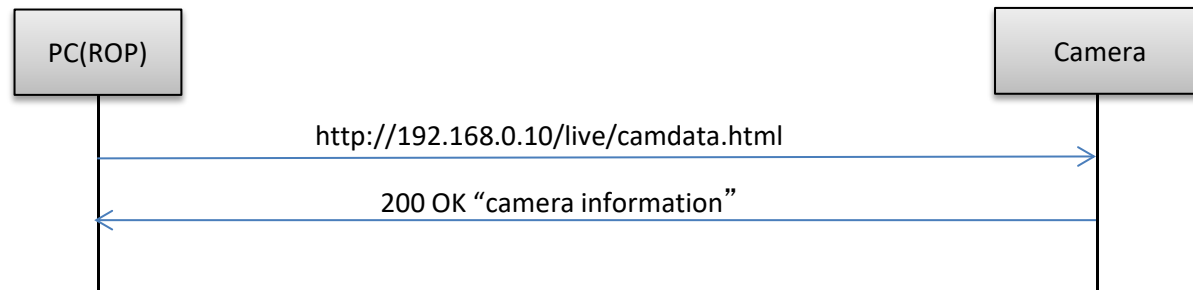
7.Error return

The three errors ER1, ER2 and ER3 below are returned in response to control or query commands by the camera.

In the case of Pan/Tilt control command
　▼ER1 (unsupported command)
　　This error is generated when a command which is not supported
　　by the camera has been received by the camera
　　example) When the non existent "#AX" command
　　　　　　is executed for the camera
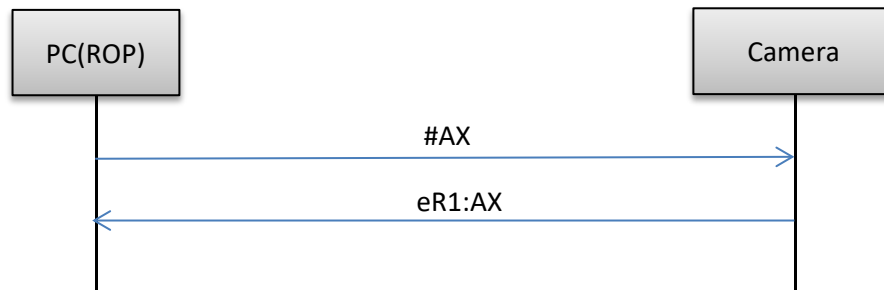
```
PC(ROP)                          Camera
   |                               |
   |------------ #AX ------------->|
   |                               |
   |<--------- eR1:AX -------------|
   |                               |
```

　▼ER2 (busy status)
　　This error is generated during Standby (Power Off) or
　　at other times when the camera is in the busy status.

```
PC(ROP)                          Camera
   |                               |
   |---------- #AXZ555 ---------->[Standby]
   |                               |
   |<--------- eR2:AXZ ----------[Standby]
   |                               |
```
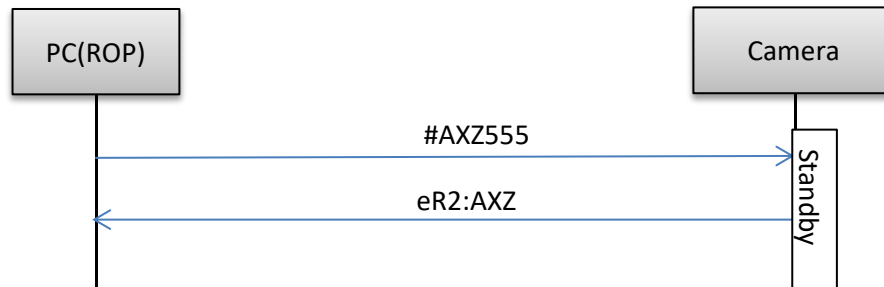
In the case of Camera control command
　▼ER1 (unsupported command)
　　This error is generated when a command which is not supported
　　by the camera has been received by the camera
　　example) When the non existent "XF" command
　　　　　　is executed for the camera
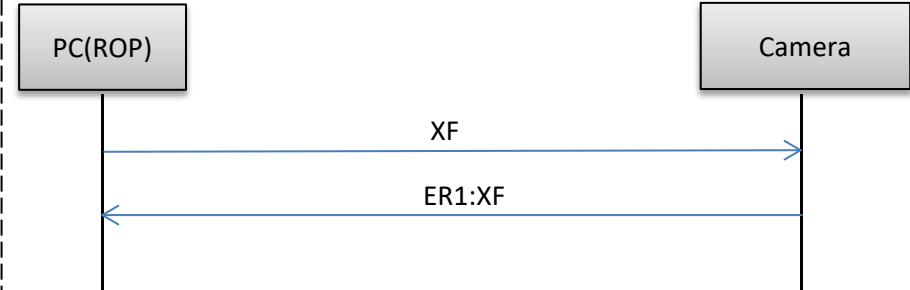
```
PC(ROP)                          Camera
   |                               |
   |------------ XF ------------->|
   |                               |
   |<--------- ER1:XF ------------|
   |                               |
```

　▼ER2 (busy status)
　　This error is generated during Standby (Power Off) or
　　at other times when the camera is in the busy status.

```
PC(ROP)                          Camera
   |                               |
   |---------- XSF:1 ----------->[Standby]
   |                               |
   |<--------- ER2:XSF ---------[Standby]
   |                               |
```
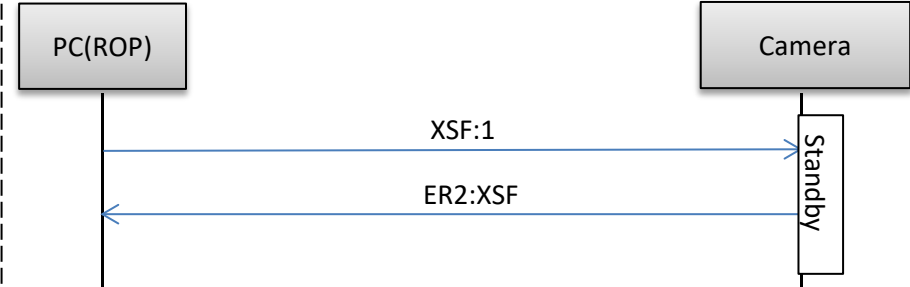
▼ER3 (outside acceptable range)
　　This error is generated when the data value of a command
　　is outside the acceptable range.
　　example) The "#AXZ" command was executed with a data
　　　　　　value of "000" which is outside the acceptable range.
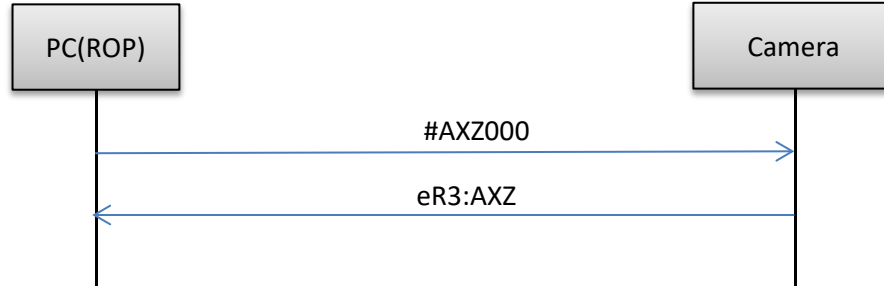
```
┌──────────┐                    ┌──────────┐
│ PC(ROP)  │                    │  Camera  │
└────┬─────┘                    └────┬─────┘
     │                               │
     │         #AXZ000               │
     │──────────────────────────────>│
     │                               │
     │         eR3:AXZ               │
     │<──────────────────────────────│
     │                               │
```

▼ER3 (outside acceptable range)
　　This error is generated when the data value of a command
　　is outside the acceptable range.
　　example) The "OGU (gain setting)" command was executed with
　　　　　　a data value of "90" which is outside the acceptable range.

```
┌──────────┐                    ┌──────────┐
│ PC(ROP)  │                    │  Camera  │
└────┬─────┘                    └────┬─────┘
     │                               │
     │         OGU:90                │
     │──────────────────────────────>│
     │                               │
     │         ER3:OGU               │
     │<──────────────────────────────│
     │                               │
```
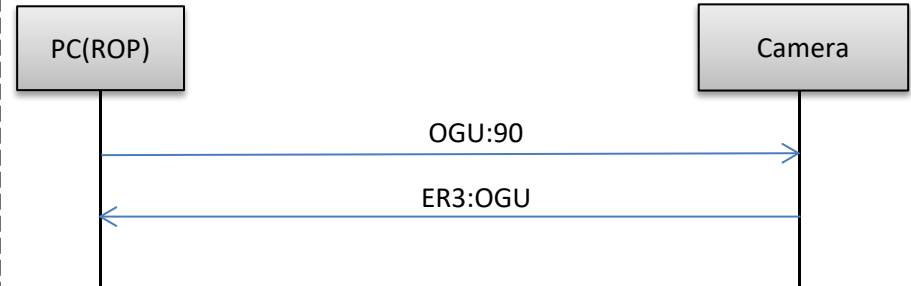
8. AW-UE150/HE145 Menu-Command Correspondance Table

Menu	Command	Remarks	UE150	HE145
Camera				
Scene	XSF			
Brightness				
Picture Level	OSD:48	Available When "Iris Mode is Auto" or "Shutter Mode is ELC" or "Gain is Auto"	○	○
Iris Mode	ORS #D3		○	○
Auto Iris Speed	OSJ:01		○	○
Auto Iris Wondow	OSJ:02		○	○
Auto Iris Close Limit	OSJ:C0		○	○
Shutter Mode	OSJ:03		○	○
Step/Synchro	OSJ:04 OSJ:05 OSJ:06 OSJ:07 OSJ:08 OSJ:09	Available when Shutter Mode is Step or Synchro	○	○
ELC Limit	OSD:BF	Available when Shutter Mode is ELC	○	○
Gain	OGU		○	○
Super Gain	OSI:28		○	○
AGC Max Gain	OSD:69		○	○
Frame mix	OSA:65	Available when Shutter Mode is Off/ELC and Format is 59.95p/59.94i/50p/50i	○	○
ND Filter	OFT	Available when Day/Night is Day	○	○
Day/Night	#D6	Available when Color Setting is Normal	○	○
Picture				
White Balance Mode	OAW OWS OAS		○	○
Color Temperature	OSI:1E OSI:1F OSI:20	Available when White Balance Mode is VAR	○	○
R Gain	OSG:39	Available when White Balance Mode is AWB A/AWB B/VAR	○	○
B Gain	OSG:3A	Available when White Balance Mode is AWB A/AWB B/VAR	○	○
Color TEMP. Setting				
Color Temperature	OSJ:48 OSJ:49 OSJ:4A	Available when White Balance Mode is AWB A/AWB B	○	○
R Gain	OSJ:4B	Available when White Balance Mode is AWB A/AWB B	○	○
B Gain	OSJ:4C	Available when White Balance Mode is AWB A/AWB B	○	○
G Axis	OSJ:4D	Available when White Balance Mode is AWB A/AWB B	○	○
AWB Gain Offset	OSJ:0C		○	○
ATW Speed	OSI:25	Available when White Balance Mode is ATW	○	○
ATW Target R	OSJ:0D	Available when White Balance Mode is ATW	○	○
ATW Target B	OSJ:0E	Available when White Balance Mode is ATW	○	○
Chroma Level	OSD:B0	Available when Color Setting is Normal	○	○
Chroma Phase	OSJ:0B	Available when Color Setting is Normal	○	○
Master Pedestal	OSJ:0F	Available when Color Setting is Normal	○	○
R Pedestal	ORP	Available when Color Setting is Normal	○	○
G Pedestal	OSJ:10	Available when Color Setting is Normal	○	○
B Pedestal	OBP	Available when Color Setting is Normal	○	○
Pedestal Offset	OSJ:11	Available when Color Setting is Normal	○	○
Detail	ODT	Available when Color Setting is Normal	○	○
Master Detail	OSA:30	Available when Detail is On	○	○
Detail Coring	OSJ:12	Available when Detail is On	○	○
V Detail Level	OSD:A1	Available when Detail is On	○	○
Detail Frequency	OSD:A2	Available when Detail is On	○	○
Level Depend.	OSJ:13	Available when Detail is On	○	○
Knee Aperture Level	OCG:3F	Available when Detail is On	○	○
Detail Gain(+)	OSA:38	Available when Detail is On	○	○
Detail Gain(-)	OSA:39	Available when Detail is On	○	○
Skin Detail	OSA:40	Available when Detail is On	○	○
Skin Detail Effect	OSD:A3	Available when Skin Detail is On	○	○
DownCon Detail	OSJ:14	Available when Format : 2160/○○ and Color Setting is Normal	○	–
DC. Master Detail	OSJ:15	Available when DownCon Detail is On	○	–
DC. Detail Coring	OSJ:16	Available when DownCon Detail is On	○	–
DC. V Detail Level	OSJ:17	Available when DownCon Detail is On	○	–
DC. Detail Frequency	OSJ:18	Available when DownCon Detail is On	○	–
DC. Level Depend.	OSJ:19	Available when DownCon Detail is On	○	–
DC. Knee Aperture Level	OSJ:1A	Available when DownCon Detail is On	○	–
Gamma Mode	OSE:72	Available when Color Setting is Normal	○	○
Gamma	OSA:6A	Available when Gamma Mode is not HLG	○	○
F-REC Dynamic Level	OSA:10	Available when Gamma Mode is FILM REC	○	○
F-REC Black STR. Level	OSA:0F	Available when Gamma Mode is FILM REC	○	○
V-REC Knee Slope	OSA:25	Available when Gamma Mode is VIDEO REC	○	○
V-REC Knee Point	OSA:21	Available when Gamma Mode is VIDEO REC	○	○
Black Gamma	OSA:07		○	○
Black Gamma Range	OSJ:1B		○	○
DRS	OSE:33	Available when Gamma Mode is not HLG	○	○
Knee mode	OSA:2D	Available when Gamma Mode is not HLG and Color Setting is Normal	○	○
Auto Knee Response	OSG:97		○	○
Knee Point	OSA:20	Available when Knee Mode is Manual	○	○
Knee Slope	OSA:24	Available when Knee Mode is Manual	○	○
HLG Knee	OSI:40	Available when Gamma Mode is HLG and Color Setting is Normal	○	○
HLG Knee Point	OSI:41		○	○
HLG Knee Slope	OSI:42		○	○
White Clip	OSA:2E	Available when Gamma Mode is not HLG and Color Setting is Normal	○	○
White Clip Level	OSA:2A	Available when White Clip is On	○	○

