HD/4K Integrated Camera Interface Specifications

AW-UE80/UE50/UE40

2023/9/1

Panasonic Connect Co., Ltd.

■目次

1.Introduction

This manual describes the external interface specifications which are applicable when theAW-UE80/UE50/UE40 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 summarizes AW-UE80/UE50/UE40 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-UE80/UE50/UE40.
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

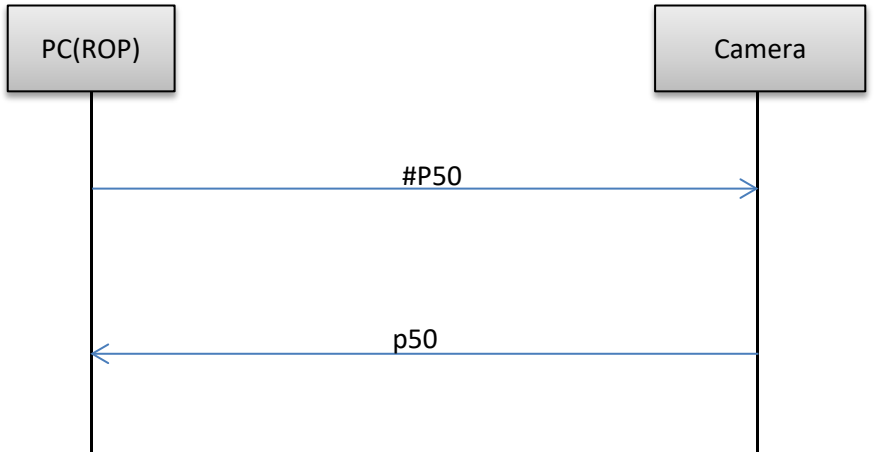
4-1.Serial communication

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

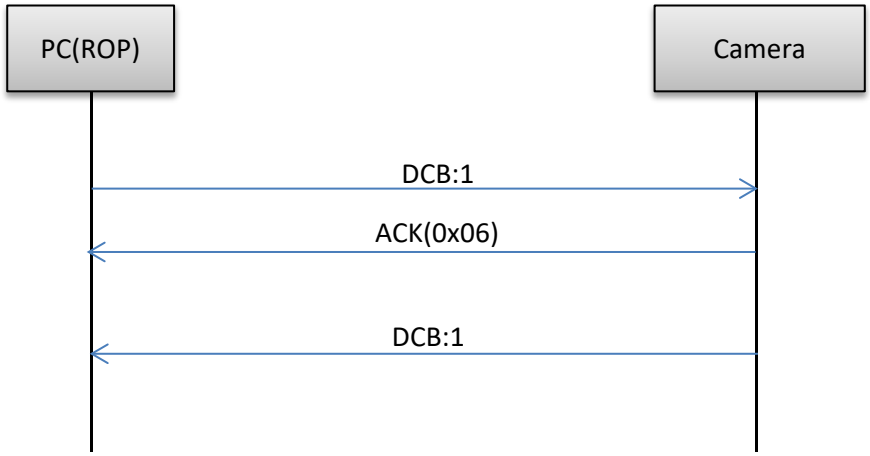
Method	Half Duplex
Commnunication Speed	9600bps
Data bit	8bit
Stop bit	1bit
Parity	None
Flow contorol	None

▼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

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”

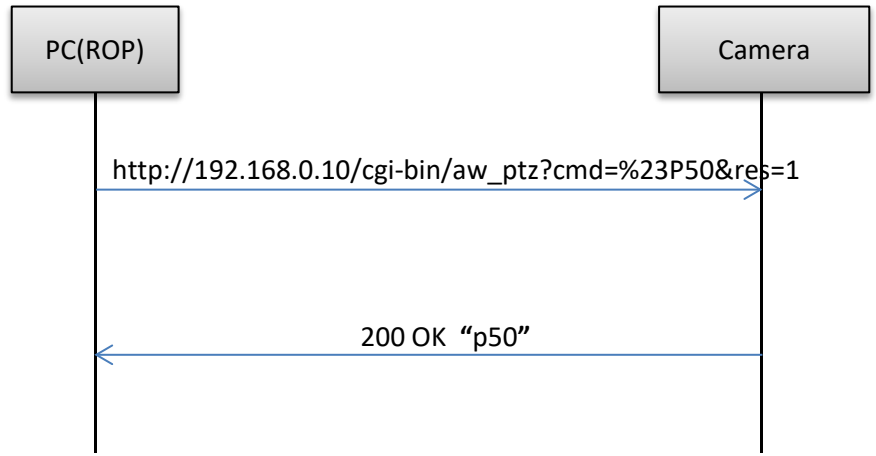
▼Receive format

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

▼Sequence



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

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”

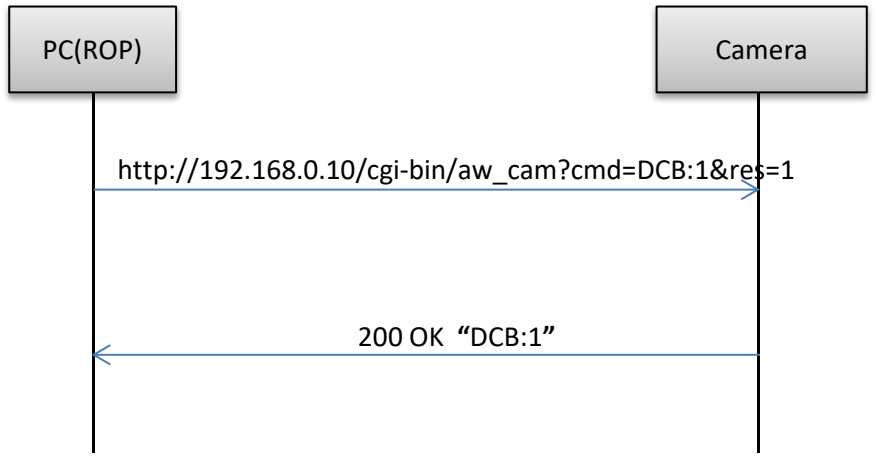
▼Receive format

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

▼Sequence



【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:

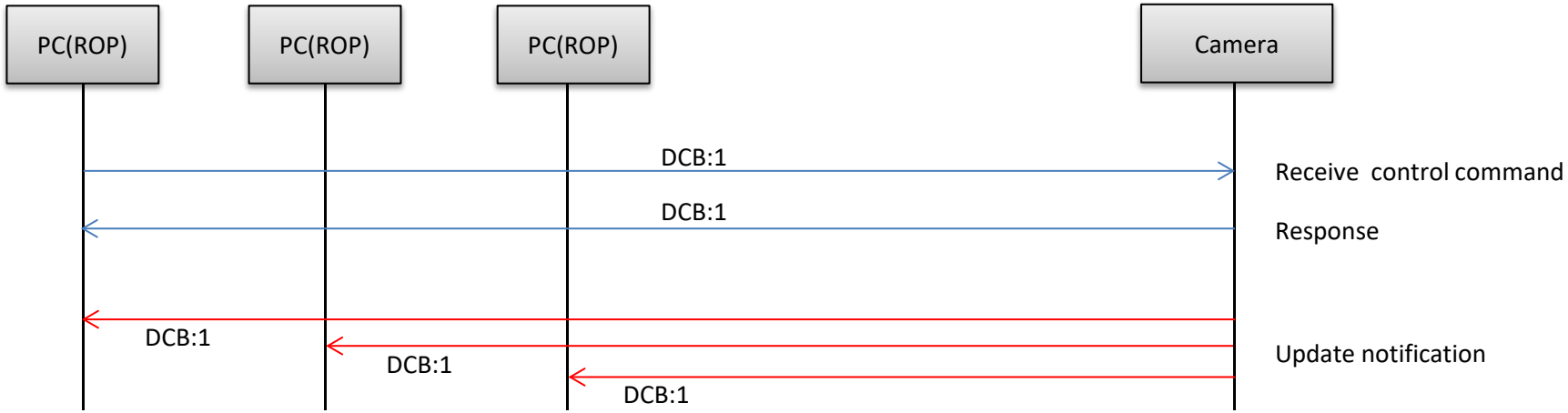
A) When a camera setting is changed by one terminal, the other terminals are notified of the setting change immediately.

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.



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

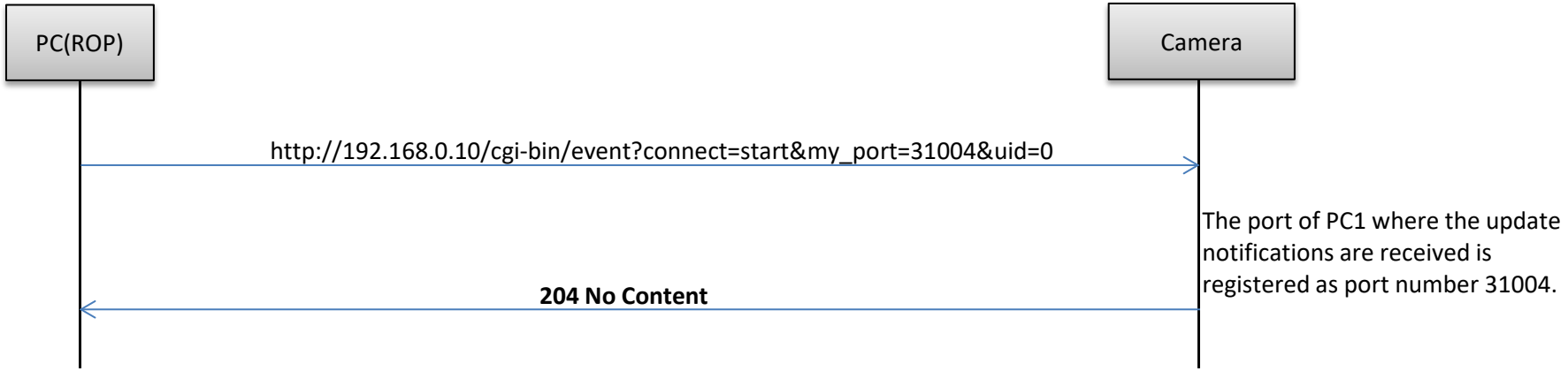
To receive an update notification via IP, you must perform the update notification reception start process in advance.
At a time like this, the number of the TCP port on the terminal for receiving the update notification (having the update notification sent) is specified.