Menu	Command	Remarks	UE150	HE145
DNR	OSD:3A		○	○
Matrix				
Matrix Type	OSE:31		○	○
Adaptive Matrix	OSJ:4F		○	○
R-G	OSD:A4	Available when Matrix Type is User	○	○
R-B	OSD:A5	Available when Matrix Type is User	○	○
G-R	OSD:A6	Available when Matrix Type is User	○	○
G-B	OSD:A7	Available when Matrix Type is User	○	○
B-R	OSD:A8	Available when Matrix Type is User	○	○
B-G	OSD:A9	Available when Matrix Type is User	○	○
B_Mg	OSD:80 OSD:81	Available when Matrix Type is User	○	○
Mg	OSD:82 OSD:83	Available when Matrix Type is User	○	○
Mg_R	OSD:84 OSD:85	Available when Matrix Type is User	○	○
Mg_R_R	OSD:9A OSD:9B	Available when Matrix Type is User	○	○
R	OSD:86 OSD:87	Available when Matrix Type is User	○	○
R_R_Yl	OSD:9C OSD:9D	Available when Matrix Type is User	○	○
R_Yl	OSD:88 OSD:89	Available when Matrix Type is User	○	○
R_Yl_Yl	OSD:9E OSD:9F	Available when Matrix Type is User	○	○
Yl	OSD:8A OSD:8B	Available when Matrix Type is User	○	○
Yl_Yl_G	OSD:1C OSD:1D	Available when Matrix Type is User	○	○
Yl_G	OSD:8C OSD:8D	Available when Matrix Type is User	○	○
G	OSD:8E OSD:8F	Available when Matrix Type is User	○	○
G_Cy	OSD:90 OSD:91	Available when Matrix Type is User	○	○
Cy	OSD:92 OSD:93	Available when Matrix Type is User	○	○
Cy_B	OSD:94 OSD:95	Available when Matrix Type is User	○	○
B	OSD:96 OSD:97	Available when Matrix Type is User	○	○
Lens				
Focus Mode	OAF #D1		○	○
Zoom Mode	OSE:70 OSD:B3		○	○
Max Digital Zoom	OSE:7A	Available when Zoom Mode is D.Zoom	○	○
Digital Extender	OSJ:4E	Available when Zoom Mode is Opt.Zoom	○	○
O.I.S. Mode	OIS		○	○
System				
Frequency	OSE:77		○	○
Format	OSA:87		○	○
Shooting mode	OSI:30		○	○
Color Setting	OSJ:56		○	–
Genlock				
Hrizontal Phase	OHP		○	○
Tracking Data Output				
Serial	OSJ:54		○	–
IP	OSJ:55		○	–
Invert Pan/Tilt Axis	OSJ:C1		○	–
Camera ID	OSJ:F4			
Wireless Control	#WLC		○	○
Fan	#FAN #FS1		○	○
Fan2	#FA2 #FS2		○	○
Output				
12G SDI				
Format	OSJ:1E		○	–
HDR Output Select	OSJ:1F	Available when Gamma Mode is HLG and Color Setting is Normal	○	–
V-Log Output Select	OSJ:57	Available when Color Setting is V-Log	○	–
3G SDI Out	OSJ:20	Available when 12G SDI>Format is 1080/59.94p / 1080/50p	○	–
3G SDI				
Format	OSJ:21		○	○
HDR Output Select	OSJ:22	Available when Gamma Mode is HLG and Color Setting is Normal	○	○
V-Log Output Select	OSJ:58	Available when Color Setting is V-Log	○	–
3G SDI Out	OSI:29	Available when 3G SDI>Format is 1080/59.94p / 1080/50p	○	○
MONI				
Format	OSJ:23		○	–
HDR Output Select	OSJ:24	Available when Gamma Mode is HLG and Color Setting is Normal	○	–
V-Log Output Select	OSJ:59	Available when Color Setting is V-Log	○	–
HDMI				
Format	OSJ:25		○	○
HDR Output Select	OSJ:26	Available when Gamma Mode is HLG and Color Setting is Normal	○	○
V-Log Output Select	OSJ:5A	Available when Color Setting is V-Log	○	–
Video Sampling	OSE:68	Available when HDMI>Format is 2160/59.94p / 2160/50p	○	○
Bar	DCB		○	○
Color Bar Type	OSD:BA	Available when Bar is Colorbar	○	○
Tone	OSJ:27	Available when Bar is Colorbar	○	○

Menu	Command	Remarks	UE150	HE145
Audio	OSA:D0		O	O
Input Type	OSA:D1	Available when Audio is On	O	O
Volume Level	OSA:D5	Available when Audio is On	O	O
Plugin Power	OSA:D2	Available when Audio is On and Input Type is Mic	O	O
OSD Mix/Crop Marker				
12G SDI	OSE:7B		O	O
3G SDI Out	OSE:7B		O	O
HDMI	OSE:7B		O	O
NDI	OSE:7B		O	O
IP/NDI|HX	OSE:7B		O	O
OSD off with Tally	OSE:75		O	O
OSD Status	OSA:88		O	O
Tally	#TAE TLR #DA TLG #TAA		O	O
Tally LED Limit				
R	OSJ:D9		O	O
G	OSJ:DA		O	O
Tally Brightness	OSA:D3		O	O
Status Lamp	#LMP		O	O
External Output				
Output1	OSJ:41		O	O
Output2	OSJ:42		O	O
UHD Crop	OSJ:2E	Available when Format is 2160/OO	O	–
3G SDI Out	OSI:32	Available when UHD Crop is Crop(1080)/Crop(720)	O	–
IP Out	OSI:33	Available when UHD Crop is Crop(1080)/Crop(720)	O	–
Crop Out	OSI:16	Available when UHD Crop is Crop(1080)/Crop(720)	O	–
Crop Marker	OSI:1A	Available when UHD Crop is Crop(1080)/Crop(720)	O	–
Crop Adjut	OSI:17	Available when UHD Crop is Crop(1080)/Crop(720)	O	–
Crop H Position	OSJ:2F OSJ:31 OSJ:33	Available when UHD Crop is Crop(1080)/Crop(720)	O	–
Crop V Position	OSJ:30 OSJ:32 OSJ:34	Available when UHD Crop is Crop(1080)/Crop(720)	O	–
(Crop H/V Position command)	OSJ:60 OSI:15 OSJ:5D OSJ:5E OSJ:5F OSJ:A0	Available when UHD Crop is Crop(1080)/Crop(720)	O	–
Pan/Tilt				
Install Position	#INS		O	O
Smart Picture Flip	#SPF QFS		O	O
Flip Detect Angle	#FDA	Available when Smart Picture Flip is Auto	O	O
P/T Speed Mode	OSJ:2D		O	O
Speed With Zoom Position	#SWZ		O	O
Focus Adjust With PTZ.	OAZ	Available when Focus Mode is Manual	O	O
Power On Poosition	OSJ:45		O	O
Preset Number	OSJ:46		O	O
Preset				
Preset Speed Unit	OSJ:29		O	O
Preset Speed Table	#PST		O	O
Preset Speed	#UPVS		O	O
Preset Acceleration Setting				
Preset Accalaration	OSJ:A8	Available when Preset Speed Unit is Speed	O	O
Rise Acceleration	OSJ:AB	Available when Preset Aceleration is Manual	O	O
Preset Scope	OSE:71		O	O
Preset Digital Extender	OSE:7C		O	O
Preset Crop	OSJ:2A	Available when UHD Crop is Crop(1080)/Crop(720)	O	–
Preset Thumbnail Update	OSJ:2B		O	O
Preset Name	OSJ:2C		O	O
Preset Iris	OSJ:5B	Available when Preset Scope is Mode A/Mode B	O	O
Preset Zoom Mode	OSE:7D		O	O
Freeze During Preset	#PRF		O	O
Maintenance				
FW Version	QSV #QSV		O	O
IP Network				
Hour Meter				
Operation	–			
Fan	–			
HDMI Status	–			
Error Status				
Lens	–			
Pan/Tilt	–			
Fan	–			
Temperature	–			

Commands not linked to menus

Command name	Command	Remarks	UE150	HE145
MENU制御				
Menu On/Off	DUS		○	○
Menu Cancel	DPG	Available when Menu is On	○	○
Menu Enter	DIT	Available when Menu is On	○	○
Menu UP	DUP	Available when Menu is On	○	○
Menu Down	DDW	Available when Menu is On	○	○
Menu Right	DRT	Available when Menu is On	○	○
Menu Left	DLT	Available when Menu is On	○	○
Pan/Tilt				
Pan Speed Control	#P		○	○
Tilt Speed Control	#T		○	○
P/T Speed Control	#PTS		○	○
P/T Absolute Position Control	#APC		○	○
P/T Relative Position Control	#RPC		○	○
P/T Absolute Position Control with Speed	#APS		○	○
P/T Relative Position Control with Speed	#RPS		○	○
Limitation Control	#LC		○	○
Limitation Control (toggle)	#L		○	○
Lens				
Zoom Scale	OSJ:3D		○	○
Digital Zoom Magnification	OSE:76		○	○
Zoom Speed Control	#Z		○	○
Zoom Position Control	#AXZ		○	○
Focus Speed Control	#F	Available when Focus Mode is Manual	○	○
Focus Position Control	#AXF	Available when Focus Mode is Manual	○	○
Push Auto Focus	OSE:69	Available when Focus Mode is Manual	○	○
Toutch AF	OSJ:28	Available when Focus Mode is Manual and UHD Crop is Off	○	○
Iris Control	#AXI #I ORV	Available when Iris Mode is Manual	○	○
Iris Follow	OSD:4F		○	○
Lens Position Information	#LPI		○	○
Lens Position Information Control	#LPC		○	○
Request Iris F No.	OIF		○	○
Request Zoom Position	#GZ		○	○
Request Focus Position	#GF		○	○
Request Iris Position	#GI		○	○
Preset				
Recall Preset Memory	#R		○	○
Save Preset Memory	#M		○	○
Delete Preset Memory	#C		○	○
Preset Entry Confirmation	#PE		○	○
Request Latest Recall Preset No.	#S		○	○
Preset completion notification	q		○	○
Save Preset Name	OSJ:35		○	○
Delete Preset Name (Single)	OSJ:36		○	○
Delete Preset Name (All)	OSJ:37		○	○
Update Preset Thumbnail	OSJ:39		○	○
Delete Preset Thumbnail (Single)	OSJ:3A		○	○
Delete Preset Thumbnail (All)	OSJ:3B		○	○
Preset Name/Preset Thumbnail Counter	OSJ:3C		○	○
Convenient command				
Get Gain/Color Temperature/Shutter/ND	#PTG		○	○
Get Pan/Tilt/Zoom/Focus/Iris	#PTV #PTD		○	○
Operation Lock				
Operation Lock	OSJ:3E		○	○
Release Operation Lock	OSJ:3F		○	○
Operation Lock Status	OSJ:40		○	○
Error				
Error Information	OER		○	○
Error Information	OSI:46		○	○
Latest Error Information	#RER		○	○
Others				
Model Number	QID		○	○
Camera Title	OSJ:5C		○	○
Resolution Control	#RZL		○	○
Power On / Standby	#O		○	○

9. コマンド仕様一覧
Scene

Command name	Category		Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
Scene File	Control		XSF:[Data]	0 1 2 3 4	– Scene1 Scene2 Scene3 Scene4	cam※1	XSF:[Data] ※2	OSF:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=XSF:1&res=1
	Response		XSF:[Data]						
	Request		QSF	0 1 2 3 4	Scene1 Scene2 Scene3 Scene4 –				
	Response		OSF:[Data]						

※1. There are two type of command type "ptz" is Pan-Tilt head Control and "cam" is for camera control

※2. When switching scene, update notification of each command belonging to the scene wii be sent

項目	コマンド	項目	コマンド
Scene	XSF	DC. Knee Aperture Level	OSJ:1A:02
Picture Level	OSD:48	Gamma	OSA:6A
Gamma Mode	OSE:72	F-REC Dynamic Level	OSA:10:3
Iris Mode	ORS #D3	F-REC Black STR. Level	OSA:0F:00
Auto Iris Speed	OSJ:01	V-REC Knee Slope	OSA:25:7C
Auto Iris Wondow	OSJ:02	V-REC Knee Point	OSA:21:62
Auto Iris Close Limit	OSJ:C0	Black Gamma	OSA:07
Shutter Mode	OSJ:03	Black Gamma Range	OSJ:1B
Step/Synchro	OSJ:06 OSJ:09	DRS	OSE:33
ELC Limit	OSD:BF	Knee mode	OSA:2D
Gain	OGU	Auto Knee Response	OSG:97
Super Gain	OSI:28	Knee Point	OSA:20
AGC MaxGain	OSD:69	Knee Slope	OSA:24
Frame mix	OSA:65	HLG Knee	OSI:40:0
ND Filter	OFT	HLG Knee Point	OSI:41:1C
Day/Night	#D6	HLG Knee Slope	OSI:42:0A
White Balance Mode	OAW	White Clip	OSA:2E
Color Temperature	OSI:20	White Clip Level	OSA:2A
R Gain	OSG:39	DNR	OSD:3A
B Gain	OSG:3A	Matrix Type	OSE:31
AWB Gain Offset	OSJ:0C	R-G	OSD:A4
ATW Speed	OSI:25	R-B	OSD:A5
ATW Target R	OSJ:0D	G-R	OSD:A6
ATW Target B	OSJ:0E	G-B	OSD:A7
Chroma Level	OSD:B0	B-R	OSD:A8
Chroma Phase	OSJ:0B	B-G	OSD:A9
Master Pedestal	OSJ:0F	Adaptive Matrix	OSJ:4F
R Pedestal	ORP	B_Mg	OSD:80 OSD:81
G Pedestal	OSJ:10	Mg	OSD:82 OSD:83
B Pedestal	OBP	Mg_R	OSD:84 OSD:85
Pedestal Offset	OSJ:11	Mg_R_R	OSD:9A OSD:9B
Detail	ODT	R	OSD:86 OSD:87
Master Detail	OSA:30	R_R_Yl	OSD:9C OSD:9D
Detail Coring	OSJ:12	R_Yl	OSD:88 OSD:89
V Detail Level	OSD:A1	R_Yl_Yl	OSD:9E OSD:9F

項目	コマンド	項目	コマンド
Detail Frequency	OSD:A2	Yl	OSD:8A OSD:8B
Level Depend.	OSJ:13	Yl_Yl_G	OSD:1C OSD:1D
Knee Aperture Level	OCG:3F	Yl_G	OSD:8C OSD:8D
Detail Gain(+)	OSA:38	G	OSD:8E OSD:8F
Detail Gain(-)	OSA:39	G_Cy	OSD:90 OSD:91
Skin Detail	OSA:40	Cy	OSD:92 OSD:93
Skin Detail Effect	OSD:A3	Cy_B	OSD:94 OSD:95
DownCon Detail	OSJ:14:1	B	OSD:96 OSD:97
DC. Master Detail	OSJ:15:6C	Color TEMP. Setting	OSJ:4A
DC. Detail Coring	OSJ:16:0F	AWB R Gain	OSJ:4B
DC. V Detail Level	OSJ:17:87	AWB B Gain	OSJ:4C
DC. Detail Frequency	OSJ:18:80	AWB G Axis	OSJ:4D
DC. Level Depend.	OSJ:19:80		

Brightness

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
Picture Level	Control	OSD:48:[Data]	00h	−50	cam	OSD:48:[Data]	OSD:48:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:48:32&res=1
	Response	OSD:48:[Data]	−	−				
	Request	QSD:48	32h	0				
	Response	OSD:48:[Data]	64h	50				
Iris Mode	Control	ORS:[Data]			cam	ORS:[Data]	ORS:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=ORS:1&res=1
	Response	ORS:[Data]	0	Manual				
	Request	QRS	1	Auto				
	Response	ORS:[Data]						
Iris Mode	Control	#D3[Data]			ptz	d3[Data]	d3[Data]	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23D30&res=1
	Response	d3[Data]	0	Manual				
	Request	#D3	1	Auto				
	Response	d3[Data]						
Auto Iris Speed	Control	OSJ:01:[Data]	0	Slow	cam	OSJ:01:[Data]	OSJ:01:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:01:0&res=1
	Response	OSJ:01:[Data]	1	Normal				
	Request	QSJ:01	2	Fast				
	Response	OSJ:01:[Data]						
Auto Iris Window	Control	OSJ:02:[Data]	0	Normal1	cam	OSJ:02:[Data]	OSJ:02:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:02:0&res=1
	Response	OSJ:02:[Data]	1	Normal2				
	Request	QSJ:02	2	Center				
	Response	OSJ:02:[Data]						
Auto Iris Close Limit	Control	OSJ:C0:[Data]	0	Normal	cam	OSJ:C0:[Data]	OSJ:C0:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:C0:0&res=1
	Response	OSJ:C0:[Data]	1	F8				
	Request	QSJ:C0	2	F7				
	Response	OSJ:C0:[Data]	3	F5.6				
Shutter Mode	Control	OSJ:03:[Data]	0	Off	cam	OSJ:03:[Data]	OSJ:03:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:03:1&res=1
	Response	OSJ:03:[Data]	1	Step				
	Request	QSJ:03	2	Synchro				
	Response	OSJ:03:[Data]	3	ELC				
Step Inc	Control	OSJ:04:[Data]	01h	1	cam	−	−	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:04:01&res=1 Increase [Data] stage among selectable Shutter Steps Update notification of OSJ:06 is sent
	Response	OSJ:04:[Data]	−	—				
	Request	−	64h	100				
	Response	−						
Step Dec	Control	OSJ:05:[Data]	01h	1	cam	−	−	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:05:01&res=1 Decrease [Data] stage among selectable Shutter Steps Update notification of OSJ:06 is sent
	Response	OSJ:05:[Data]	−	—				
	Request	−	64h	100				
	Response	−						

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
Step VAL	Control	OSJ:06:[Data]	0001h 〜 2710h	1/1 〜 1/10000	cam	OSJ:06:[Data]	OSJ:06:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:06:003C&res=1 Specify the denominator value of [Setting] in [Data] (hexadecimal number) Except for the effective shutter speed, respond with ER3 ・59.94p / 59.94i mode 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000 ・29.97p mode 1/30,1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000 ・23.98p / 24p mode 1/24,1/48, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000 ・50p / 50i mode 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000 ・25p mode 1/25,1/50,1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000
	Response	OSJ:06:[Data]						
	Request	QSJ:06						
	Response	OSJ:06:[Data]						
Synchro Inc	Control	OSJ:07:[Data]	01h 〜 64h	1 〜 100	cam	-	-	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:07:01&res=1 Increase [Data] stage among selectable Shutter Steps Update notification of OSJ:09 is sent
	Response	OSJ:07:[Data]						
	Request	-						
	Response	-						
Synchro Dec	Control	OSJ:08:[Data]	01h 〜 64h	1 〜 100	cam	-	-	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:08:01&res=1 Decrease [Data] stage among selectable Shutter Steps Update notification of OSJ:09 is sent
	Response	OSJ:08:[Data]						
	Request	-						
	Response	-						
Synchro VAL	Control	OSJ:09:[Data]	00000h 〜 186A0h	0.0[Hz] 〜 10000.0[Hz]	cam	OSJ:09:[Data]	OSJ:09:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:09:00258&res=1 Specify a value that is 10 times the [Setting] for [Data] (hexadecimal number). Except for the effective shutter speed, round down ・59.94p / 59.94i mode 60.0Hz〜7200Hz ・29.97p mode 30.0Hz〜7200Hz ・23.98p / 24p mode 24.0Hz〜7200Hz ・50p / 50i mode 50.0Hz〜7200Hz ・25p mode 25.0Hz〜7200Hz
	Response	OSJ:09:[Data]						
	Request	QSJ:09						
	Response	OSJ:09:[Data]						
ELC Limit (Auto Shutter Limit)	Control	OSD:BF:[Data]	2 3 4	1/100 1/120 1/250	cam	OSD:BF:[Data]	OSD:BF:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:BF:2&res=1
	Response	OSD:BF:[Data]						
	Request	QSD:BF						
	Response	OSD:BF:[Data]						
Gain	Control	OGU:[Data]	05h 〜 08h 〜 32h 80h	-3dB 〜 0dB 〜 42dB AGC On	cam	OGU:[Data]	OGU:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OGU:08&res=1 When Super Gain is Off 　Auto, -3dB〜36dB When Super Gain is On 　Auto, -3dB〜42dB
	Response	OGU:[Data]						
	Request	QGU						
	Response	OGU:[Data]						
Super Gain	Control	OSI:28:[Data]	0 1	Off On	cam	OSI:28:[Data]	OSI:28:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSI:28:0&res=1
	Response	OSI:28:[Data]						
	Request	QSI:28						
	Response	OSI:28:[Data]						

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
AGC Max Gain	Control	OSD:69:[Data]	01 02 03	6dB 12dB 18dB	cam	OSD:69:[Data]	OSD:69:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:69:01&res=1
	Response	OSD:69:[Data]						
	Request	QSD:69						
	Response	OSD:69:[Data]						
Fram Mix	Control	OSA:65:[Data]	00h 06h 0Ch 12h 18h	Off +6dB +12dB +18dB +24dB	cam	OSA:65:[Data]	OSA:65:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSA:65:00&res=1 When Shutter Mode is ELC Off/Auto is available
	Response	OSA:65:[Data]						
	Request	QSA:65						
	Response	OSA:65:[Data]						
ND Filter	Control	OFT:[Data]	0 1 2 3	Through 1/4 ND 1/16 ND 1/64 ND	cam	OFT:[Data]	OFT:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OFT:0&res=1
	Response	OFT:[Data]						
	Request	QFT						
	Response	OFT:[Data]						
Day/Night	Control	#D6[Data]	0 1	Off On	ptz	d6[Data]	d6[Data]	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23D60&res=1
	Response	d6[Data]						
	Request	#D6						
	Response	d6[Data]						

Picture

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
White Balance Mode	Control	OAW:[Data]	0 1 2 3 4 5 9	ATW AWC A AWC B ——— PRESET 3200K PRESET 5600K VAR	cam	OAW:[Data]	OAW:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OAW:1&res=1 ATW variable range is from 2000k to 15000K
	Response	OAW:[Data]						
	Request	QAW	0 1 2 3 4 5 9	ATW ——— AWC A AWC B PRESET 3200K PRESET 5600K VAR				
	Response	OAW:[Data]						
AWB	Control	OWS	–	–	cam	OWS ER3:OWS	–	http://192.168.0.10/cgi-bin/aw_cam?cmd=OWS&res=1 See Chapter.6 for AWB execution sequence When Day/Night is Night, AWB is unavailable
	Response	OWS						
	Request	–						
	Response	–						
ABB	Control	OAS	–	–	cam	OAS ER3:OAS	–	http://192.168.0.10/cgi-bin/aw_cam?cmd=OAS&res=1
	Response	OAS						
	Request	–						
	Response	–						
Color Temperature Inc	Control	OSI:1E:[Data]	1h – Ah	1 – 10	cam	OSI:1E:[Data]	–	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSI:1E:1&res=1 Increase [Data] stage among selectable Color Temperature Update notification of OSI:20 is sent
	Response	OSI:1E:[Data]						
	Request	–						
	Response	–						
Color Temperature Dec	Control	OSI:1F:[Data]	1h – Ah	1 – 10	cam	OSI:1F:[Data]	–	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSI:1F:1&res=1 Decrease [Data] stage among selectable Color Temperature Update notification of OSI:20 is sent
	Response	OSI:1F:[Data]						
	Request	–						
	Response	–						
Color Temperature	Control	OSI:20:[Data1]:[Data2]	[Data1] 007D0h – 03A98h [Data2] 0h 1h 2h	[Data1] 2000K – 15000K [Data2] Valid Under Over	cam	OSI:20:[Data1]:[Data2]	OSI:20:0x[Data1]:[Data2]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSI:20:007D0&res=1 Except for the effective Color Temperature, round down
	Response	OSI:20:[Data1]:[Data2]						
	Request	QSI:20						
	Response	OSI:20:[Data1]:[Data2]						
R Gain	Control	OSG:39:[Data]	738h – 800h – 8C8h	–200 – 0 – 200	cam	OSG:39:[Data]	OSG:39:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSG:39:800&res=1
	Response	OSG:39:[Data]						
	Request	QSG:39						
	Response	OSG:39:[Data]						
B Gain	Control	OSG:3A:[Data]	738h – 800h – 8C8h	–200 – 0 – 200	cam	OSG:3A:[Data]	OSG:3A:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSG:3A:800&res=1
	Response	OSG:3A:[Data]						
	Request	QSG:3A						
	Response	OSG:3A:[Data]						
AWB Color Temperature Inc	Control	OSJ:48:[Data]	1h – Ah	1 – 10	cam	OSJ:48:[Data]	–	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:48:1&res=1 Increase [Data] stage among selectable Color Temperature Update notification of OSJ:4A is sent
	Response	OSJ:48:[Data]						
	Request	–						
	Response	–						
AWB Color Temperature Dec	Control	OSJ:49:[Data]	1h – Ah	1 – 10	cam	OSJ:49:[Data]	–	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:49:1&res=1 Decrease [Data] stage among selectable Color Temperature Update notification of OSJ:4A is sent
	Response	OSJ:49:[Data]						
	Request	–						
	Response	–						

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
AWB Color Temperature	Control	OSJ:4A:[Data1]:[Data2]	[Data1] 007D0h – 03A98h [Data2] 0h 1h 2h	[Data1] 2000K – 15000K [Data2] Valid Under Over	cam	OSJ:4A:[Data1]:[Data2]	OSJ:4A:0x[Data1]:[Data2]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:4A:0&res=1 Except for the effective Color Temperature, round down
	Response	OSJ:4A:[Data1]:[Data2]						
	Request	QSJ:4A						
	Response	OSJ:4A:[Data1]:[Data2]						
AWB R Gain	Control	OSJ:4B:[Data]	670h – 800h – 990h	–400 – 0 – 400	cam	OSJ:4B:[Data]	OSJ:4B:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:4B:800&res=1
	Response	OSJ:4B:[Data]						
	Request	QSJ:4B						
	Response	OSJ:4B:[Data]						
AWB B Gain	Control	OSJ:4C:[Data]	670h – 800h – 990h	–400 – 0 – 400	cam	OSJ:4C:[Data]	OSJ:4C:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:4C:800&res=1
	Response	OSJ:4C:[Data]						
	Request	QSJ:4C						
	Response	OSJ:4C:[Data]						
AWB G Axis	Control	OSJ:4D:[Data]	670h – 800h – 990h	–400 – 0 – 400	cam	OSJ:4D:[Data]	OSJ:4D:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:4D:800&res=1
	Response	OSJ:4D:[Data]						
	Request	QSJ:4D						
	Response	OSJ:4D:[Data]						
AWB Gain Offset	Control	OSJ:0C:[Data]	0 1	Off On	cam	OSJ:0C:[Data]	OSJ:0C:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:0C:0&res=1
	Response	OSJ:0C:[Data]						
	Request	QSJ:0C						
	Response	OSJ:0C:[Data]						
ATW Speed	Control	OSI:25:[Data]	0 1 2	Normal Slow Fast	cam	OSI:25:[Data]	OSI:25:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSI:25:0&res=1
	Response	OSI:25:[Data]						
	Request	QSI:25						
	Response	OSI:25:[Data]						
ATW Target R	Control	OSJ:0D:[Data]	76h – 80h – 8Ah	–10 – 0 – +10	cam	OSJ:0D:[Data]	OSJ:0D:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:0D:80&res=1
	Response	OSJ:0D:[Data]						
	Request	QSJ:0D						
	Response	OSJ:0D:[Data]						
ATW Target B	Control	OSJ:0E:[Data]	76h – 80h – 8Ah	–10 – 0 – +10	cam	OSJ:0E:[Data]	OSJ:0E:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:0E:80&res=1
	Response	OSJ:0E:[Data]						
	Request	QSJ:0E						
	Response	OSJ:0E:[Data]						
Chroma Level	Control	OSD:B0:[Data]	00h 1Dh – 80h – E3h	OFF –99% – 0 – 99%	cam	OSD:B0:[Data]	OSD:B0:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:B0:80&res=1 Step:1%
	Response	OSD:B0:[Data]						
	Request	QSD:B0						
	Response	OSD:B0:[Data]						
Chroma Phase	Control	OSJ:0B:[Data]	61h – 80h – 9Fh	–31 – 0 – +31	cam	OSJ:0B:[Data]	OSJ:0B:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:0B:80&res=1
	Response	OSJ:0B:[Data]						
	Request	QSJ:0B						
	Response	OSJ:0B:[Data]						
Master Pedestal	Control	OSJ:0F:[Data]	738h – 800h – 8C8h	–200 – 0 – 200	cam	OSJ:0F:[Data]	OSJ:0F:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:0F:800&res=1
	Response	OSJ:0F:[Data]						
	Request	QSJ:0F						
	Response	OSJ:0F:[Data]						
R Pedestal	Control	ORP:[Data]	032h – 096h – 0FAh	–100 – 0 – +100	cam	ORP:[Data]	ORP:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=ORP:096&res=1
	Response	ORP:[Data]						
	Request	QRP						
	Response	ORP:[Data]						

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
G Pedestal	Control	OSJ:10:[Data]	032h	-100	cam	OSJ:10:[Data]	OSJ:10:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:10:096&res=1
	Response	OSJ:10:[Data]	—	—				
	Request	QSJ:10	096h	0				
	Response	OSJ:10:[Data]	—	—				
			0FAh	+100				
B Pedestal	Control	OBP:[Data]	032h	-100	cam	OBP:[Data]	OBP:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OBP:960&res=1
	Response	OBP:[Data]	—	—				
	Request	QBP	096h	0				
	Response	OBP:[Data]	—	—				
			0FAh	+100				
Pedestal Offset	Control	OSJ:11:[Data]			cam	OSJ:11:[Data]	OSJ:11:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:11:0&res=1
	Response	OSJ:11:[Data]	0	Off				
	Request	QSJ:11	1	On				
	Response	OSJ:11:[Data]						
Detail	Control	ODT:[Data]			cam	ODT:[Data]	ODT:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=ODT:1&res=1
	Response	ODT:[Data]	0	Off				
	Request	QDT	1	On				
	Response	ODT:[Data]	2	On				
Master Detail	Control	OSA:30:[Data]	61h	-31	cam	OSA:30:[Data]	OSA:30:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSA:30:80&res=1
	Response	OSA:30:[Data]	—	—				
	Request	QSA:30	80h	0				
	Response	OSA:30:[Data]	—	—				
			9Fh	+31				
Detail Coring	Control	OSJ:12:[Data]	00h	0	cam	OSJ:12:[Data]	OSJ:12:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:12:00&res=1
	Response	OSJ:12:[Data]	—	—				
	Request	QSJ:12	3Ch	60				
	Response	OSJ:12:[Data]						
V Detail Level	Control	OSD:A1:[Data]	79h	-7	cam	OSD:A1:[Data]	OSD:A1:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:A1:80&res=1
	Response	OSD:A1:[Data]	—	—				
	Request	QSD:A1	80h	0				
	Response	OSD:A1:[Data]	—	—				
			87h	7				
Detail Frequency	Control	OSD:A2:[Data]	79h	-7	cam	OSD:A2:[Data]	OSD:A2:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:A2:80&res=1
	Response	OSD:A2:[Data]	—	—				
	Request	QSD:A2	80h	0				
	Response	OSD:A2:[Data]	—	—				
			87h	7				
Level Depend	Control	OSJ:13:[Data]	79h	-7	cam	OSJ:13:[Data]	OSJ:13:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:13:80&res=1
	Response	OSJ:13:[Data]	—	—				
	Request	QSJ:13	80h	0				
	Response	OSJ:13:[Data]	—	—				
			87h	7				
Knee Ape. Level	Control	OSG:3F:[Data]	00h	0	cam	OSG:3F:[Data]	OSG:3F:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSG:3F:00&res=1
	Response	OSG:3F:[Data]	—	—				
	Request	QSG:3F	05h	5				
	Response	OSG:3F:[Data]						
Detail Gain(+)	Control	OSA:38:[Data]	61h	-31	cam	OSA:38:[Data]	OSA:38:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSA:38:80&res=1
	Response	OSA:38:[Data]	—	—				
	Request	QSA:38	80h	0				
	Response	OSA:38:[Data]	—	—				
			9Fh	+31				
Detail Gain(-)	Control	OSA:39:[Data]	61h	-31	cam	OSA:39:[Data]	OSA:39:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSA:39:80&res=1
	Response	OSA:39:[Data]	—	—				
	Request	QSA:39	80h	0				
	Response	OSA:39:[Data]	—	—				
			9Fh	+31				
Skin Tone Detail	Control	OSA:40:[Data]			cam	OSA:40:[Data]	OSA:40:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSA:40:0&res=1
	Response	OSA:40:[Data]	0	Off				
	Request	QSA:40	1	On				
	Response	OSA:40:[Data]						
Skin Detail Effect	Control	OSD:A3:[Data]	80h	0	cam	OSD:A3:[Data]	OSD:A3:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:A3:80&res=1
	Response	OSD:A3:[Data]	—	—				
	Request	QSD:A3	9Fh	+31				
	Response	OSD:A3:[Data]						