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.



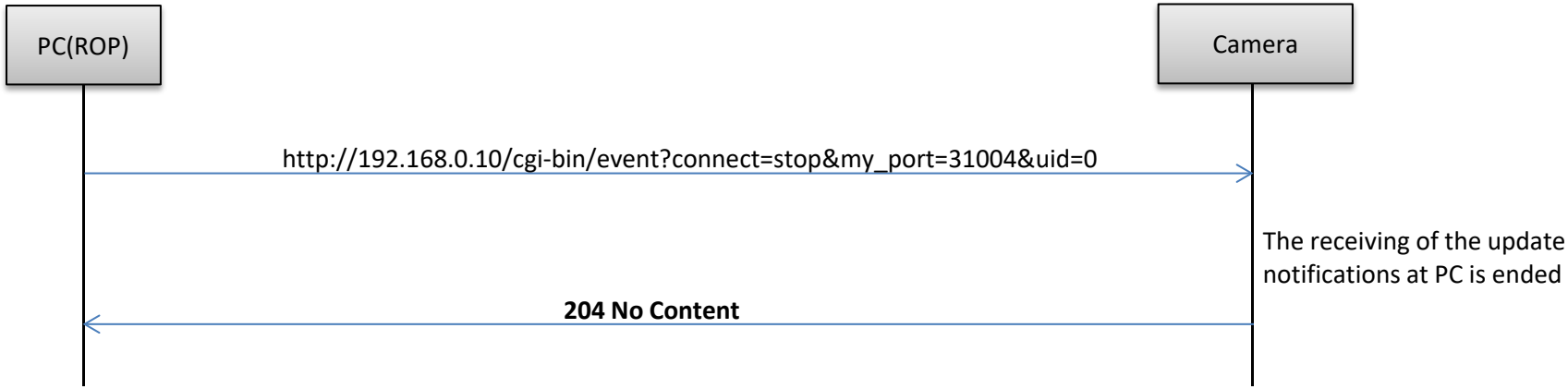
【Caution】
Proceed with the update notification receive start step when communication has been cut off because the LAN cable has been disconnected, for example.

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

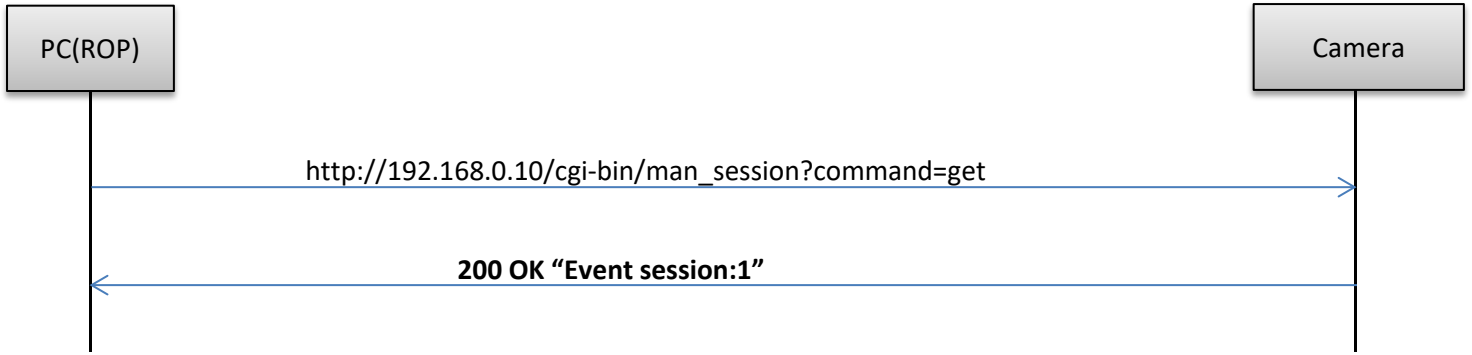
【Update notification receive end sequence】

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.



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



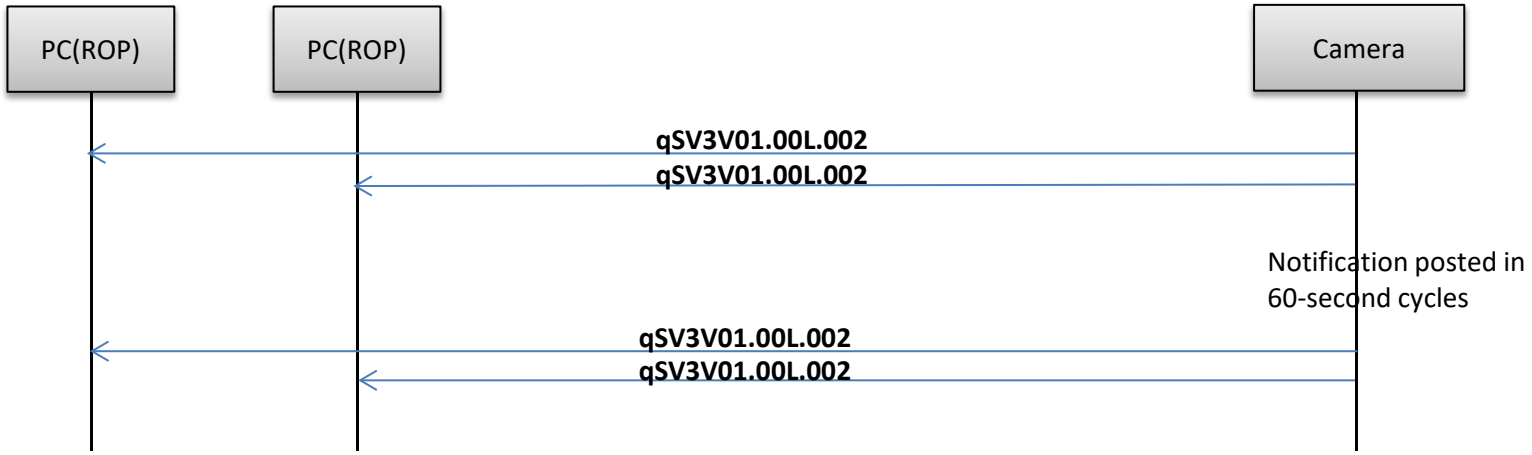
6.Special sequences

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

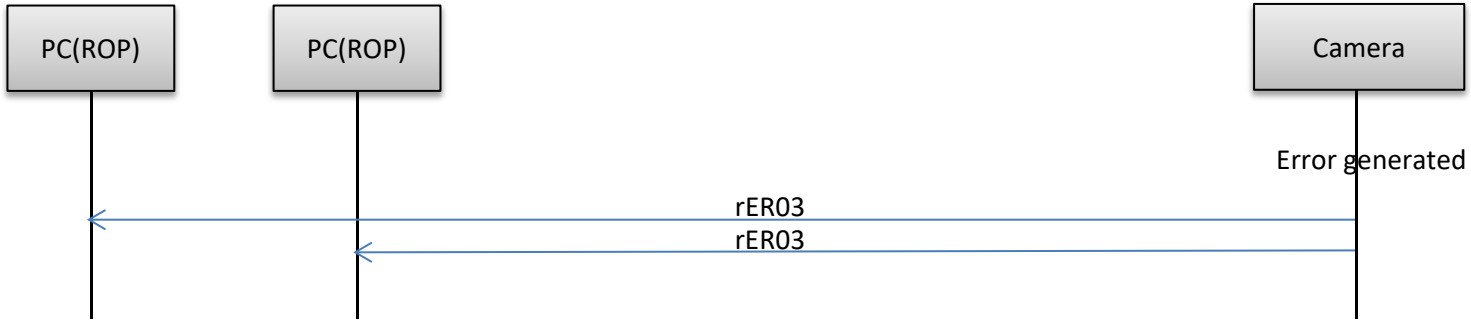
【Sequence when the version information is received】
The camera sends the version information in 60-second cycles, and this information is received by terminals PC1 and PC2.



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.

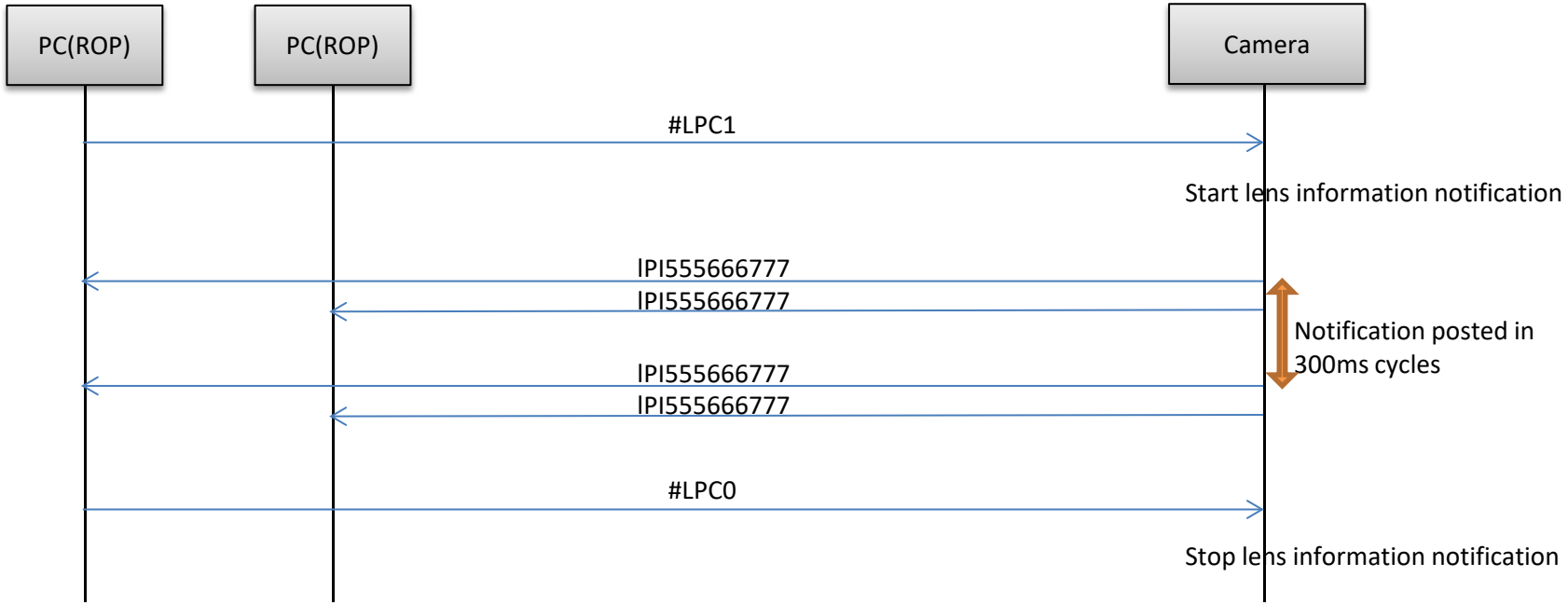


6-3.Lens Information

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).

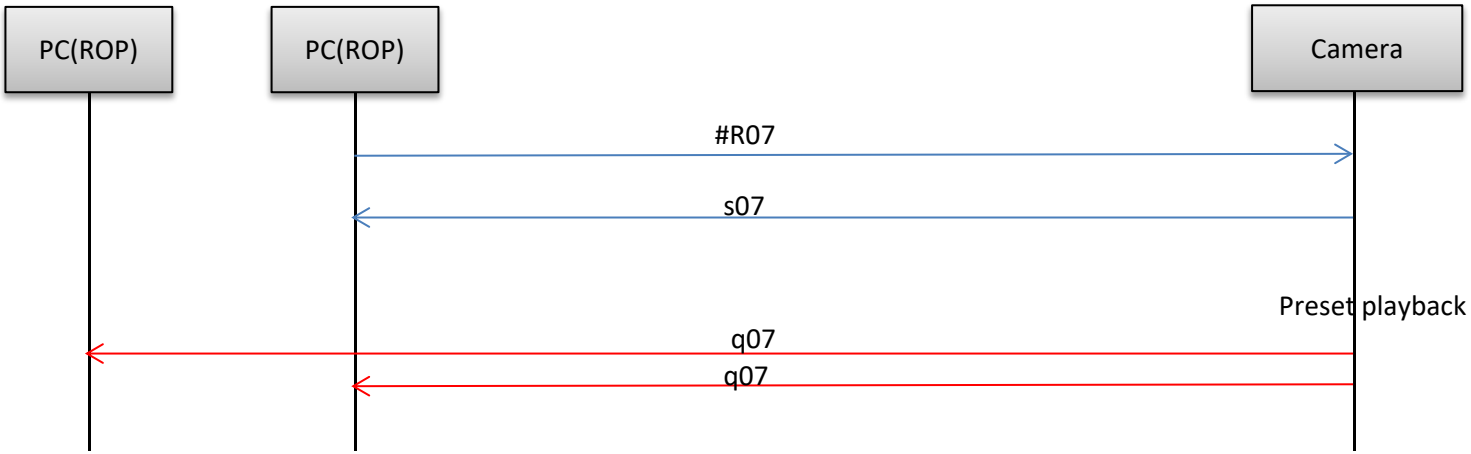


6-4.Preset playback

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.



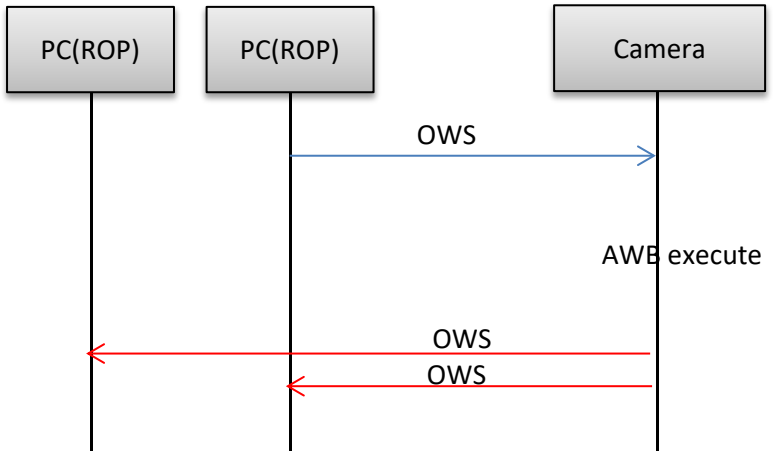
6-5.AWB/ABB execution

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

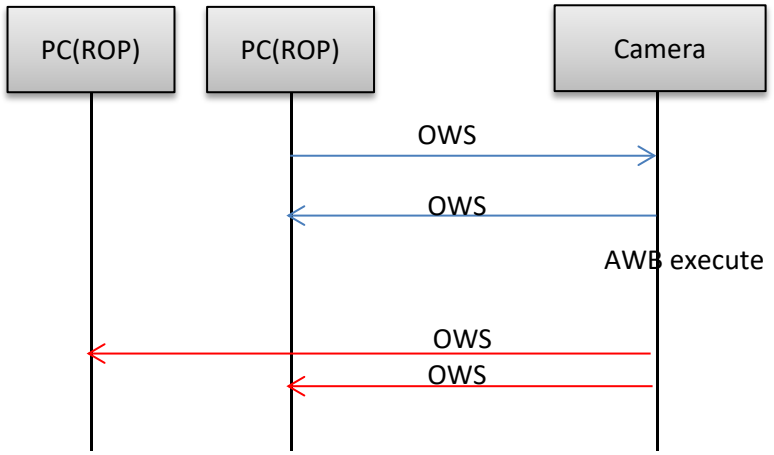
Notification	Remarks
OWS	AWB execution successful
OAS	ABB execution successful

【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



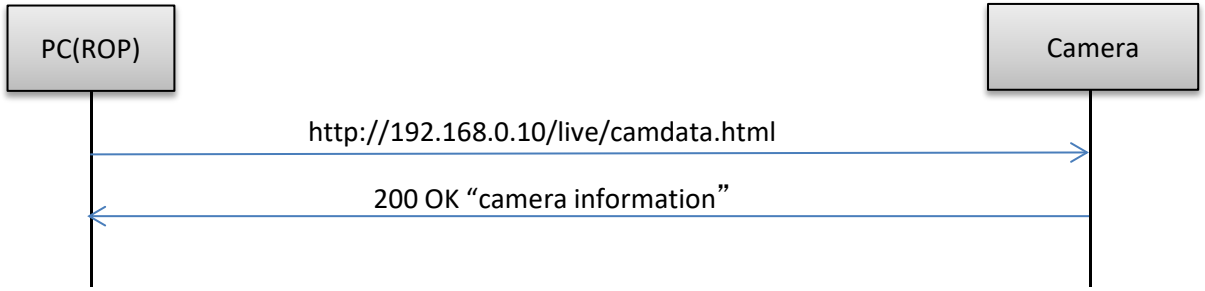
6-6.Camera information batch acquisition

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

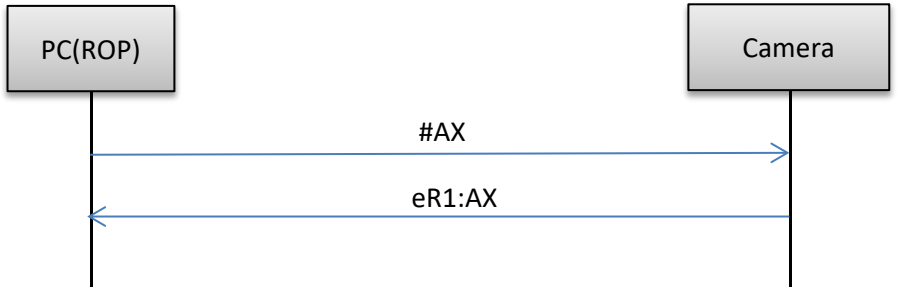
The three errors ER1, ER2 and ER3 below are returned in response to control or query commands by the camera.

In the case of Pan/Tilt control command

▼ER1 (unsupported command)

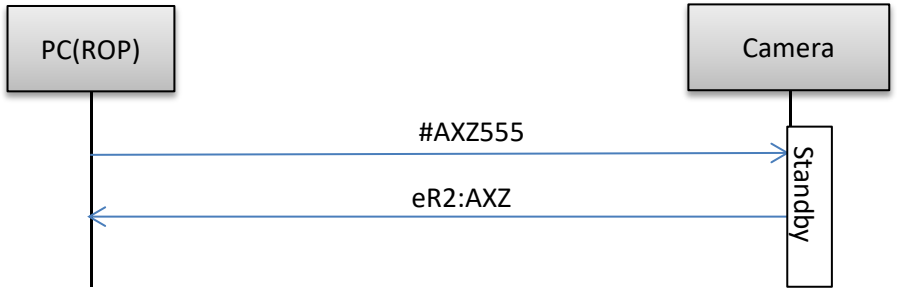
This error is generated when a command which is not supported by the camera has been received by the camera

example) When the non existent “#AX” command is executed for the camera



▼ER2 (busy status)

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

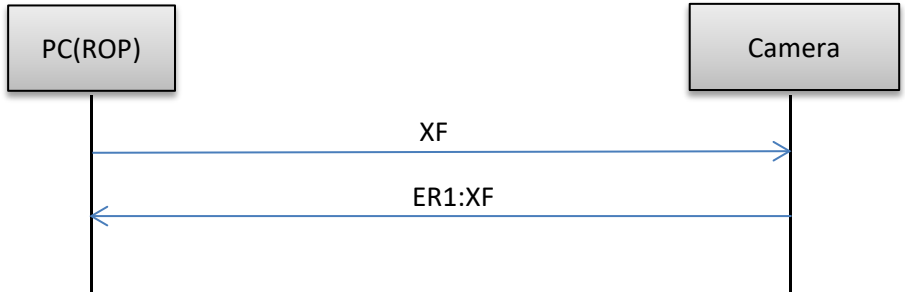


In the case of Camera control command

▼ER1 (unsupported command)