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
DownCon Detail	Control	OSJ:14:[Data]	0	Off	cam	OSJ:14:[Data]	OSJ:14:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:14:0&res=1
	Response	OSJ:14:[Data]	1	On				Only supported by AW-UE150
	Request	QSJ:14						
	Response	OSJ:14:[Data]						
DC. Master Detail	Control	OSJ:15:[Data]	61h	−31	cam	OSJ:15:[Data]	OSJ:15:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:15:80&res=1
	Response	OSJ:15:[Data]	−	−				Only supported by AW-UE150
	Request	QSJ:15	80h	0				
	Response	OSJ:15:[Data]	−	−				
			9Fh	31				
DC. Detail Coring	Control	OSJ:16:[Data]	00h	0	cam	OSJ:16:[Data]	OSJ:16:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:16:00&res=1
	Response	OSJ:16:[Data]	−	−				Only supported by AW-UE150
	Request	QSJ:16	3Ch	60				
	Response	OSJ:16:[Data]						
DC. V Detail Level	Control	OSJ:17:[Data]	79h	−7	cam	OSJ:17:[Data]	OSJ:17:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:17:80&res=1
	Response	OSJ:17:[Data]	−	−				Only supported by AW-UE150
	Request	QSJ:17	80h	0				
	Response	OSJ:17:[Data]	−	−				
			87h	+7				
DC. Detail Frequency	Control	OSJ:18:[Data]	7Eh	−2	cam	OSJ:18:[Data]	OSJ:18:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:18:80&res=1
	Response	OSJ:18:[Data]	−	−				Only supported by AW-UE150
	Request	QSJ:18	80h	0				
	Response	OSJ:18:[Data]	−	−				
			82h	+2				
DC. Level Depend.	Control	OSJ:19:[Data]	79h	−7	cam	OSJ:19:[Data]	OSJ:19:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:19:80&res=1
	Response	OSJ:19:[Data]	−	−				Only supported by AW-UE150
	Request	QSJ:19	80h	0				
	Response	OSJ:19:[Data]	−	−				
			87h	+7				
DC. Knee Ape. Level	Control	OSJ:1A:[Data]	00h	0	cam	OSJ:1A:[Data]	OSJ:1A:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:1A:00&res=1
			01h	1				
	Response	OSJ:1A:[Data]	02h	2				Only supported by AW-UE150
			03h	3				
	Request	QSJ:1A	04h	4				
	Response	OSJ:1A:[Data]	05h	5				
Gamma Mode	Control	OSE:72:[Data]	0	HD	cam	OSE:72:[Data]	OSE:72:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSE:72:0&res=1
			2	FILMLIKE1				
	Response	OSE:72:[Data]	3	FILMLIKE2				
			4	FILMLIKE3				
	Request	QSE:72	5	FILM REC				
			6	VIDEO REC				
	Response	OSE:72:[Data]	7	HLG				
Gamma	Control	OSA:6A:[Data]	67h	0.30	cam	OSA:6A:[Data]	OSA:6A:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSA:6A:67&res=1
			−	−				
	Response	OSA:6A:[Data]	6Ch	0.35				Step : 0.01
			−	−				
	Request	QSA:6A	80h	0.55				
			−	−				
	Response	OSA:6A:[Data]	94h	0.75				
F-REC Dynamic LVL	Control	OSA:10:[Data]	0	200%	cam	OSA:10:[Data]	OSA:10:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSA:10:0&res=1
	Response	OSA:10:[Data]	1	300%				
	Request	QSA:10	2	400%				
			3	500%				
	Response	OSA:10:[Data]	4	600%				
F-REC Black STR LVL	Control	OSA:0F:[Data]	00h	0	cam	OSA:0F:[Data]	OSA:0F:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSA:0F:00&res=1
	Response	OSA:0F:[Data]	−	−				
	Request	QSA:0F	1Eh	30				
	Response	OSA:0F:[Data]						
V-REC Knee Slope	Control	OSA:25:[Data]	7Ch	150%	cam	OSA:25:[Data]	OSA:25:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSA:25:80&res=1
	Response	OSA:25:[Data]	−	−				
	Request	QSA:25	80h	350%				Step:50%
			−	−				
	Response	OSA:25:[Data]	83h	500%				

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
V-REC Knee Point	Control	OSA:21:[Data]	62h	30%	cam	OSA:21:[Data]	OSA:21:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSA:21:80&res=1
	Response	OSA:21:[Data]	—	—				
			80h	60%				
	Request	QSA:21	—	—				
			9Eh	90%				
	Response	OSA:21:[Data]	—	—				
			Afh	107%				
Black Gamma	Control	OSA:07:[Data]	78h	−8	cam	OSA:07:[Data]	OSA:07:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSA:07:80&res=1
	Response	OSA:07:[Data]	—	—				
			80h	0				
	Request	QSA:07	—	—				
	Response	OSA:07:[Data]	88h	8				
B Gamma Range	Control	OSJ:1B:[Data]	1	1	cam	OSJ:1B:[Data]	OSJ:1B:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:1B:1&res=1
	Response	OSJ:1B:[Data]	2	2				
	Request	QSJ:1B	3	3				
	Response	OSJ:1B:[Data]						
DRS	Control	OSE:33:[Data]	0	OFF	cam	OSE:33:[Data]	OSE:33:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSE:33:1&res=1
	Response	OSE:33:[Data]	1	LOW				
	Request	QSE:33	2	MID				
	Response	OSE:33:[Data]	3	HIGH				
Knee Mode	Control	OSA:2D:[Data]	0	OFF	cam	OSA:2D:[Data]	OSA:2D:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSA:2D:0&res=1
	Response	OSA:2D:[Data]	1	MANUAL				
	Request	QSA:2D	2	AUTO				
	Response	OSA:2D:[Data]						
Auto Knee Response	Control	OSG:97:[Data]	1	1	cam	OSG:97:[Data]	OSG:97:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSG:97:1&res=1
	Response	OSG:97:[Data]	—	—				
	Request	QSG:97	8	8				
	Response	OSG:97:[Data]						
Knee Point	Control	OSA:20:[Data]	22h	70.00%	cam	OSA:20:[Data]	OSA:20:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSA:20:4A&res=1
	Response	OSA:20:[Data]	—	—				
			4Ah	80.00%				Step : 0.5%
	Request	QSA:20	—	—				
			80h	93.50%				
	Response	OSA:20:[Data]	—	—				
			B6h	107.00%				
Knee Slope	Control	OSA:24:[Data]	00h	0	cam	OSA:24:[Data]	OSA:24:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSA:24:00&res=1
	Response	OSA:24:[Data]	—	—				
	Request	QSA:24	63h	99				
	Response	OSA:24:[Data]						
HLG Knee SW	Control	OSI:40:[Data]	0	Off	cam	OSI:40:[Data]	OSI:40:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSI:40:0&res=1
	Response	OSI:40:[Data]	1	On				
	Request	QSI:40						
	Response	OSI:40:[Data]						
HLG Knee Point	Control	OSI:41:[Data]	1Ch	55.00%	cam	OSI:41:[Data]	OSI:41:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSI:41:80&res=1
	Response	OSI:41:[Data]	—	—				Step : 0.5%
			80h	80.00%				
	Request	QSI:41	—	—				
			D0h	100.00				
	Response	OSI:41:[Data]						
HLG Knee Slope	Control	OSI:42:[Data]	00h	0	cam	OSI:42:[Data]	OSI:42:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSI:42:00&res=1
	Response	OSI:42:[Data]	—	—				
	Request	QSI:42	64h	100				
	Response	OSI:42:[Data]						
White Clip	Control	OSA:2E:[Data]	0	Off	cam	OSA:2E:[Data]	OSA:2E:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSA:2E:0&res=1
	Response	OSA:2E:[Data]	1	On				
	Request	QSA:2E						
	Response	OSA:2E:[Data]						
White Clip Level	Control	OSA:2A:[Data]	00h	90%	cam	OSA:2A:[Data]	OSA:2A:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSA:2A:00&res=1
	Response	OSA:2A:[Data]	—	—				Step : 1%
	Request	QSA:2A	13h	109%				
	Response	OSA:2A:[Data]						
DNR	Control	OSD:3A:[Data]	00	Off	cam	OSD:3A:[Data]	OSD:3A:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:3A:01&res=1
	Response	OSD:3A:[Data]	01	Low				
	Request	QSD:3A	02	High				
	Response	OSD:3A:[Data]						

Matrix

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
Matrix Type	Control	OSE:31:[Data]	0	NORMAL	cam	OSE:31:[Data]	OSE:31:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSE:31:0&res=1
	Response	OSE:31:[Data]	1	EBU				
	Request	QSE:31	2	NTSC				
	Response	OSE:31:[Data]	3	USER				
Adaptive Matrix	Control	OSJ:4F:[Data]			cam	OSJ:4F:[Data]	OSJ:4F:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:4F:0&res=1
	Response	OSJ:4F:[Data]	0	Off				
	Request	QSJ:4F	1	On				
	Response	OSJ:4F:[Data]						
Matrix(R-G)	Control	OSD:A4:[Data]	41h	-63	cam	OSD:A4:[Data]	OSD:A4:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:A4:80&res=1
	Response	OSD:A4:[Data]	—	—				
	Request	QSD:A4	80h	0				
			—	—				
	Response	OSD:A4:[Data]	BFh	63				
Matrix(R-B)	Control	OSD:A5:[Data]	41h	-63	cam	OSD:A5:[Data]	OSD:A5:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:A5:80&res=1
	Response	OSD:A5:[Data]	—	—				
	Request	QSD:A5	80h	0				
			—	—				
	Response	OSD:A5:[Data]	BFh	63				
Matrix(G-R)	Control	OSD:A6:[Data]	41h	-63	cam	OSD:A6:[Data]	OSD:A6:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:A6:80&res=1
	Response	OSD:A6:[Data]	—	—				
	Request	QSD:A6	80h	0				
			—	—				
	Response	OSD:A6:[Data]	BFh	63				
Matrix(G-B)	Control	OSD:A7:[Data]	41h	-63	cam	OSD:A7:[Data]	OSD:A7:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:A7:80&res=1
	Response	OSD:A7:[Data]	—	—				
	Request	QSD:A7	80h	0				
			—	—				
	Response	OSD:A7:[Data]	BFh	63				
Matrix(B-R)	Control	OSD:A8:[Data]	41h	-63	cam	OSD:A8:[Data]	OSD:A8:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:A8:80&res=1
	Response	OSD:A8:[Data]	—	—				
	Request	QSD:A8	80h	0				
			—	—				
	Response	OSD:A8:[Data]	BFh	63				
Matrix(B-G)	Control	OSD:A9:[Data]	41h	-63	cam	OSD:A9:[Data]	OSD:A9:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:A9:80&res=1
	Response	OSD:A9:[Data]	—	—				
	Request	QSD:A9	80h	0				
			—	—				
	Response	OSD:A9:[Data]	BFh	63				
Color Correction B_Mg Saturation	Control	OSD:80:[Data]	41h	-63	cam	OSD:80:[Data]	OSD:80:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:80:80&res=1
	Response	OSD:80:[Data]	—	—				
	Request	QSD:80	80h	0				
			—	—				
	Response	OSD:80:[Data]	BFh	63				
Color Correction B_Mg Phase	Control	OSD:81:[Data]	41h	-63	cam	OSD:81:[Data]	OSD:81:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:81:80&res=1
	Response	OSD:81:[Data]	—	—				
	Request	QSD:81	80h	0				
			—	—				
	Response	OSD:81:[Data]	BFh	63				
Color Correction Mg Saturation	Control	OSD:82:[Data]	41h	-63	cam	OSD:82:[Data]	OSD:82:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:82:80&res=1
	Response	OSD:82:[Data]	—	—				
	Request	QSD:82	80h	0				
			—	—				
	Response	OSD:82:[Data]	BFh	63				
Color Correction Mg Phase	Control	OSD:83:[Data]	41h	-63	cam	OSD:83:[Data]	OSD:83:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:83:80&res=1
	Response	OSD:83:[Data]	—	—				
	Request	QSD:83	80h	0				
			—	—				
	Response	OSD:83:[Data]	BFh	63				

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
Color Correction Mg_R Saturation	Control	OSD:84:[Data]	41h	−63	cam	OSD:84:[Data]	OSD:84:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:84:80&res=1
	Response	OSD:84:[Data]	−	−				
	Request	QSD:84	80h	0				
			−	−				
	Response	OSD:84:[Data]	BFh	63				
Color Correction Mg_R Phase	Control	OSD:85:[Data]	41h	−63	cam	OSD:85:[Data]	OSD:85:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:85:80&res=1
	Response	OSD:85:[Data]	−	−				
	Request	QSD:85	80h	0				
			−	−				
	Response	OSD:85:[Data]	BFh	63				
Color Correction Mg_R_R Saturation	Control	OSD:9A:[Data]	41h	−63	cam	OSD:9A:[Data]	OSD:9A:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:9A:80&res=1
	Response	OSD:9A:[Data]	−	−				
	Request	QSD:9A	80h	0				
			−	−				
	Response	OSD:9A:[Data]	BFh	63				
Color Correction Mg_R_R Phase	Control	OSD:9B:[Data]	41h	−63	cam	OSD:9B:[Data]	OSD:9B:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:9B:80&res=1
	Response	OSD:9B:[Data]	−	−				
	Request	QSD:9B	80h	0				
			−	−				
	Response	OSD:9B:[Data]	BFh	63				
Color Correction R Saturation	Control	OSD:86:[Data]	41h	−63	cam	OSD:86:[Data]	OSD:86:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:86:80&res=1
	Response	OSD:86:[Data]	−	−				
	Request	QSD:86	80h	0				
			−	−				
	Response	OSD:86:[Data]	BFh	63				
Color Correction R Phase	Control	OSD:87:[Data]	41h	−63	cam	OSD:87:[Data]	OSD:87:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:87:80&res=1
	Response	OSD:87:[Data]	−	−				
	Request	QSD:87	80h	0				
			−	−				
	Response	OSD:87:[Data]	BFh	63				
Color Correction R_R_Yl Saturation	Control	OSD:9C:[Data]	41h	−63	cam	OSD:9C:[Data]	OSD:9C:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:9C:80&res=1
	Response	OSD:9C:[Data]	−	−				
	Request	QSD:9C	80h	0				
			−	−				
	Response	OSD:9C:[Data]	BFh	63				
Color Correction R_R_Yl Phase	Control	OSD:9D:[Data]	41h	−63	cam	OSD:9D:[Data]	OSD:9D:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:9D:80&res=1
	Response	OSD:9D:[Data]	−	−				
	Request	QSD:9D	80h	0				
			−	−				
	Response	OSD:9D:[Data]	BFh	63				
Color Correction R_Yl Saturation	Control	OSD:88:[Data]	41h	−63	cam	OSD:88:[Data]	OSD:88:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:88:80&res=1
	Response	OSD:88:[Data]	−	−				
	Request	QSD:88	80h	0				
			−	−				
	Response	OSD:88:[Data]	BFh	63				
Color Correction R_Yl Phase	Control	OSD:89:[Data]	41h	−63	cam	OSD:89:[Data]	OSD:89:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:89:80&res=1
	Response	OSD:89:[Data]	−	−				
	Request	QSD:89	80h	0				
			−	−				
	Response	OSD:89:[Data]	BFh	63				
Color Correction R_Yl_Yl Saturation	Control	OSD:9E:[Data]	41h	−63	cam	OSD:9E:[Data]	OSD:9E:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:9E:80&res=1
	Response	OSD:9E:[Data]	−	−				
	Request	QSD:9E	80h	0				
			−	−				
	Response	OSD:9E:[Data]	BFh	63				
Color Correction R_Yl_Yl Phase	Control	OSD:9F:[Data]	41h	−63	cam	OSD:9F:[Data]	OSD:9F:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:9F:80&res=1
	Response	OSD:9F:[Data]	−	−				
	Request	QSD:9F	80h	0				
			−	−				
	Response	OSD:9F:[Data]	BFh	63				