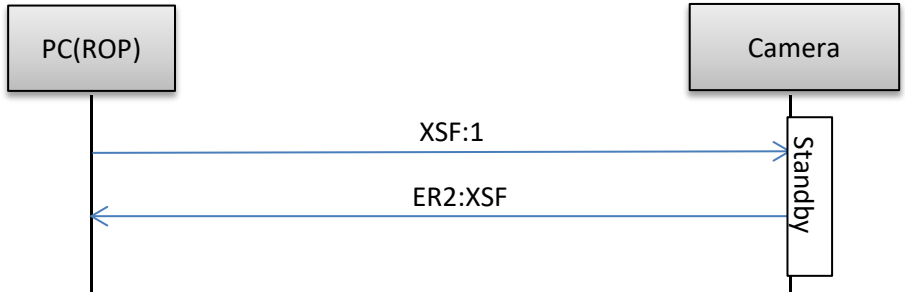
This error is generated when a command which is not supported by the camera has been received by the camera

example) When the non existent “XF” command is executed for the camera

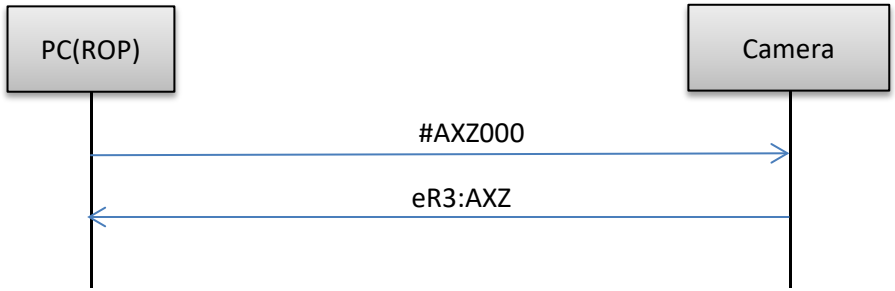


▼ER2 (busy status)

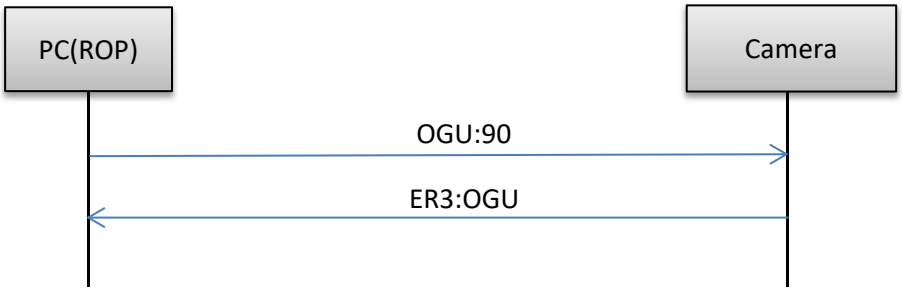
This error is generated during Standby (Power Off) or at other times when the camera is in the busy status.



▼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.



▼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.



8. AW-UE80/AW-UE50/AW-UE4 Menu-Command Correspondance Table

Menu	Command	Remarks	UE80	UE50	UE40
Camera					
Scene	XSF		○	○	○
Brightness					
Picture Level	OSD:48	Available when "Iris Mode is Auto" or "Shutter Mode is ELC" or "Gain is Auto" or "FrameMix is Auto"	○	○	○
Iris Mode	ORS #D3	Not available when Scene is Full Auto	○	○	○
Auto Iris Speed	OSJ:01		○	○	○
Auto Iris Wondow	OSJ:02		○	○	○
Iris Limit	OSJ:90	Not available when Scene is Full Auto	○	○	○
Shutter Mode	OSJ:03	Not available when Scene is Full Auto	○	○	○
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 ・Not available when Scene is Full Auto	○	○	○
Gain	OGU	Not available when Scene is Full Auto	○	○	○
Super Gain	OSI:28	Not available when Scene is Full Auto	○	○	○
AGC Max Gain	OSD:69	Not available when Scene is Full Auto	○	○	○
Frame mix	OSA:65	・Available when Shutter Mode is Off/ELC and Format is 59.95p/59.94i/50p/50i ・Not available when Scene is Full Auto	○	○	○
Auto F.Mix Max Gain	OSE:74		○	○	○
Backlight COMP.	OSE:73	Spotlight COMP. change to off when backlight COMP.set to On	○	○	○
Spotlight COMP.	OSJ:D0	Backlightt COMP. change to off when Spotlight COMP.set to On	○	○	○
Flicker Suppression	OSJ:D1		○	○	○
ND Filter	OFT OSJ:D2	Available when Day/Night is Day	○	–	–
Day/Night	#D6		○	–	–
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	○	○	○
AWB Color TEMP. Info	OSJ:4A	・Query Only	○	○	○
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		○	○	○
Chroma Phase	OSJ:0B		○	○	○
Master Pedestal	OSJ:0F		○	○	○
Detail	ODT		○	○	○
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	○	○	○
Skin Detail	OSA:40	Available when Detail is On	○	○	○
Skin Detail Effect	OSD:A3	Available when Skin Detail is On	○	○	○
Gamma Mode	OSJ:D7	・Available when DRS is Off ・Not available when Scene is Full Auto	○	○	○
Gamma	OSA:6A	・Available when Gamma Mode is Norma or HD ・Not available when Scene is Full Auto	○	○	○
DRS	OSE:33	・Available when Gamma Mode is Norma or HD ・Not available when Scene is Full Auto	○	○	○
Knee mode	OSA:2D	・Available when Gamma Mode is Norma or HD ・Not available when Scene is Full Auto	○	○	○
White Clip	OSA:2E		○	○	○
White Clip Level	OSA:2A	Available when White Clip is On	○	○	○
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	○	○	○

Menu	Command	Remarks	UE80	UE50	UE40
R_YI_YI	OSD:9E OSD:9F	Available when Matrix Type is User	○	○	○
YI	OSD:8A OSD:8B	Available when Matrix Type is User	○	○	○
YI_YI_G	OSD:1C OSD:1D	Available when Matrix Type is User	○	○	○
YI_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		○	○	○
AF Sensitivity	OSJ:D8	Available when Focus Mode is Auto	○	○	○
Zoom Mode	OSE:70 OSD:B3	Available when UHD Crop is Off	○	○	○
Max Digital Zoom	OSE:7A	Available when Zoom Mode is D.Zoom	○	○	○
Digital Extender	OSJ:4E	・Available when Zoom Mode is Opt.Zoom ・Digital Extender change to off when Zoom Mode is set to i.Zoom or d.Zoom	○	○	○
O.I.S. Mode	OIS		○	○	○
System					
Frequency	OSE:77		○	○	○
Format	OSA:87		○	○	○
Genlock					
Horizontal Phase	OHP		○	–	–
Tracking Data Output					
Serial	OSJ:54		○	–	–
IP	OSJ:55		○	–	–
Invert Pan/Tilt Axis	OSJ:C1		○	–	–
Camera ID	OSJ:F4		○	–	–
Wireless Control	#WLC		○	○	○
Wireless ID	#RID		–	○	○
Fan	#FAN #FS1		○	–	–
USB					
USB Mode	OSJ:D3	Available when System Frequency is 59.94/50Hz and System Format is other than 1080/23.98p over 59.94i	–	○	○
USB Auto Active	OSJ:D4		–	○	○
USB Auto Standby	OSJ:DC		–	○	○
Video Conference Mode	OSJ:F3		–	○	○
Auto Tracking Mode	OSL:B6		○	○	○
Angle	OSL:B7		○	○	○
Target Marker	OSL:B8		○	○	○
Tracking Status	QSL:BB	Available when Auto Tracking Mode is On.	○	○	○
Tracking Start	OSL:BC	Available when Tracking Status is "Not Tracking".	○	○	○
Tracking Stop	OSL:BC	Available when Tracking Status is "Tracking" or "Lost".	○	○	○
Tracking Auto Start	OSL:BD		○	○	○
Home Position	OSL:C2		○	○	○
Output					
3G SDI					
Format	OSJ:21		○	○	–
3G SDI Out	OSI:29	Available when 3G SDI>Format is 1080/59.94p / 1080/50p	○	○	–
HDMI					
Format	OSJ:25		○	○	○
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	○	○	○
Audio	OSA:D0		○	○	○
Input Type	OSA:D1	Available when Audio is On	○	○	○
Volume Level CH1/CH2	OSA:D5	Available when Audio is On	○	○	○
Plugin Power	OSA:D2	Available when Audio is On and Input Type is Mic	○	○	○
OSD Mix/Crop Marker					
12G SDI	OSE:7B		○	○	○
3G SDI Out	OSE:7B		○	○	○
HDMI	OSE:7B		○	○	○
NDI	OSE:7B		○	○	○
IP/NDI|HX	OSE:7B		○	○	○
OSD off with Tally	OSE:75		○	○	○
OSD Status	OSA:88		○	○	○
Tally	#TAE TLR #DA TLG #TAA		○	○	○
Tally LED Limit					
R	OSJ:D9		○	○	○
G	OSJ:DA		○	○	○
B	OSJ:DB		–	○	○
Tally Brightness	OSA:D3		○	○	○
Status Lamp	#LMP		○	○	○
External Output					
Output1	OSJ:41		○	○	–
Output2	OSJ:42		○	○	–

Menu	Command	Remarks	UE80	UE50	UE40
Pan/Tilt					
Install Position	#INS		○	○	○
P/T Speed Mode	OSJ:2D		○	○	○
P/T Accelaration Setting					
P/T Accelaration	OSJ:A2		○	–	–
Rise S-Curve	OSJ:A3	Available when P/T Acceleration is Manual	○	–	–
Fall S-Curve	OSJ:A4	Available when P/T Acceleration is Manual	○	–	–
Rise Acceleration	OSJ:A5	Available when P/T Acceleration is Manual	○	–	–
Fall Acceleration	OSJ:A6	Available when P/T Acceleration is Manual	○	–	–
Speed With Zoom Position	#SWZ		○	○	○
Focus Adjust With PTZ.	OAZ	Available when Focus Mode is Manual	○	○	○
Privacy Mode	OSJ:A7	Available when USB Auto Standby is Off	○	○	○
Power On Poosition	OSJ:45	Available when USB Auto Standby is Off	○	○	○
Preset Number	OSJ:46		○	○	○
Preset					
Preset Speed Unit	OSJ:29		○	○	○
Preset Speed Table	#PST		○	○	○
Preset Speed	#UPVS		○	○	○
Preset Acceleration Setting					
Preset Accelaration	OSJ:A8		○	–	–
Rise S-Curve	OSJ:A9	Available when Preset Aceleration is Manual	○	–	–
Fall S-Curve	OSJ:AA	Available when Preset Aceleration is Manual	○	–	–
Rise Acceleration	OSJ:AB	Available when Preset Aceleration is Manual and Preset Speed Unit is Speed	○	–	–
Fall Acceleration	OSJ:AC	Available when Preset Aceleration is Manual and Preset Speed Unit is Speed	○	–	–
Rise Ramp Time	OSJ:AD	Available when Preset Aceleration is Manual and Preset Speed Unit is Time	○	–	–
Fall Ramp Time	OSJ:AE	Available when Preset Aceleration is Manual and Preset Speed Unit is Time	○	–	–
Preset Scope	OSE:71		○	○	○
Preset Digital Extender	OSE:7C		○	○	○
Preset Thumbnail Update	OSJ:2B		○	○	○
Preset Name	OSJ:2C		○	○	○
Preset Iris	OSJ:5B	Available when Preset Scope is Mode A/Mode B	○	○	○
Preset Shutter	OSJ:D5	Available when Preset Scope is Mode A	○	○	○
Preset Zoom Mode	OSE:7D		○	○	○
Freeze During Preset	#PRF		○	○	○
Maintenance					
FW Version	QSV #QSV		○	○	○
IP Network					
Scene Copy	OSJ:D6				
Hour Meter					
Operation	–				
Fan	–				
HDMI Status	–				
Error Status					
Lens	–				
Pan/Tilt	–				
Fan	–				
Temperature	–				

Commands not linked to menus

Command name	Command	Remarks	UE80	UE50	UE40
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		○	○	○
Pan Speed Control (High precision)	#HP		○	○	○
Tilt Speed Control (High precision)	#HT		○	○	○
P/T Speed Control (High precision)	#HPT		○	○	○
P/T Position Control (PT Independent)	#HAC		○	○	○
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		○	○	○
Auto Tracking					
Mask Top	OSL:BE		○	○	○
Mask Bottom	OSL:BF		○	○	○
Mask Left	OSL:C0		○	○	○
Mask Right	OSL:C1		○	○	○
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. Command List

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 Full Auto	cam※	XSF:[Data]	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 Full Auto –				
	Response	OSF:[Data]						
Scene Copy	Control	OSJ:D6:[Data1]:[Data2]	[Data1] 1 2 3 4	[Data1]Scene(From) Scene1 Scene2 Scene3 Full Auto	cam	–	–	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:D6:1:2&res=1
	Response	OSJ:D6:[Data1]:[Data2]						
	Request	–	[Data2] 1 2 3 4	[Data2]Scene(To) Scene1 Scene2 Scene3 Full Auto				
	Response	–						

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

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

Item	Command	Item	Command
Scene	XSF	V Detail Level	OSD:A1
Picture Level	OSD:48	Skin Detail	OSA:40
Gamma Mode	OSJ:D7	Skin Detail Effect	OSD:A3
Iris Mode	ORS #D3	Gamma	OSA:6A
Auto Iris Speed	OSJ:01	DRS	OSE:33
Auto Iris Wondow	OSJ:02	Knee mode	OSA:2D
Iris Limit	OSJ:90	White Clip	OSA:2E
Shutter Mode	OSJ:03	White Clip Level	OSA:2A
Step/Synchro	OSJ:06 OSJ:09	DNR	OSD:3A
ELC Limit	OSD:BF	Matrix Type	OSE:31
Gain	OGU	R-G	OSD:A4
Super Gain	OSI:28	R-B	OSD:A5
AGC MaxGain	OSD:69	G-R	OSD:A6
Frame mix	OSA:65	G-B	OSD:A7
ND Filter	OFT	B-R	OSD:A8
Day/Night	#D6	B-G	OSD:A9
Auto F.Mix Max Gain	OSE:74	Adaptive Matrix	OSJ:4F
Backlight COMP.	OSE:73	B_Mg	OSD:80 OSD:81
Spotlight COMP.	OSE:D0	Mg	OSD:82 OSD:83
Flicker Suppression	OSE:D1	Mg_R	OSD:84 OSD:85
ND Filter Status	OSE:D2	Mg_R_R	OSD:9A OSD:9B
White Balance Mode	OAW	R	OSD:86 OSD:87
Color Temperature	OSI:20	R_R_Yl	OSD:9C OSD:9D
R Gain	OSG:39	R_Yl	OSD:88 OSD:89

Item	Command	Item	Command
B Gain	OSG:3A	R_YI_YI	OSD:9E OSD:9F
AWB Gain Offset	OSJ:0C	YI	OSD:8A OSD:8B
ATW Speed	OSI:25	YI_YI_G	OSD:1C OSD:1D
ATW Target R	OSJ:0D	YI_G	OSD:8C OSD:8D
ATW Target B	OSJ:0E	G	OSD:8E OSD:8F
Chroma Level	OSD:B0	G_Cy	OSD:90 OSD:91
Chroma Phase	OSJ:0B	Cy	OSD:92 OSD:93
Master Pedestal	OSJ:0F	Cy_B	OSD:94 OSD:95
Detail	ODT	B	OSD:96 OSD:97
Master Detail	OSA:30	Color TEMP. Setting	OSJ:4A
Detail Coring	OSJ:12		

Brightness

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
Picture Level	Control	OSD:48:[Data]	00h – 32h – 64h	-50 – 0 – 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						
	Response	OSD:48:[Data]						
Iris Mode	Control	ORS:[Data]	0 1	Manual Auto	cam	ORS:[Data]	ORS:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=ORS:1&res=1
	Response	ORS:[Data]						
	Request	QRS						
	Response	ORS:[Data]						
Iris Mode	Control	#D3[Data]	0 1	Manual Auto	ptz	d3[Data]	d3[Data]	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23D30&res=1
	Response	d3[Data]						
	Request	#D3						
	Response	d3[Data]						
Auto Iris Speed	Control	OSJ:01:[Data]	0 1 2	Slow Normal Fast	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]						
	Request	QSJ:01						
	Response	OSJ:01:[Data]						
Auto Iris Window	Control	OSJ:02:[Data]	0 1 2	Normal1 Normal2 Center	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]						
	Request	QSJ:02						
	Response	OSJ:02:[Data]						
Iris Limit	Control	OSJ:90:[Data]	0 1	Off On	cam	OSJ:90:[Data]	OSJ:90:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:90:0&res=1
	Response	OSJ:90:[Data]						
	Request	QSJ:90						
	Response	OSJ:90:[Data]						
Shutter Mode	Control	OSJ:03:[Data]	0 1 2 3	Off Step Synchro ELC	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]						
	Request	QSJ:03						
	Response	OSJ:03:[Data]						
Step Inc	Control	OSJ:04:[Data]	01h – 64h	1 — 100	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	–						
	Response	–						
Step Dec	Control	OSJ:05:[Data]	01h – 64h	1 — 100	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	–						
	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 5 6 7	1/100 1/120 1/250 1/500 1/1000 1/2000	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]	08h – 11h – 1Ah – 32h 80h	0dB – 9dB – 18dB – 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, 0dB～36dB When Super Gain is On Auto, 0dB～42dB
	Response	OGU:[Data]						
	Request	QGU						
	Response	OGU:[Data]						

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
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]						
AGC Max Gain	Control	OSD:69:[Data]	01 02 03 04 05 06	6dB 12dB 18dB 24dB 30dB 36dB	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 80h	Off +6dB +12dB +18dB +24dB Auto	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]						
Auto F.Mix Max Gain	Control	OSE:74:[Data]	00 01 02 03	(Off) 6dB 12dB 18dB	cam	OSE:74:[Data]	OSE:74:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSE:74:01&res=1
	Response	OSE:74:[Data]						
	Request	QSE:74						
	Response	OSE:74:[Data]						
Backlight COMP.	Control	OSE:73:[Data]	0 1	Off On	cam	OSE:73:[Data]	OSE:73:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSE:73:1&res=1
	Response	OSE:73:[Data]						
	Request	QSE:73						
	Response	OSE:73:[Data]						
Spotlight COMP.	Control	OSJ:D0:[Data]	0 1	Off On	cam	OSJ:D0:[Data]	OSJ:D0:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:D0:1&res=1
	Response	OSJ:D0:[Data]						
	Request	QSJ:D0						
	Response	OSJ:D0:[Data]						
Flicker Suppression	Control	OSJ:D1:[Data]	0 1	Off On	cam	OSJ:D1:[Data]	OSJ:D1:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:D1:1&res=1
	Response	OSJ:D1:[Data]						
	Request	QSJ:D1						
	Response	OSJ:D1:[Data]						
ND Filter	Control	OFT:[Data]	0 1 2 3 8	Through 1/4 ND 1/16 ND 1/64 ND Auto	cam	OFT:[Data]	OFT:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OFT:0&res=1 Only supported by AW-UE80
	Response	OFT:[Data]						
	Request	QFT						
	Response	OFT:[Data]						
ND Filter Status	Control	-	0 1 2 3	Through 1/4 ND 1/16 ND 1/64 ND	cam	OSJ:D2:[Data]	OSJ:D2:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=QSJ:D2&res=1 Only supported by AW-UE80
	Response	-						
	Request	QSJ:D2						
	Response	OSJ:D2:[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 Only supported by AW-UE80
	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	Control	-	[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=QSJ:4A&res=1
	Response	-						
	Request	QSJ:4A						
	Response	OSJ:4A:[Data1]:[Data2]						
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]						