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
Color Correction YI Saturation	Control	OSD:8A:[Data]	41h	-63	cam	OSD:8A:[Data]	OSD:8A:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:8A:80&res=1
	Response	OSD:8A:[Data]	— 80h	— 0				
	Request	QSD:8A	—	—				
	Response	OSD:8A:[Data]	BFh	63				
Color Correction YI Phase	Control	OSD:8B:[Data]	41h	-63	cam	OSD:8B:[Data]	OSD:8B:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:8B:80&res=1
	Response	OSD:8B:[Data]	— 80h	— 0				
	Request	QSD:8B	—	—				
	Response	OSD:8B:[Data]	BFh	63				
Color Correction YI_YI_G Saturation	Control	OSJ:1C:[Data]	41h	-63	cam	OSJ:1C:[Data]	OSJ:1C:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:1C:80&res=1
	Response	OSJ:1C:[Data]	— 80h	— 0				
	Request	QSJ:1C	—	—				
	Response	OSJ:1C:[Data]	BFh	63				
Color Correction YI_YI_G Phase	Control	OSJ:1D:[Data]	41h	-63	cam	OSJ:1D:[Data]	OSJ:1D:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:1D:80&res=1
	Response	OSJ:1D:[Data]	— 80h	— 0				
	Request	QSJ:1D	—	—				
	Response	OSJ:1D:[Data]	BFh	63				
Color Correction YI_G Saturation	Control	OSD:8C:[Data]	41h	-63	cam	OSD:8C:[Data]	OSD:8C:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:8C:80&res=1
	Response	OSD:8C:[Data]	— 80h	— 0				
	Request	QSD:8C	—	—				
	Response	OSD:8C:[Data]	BFh	63				
Color Correction YI_G Phase	Control	OSD:8D:[Data]	41h	-63	cam	OSD:8D:[Data]	OSD:8D:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:8D:80&res=1
	Response	OSD:8D:[Data]	— 80h	— 0				
	Request	QSD:8D	—	—				
	Response	OSD:8D:[Data]	BFh	63				
Color Correction G Saturation	Control	OSD:8E:[Data]	41h	-63	cam	OSD:8E:[Data]	OSD:8E:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:8E:80&res=1
	Response	OSD:8E:[Data]	— 80h	— 0				
	Request	QSD:8E	—	—				
	Response	OSD:8E:[Data]	BFh	63				
Color Correction G Phase	Control	OSD:8F:[Data]	41h	-63	cam	OSD:8F:[Data]	OSD:8F:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:8F:80&res=1
	Response	OSD:8F:[Data]	— 80h	— 0				
	Request	QSD:8F	—	—				
	Response	OSD:8F:[Data]	BFh	63				
Color Correction G_Cy Saturation	Control	OSD:90:[Data]	41h	-63	cam	OSD:90:[Data]	OSD:90:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:90:80&res=1
	Response	OSD:90:[Data]	— 80h	— 0				
	Request	QSD:90	—	—				
	Response	OSD:90:[Data]	BFh	63				
Color Correction G_Cy Phase	Control	OSD:91:[Data]	41h	-63	cam	OSD:91:[Data]	OSD:91:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:91:80&res=1
	Response	OSD:91:[Data]	— 80h	— 0				
	Request	QSD:91	—	—				
	Response	OSD:91:[Data]	BFh	63				
Color Correction Cy Saturation	Control	OSD:92:[Data]	41h	-63	cam	OSD:92:[Data]	OSD:92:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:92:80&res=1
	Response	OSD:92:[Data]	— 80h	— 0				
	Request	QSD:92	—	—				
	Response	OSD:92:[Data]	BFh	63				
Color Correction Cy Phase	Control	OSD:93:[Data]	41h	-63	cam	OSD:93:[Data]	OSD:93:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:93:80&res=1
	Response	OSD:93:[Data]	— 80h	— 0				
	Request	QSD:93	—	—				
	Response	OSD:93:[Data]	BFh	63				

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
Color Correction Cy_B Saturation	Control	OSD:94:[Data]	41h	−63	cam	OSD:94:[Data]	OSD:94:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:94:80&res=1
	Response	OSD:94:[Data]	−	−				
	Request	QSD:94	80h	0				
			−	−				
	Response	OSD:94:[Data]	BFh	63				
Color Correction Cy_B Phase	Control	OSD:95:[Data]	41h	−63	cam	OSD:95:[Data]	OSD:95:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:95:80&res=1
	Response	OSD:95:[Data]	−	−				
	Request	QSD:95	80h	0				
			−	−				
	Response	OSD:95:[Data]	BFh	63				
Color Correction B Saturation	Control	OSD:96:[Data]	41h	−63	cam	OSD:96:[Data]	OSD:96:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:96:80&res=1
	Response	OSD:96:[Data]	−	−				
	Request	QSD:96	80h	0				
			−	−				
	Response	OSD:96:[Data]	BFh	63				
Color Correction B Phase	Control	OSD:97:[Data]	41h	−63	cam	OSD:97:[Data]	OSD:97:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:97:80&res=1
	Response	OSD:97:[Data]	−	−				
	Request	QSD:97	80h	0				
			−	−				
	Response	OSD:97:[Data]	BFh	63				

Lens

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
Focus Mode	Control	OAF:[Data]	0	Manual	cam	OAF:[Data]	OAF:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OAF:0&res=1
	Response	OAF:[Data]	1	Auto				
	Request	QAF						
	Response	OAF:[Data]						
Focus Mode	Control	#D1[Data]	0	Manual	ptz	d1[Data]	d1[Data]	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23D10&res=1
	Response	d1[Data]	1	Auto				
	Request	#D1						
	Response	d1[Data]						

Digital Zoom	Control	OSE:70:[Data]	0	Disable	cam	OSE:70:[Data]	OSE:70:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSE:70:1&res=1
								[Zoom Mode]
								 -Opt Zoom
								   OSE:70:0
								   OSD:B3:0
								 -i Zoom
								   OSE:70:0
								   OSD:B3:1
								 -D Zoom
								   OSE:70:1
								   OSD:B3:0

	Response	OSE:70:[Data]	1	Enable				
	Request	QSE:70						
	Response	OSE:70:[Data]						
i.zoom	Control	OSD:B3:[Data]	0	Disable	cam	OSD:B3:[Data]	OSD:B3:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:B3:0&res=1
	Response	OSD:B3:[Data]	1	Enable				
	Request	QSD:B3						
	Response	OSD:B3:[Data]						
Max Digital Zoom	Control	OSE:7A:[Data]	02	x2	cam	OSE:7A:[Data]	OSE:7A:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSE:7A:10&res=1
	Response	OSE:7A:[Data]	–	–				
	Request	QSE:7A	10	x10				
	Response	OSE:7A:[Data]						
Digital Extender	Control	OSJ:4E:[Data]	0	OFF	cam	OSJ:4E:[Data]	OSJ:4E:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:4E:1&res=1
	Response	OSJ:4E:[Data]	1	x1.4				
	Request	QSJ:4E	2	x2.0				
	Response	OSJ:4E:[Data]						
Zoom Scale	Control	–	000h	0	cam	–	–	http://192.168.0.10/cgi-bin/aw_cam?cmd=QSJ:3D&res=1
	Response	–	–	–				
	Request	QSJ:3D	3E7h	999				
	Response	OSJ:3D:[Data]						
Digital Zoom Magnification	Control	OSE:76:[Data]	0100	x1.00	cam	OSE:76:[Data]	–	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSE:76:0100&res=1
	Response	OSE:76:[Data]	–	–				
	Request	QSE:76	9999	x99.99				
	Response	OSE:76:[Data]						
OIS	Control	OIS:[Data]	0	Off	cam	OIS:[Data]	OIS:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OIS:0&res=1
	Response	OIS:[Data]	1	On				
	Request	QIS						
	Response	OIS:[Data]						
Zoom Speed Control	Control	#Z[Data]	01	Wide Max. Speed	ptz	–	–	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23Z50&res=1
	Response	zS[Data]	– 49	– Wide Min. Speed				
	Request	–	50 51	Zoom Stop Tele Min. Speed				
	Response	–	– 99	– Tele Max. Speed				
Zoom Position Control	Control	#AXZ[Data]	555h	Wide	ptz	–	axz[Data]	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23AXZ555&res=1
	Response	axz[Data]	–	–				
	Request	#AXZ	FFFh	Tele				
	Response	axz[Data]						
Focus Speed Control	Control	#F[Data]	01	Near Max. Speed	ptz	–	–	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23F50&res=1
	Response	fS[Data]	– 49	– Near Min. Speed				
	Request	–	50 51	Stop Far Min. Speed				
	Response	–	– 99	– Far Max. Speed				

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
Focus Position Control	Control	#AXF[Data]	555h – FFFh	Near – Far	ptz	–	axf[Data]	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23AXF555&res=1
	Response	axf[Data]						
	Request	#AXF						
	Response	axf[Data]						
Push Auto Focus	Control	OSE:69:[Data]	1	Push Auto	cam	–	–	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSE:69:1&res=1
	Response	OSE:69:[Data]						
	Request	–						
	Response	–						
Toutch AF	Control	OSJ:28:[Data1]:[Data2]	[Data1] 00h – 64h [Data2] 00h – 64h	[Data1] H Pos. 0% – 100% [Data2]V Pos. 0% – 100%	cam	–	–	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:28:32:32&res=1
	Response	OSJ:28:[Data1]:[Data2]						
	Request	–						
	Response	–						
Iris Control	Control	#AXI[Data]	555h – FFFh	Iris Close – Iris Open	ptz	–	axi[Data]	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23AXI555&res=1
	Response	axi[Data]						
	Request	#AXI						
	Response	axi[Data]						
Iris Control	Control	#I[Data]	01 – 99	Iris Close – Iris Open	ptz	–	–	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23I50&res=1
	Response	iC[Data]						
	Request	#I						
	Response	iC[Data]						
Iris Control	Control	ORV:[Data]	000h – 3FFh	Iris Close – Iris Open	cam	ORV:[Data]	–	http://192.168.0.10/cgi-bin/aw_cam?cmd=ORV:000&res=1
	Response	ORV:[Data]						
	Request	QRV						
	Response	ORV:[Data]						
Iris Follow	Control	–	00h – FFh	Iris Close – Iris Open	cam	–	OSD:4F:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=QSD:4F&res=1
	Response	–						
	Request	QSD:4F						
	Response	OSD:4F:[Data]						
Lens Position Information	Control	–	[Data1] 555h – FFFh [Data2] 555h – FFFh [Data3] 555h – FFFh	[Data1]Zoom Position Wide – Tele [Data2]Focus Position Near – Far [Data3]Iris Position Close – Open	ptz	–	–	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23LPI&res=1
	Response	–						
	Request	#LPI						
	Response	lPI[Data1][Data2][Data3]						
Lens Position Information Control	Control	#LPC[Data]	0 1	Off On	ptz	lPC[Data]	–	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23LPC1&res=1
	Response	lPC[Data]						
	Request	#LPC						
	Response	lPC[Data]						
Request Iris F No.	Control	–	0Eh – 1Ch – 38h – A0h – FFh	F1.4 – F2.8 – F5.6 – F16 – CLOSE	cam	–	OIF:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=QIF&res=1
	Response	–						
	Request	QIF						
	Response	OIF:[Data]						
Request Zoom Position	Control	–	555h – FFFh "---"	Wide – Tele @Power OFF	ptz	–	–	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23GZ&res=1
	Response	–						
	Request	#GZ						
	Response	gz[Data]						

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
Request Focus Position	Control	–	555h	Near	ptz	–	–	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23GF&res=1
	Response	–	–	–				
	Request	#GF	FFFh	Far				
	Response	gf[Data]	"—––"	@Power OFF				
Request Iris Position	Control	–	[Data1] 555h	[Data1] Close	ptz	–	–	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23GI&res=1
	Response	–	– FFFh	– Open				
	Request	#GI	"—––"	@Power OFF				
	Response	gi[Data1][Data2]	[Data2] 0 1	[Data2] Manual Iris Auto Iris				

System

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
Frequency	Control	OSE:77:[Data]	0	59.94Hz	cam	OSE:77:[Data]	OSE:77:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSE:77:1&res=1
	Response	OSE:77:[Data]	1	50.00Hz				Reboot after changing Frequency
	Request	QSE:77	2	24Hz				
	Response	OSE:77:[Data]	3	23.98Hz				
Format	Control	OSA:87:[Data]	1h 2h 4h 5h 7h 8h Ah 10h 11h 14h 15h 16h 17h 18h 19h 1Ah 1Bh 21h 22h 23h	720/59.94p 720/50p 1080/59.94i 1080/50i 1080/29.97psF 1080/25psF 1080/23.98psF 1080/59.94p 1080/50p 1080/29.97p 1080/25p 1080/23.98p (over 59.94i/p) 2160/29.97p 2160/25p 2160/59.94p 2160/50p 2160/23.98p 2160/24p 1080/24p 1080/23.98p	cam	OSA:87:[Data]	OSA:87:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSA:87:1&res=1 UE150 [59.94Hz] 2160/59.94p, 2160/29.97p, 1080/59.94p, 1080/59.94i, 1080/29.97p, 1080/29.97PsF, 1080/23.98p(59.94i), 720/59.94p [50Hz] 2160/50p, 2160/25p, 1080/50p, 1080/50i, 1080/25p, 1080/25PsF, 720/50p [24.00Hz] 2160/24p, 1080/24p [23.98Hz] 2160/23.98p, 1080/23.98p, 1080/23.98PsF HE145 [59.94Hz] 1080/59.94p, 1080/59.94i, 1080/29.97p, 1080/29.97PsF, 1080/23.98p(59.94i), 720/59.94p [50Hz] 1080/50p, 1080/50i, 1080/25p, 1080/25PsF, 720/50p [24.00Hz] 1080/24p [23.98Hz] 1080/23.98p, 1080/23.98PsF
	Response	OSA:87:[Data]						
	Request	QSA:87						
	Response	OSA:87:[Data]						
Shooting Mode	Control	OSI:30:[Data]	0	Normal	cam	OSI:30:[Data]	OSI:30:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSI:30:0&res=1
	Response	OSI:30:[Data]	1	High Sens.				
	Request	QSI:30						
	Response	OSI:30:[Data]						
Color Setting	Control	OSJ:56:[Data]	0	Normal	cam	OSJ:56:[Data]	OSJ:56:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:56:0&res=1
	Response	OSJ:56:[Data]	1	V-log				Only supported by AW-UE150
	Request	QSJ:56						
	Response	OSJ:56:[Data]						
Horizontal Phase	Control	OHP:[Data]	000h	-206	cam	OHP:[Data]	-	http://192.168.0.10/cgi-bin/aw_cam?cmd=OHP:000&res=1
	Response	OHP:[Data]	-	-				
	Request	QHP	3FFh	+49				
	Response	OHP:[Data]						
Tracking data output Serial Out	Control	OSJ:54:[Data]	0	Off	cam	OSJ:54:[Data]	OSJ:54:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:54:0&res=1
	Response	OSJ:54:[Data]	1	On				Only supported by AW-UE150
	Request	QSJ:54						
	Response	OSJ:54:[Data]						
Tracking data output IP Out	Control	OSJ:55:[Data]	0	Off	cam	OSJ:55:[Data]	OSJ:55:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:55:0&res=1
	Response	OSJ:55:[Data]	1	On				Only supported by AW-UE150
	Request	QSJ:55						
	Response	OSJ:55:[Data]						
Tracking data output Invert Pan/Tilt Axis	Control	OSJ:C1:[Data]	0	Off	cam	OSJ:C1:[Data]	OSJ:C1:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:C1:0&res=1
	Response	OSJ:C1:[Data]	1	On				Only supported by AW-UE150
	Request	QSJ:C1						
	Response	OSJ:C1:[Data]						
Tracking data output Camera ID	Control	OSJ:F4:[Data]	0x00	0x00	cam	OSJ:F4:[Data]	OSJ:F4:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:F4:00&res=1
	Response	OSJ:F4:[Data]	-	-				Only supported by AW-UE150
	Request	QSJ:F4	0xFF	0xFF				
	Response	OSJ:F4:[Data]						
Wireless Control	Control	#WLC[Data1]	0	Disable	ptz	wLC[Data1]	-	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23WLC1&res=1
	Response	wLC[Data1]	1	Enable				
	Request	#WLC						
	Response	wLC[Data1]						

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
Fan	Control	#FAN[Data]	0	Auto	ptz	fAN[Data]	fAN[Data]	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23FAN0&res=1
	Response	fAN[Data]	1	High				
	Request	#FAN	2	Mid				
	Response	fAN[Data]	3	Low				
Fan Status	Control	−	0	Off	ptz	fS1[Data]	−	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23FS1&res=1
	Response	−	1	On				
	Request	#FS1	2	Error				
	Response	fS1[Data]						
Fan2	Control	#FA2[Data]	0	Auto	ptz	fA2[Data]	fA2[Data]	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23FA20&res=1
	Response	#FA2[Data]	1	High				
	Request	#FA2	2	Mid				
	Response	#FA2[Data]	3	Low				
Fan2 Status	Control	−	0	Off	ptz	fS2[Data]	−	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23FS2&res=1
	Response	−	1	On				
	Request	#FS2	2	Error				
	Response	fS2[Data]						

Output

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
12G SDI Output Format	Control	OSJ:1E:[Data]	1h 2h 4h 5h 7h	720/59.94p 720/50p 1080/59.94i 1080/50i 1080/29.97psF	cam	OSJ:1E:[Data]	–	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:1E:1&res=1 Only supported by AW-UE150 [59.94Hz] 2160/59.94p, 2160/29.97p, 1080/59.94p, 1080/59.94i, 1080/29.97p, 1080/29.97PsF, 1080/23.98p(59.94i), 720/59.94p [50Hz] 2160/50p, 2160/25p, 1080/50p, 1080/50i, 1080/25p, 1080/25PsF, 720/50p [24.00Hz] 2160/24p, 1080/24p [23.98Hz] 2160/23.98p, 1080/23.98p, 1080/23.98PsF
	Response	OSJ:1E:[Data]	8h Ah 10h 11h 14h 15h 16h	1080/25psF 1080/23.98psF 1080/59.94p 1080/50p 1080/29.97p 1080/25p 1080/23.98p (over 59.94i/p)				
	Request	QSJ:1E	17h 18h 19h	2160/29.97p 2160/25p 2160/59.94p				
	Response	OSJ:1E:[Data]	1Ah 1Bh 21h 22h 23h	2160/50p 2160/23.98p 2160/24p 1080/24p 1080/23.98p				
12G SDI HDR Output Select	Control	OSJ:1F:[Data]	0 1 2	SDR HDR(2020) HDR(709)	cam	OSJ:1F:[Data]	OSJ:1F:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:1F:0&res=1 Only supported by AW-UE150
	Response	OSJ:1F:[Data]						
	Request	QSJ:1F						
	Response	OSJ:1F:[Data]						
12G SDI V-log Output Select	Control	OSJ:57:[Data]	0 1	V-Log V709	cam	OSJ:57:[Data]	OSJ:57:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:57:0&res=1 Only supported by AW-UE150
	Response	OSJ:57:[Data]						
	Request	QSJ:57						
	Response	OSJ:57:[Data]						
12G SDI 3G SDI Out	Control	OSJ:20:[Data]	0 1	Level A Level B	cam	OSJ:20:[Data]	–	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:20:0&res=1 Only supported by AW-UE150
	Response	OSJ:20:[Data]						
	Request	QSJ:20						
	Response	OSJ:20:[Data]						
3G SDI Output Format	Control	OSJ:21:[Data]	1h 2h 4h 5h 7h 8h Ah	720/59.94p 720/50p 1080/59.94i 1080/50i 1080/29.97psF 1080/25psF 1080/23.98psF	cam	OSJ:21:[Data]	–	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:21:1&res=1 [59.94Hz] 1080/59.94p, 1080/59.94i, 1080/29.97p, 1080/29.97PsF, 1080/23.98p(59.94i), 720/59.94p [50Hz] 1080/50p, 1080/50i, 1080/25p, 1080/25PsF, 720/50p [24.00Hz] 1080/24p [23.98Hz] 1080/23.98p, 1080/23.98PsF
	Response	OSJ:21:[Data]	10h 11h 14h 15h 16h	1080/59.94p 1080/50p 1080/29.97p 1080/25p 1080/23.98p (over 59.94i/p)				
	Request	QSJ:21						
	Response	OSJ:21:[Data]	22h 23h	1080/24p 1080/23.98p				
3G SDI HDR Output Select	Control	OSJ:22:[Data]	0 1 2	SDR HDR(2020) HDR(709)	cam	OSJ:22:[Data]	OSJ:22:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:22:0&res=1
	Response	OSJ:22:[Data]						
	Request	QSJ:22						
	Response	OSJ:22:[Data]						
3G SDI V-log Output Select	Control	OSJ:58:[Data]	0 1	V-Log V709	cam	OSJ:58:[Data]	OSJ:58:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:58:0&[res=1 Only supported by AW-UE150
	Response	OSJ:58:[Data]						
	Request	QSJ:58						
	Response	OSJ:58:[Data]						
3G SDI 3G SDI Out	Control	OSI:29:[Data]	0 1	Level A Level B	cam	OSI:29:[Data]	–	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSI:29:0&res=1
	Response	OSI:29:[Data]						
	Request	QSI:29						
	Response	OSI:29:[Data]						

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
MONI Output Format	Control	OSJ:23:[Data]	1h 2h 4h 5h 7h 8h Ah 10h 11h 14h 15h 16h 22h 23h	720/59.94p 720/50p 1080/59.94i 1080/50i 1080/29.97psF 1080/25psF 1080/23.98psF 1080/59.94p 1080/50p 1080/29.97p 1080/25p 1080/23.98p (over 59.94i/p) 1080/24p 1080/23.98p	cam	OSJ:23:[Data]	-	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:23:1&res=1 Only supported by AW-UE150 [59.94Hz] 1080/59.94p, 1080/59.94i, 1080/29.97p, 1080/29.97PsF, 1080/23.98p(59.94i), 720/59.94p [50Hz] 1080/50p, 1080/50i, 1080/25p, 1080/25PsF, 720/50p [24.00Hz] 1080/24p [23.98Hz] 1080/23.98p, 1080/23.98PsF
	Response	OSJ:23:[Data]						
	Request	QSJ:23						
	Response	OSJ:23:[Data]						
MONI HDR Output Select	Control	OSJ:24:[Data]	0 1 2	SDR HDR(2020) HDR(709)	cam	OSJ:24:[Data]	OSJ:24:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:24:0&res=1 Only supported by AW-UE150
	Response	OSJ:24:[Data]						
	Request	QSJ:24						
	Response	OSJ:24:[Data]						
MONI V-log Output Select	Control	OSJ:59:[Data]	0 1	V-Log V709	cam	OSJ:59:[Data]	OSJ:59:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:59:0&[res=1 Only supported by AW-UE150
	Response	OSJ:59:[Data]						
	Request	QSJ:59						
	Response	OSJ:59:[Data]						
HDMI Output Format	Control	OSJ:25:[Data]	1h 2h 4h 5h 10h 11h 14h 15h 16h 17h 18h 19h 1Ah 1Bh 21h 22h 23h	720/59.94p 720/50p 1080/59.94i 1080/50i 1080/59.94p 1080/50p 1080/29.97p 1080/25p 1080/23.98p (over 59.94i/p) 2160/29.97p 2160/25p 2160/59.94p 2160/50p 2160/23.98p 2160/24p 1080/24p 1080/23.98p	cam	OSJ:25:[Data]	-	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:25:1&res=1 [59.94Hz] 2160/59.94p, 2160/29.97p, 1080/59.94p, 1080/59.94i, 1080/29.97p, 1080/23.98p(59.94i), 720/59.94p [50Hz] 2160/50p, 2160/25p, 1080/50p, 1080/50i, 1080/25p, 720/50p [24.00Hz] 2160/24p, 1080/24p [23.98Hz] 2160/23.98p, 1080/23.98p
	Response	OSJ:25:[Data]						
	Request	QSJ:25						
	Response	OSJ:25:[Data]						
HDMI HDR Output Select	Control	OSJ:26:[Data]	0 1 2	SDR HDR(2020) HDR(709)	cam	OSJ:26:[Data]	OSJ:26:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:26:0&res=1
	Response	OSJ:26:[Data]						
	Request	QSJ:26						
	Response	OSJ:26:[Data]						
HDMI V-log Output Select	Control	OSJ:5A:[Data]	0 1	V-Log V709	cam	OSJ:5A:[Data]	OSJ:5A:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:5A:0&[res=1 Only supported by AW-UE150
	Response	OSJ:5A:[Data]						
	Request	QSJ:5A						
	Response	OSJ:5A:[Data]						
HDMI Video Sampling	Control	OSE:68:[Data]	2 4	YPbPr(422) YPbPr(420)	cam	OSE:68:[Data]	-	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSE:68:2&res=1
	Response	OSE:68:[Data]						
	Request	QSE:68						
	Response	OSE:68:[Data]						
Color Bar	Control	DCB:[Data]	0 1	Camera Colorbar	cam	DCB:[Data]	OBR:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=DCB:1&res=1
	Response	DCB:[Data]						
	Request	QBR						
	Response	OBR:[Data]						
Colo Bar Type	Control	OSD:BA:[Data]	0 1	Type2(Full Bar/EBU) Type1(SMPTE)	cam	OSD:BA:[Data]	-	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:BA:0&res=1
	Response	OSD:BA:[Data]						
	Request	QSD:BA						
	Response	OSD:BA:[Data]						
Color Bar Tone	Control	OSJ:27:[Data]	0 1 2	Off Low Normal	cam	OSJ:27:[Data]	-	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:27:0&res=1
	Response	OSJ:27:[Data]						
	Request	QSJ:27						
	Response	OSJ:27:[Data]						

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
Audio	Control	OSA:D0:[Data]	0 1	Off On	cam	OSA:D0:[Data]	-	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSA:D0:1&res=1
	Response	OSA:D0:[Data]						
	Request	QSA:D0						
	Response	OSA:D0:[Data]						
Audio Input Type	Control	OSA:D1:[Data]	0 3	Mic Line	cam	OSA:D1:[Data]	-	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSA:D1:0&res=1
	Response	OSA:D1:[Data]						
	Request	QSA:D1						
	Response	OSA:D1:[Data]						
Audio Volume Level	Control	OSA:D5:[Data1]:[Data2]	[Data1] 0 [Data2] 5Ch – 80h – 8Ch	[Data1] CH1 [Data2] –36dB – 0dB – 12dB	cam	OSA:D5:[Data1]:[Data2]	-	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSA:D5:0:5C&res=1
	Response	OSA:D5:[Data1]:[Data2]						
	Request	QSA:D5:[Data1]						
	Response	OSA:D5:[Data1]:[Data2]						
Audio Plugin Power	Control	OSA:D2:[Data]	0 1	Off On	cam	OSA:D2:[Data]	-	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSA:D2:0&res=1
	Response	OSA:D2:[Data]						
	Request	QSA:D2						
	Response	OSA:D2:[Data]						
OSD Mix	Control	OSE:7B:[Data]	00h 01h 02h 10h 20h 40h	00h:OSD Mix Off 01h:3G SDI On 02h:HDMI On 10h:IP On 20h:12G SDI On 40h:MONI On ※bit0:3G SDI, bit1:HDMI, bit4: IP/NDI|HX bit5:12G SDI, bit6:MONI	cam	OSE:7B:[Data]	-	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSE:7B:73&res=1 UE150 : 3G SDI / HDMI / IP / 12G SDI / MONI HE145 : 3G SDI / HDMI / IP
	Response	OSE:7B:[Data]						
	Request	QSE:7B						
	Response	OSE:7B:[Data]						
OSD Off With TALLY	Control	OSE:75:[Data]	0 1	Off On	cam	OSE:75:[Data]	-	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSE:75:1&res=1
	Response	OSE:75:[Data]						
	Request	QSE:75						
	Response	OSE:75:[Data]						
OSD Status	Control	OSA:88:[Data]	0 1	Off On	cam	OSA:88:[Data]	-	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSA:88:0&res=1
	Response	OSA:88:[Data]						
	Request	QSA:88						
	Response	OSA:88:[Data]						
TALLY Enable	Control	#TAE[Data]	0 1	Disable Enable	ptz	tAE[Data]	tAE[Data]	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23TAE1&res=1
	Response	tAE[Data]						
	Request	#TAE						
	Response	tAE[Data]						
Tally LED Limit R	Control	OSJ:D9:[Data]	0 1	Unlimited Limited	cam	OSJ:D9:[Data]	OSJ:D9:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:D9:0&res=1
	Response	OSJ:D9:[Data]						
	Request	QSJ:D9						
	Response	OSJ:D9:[Data]						
Tally LED Limit G	Control	OSJ:DA:[Data]	0 1	Unlimited Limited	cam	OSJ:DA:[Data]	OSJ:DA:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:DA:0&res=1
	Response	OSJ:DA:[Data]						
	Request	QSJ:DA						
	Response	OSJ:DA:[Data]						
Tally Brightness	Control	OSA:D3:[Data]	0 1 2	Low Mid High	cam	OSA:D3:[Data]	-	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSA:D3:0&res=1
	Response	OSA:D3:[Data]						
	Request	QSA:D3						
	Response	OSA:D3:[Data]						
R-Tally Control	Control	TLR:[Data]	0 1	Off On	cam	TLR:[Data]	TLR:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=TLR:1&res=1
	Response	TLR:[Data]						
	Request	QLR						
	Response	OLR:[Data]						
R-Tally Control	Control	#DA[Data]	0 1	Off On	ptz	dA[Data]	dA[Data]	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23DA1&res=1
	Response	dA[Data]						
	Request	#DA						
	Response	dA[Data]						
G-Tally Control	Control	TLG:[Data]	0 1	Off On	cam	TLG:[Data]	TLG:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=TLG:1&res=1
	Response	TLG:[Data]						
	Request	QLG						
	Response	OLG:[Data]						