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
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]						
Detail	Control	ODT:[Data]	0 1 2	Off On On	cam	ODT:[Data]	ODT:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=ODT:1&res=1
	Response	ODT:[Data]						
	Request	QDT						
	Response	ODT:[Data]						
Master Detail	Control	OSA:30:[Data]	61h – 80h – 9Fh	-31 – 0 – +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						
	Response	OSA:30:[Data]						
Detail Coring	Control	OSJ:12:[Data]	00h – 3Ch	0 – 60	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						
	Response	OSJ:12:[Data]						
V Detail Level	Control	OSD:A1:[Data]	79h – 80h – 87h	-7 – 0 – 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						
	Response	OSD:A1:[Data]						
Skin Tone Detail	Control	OSA:40:[Data]	0 1	Off On	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]						
	Request	QSA:40						
	Response	OSA:40:[Data]						
Skin Detail Effect	Control	OSD:A3:[Data]	80h – 9Fh	0 – +31	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						
	Response	OSD:A3:[Data]						
Gamma Mode	Control	OSJ:D7:[Data]	00 01 02 03 04	HD Normal Cinema1 Cinema2 Still Like	cam	OSJ:D7:[Data]	OSJ:D7:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:D7:00&res=1
	Response	OSJ:D7:[Data]						
	Request	QSJ:D7						
	Response	OSJ:D7:[Data]						

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
Gamma	Control	OSA:6A:[Data]	67h – 6Ch – 80h – 94h	0.30 – 0.35 – 0.55 – 0.75	cam	OSA:6A:[Data]	OSA:6A:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSA:6A:67&res=1 Step : 0.01
	Response	OSA:6A:[Data]						
	Request	QSA:6A						
	Response	OSA:6A:[Data]						
DRS	Control	OSE:33:[Data]	0 1 2 3	OFF LOW MID HIGH	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]						
	Request	QSE:33						
	Response	OSE:33:[Data]						
Knee Mode	Control	OSA:2D:[Data]	0 2 3 4 5	Off Auto Low Mid High	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]						
	Request	QSA:2D						
	Response	OSA:2D:[Data]						
White Clip	Control	OSA:2E:[Data]	0 1	Off On	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]						
	Request	QSA:2E						
	Response	OSA:2E:[Data]						
White Clip Level	Control	OSA:2A:[Data]	00h – 13h	90% – 109%	cam	OSA:2A:[Data]	OSA:2A:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSA:2A:00&res=1 Step : 1%
	Response	OSA:2A:[Data]						
	Request	QSA:2A						
	Response	OSA:2A:[Data]						
DNR	Control	OSD:3A:[Data]	00 01 02	Off Low High	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]						
	Request	QSD:3A						
	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 3 4	NORMAL USER Professional	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]						
	Request	QSE:31						
	Response	OSE:31:[Data]						
Adaptive Matrix	Control	OSJ:4F:[Data]	0 1	Off On	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]						
	Request	QSJ:4F						
	Response	OSJ:4F:[Data]						
Matrix(R-G)	Control	OSD:A4:[Data]	41h – 80h – BFh	-63 – 0 – 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						
	Response	OSD:A4:[Data]						
Matrix(R-B)	Control	OSD:A5:[Data]	41h – 80h – BFh	-63 – 0 – 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						
	Response	OSD:A5:[Data]						
Matrix(G-R)	Control	OSD:A6:[Data]	41h – 80h – BFh	-63 – 0 – 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						
	Response	OSD:A6:[Data]						
Matrix(G-B)	Control	OSD:A7:[Data]	41h – 80h – BFh	-63 – 0 – 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						
	Response	OSD:A7:[Data]						
Matrix(B-R)	Control	OSD:A8:[Data]	41h – 80h – BFh	-63 – 0 – 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						
	Response	OSD:A8:[Data]						
Matrix(B-G)	Control	OSD:A9:[Data]	41h – 80h – BFh	-63 – 0 – 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						
	Response	OSD:A9:[Data]						
Color Correction B_Mg Saturation	Control	OSD:80:[Data]	41h – 80h – BFh	-63 – 0 – 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						
	Response	OSD:80:[Data]						
Color Correction B_Mg Phase	Control	OSD:81:[Data]	41h – 80h – BFh	-63 – 0 – 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						
	Response	OSD:81:[Data]						
Color Correction Mg Saturation	Control	OSD:82:[Data]	41h – 80h – BFh	-63 – 0 – 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						
	Response	OSD:82:[Data]						

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
Color Correction Mg Phase	Control	OSD:83:[Data]	41h – 80h – BFh	-63 – 0 – 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						
	Response	OSD:83:[Data]						
Color Correction Mg_R Saturation	Control	OSD:84:[Data]	41h – 80h – BFh	-63 – 0 – 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						
	Response	OSD:84:[Data]						
Color Correction Mg_R Phase	Control	OSD:85:[Data]	41h – 80h – BFh	-63 – 0 – 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						
	Response	OSD:85:[Data]						
Color Correction Mg_R_R Saturation	Control	OSD:9A:[Data]	41h – 80h – BFh	-63 – 0 – 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						
	Response	OSD:9A:[Data]						
Color Correction Mg_R_R Phase	Control	OSD:9B:[Data]	41h – 80h – BFh	-63 – 0 – 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						
	Response	OSD:9B:[Data]						
Color Correction R Saturation	Control	OSD:86:[Data]	41h – 80h – BFh	-63 – 0 – 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						
	Response	OSD:86:[Data]						
Color Correction R Phase	Control	OSD:87:[Data]	41h – 80h – BFh	-63 – 0 – 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						
	Response	OSD:87:[Data]						
Color Correction R_R_YI Saturation	Control	OSD:9C:[Data]	41h – 80h – BFh	-63 – 0 – 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						
	Response	OSD:9C:[Data]						
Color Correction R_R_YI Phase	Control	OSD:9D:[Data]	41h – 80h – BFh	-63 – 0 – 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						
	Response	OSD:9D:[Data]						
Color Correction R_YI Saturation	Control	OSD:88:[Data]	41h – 80h – BFh	-63 – 0 – 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						
	Response	OSD:88:[Data]						
Color Correction R_YI Phase	Control	OSD:89:[Data]	41h – 80h – BFh	-63 – 0 – 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						
	Response	OSD:89:[Data]						

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
Color Correction R_YI_YI Saturation	Control	OSD:9E:[Data]	41h – 80h – BFh	-63 – 0 – 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						
	Response	OSD:9E:[Data]						
Color Correction R_YI_YI Phase	Control	OSD:9F:[Data]	41h – 80h – BFh	-63 – 0 – 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						
	Response	OSD:9F:[Data]						
Color Correction YI Saturation	Control	OSD:8A:[Data]	41h – 80h – BFh	-63 – 0 – 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]						
	Request	QSD:8A						
	Response	OSD:8A:[Data]						
Color Correction YI Phase	Control	OSD:8B:[Data]	41h – 80h – BFh	-63 – 0 – 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]						
	Request	QSD:8B						
	Response	OSD:8B:[Data]						
Color Correction YI_YI_G Saturation	Control	OSJ:1C:[Data]	41h – 80h – BFh	-63 – 0 – 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]						
	Request	QSJ:1C						
	Response	OSJ:1C:[Data]						
Color Correction YI_YI_G Phase	Control	OSJ:1D:[Data]	41h – 80h – BFh	-63 – 0 – 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]						
	Request	QSJ:1D						
	Response	OSJ:1D:[Data]						
Color Correction YI_G Saturation	Control	OSD:8C:[Data]	41h – 80h – BFh	-63 – 0 – 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]						
	Request	QSD:8C						
	Response	OSD:8C:[Data]						
Color Correction YI_G Phase	Control	OSD:8D:[Data]	41h – 80h – BFh	-63 – 0 – 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]						
	Request	QSD:8D						
	Response	OSD:8D:[Data]						
Color Correction G Saturation	Control	OSD:8E:[Data]	41h – 80h – BFh	-63 – 0 – 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]						
	Request	QSD:8E						
	Response	OSD:8E:[Data]						
Color Correction G Phase	Control	OSD:8F:[Data]	41h – 80h – BFh	-63 – 0 – 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]						
	Request	QSD:8F						
	Response	OSD:8F:[Data]						
Color Correction G_Cy Saturation	Control	OSD:90:[Data]	41h – 80h – BFh	-63 – 0 – 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]						
	Request	QSD:90						
	Response	OSD:90:[Data]						

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
Color Correction G_Cy Phase	Control	OSD:91:[Data]	41h – 80h – BFh	-63 – 0 – 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]						
	Request	QSD:91						
	Response	OSD:91:[Data]						
Color Correction Cy Saturation	Control	OSD:92:[Data]	41h – 80h – BFh	-63 – 0 – 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]						
	Request	QSD:92						
	Response	OSD:92:[Data]						
Color Correction Cy Phase	Control	OSD:93:[Data]	41h – 80h – BFh	-63 – 0 – 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]						
	Request	QSD:93						
	Response	OSD:93:[Data]						
Color Correction Cy_B Saturation	Control	OSD:94:[Data]	41h – 80h – BFh	-63 – 0 – 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						
	Response	OSD:94:[Data]						
Color Correction Cy_B Phase	Control	OSD:95:[Data]	41h – 80h – BFh	-63 – 0 – 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						
	Response	OSD:95:[Data]						
Color Correction B Saturation	Control	OSD:96:[Data]	41h – 80h – BFh	-63 – 0 – 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						
	Response	OSD:96:[Data]						
Color Correction B Phase	Control	OSD:97:[Data]	41h – 80h – BFh	-63 – 0 – 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						
	Response	OSD:97:[Data]						

Lens

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
Focus Mode	Control	OAF:[Data]	0 1	Manual Auto	cam	OAF:[Data]	OAF:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OAF:0&res=1
	Response	OAF:[Data]						
	Request	QAF						
	Response	OAF:[Data]						
Focus Mode	Control	#D1[Data]	0 1	Manual Auto	ptz	d1[Data]	d1[Data]	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23D10&res=1
	Response	d1[Data]						
	Request	#D1						
	Response	d1[Data]						
AF Sensivity	Control	OSJ:D8:[Data]	0 1	Normal Stable	cam	OSJ:D8:[Data]	OSJ:D8:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:D8:1&res=1
	Response	OSJ:D8:[Data]						
	Request	QSJ:D8						
	Response	OSJ:D8:[Data]						
Digital Zoom	Control	OSE:70:[Data]	0 1	Disable Enable	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]						
	Request	QSE:70						
	Response	OSE:70:[Data]						
i.zoom	Control	OSD:B3:[Data]	0 1	Disable Enable	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]						
	Request	QSD:B3						
	Response	OSD:B3:[Data]						
Max Digital Zoom	Control	OSE:7A:[Data]	02 – 10	x2 – x10	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						
	Response	OSE:7A:[Data]						
Digital Extender	Control	OSJ:4E:[Data]	0 1 2	OFF x1.4 x2.0	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]						
	Request	QSJ:4E						
	Response	OSJ:4E:[Data]						
Zoom Scale	Control	–	000h – 3E7h	0 – 999	cam	–	–	http://192.168.0.10/cgi-bin/aw_cam?cmd=QSJ:3D&res=1
	Response	–						
	Request	QSJ:3D						
	Response	OSJ:3D:[Data]						
Digital Zoom Magnification	Control	OSE:76:[Data]	0100 – 9999	x1.00 – x99.99	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						
	Response	OSE:76:[Data]						
OIS	Control	OIS:[Data]	0 1	【UE40/UE50】 Off O.I.S	cam	OIS:[Data]	OIS:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OIS:0&res=1
	Response	OIS:[Data]						
	Request	QIS	0 1 2	【UE80】 Off OIS (STABLE) OIS (PAN/TILT)				
	Response	OIS:[Data]						

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
Zoom Speed Control	Control	#Z[Data]	01 – 49 50 51 – 99	Wide Max. Speed – Wide Min. Speed Zoom Stop Tele Min. Speed – Tele Max. Speed	ptz	–	–	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23Z50&res=1
	Response	zS[Data]						
	Request	–						
	Response	–						
Zoom Position Control	Control	#AXZ[Data]	555h – FFFh	Wide – Tele	ptz	–	axz[Data]	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23AXZ555&res=1
	Response	axz[Data]						
	Request	#AXZ						
	Response	axz[Data]						
Focus Speed Control	Control	#F[Data]	01 – 49 50 51 – 99	Near Max. Speed – Near Min. Speed Stop Far Min. Speed – Far Max. Speed	ptz	–	–	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23F50&res=1
	Response	fS[Data]						
	Request	–						
	Response	–						
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]						

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
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	F1.4 - F2.8	cam	-	0IF:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=QIF&res=1
	Response	-						
	Request	QIF						
	Response	0IF:[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]						
Request Focus Position	Control	-	555h - FFFh "---"	Near - Far @Power OFF	ptz	-	-	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23GF&res=1
	Response	-						
	Request	#GF						
	Response	gf[Data]						
Request Iris Position	Control	-	[Data1] 555h - FFFh "---" [Data2] 0 1	[Data1] Close - Open @Power OFF [Data2] Manual Iris Auto Iris	ptz	-	-	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23GI&res=1
	Response	-						
	Request	#GI						
	Response	gi[Data1][Data2]						

System

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
Frequency	Control	OSE:77:[Data]	0 1 2 3	59.94Hz 50.00Hz 24Hz 23.98Hz	cam	OSE:77:[Data]	OSE:77:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSE:77:1&res=1 Reboot after changing Frequency
	Response	OSE:77:[Data]						
	Request	QSE:77						
	Response	OSE:77:[Data]						
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(UE80/UE50) 1080/25psF 1080/23.98psF(UE80/UE50) 1080/59.94p 1080/50p 1080/29.97p 1080/25p 1080/23.98p (over 59.94i/p) (UE80/UE50) 2160/29.97p 2160/25p 2160/59.94p(UE80) 2160/50p(UE80) 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 [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 PsF, 1080/23.98p(59.94i) is only supported by UE80 and UE50 2160/59.94p, 2160/50p is only supported by UE80
	Request	QSA:87						
	Response	OSA:87:[Data]						
Horizontal Phase	Control	OHP:[Data]	000h – 3FFh	-206 – +49	cam	OHP:[Data]	–	http://192.168.0.10/cgi-bin/aw_cam?cmd=OHP:000&res=1 Only supported by AW-UE80
	Response	OHP:[Data]						
	Request	QHP						
	Response	OHP:[Data]						
Tracking data output Serial Out	Control	OSJ:54:[Data]	0 1	Off On	cam	OSJ:54:[Data]	OSJ:54:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:54:0&res=1 Only supported by AW-UE80
	Response	OSJ:54:[Data]						
	Request	QSJ:54						
	Response	OSJ:54:[Data]						
Tracking data output IP Out	Control	OSJ:55:[Data]	0 1	Off On	cam	OSJ:55:[Data]	OSJ:55:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:55:0&res=1 Only supported by AW-UE80
	Response	OSJ:55:[Data]						
	Request	QSJ:55						
	Response	OSJ:55:[Data]						
Tracking data output Invert Pan/Tilt Axis	Control	OSJ:C1:[Data]	0 1	Off On	cam	OSJ:C1:[Data]	OSJ:C1:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:C1:0&res=1 Only supported by AW-UE80
	Response	OSJ:C1:[Data]						
	Request	QSJ:C1						
	Response	OSJ:C1:[Data]						
Tracking data output Camera ID	Control	OSJ:F4:[Data]	00h – FFh	00h – FFh	cam	OSJ:F4:[Data]	OSJ:F4:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:F4:01&res=1 Only supported by AW-UE80
	Response	OSJ:F4:[Data]						
	Request	QSJ:F4						
	Response	OSJ:F4:[Data]						
Wireless Control	Control	#WLC[Data1]	0 1	Disable Enable	ptz	wLC[Data1]	–	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23WLC1&res=1
	Response	wLC[Data1]						
	Request	#WLC						
	Response	wLC[Data1]						
Wireless ID	Control	#RID[Data]	0 1 2 3	Cam1 Cam2 Cam3 Cam4	ptz	rID[Data]	–	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23RID0&res=1 Only supported by AW-UE50/AW-UE40
	Response	rID[Data]						
	Request	#RID						
	Response	rID[Data]						
Fan	Control	#FAN[Data]	0 1 2 3	Auto High Mid Low	ptz	fAN[Data]	fAN[Data]	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23FAN0&res=1 Only supported by AW-UE80
	Response	fAN[Data]						
	Request	#FAN						
	Response	fAN[Data]						
Fan Status	Control	–	0 1 2	Off On Error	ptz	fS1[Data]	–	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23FS1&res=1 Only supported by AW-UE80
	Response	–						
	Request	#FS1						
	Response	fS1[Data]						

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
USB Mode	Control	OSJ:D3:[Data]	0 1	Off On	cam	OSJ:D3:[Data]	OSJ:D3:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:D3:0&res=1 Only supported by AW-UE50/AW-UE40
	Response	OSJ:D3:[Data]						
	Request	QSJ:D3						
	Response	OSJ:D3:[Data]						
USB Auto Active	Control	OSJ:D4:[Data]	0 1	Off On	cam	OSJ:D4:[Data]	OSJ:D4:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:D1:0&res=1 Only supported by AW-UE50/AW-UE40
	Response	OSJ:D4:[Data]						
	Request	QSJ:D4						
	Response	OSJ:D4:[Data]						
USB Auto Standby	Control	OSJ:DC:[Data]	0 1	Off On	cam	OSJ:DC:[Data]	OSJ:DC:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:DC:0&res=1 Only supported by AW-UE50/AW-UE40
	Response	OSJ:DC:[Data]						
	Request	QSJ:DC						
	Response	OSJ:DC:[Data]						
Video Conference Mode	Control	OSJ:F3:[Data]	0 1	Off On	cam	OSJ:F3:[Data]	-	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:F3:0&res=1 Only supported by AW-UE50/AW-UE40
	Response	OSJ:F3:[Data]						
	Request	QSJ:F3						
	Response	OSJ:F3:[Data]						
Auto Tracking Mode	Control	OSL:B6:[Data]	0 1	Off On	cam	OSL:B6:[Data]	-	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSL:B6:1&res=1
	Response	OSL:B6:[Data]						
	Request	QSL:B6						
	Response	OSL:B6:[Data]						
Auto Tracking Angle	Control	OSL:B7:[Data]	0 1 2	Off Full Body Upper Body	cam	OSL:B7:[Data]	-	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSL:B7:1&res=1
	Response	OSL:B7:[Data]						
	Request	QSL:B7						
	Response	OSL:B7:[Data]						
Auto Tracking Target Marker	Control	OSL:B8:[Data]	0 1	Off On	cam	OSL:B8:[Data]	-	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSL:B8:1&res=1
	Response	OSL:B8:[Data]						
	Request	QSL:B8						
	Response	OSL:B8:[Data]						
Tracking Status	Control	-	0 1 2	Not Tracking Tracking Lost	cam	OSL:BB:[Data]	-	http://192.168.0.10/cgi-bin/aw_cam?cmd=QSL:BB&res=1
	Response	-						
	Request	QSL:BB						
	Response	OSL:BB:[Data]						
Tracking Start/Stop	Control	OSL:BC:[Data]	0 1	Stop Start	cam	-	-	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSL:BC:0&res=1
	Response	OSL:BC:[Data]						
	Request	-						
	Response	-						
Tracking Auto Start	Control	OSL:BD:[Data]	0 1	Disable Enable	cam	OSL:BD:[Data]	-	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSL:BD:1&res=1
	Response	OSL:BD:[Data]						
	Request	QSL:BD						
	Response	OSL:BD:[Data]						
Auto Tracking Mask Top	Control	OSL:BE:[Data]	000h - 438h	0 (No Mask) - 1080	cam	OSL:BE:[Data]	-	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSL:BE:020&res=1
	Response	OSL:BE:[Data]						
	Request	QSL:BE						
	Response	OSL:BE:[Data]						
Auto Tracking Mask Bottom	Control	OSL:BF:[Data]	000h - 438h	0 (No Mask) - 1080	cam	OSL:BF:[Data]	-	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSL:BF:020&res=1
	Response	OSL:BF:[Data]						
	Request	QSL:BF						
	Response	OSL:BF:[Data]						
Auto Tracking Mask Left	Control	OSL:C0:[Data]	000h - 780h	0 (No Mask) - 1920	cam	OSL:C0:[Data]	-	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSL:C0:020&res=1
	Response	OSL:C0:[Data]						
	Request	QSL:C0						
	Response	OSL:C0:[Data]						
Auto Tracking Mask Right	Control	OSL:C1:[Data]	000h - 780h	0 (No Mask) - 1920	cam	OSL:C1:[Data]	-	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSL:C1:020&res=1
	Response	OSL:C1:[Data]						
	Request	QSL:C1						
	Response	OSL:C1:[Data]						
Auto Tracking Home Position	Control	OSL:C2:[Data]	0 1 2 3	Preset1 Preset2 Preset3 None	cam	OSL:C2:[Data]	-	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSL:C2:1&res=1
	Response	OSL:C2:[Data]						
	Request	QSL:C2						
	Response	OSL:C2:[Data]						