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
Tally Information	Control	–	[Data1] 0 1 [Data2] 0 1 [Data3] 0 1 [Data4] 0 1 [Data5] 0 1 [Data6] 0 1 [Data7] 0 1 [Data8] 0 1 [Data9] 0 1	[Data1] R-Tally Off R-Tally On [Data2] Wired R-Tally In Off Wired R-Tally In On [Data3] Command R-Tally In Off Command R-Tally In On [Data4] G-Tally Off G-Tally On [Data5] Wired G-Tally In Off Wired G-Tally In On [Data6] Command G-Tally In Off Command G-Tally In On [Data7] Y-Tally Off Y-Tally On [Data8] Wired Y-Tally In Off Wired Y-Tally In On [Data9] Command Y-Tally In Off Command Y- Tally In On	ptz	tAA[Data1][Data2][Data3][Data4][Data5][Data6][Data7][Data8][Data9]	tAA[Data1][Data2][Data3][Data4][Data5][Data6][Data7][Data8][Data9]	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23TAA&res=1
	Response	–						
	Request	#TAA						
	Response	tAA[Data1][Data2][Data3][Data4][Data5][Data6][Data7][Data8][Data9]						
Status Lamp	Control	#LMP[Data]	0 1	Disable Enable	ptz	lMP[Data]	–	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23LMP0&res=1
	Response	lMP[Data]						
	Request	#LMP						
	Response	lMP[Data]						
External Output1	Control	OSJ:41:[Data]	0 1 2	Off R-Tally G-Tally	cam	OSJ:41:[Data]	–	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:41:0&res=1
	Response	OSJ:41:[Data]						
	Request	QSJ:41						
	Response	OSJ:41:[Data]						
External Output2	Control	OSJ:42:[Data]	0 1 2	Off R-Tally G-Tally	cam	OSJ:42:[Data]	–	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:42:0&res=1
	Response	OSJ:42:[Data]						
	Request	QSJ:42						
	Response	OSJ:42:[Data]						
UHD Crop	Control	OSJ:2E:[Data]	0 1 2	Off Crop(1080) Crop(720)	cam	OSJ:2E:[Data]	OSJ:2E:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:2E:0&res=1 Only supported by AW-UE150 When Format is 2160/59.94p or 2160/50p Off, Crop(1080) and Crop(720) are available When Format is 2160/29.97p, 2160/25p, 2160/24p or 2160/23.98p
	Response	OSJ:2E:[Data]						
	Request	QSJ:2E						
	Response	OSJ:2E:[Data]						
Crop 3G SDI Out	Control	OSI:32:[Data]	0 1	Full Crop	cam	OSI:32:[Data]	OSI:32:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSI:32:0&res=1 Only supported by AW-UE150
	Response	OSI:32:[Data]						
	Request	QSI:32						
	Response	OSI:32:[Data]						
Crop IP Out	Control	OSI:33:[Data]	0 1	Full Crop	cam	OSI:33:[Data]	OSI:33:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSI:33:0&res=1 Only supported by AW-UE150
	Response	OSI:33:[Data]						
	Request	QSI:33						
	Response	OSI:33:[Data]						
Crop Marker	Control	OSI:1A:[Data1]	0 1 2 3 4 5 6 7	OFF YL G MG YL+G YL+MG G+MG YL+G+MG	cam	OSI:1A:[Data1]	OSI:1A:[Data1]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSI:1A:0&res=1 Only supported by AW-UE150
	Response	OSI:1A:[Data1]						
	Request	QSI:1A						
	Response	OSI:1A:[Data1]						
Crop out	Control	OSI:16:[Data1]	1 2 3	YL G MG	cam	OSI:16:[Data1]	OSI:16:[Data1]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSI:16:1&res=1 Only supported by AW-UE150
	Response	OSI:16:[Data1]						
	Request	QSI:16						
	Response	OSI:16:[Data1]						

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
Crop Adjust	Control	OSI:17:[Data1]	1	YL	cam	OSI:17:[Data1]	OSI:17:[Data1]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSI:17:1&res=1
	Response	OSI:17:[Data1]	2	G				Only supported by AW-UE150
	Request	QSI:17	3	MG				
	Response	OSI:17:[Data1]						
Crop H Position(Yl)	Control	OSJ:2F:[Data]	000h	0	cam	OSJ:2F:[Data]	OSJ:2F:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:2F:000&res=1
	Response	OSJ:2F:[Data]	–	–				Only supported by AW-UE150
	Request	QSJ:2F	A00h	2560				[Data]:even only
	Response	OSJ:2F:[Data]						
Crop H Position(G)	Control	OSJ:31:[Data]	000h	0	cam	OSJ:31:[Data]	OSJ:31:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:31:000&res=1
	Response	OSJ:31:[Data]	–	–				Only supported by AW-UE150
	Request	QSJ:31	A00h	2560				[Data]:even only
	Response	OSJ:31:[Data]						
Crop H Position(Mg)	Control	OSJ:33:[Data]	000h	0	cam	OSJ:33:[Data]	OSJ:33:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:33:000&res=1
	Response	OSJ:33:[Data]	–	–				Only supported by AW-UE150
	Request	QSJ:33	A00h	2560				[Data]:even only
	Response	OSJ:33:[Data]						
Crop V Position(Yl)	Control	OSJ:30:[Data]	000h	0	cam	OSJ:30:[Data]	OSJ:30:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:30:000&res=1
	Response	OSJ:30:[Data]	–	–				Only supported by AW-UE150
	Request	QSJ:30	5A0h	1440				
	Response	OSJ:30:[Data]						
Crop V Position(G)	Control	OSJ:32:[Data]	000h	0	cam	OSJ:32:[Data]	OSJ:32:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:32:000&res=1
	Response	OSJ:32:[Data]	–	–				Only supported by AW-UE150
	Request	QSJ:32	5A0h	1440				
	Response	OSJ:32:[Data]						
Crop V Position(Mg)	Control	OSJ:34:[Data]	000h	0	cam	OSJ:34:[Data]	OSJ:34:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:34:000&res=1
	Response	OSJ:34:[Data]	–	–				Only supported by AW-UE150
	Request	QSJ:34	5A0h	1440				
	Response	OSJ:34:[Data]						
Get Crop H/V Position (Yl, G, Mg)	Control	–	[Data1] 000h – A00h	[Data1] H POS (YL) 0 – 2560	cam	–	–	http://192.168.0.10/cgi-bin/aw_cam?cmd=QSJ:60&res=1
			[Data2] 000h – 5A0	[Data2] V POS (YL) 0 – 1440				
	Response	–	[Data3] 000h – A00h	[Data3] H POS (G) 0 – 2560				Only supported by AW-UE150
			[Data4] 000h – 5A0	[Data4] V POS (G) 0 – 1440				[Data1], [Data3], [Data5]:even only
	Request	QSJ:60	[Data5] 000h – A00h	[Data5] H POS (MG) 0 – 2560				
	Response	OSJ:60:[Data1]:[Data2]:[Data3]:[Data4]:[Data5]:[Data6]	[Data6] 000h – 5A0h	[Data6] V POS (MG) 0 – 1440				
Crop H/V Position Speed Control	Control	OSI:15:[Data1]:[Data2]	[Data1] 01 – 50 – 99	[Data1] Left Max. Speed – Stop – Right Max. Speed	cam	–	–	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSI:15:50:50&res=1
	Response	OSI:15:[Data1]:[Data2]						Only supported by AW-UE150
	Request	―――	[Data2] 01 – 50 – 99	[Data2] Down Max. Speed – Stop – UP Max. Speed				
	Response	―――						

48

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
Crop H/V Position Speed Control(Yl)	Control	OSJ:5D:[Data1]:[Data2]	[Data1] 01 – 50 – 99 [Data2] 01 – 50 – 99	[Data1] Left Max. Speed – Stop – Right Max. Speed [Data2] Down Max. Speed – Stop – UP Max. Speed	cam	–	–	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:5D:50:50&res=1 Only supported by AW-UE150
	Response	OSJ:5D:[Data1]:[Data2]						
	Request	---						
	Response	---						
Crop H/V Position Speed Control(G)	Control	OSJ:5E:[Data1]:[Data2]	[Data1] 01 – 50 – 99 [Data2] 01 – 50 – 99	[Data1] Left Max. Speed – Stop – Right Max. Speed [Data2] Down Max. Speed – Stop – UP Max. Speed	cam	–	–	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:5E:50:50&res=1 Only supported by AW-UE150
	Response	OSJ:5E:[Data1]:[Data2]						
	Request	---						
	Response	---						
Crop H/V Position Speed Control(Mg)	Control	OSJ:5F:[Data1]:[Data2]	[Data1] 01 – 50 – 99 [Data2] 01 – 50 – 99	[Data1] Left Max. Speed – Stop – Right Max. Speed [Data2] Down Max. Speed – Stop – UP Max. Speed	cam	–	–	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:5F:50:50&res=1 Only supported by AW-UE150
	Response	OSJ:5F:[Data1]:[Data2]						
	Request	---						
	Response	---						
Crop H/V Position Speed Control(Yl/G/Mg)	Control	OSJ:A0:[Data1]:[Data2]:[Data3]:[Data4]:[Data5]:[Data6]	[Data1] 01 50 99 [Data2] 01 50 99 [Data3] 01 50 99 [Data4] 01 50 99 [Data5] 01 50 99 [Data6] 01 50 99	[Data1] (YL) Left Max. Speed Stop Right Max. Speed [Data2] (YL) Down Max. Speed Stop UP Max. Speed [Data3] (G) Left Max. Speed Stop Right Max. Speed [Data4] (G) Down Max. Speed Stop UP Max. Speed [Data5] (MG) Left Max. Speed Stop Right Max. Speed [Data6] (MG) Down Max. Speed Stop UP Max. Speed	cam	–	–	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:A0:50:50:50:50:50:50&res=1 Only supported by AW-UE150
	Response	OSJ:A0:[Data1]:[Data2]:[Data3]:[Data4]:[Data5]:[Data6]						
	Request	---						
	Response	---						

Pan/Tilt

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
Install Positon	Control	#INS[Data]	0	Desktop	ptz	iNS[Data]	iNS[Data]	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23INS1&res=1
	Response	#INS[Data]	1	Hanging				
	Request	#INS						
	Response	iNS[Data]						
Smart Picture Flip	Control	#SPF[Data]	0	Off	ptz	sPF[Data]	−	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23SPF1&res=1
	Response	sPF[Data]	1	Auto				
	Request	#SPF						
	Response	sPF[Data]						
Flip Detect Angle	Control	#FDA[Data]	3Ch	60deg	ptz	fDA[Data]	−	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23SPF5A&res=1
	Response	fDA[Data]	−	−				
	Request	#FDA	78h	120deg				
	Response	fDA[Data]						
Flip Status	Control	−	0	Normal	cam	−	−	http://192.168.0.10/cgi-bin/aw_cam?cmd=QFS&res=1
	Response	−	1	Flip				
	Request	QFS						
	Response	OFS:[Data]						
P/T Speed Mode	Control	OSJ:2D:[Data]	0	Normal(60deg/s)	cam	OSJ:2D:[Data]	OSJ:2D:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:2D:0&res=1
	Response	OSJ:2D:[Data]	1	Fast(180deg/s)				
	Request	QSJ:2D	2	Quick(60deg/s)				
	Response	OSJ:2D:[Data]						
Speed With Zoom Position	Control	#SWZ[Data]	0	Off	ptz	sWZ[Data]	sWZ[Data]	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23SWZ1&res=1
	Response	sWZ[Data]	1	On				
	Request	#SWZ						
	Response	sWZ[Data]						
Focus Adjust With PTZ.	Control	OAZ:[Data]	0	Off	cam	OAZ:[Data]	OAZ:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OAZ:0&res=1
	Response	OAZ:[Data]	1	On				
	Request	QAZ						
	Response	OAZ:[Data]						
Power On Position	Control	OSJ:45:[Data]	1	Standby	cam	OSJ:45:[Data]	OSJ:45:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:45:1&res=1
	Response	OSJ:45:[Data]	2	Home				
	Request	QSJ:45	3	Preset				
	Response	OSJ:45:[Data]						
Power On Preset Number	Control	OSJ:46:[Data]	00	Preset001	cam	OSJ:46:[Data]	OSJ:46:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:46:00&res=1
	Response	OSJ:46:[Data]	−	−				
	Request	QSJ:46	99	Preset100				
	Response	OSJ:46:[Data]						
Pan Speed Control	Control	#P[Data]	01	Left Max. Speed	ptz	−	−	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23P50&res=1
	Response	pS[Data]	−	−				
	Request	−	50	Stop				
			−	−				
	Response	−	99	Right Max. Speed				
Tilt Speed Control	Control	#T[Data]	01	Down Max. Speed	ptz	−	−	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23T50&res=1
	Response	tS[Data]	−	−				
	Request	−	50	Stop				
			−	−				
	Response	−	99	UP Max. Speed				
P/T Speed Control	Control	#PTS[Data1][Data2]	[Data1] 01	[Data1] Left Max. Speed	ptz	−	−	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23PTS5050&res=1
			− 50	− Stop				
	Response	pTS[Data1][Data2]	− 99	− Right Max. Speed				
	Request	−	[Data2] 01	[Data2] Down Max. Speed				
			− 50	− Stop				
	Response	−	− 99	− UP Max. Speed				

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
P/T Absolute Position Control	Control	#APC[Data1][Data2]	[Data1] 0000h – 8000h – FFFFh [Data2] 0000h – 8000h – FFFFh	[Data1]Pan Position CCW Limit – Center – CW Limit [Data2]Tilt Position UP Limit – Center – DOWN Limit	ptz	–	aPC[Data1][Data 2]	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23APC80008000&res=1 □Pan : 2D09(-175deg) - D2F5(+175deg) □Tilt : 5555(-30deg) - 8E38(+90deg)
	Response	aPC[Data1][Data2]						
	Request	–						
	Response	–						
P/T Relative Position Control	Control	#RPC[Data1][Data2]	[Data1] 0000h – 8000h – FFFFh [Data2] 0000h – 8000h – FFFFh	[Data1]Pan Position CCW Limit – Center – CW Limit [Data2]Tilt Position UP Limit – Center – DOWN Limit	ptz	–	–	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23RPC80008000&res=1
	Response	rPC[Data1][Data2]						
	Request	–						
	Response	–						
P/T Absolute Position Control with Speed	Control	#APS[Data1][Data2][Data3][Data4]	[Data1] 0000h – 8000h – FFFFh [Data2] 0000h – 8000h – FFFFh [Data3] 00h – 1Dh [Data4] 0 1 2	[Data1]Pan Position CCW Limit – Center – CW Limit [Data2]Tilt Position UP Limit – Center – DOWN Limit [Data3]Preset Speed 1 – 30 [Data4]Preset Speed Table SLOW MID FAST	ptz	–	–	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23APS800080001D0&res=1 □Pan : 2D09(-175deg) - D2F5(+175deg) □Tilt : 5555(-30deg) - 8E38(+90deg)
	Response	aPS[Data1][Data2][Data3][Data4]						
	Request	–						
	Response	–						

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
P/T Relative Position Control with Speed	Control	#RPS[Data1][Data2][Data3][Data4]	[Data1] 0000h – 8000h – FFFFh	[Data1]Pan Position CCW Limit – Center – CW Limit	ptz	–	–	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23RPS800080001D0&res=1
	Response	rPS[Data1][Data2][Data3][Data4]	[Data2] 0000h – 8000h – FFFFh	[Data2]Tilt Position UP Limit – Center – DOWN Limit				
	Request	–	[Data3] 00h – 1Dh	[Data3]Preset Speed 1 – 30				
	Response	–	[Data4] 0 1 2	[Data4]Preset Speed Table SLOW MID FAST				
Limitation Control	Control	#LC[Data1][Data2]	[Data1] 1 2 3 4	[Data1] Tilt Up Tilt Down Pan Left Pan Right	ptz	lC[Data1][Data2]	lC1[Data2] lC2[Data2] lC3[Data2] lC4[Data2]	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23LC11&res=1
	Response	lC[Data1][Data2]						
	Request	#LC[Data1]	[Data2] 0 1	[Data2] Release Set				
	Response	lC[Data1][Data2]						
Limitation Control(toggle)	Control	#L[Data]	Controller -> P/T 1 2 3 4	Tilt Up Tilt Down Pan Left Pan Right	ptz	–	–	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23L1&res=1
	Response	l[Data]						
	Request	–	P/T -> Controller 0 1	Release Set				
	Response	–						

Preset

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
Preset Speed Unit	Control	OSJ:29:[Data]	0 1	Speed Table Time	cam	OSJ:29:[Data]	OSJ:29:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:29:0&res=1
	Response	OSJ:29:[Data]						
	Request	QSJ:29						
	Response	OSJ:29:[Data]						
Preset Speed Table	Control	#PST[Data]	0 2	Slow Fast	ptz	pST[Data]	pST[Data]	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23PST0&res=1
	Response	pST[Data]						
	Request	#PST						
	Response	pST[Data]						
Preset Speed	Control	#UPVS[Data]	000 250 – 999 001h – 063h	Preset Speed Unit :Speed 30 : MaxSpeed 1 : Slow ~ 30 : Fast Preset Speed Unit :Time 1s ~ 99s	ptz	uPVS[Data]	uPVS[Data]	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23UPVS250&res=1 Preset Speed Unit : Speed 001–275:1 276–301:2 302–327:3 328–353:4 354–379:5 380–404:6 405–430:7 431–456:8 457–482:9 483–508:10 509–534:11 535–559:12 560–585:13 586–611:14 612–637:15 638–663:16 664–689:17 690–714:18 715–740:19 741–766:20 767–792:21 793–818:22 819–844:23 845–869:24 870–895:25 896–921:26 922–947:27 948–973:28 974–998:29 999,000:30
	Response	uPVS[Data]						
	Request	#UPVS						
	Response	uPVS[Data]						
Preset Acceleration	Control	OSJ:A8:[Data]	0 1	Manual Auto	cam	OSJ:A8:[Data]	OSJ:A8:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:A8:0&res=1
	Response	OSJ:A8:[Data]						
	Request	QSJ:A8						
	Response	OSJ:A8:[Data]						
Preset Rise Acceleration	Control	OSJ:AB:[Data]	01h – FFh	1 – 255	cam	OSJ:AB:[Data]	OSJ:AB:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:AB:01&res=1
	Response	OSJ:AB:[Data]						
	Request	QSJ:AB						
	Response	OSJ:AB:[Data]						
Preset Scope	Control	OSE:71:[Data]	0 1 2	MODE A MODE B MODE C	cam	OSE:71:[Data]	OSE:71:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSE:71:0&res=1
	Response	OSE:71:[Data]						
	Request	QSE:71						
	Response	OSE:71:[Data]						
Preset D-Extender	Control	OSE:7C:[Data]	0 1	Off On	cam	OSE:7C:[Data]	OSE:7C:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSE:7C:0&res=1
	Response	OSE:7C:[Data]						
	Request	QSE:7C						
	Response	OSE:7C:[Data]						
Preset Crop	Control	OSJ:2A:[Data]	0 1	Off On	cam	OSJ:2A:[Data]	OSJ:2A:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:2A:0&res=1 Only supported by AW-UE150
	Response	OSJ:2A:[Data]						
	Request	QSJ:2A						
	Response	OSJ:2A:[Data]						
Preset Thumbnail Update	Control	OSJ:2B:[Data]	0 1	Off On	cam	OSJ:2B:[Data]	OSJ:2B:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:2B:0&res=1
	Response	OSJ:2B:[Data]						
	Request	QSJ:2B						
	Response	OSJ:2B:[Data]						

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
Preset Name	Control	OSJ:2C:[Data]	0	Reset	cam	OSJ:2C:[Data]	OSJ:2C:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:2C:0&res=1
	Response	OSJ:2C:[Data]						
	Request	QSJ:2C	1	Hold				
	Response	OSJ:2C:[Data]						
Preset Iris	Control	OSJ:5B:[Data]	0	Off	cam	OSJ:5B:[Data]	OSJ:5B:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:5B:0&res=1
	Response	OSJ:5B:[Data]						
	Request	QSJ:5B	1	On				
	Response	OSJ:5B:[Data]						
Preset Zoom Mode	Control	OSE:7D:[Data]	0	Mode A	cam	OSE:7D:[Data]	OSE:7D:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSE:7D:0&res=1
	Response	OSE:7D:[Data]						
	Request	QSE:7D	1	Mode B				
	Response	OSE:7D:[Data]						
Freeze During Preset	Control	#PRF[Data]	0	Off	ptz	pRF[Data]	pRF[Data]	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23PRF0&res=1
	Response	pRF[Data]						
	Request	#PRF	1	On				
	Response	pRF[Data]						
Recall Preset Memory	Control	#R[Data]	00	Preset001	ptz	–	–	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23R00&res=1
	Response	s[Data]	–	–				
	Request	–	99	Preset100				
	Response	–						
Save Preset Memory	Control	#M[Data]	00	Preset001	ptz	–	–	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23M00&res=1
	Response	s[Data]	–	–				
	Request	–	99	Preset100				
	Response	–						
Delete Preset Memory	Control	#C[Data]	00	Preset001	ptz	–	–	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23C00&res=1
	Response	s[Data]	–	–				
	Request	–	99	Preset100				
	Response	–						
Preset Entry Confirmation	Control	–	[Data1] 00h – 02h	[Data1] multiple (each 40 Presert No)	ptz	pE[Data1][Data2]	pE00[Data2] pE01[Data2] pE02[Data2]	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23PE00&res=1
	Response	–	[Data2] 0000000000h – FFFFFFFFFFh (bit0) 0 1	[Data2] PRESET No. (Data1*40 +1) No Entry Entry				
	Request	#PE[Data1]	(bit1) 0 1 –	PRESET No. (Data1*40 +2) No Entry Entry –				
	Response	pE[Data1][Data2]	(39bit) 0 1	PRESET No. (Data1*40 +40) No Entry Entry				
Request Latest Recall Preset No.	Control	–	00	Preset001	ptz	s[Data]	s[Data]	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23S&res=1
	Response	–	–	–				
	Request	#S	99	Preset100				
	Response	s[Data]						
Preset completion notification	Control	–	00	Preset001	ptz	q[Data]	–	
	Response	q[Data]	–	–				
	Request	–	99	Preset100				
	Response	–						
Save Preset Name	Control	OSJ:35:[Data1]:[Data2]	[Data1] 00h – 99h	[Data1] Preset001 – Preset100	cam	OSJ:35:[Data1]:[Data2]	–	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:35:00:xxxxxxxxxxxxxxx&res=1
	Response	OSJ:35:[Data1]:[Data2]						
	Request	QSJ:35:[Data1]	[Data2] xxxxxxxxxxxxxxx	[Data2] Preset Name (Fixed 15 Charactors)				
	Response	OSJ:35:[Data1]:[Data2]						
Delete Preset Name (Single)	Control	OSJ:36:[Data1]	00	Preset001	cam	OSJ:36:[Data]	–	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:36:00&res=1
	Response	OSJ:36:[Data]	–	–				
	Request	–	99	Preset100				
	Response	–						

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
Delete Preset Name (All)	Control	OSJ:37			cam	OSJ:37	−	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:37&res=1
	Response	OSJ:37						
	Request	−						
	Response	−						
Update Preset Thumbnail	Control	OSJ:39:[Data1]	00	Preset001	cam	OSJ:39:[Data]	−	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:39:00&res=1
	Response	OSJ:39:[Data]	−	−				
	Request		99	Preset100				
	Response							
Delete Preset Thumbnail (Single)	Control	OSJ:3A:[Data1]	00	Preset001	cam	OSJ:3A:[Data]	−	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:3A:00&res=1
	Response	OSJ:3A:[Data]	−	−				
	Request	−	99	Preset100				
	Response	−						
Delete Preset Thumbnail (All)	Control	OSJ:3B			cam	OSJ:3B	−	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:3B&res=1
	Response	OSJ:3B						
	Request	−						
	Response	−						
Preset Name/Preset Thumbnail Counter	Control	−	[Data1] 00h 01h 02h 03h 04h 05h 06h 07h 08h 09h 0Ah 0Bh [Data2] 000000000h − FFFFFFFFFh	[Data1] Preset 001-009 Preset 010-018 Preset 019-027 Preset 028-036 Preset 037-045 Preset 046-054 Preset 055-063 Preset 064-072 Preset 073-081 Preset 082-090 Preset 091-099 Preset 100 [Data2] 000000000h − FFFFFFFFFh	cam	−	−	http://192.168.0.10/cgi-bin/aw_cam?cmd=QSJ:3C:00&res=1
	Response	−						
	Request	QSJ:3C:[Data1]						
	Response	OSJ:3C:[Data1]:[Data2]						

See Chapter.6 for Preset sequence

Convenient command

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
Get Gain/Color Temperature/Shutter/ND	Control	–	[Data1] 08h – 11h – 1Ah – 32h 80h	[Data1] (Gain) 0dB – 9dB – 18dB – 42dB AGC ON	ptz	–	–	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23PTG&res=1
	Response	–	[Data2] 00000h – 3A98h	[Data2] OK – 15000K				
	Request	#PTG	[Data3] 0h 1h 2h 3h [Data4] 0001h – 2710 h	[Data3] (Shutter Mode) Off step Syncro ELC [Data4] (Shutter Step) 1/1 – 1/10000				
	Response	pTG[Data1][Data2][Data3][Data4][Data5][Data6]	[Data5] 00000h – 186A0h [Data6] 0 1 2 3	[Data5] (Shutter Synchro) 0.0 [Hz] – 10000.0[Hz] [Data6] (ND) Throgh 1/4 ND 1/16 ND 1/64 ND				
Get Pan/Tilt/Zoom/Focus/Iris	Control	–	[Data1] 0000h – 8000h – FFFFh	[Data1] (Pan) ccwLimit – Center – cwLimit	ptz	–	–	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23PTV&res=1
	Response	–	[Data2] 0000h – 8000h – FFFFh	[Data2] (Tilt) UpLimit – Center – DownLimit				
	Request	#PTV	[Data3] 555h – FFFh [Data4] 555h – FFFh	[Data3] (Zoom) Wide – Tele [Data4] (Focus) Near – Far				
	Response	pTV[Data1][Data2][Data3][Data4][Data5]	[Data5] 555h – FFFh	[Data5] (Iris) Close – Open				

56

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
Get Pan/Tilt/Zoom/Focus/Iris	Control	−	[Data1] 0000h − FFFFh [Data2] 0000h − FFFFh [Data3] 000h − 3E7h [Data4] 00h − 63h [Data5] 00h − FEh FFh	[Data1] (Pan) 0000h − FFFFh [Data2] (Tilt) 0000h − FFFFh [Data3] (Zoom) 0 − 999 [Data4] (Focus) 0 − 99 [Data5] (Iris) F0.0 − F25.4 CLOSE	ptz	−	−	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23PTD&res=1
	Response	−						
	Request	#PTD						
	Response	pTD[Data1][Data2][Data 3][Data4][Data5]						

OSD

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
Menu On/Off	Control	DUS:[Data]	0	Off	cam	–	OUS:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=DUS:1&res=1
	Response	DUS:[Data]	0	Off				
	Request	QUS	1	On				
	Response	OUS:[Data]						
Menu Cancel	Control	DPG:[Data]	1	Cancel	cam	–	–	http://192.168.0.10/cgi-bin/aw_cam?cmd=DPG&res=1
	Response	DPG:[Data]						
	Request	–						
	Response	–						
Menu Enter	Control	DIT:[Data]	1	Enter	cam	–	–	http://192.168.0.10/cgi-bin/aw_cam?cmd=DIT&res=1
	Response	DIT:[Data]						
	Request	–						
	Response	–						
Menu Up	Control	DUP:[Data]	1	Up	cam	–	–	http://192.168.0.10/cgi-bin/aw_cam?cmd=DUP&res=1
	Response	DUP:[Data]						
	Request	–						
	Response	–						
Menu Down	Control	DDW:[Data]	1	Down	cam	–	–	http://192.168.0.10/cgi-bin/aw_cam?cmd=DDW&res=1
	Response	DDW:[Data]						
	Request	–						
	Response	–						
Menu Right	Control	DRT:[Data]	1	Right	cam	–	–	http://192.168.0.10/cgi-bin/aw_cam?cmd=DRT&res=1
	Response	DRT:[Data]						
	Request	–						
	Response	–						
Menu Left	Control	DLT:[Data]	1	Left	cam	–	–	http://192.168.0.10/cgi-bin/aw_cam?cmd=DLT&res=1
	Response	DLT:[Data]						
	Request	–						
	Response	–						

Remote Controller

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
Operation Lock	Control	OSJ:3E:[Data]	xxxxxxxx	Any Information (40 Charactors)	cam	–	–	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:3E:xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx&res=1
	Response	OSJ:3E:[Data]						
	Request	–						
	Response	–						
Release Operation Lock	Control	OSJ:3F	–	–	cam	–	–	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:3F&res=1
	Response	OSJ:3F						
	Request	–						
	Response	–						
Operation Lock Status	Control	–	[Data1] 0 1 [Data2] xxxxxxxx	[Data1] Unlock Lock [Data2] Any Information (40 Charactors)	cam	OSJ:40:[Data1]:[Data2]	OSJ:40:[Data1]:[Data2]	http://192.168.0.10/cgi-bin/aw_cam?cmd=QSJ:40&res=1
	Response	–						
	Request	QSJ:40						
	Response	OSJ:40:[Data1]:[Data2]						

Maintenance

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
Error Information	Control	–	0	Normal	cam	OER:[Data]	OER:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=QER&res=1
	Response	–	1	Fan Error				
	Request	QER	2	Other Error				
	Response	OER:[Data]						
Error Information	Control	–	00000000h 00000001h 00000002h 00000004h 00000008h 00000010h	No Error Fan Error High Temperature Lens Error Pan/Tilt Error Sensor Error	cam	OSI:46:[Data]	OSI:46:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=QSI:46&res=1
	Response	–						
	Request	QSI:46		※bit0:Fan Error, bit1:High Temperature, bit2:Lens Error, bit3:Pan/Tilt Error, bit4:Sensor Error				
	Response	OSI:46:[Data]						
Latest Error Information	Control	–	00h 03h 04h 05h 06h 07h 08h 09h 17h 19h 21h 22h 23h 24h 25h 26h 27h 28h 29h 31h 32h 33h 36h 40h 41h 42h 50h 52h 53h 54h 55h 56h	Normal Motor Driver Error Pan Sensor Error Tilt Sensor Error Controller RX Over run Error Controller RX Framing Error Network RX Over run Error Network RX Framing Error Controller RX Command Buffer Overflow Network RX Command Buffer Overflow System Error Spec Limit Over FPGA Config Error NET Life-monitoring Error BE Life-monitoring Error IF/BE UART Buffer Overflow IF/BE UART Framing Error IF/BE UART Buffer Overflow CAM Life-monitoring Error Fan1 error Fan2 error High Temp Low Temp Temp Sensor Error Lens Initialize Error PT. Initialize Error MR Level Error MR Offset Error Origin Offset Error Angle MR Sensor Error	ptz	rER[Data]	–	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23RER&res=1
	Response	–						
	Request	#RER						
	Response	rER[Data]						

Others

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
Model Number	Control	-		AW-UE150 AW-HE145	cam	-	OID:AW-UE150 OID:AW-HE145	http://192.168.0.10/cgi-bin/aw_cam?cmd=QID&res=1
	Response	-						
	Request	QID						
	Response	OID:[Data]						
Software Version (System Version)	Control	-	-	VXX.XX ※例 V01.00	cam	-	-	http://192.168.0.10/cgi-bin/aw_cam?cmd=QSV&res=1
	Response							
	Request	QSV						
	Response	OSV:[Data1]						
Software Version	Control	-	[Data1] 0 1 2 3 4 5 6 7 8 9 [Data2] 00~99 [Data3] 00~99 [Data4] E L [Data5] 00~99 [data6] 0 1	[Data1] Servo CPU Camera CPU COM FPGA Main/Network CPU AVIO FPGA Interface CPU Lens CPU Interface EEPROM NDI FPGA BE EEPROM [Data2] MAJOR VERSION [Data3] MINOR VERSION [Data4] (Debug Build) (Release Build) [Data5] (REVISION) [data6] NTSC PAL	ptz	-	-	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23QSV&res=1
	Response	-						
	Request	#QSV[Data1]						
	Response	qSV[Data1]V[Data2].[Data3][Data4][Data5][data6]						
Power On / Standby	Control	#O[Data]	0 1	Standby PowerOn	ptz	p[Data]	p[Data]	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%2300&res=1
	Response	p[Data]						
	Request	#O						
	Response	p[Data]						
Resolution Control	Control	#RZL[Data]	0 1 2 3	640x360 320x180 1280x720 1920x1080	ptz	rZL[Data]	-	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23RZL0&res=1
	Response	rZL[Data]						
	Request	#RZL						
	Response	rZL[Data]						
Camera Title	Control	OSJ:5C:[Data]	xxxxxxxx	Camera Title (Fixed 40 Charactors : ASCII CODE)	cam	OSJ:5C:[Data]	OSJ:5C:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:5C:xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx&res=1
	Response	OSJ:5C:[Data]						
	Request	QSJ:5C						
	Response	OSJ:5C:[Data]						