Output

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
3G SDI Output Format	Control	OSJ:21:[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: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 Only supported by AW-UE80/AW-UE50
	Response	OSJ:21:[Data]						
	Request	QSJ:21						
	Response	OSJ:21:[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 Only supported by AW-UE80/AW-UE50
	Response	OSI:29:[Data]						
	Request	QSI:29						
	Response	OSI:29:[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) (UE80/UE50) 2160/29.97p 2160/25p 2160/59.94p(UE80) 2160/50p(UE80) 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 1080/23.98p(59.94i) is only supported by UE80 and UE50 2160/59.94p, 2160/50p is only supported by UE80
	Request	QSJ:25						
	Response	OSJ:25:[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 Only supported by AW-UE80
	Response	OSE:68:[Data]						
	Request	QSE:68						
	Response	OSE:68:[Data]						

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
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]						
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 1 [Data2] 5Ch - 80h - 8Ch	[Data1] CH1 CH2 [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 80h	00h:OSD Mix Off 01h:3G SDI On 02h:HDMI On 10h:IP/NDI|HX On 20h:12G SDI On 80h:NDI On ※bit0:3G SDI, bit1:HDMI, bit4: IP/NDI|HX bit5:12G SDI, bit7:NDI	cam	OSE:7B:[Data]	-	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSE:7B:B3&res=1 UE80 : 3G SDI / HDMI / IP/NDI|HX / NDI UE50 : 3G SDI / HDMI / IP/NDI|HX UE40 : HDMI / IP/NDI|HX
	Response	OSE:7B:[Data]						
	Request	QSE:7B						
	Response	OSE:7B:[Data]						

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
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 LED Limit B	Control	OSJ:DB:[Data]	0 1	Unlimited Limited	cam	OSJ:DB:[Data]	OSJ:DB:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:DB:0&res=1 Only supported by AW-UE50/AW-UE40
	Response	OSJ:DB:[Data]						
	Request	QSJ:DB						
	Response	OSJ:DB:[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]						

Pan/Tilt

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
Install Positon	Control	#INS[Data]	0 1	Desktop Hanging	ptz	iNS[Data]	iNS[Data]	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23INS1&res=1
	Response	#INS[Data]						
	Request	#INS						
	Response	iNS[Data]						
P/T Speed Mode	Control	OSJ:2D:[Data]	0 1 2	Normal(60deg/s) Fast1(90deg/s) Fast2(180deg/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]						
	Request	QSJ:2D						
	Response	OSJ:2D:[Data]						
P/T Acceleration	Control	OSJ:A2:[Data]	0 1	Manual Auto	cam	OSJ:A2:[Data]	OSJ:A2:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:A2:0&res=1 Only supported by AW-UE80
	Response	OSJ:A2:[Data]						
	Request	QSJ:A2						
	Response	OSJ:A2:[Data]						
P/T Rise S-Curve	Control	OSJ:A3:[Data]	00h – 1E	0 – 30	cam	OSJ:A3:[Data]	OSJ:A3:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:A3:00&res=1 Only supported by AW-UE80
	Response	OSJ:A3:[Data]						
	Request	QSJ:A3						
	Response	OSJ:A3:[Data]						
P/T Fall S-Curve	Control	OSJ:A4:[Data]	00h – 1E	0 – 30	cam	OSJ:A4:[Data]	OSJ:A4:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:A4:00&res=1 Only supported by AW-UE80
	Response	OSJ:A4:[Data]						
	Request	QSJ:A4						
	Response	OSJ:A4:[Data]						
P/T Rise Acceleration	Control	OSJ:A5:[Data]	01h – FFh	1 – 255	cam	OSJ:A5:[Data]	OSJ:A5:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:A5:01&res=1 Only supported by AW-UE80
	Response	OSJ:A5:[Data]						
	Request	QSJ:A5						
	Response	OSJ:A5:[Data]						
P/T Fall Acceleration	Control	OSJ:A6:[Data]	01h – FFh	1 – 255	cam	OSJ:A6:[Data]	OSJ:A6:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:A6:01&res=1 Only supported by AW-UE80
	Response	OSJ:A6:[Data]						
	Request	QSJ:A6						
	Response	OSJ:A6:[Data]						
Speed With Zoom Position	Control	#SWZ[Data]	0 1	Off On	ptz	sWZ[Data]	sWZ[Data]	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23SWZ1&res=1
	Response	sWZ[Data]						
	Request	#SWZ						
	Response	sWZ[Data]						
Focus Adjust With PTZ.	Control	OAZ:[Data]	0 1	Off On	cam	OAZ:[Data]	OAZ:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OAZ:0&res=1
	Response	OAZ:[Data]						
	Request	QAZ						
	Response	OAZ:[Data]						
Privacy Mode	Control	OSJ:A7:[Data]	0 1	Off On	cam	OSJ:A7:[Data]	OSJ:A7:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:A7:0&res=1
	Response	OSJ:A7:[Data]						
	Request	QSJ:A7						
	Response	OSJ:A7:[Data]						
Power On Position	Control	OSJ:45:[Data]	1 2 3	Standby Home Preset	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]						
	Request	QSJ:45						
	Response	OSJ:45:[Data]						
Power On Preset Number	Control	OSJ:46:[Data]	00 – 99	Preset001 – Preset100	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						
	Response	OSJ:46:[Data]						
Pan Speed Control	Control	#P[Data]	01 – 50 – 99	Left Max. Speed – Stop – Right Max. Speed	ptz	–	–	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23P50&res=1
	Response	pS[Data]						
	Request	–						
	Response	–						
Tilt Speed Control	Control	#T[Data]	01 – 50 – 99	Down Max. Speed – Stop – UP Max. Speed	ptz	–	–	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23T50&res=1
	Response	tS[Data]						
	Request	–						
	Response	–						

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
P/T Speed Control	Control	#PTS[Data1][Data2]	[Data1] 01 – 50 – 99 [Data2] 01 – 50 – 99	[Data1] Left Max. Speed – Stop – Right Max. Speed [Data2] Down Max. Speed – Stop – UP Max. Speed	ptz	–	–	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23PTS5050&res=1
	Response	pTS[Data1][Data2]						
	Request	–						
	Response	–						
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][Data2]	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=%23APS8000800010D0&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 [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=%23RPS800080001D0&res=1
	Response	rPS[Data1][Data2][Data3][Data4]						
	Request	–						
	Response	–						
Limitation Control	Control	#LC[Data1][Data2]	[Data1] 1 2 3 4 [Data2] 0 1	[Data1] Tilt Up Tilt Down Pan Left Pan Right [Data2] Release Set	ptz	IC[Data1][Data2]	IC1[Data2] IC2[Data2] IC3[Data2] IC4[Data2]	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23LC11&res=1
	Response	IC[Data1][Data2]						
	Request	#LC[Data1]						
	Response	IC[Data1][Data2]						
Limitation Control(toggle)	Control	#L[Data]	Controller -> P/T 1 2 3 4 P/T -> Controller 0 1	Tilt Up Tilt Down Pan Left Pan Right Release Set	ptz	–	–	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23L1&res=1
	Response	l[Data]						
	Request	–						
	Response	–						
Pan Speed Control (High precision)	Control	#HP[Data]	7F00h – 8000h – 8100h	-256 : Left Max. Speed – 0 : Stop – +256 : Right Max. Speed	ptz	–	–	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23HP8100&res=1
	Response	hP[Data]						
	Request	–						
	Response	–						
Tilt Speed Control (High precision)	Control	#HT[Data]	7F00h – 8000h – 8100h	-256 : Down Max. Speed – 0 : Stop – +256 : Up Max. Speed	ptz	–	–	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23HT8100&res=1
	Response	hT[Data]						
	Request	–						
	Response	–						

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
P/T Speed Control (High precision)	Control	#HPT[Data1][Data2]	[Data1] 7F00h – 8000h – 8100h [Data2] 7F00h – 8000h – 8100h	[Data1] -256 : Left Max. Speed – 0 : Stop – +256 : Right Max. Speed [Data2] -256 : Down Max. Speed – 0 : Stop – +256 : Up Max. Speed	ptz	–	–	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23HPT81007F00&res=1
	Response	hPT[Data1][Data2]						
	Request	–						
	Response	–						
P/T Absolute Position Control with Speed and acceleration (PT Independent Control)	Control	#HAC[Data1][Data2][Data3][Data4][Data5][Data6][Data7][Data8]	[Data1] 0000h – FFFF [Data2] 0000h – FFFFh [Data3] 00h 01h – FFh [Data4] 00h 01h – FFh [Data5] 01h – FFh [Data6] 01h – FFh [Data7] 01h – FFh [Data8] 01h – FFh	[Data1] Pan Position CCW Limit – CW Limit [Data2] Tilt Position UP Limit – DOWN Limit [Data3] Pan Speed 0(stop) 1(minimum speed) – 255(max speed) [Data4] Tilt Speed 0(stop) 1(minimum speed) – 255(max speed) [Data5] Pan Rise Acceleration 1(minimum acceleration) – 255(max acceleration) [Data6] Tilt Rise Acceleration 1(minimum acceleration) – 255(max acceleration) [Data7] Pan Fall Acceleration 1(minimum acceleration) – 255(max acceleration) [Data8] Tilt Fall Acceleration 1(minimum acceleration) – 255(max acceleration)	ptz	–	–	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23HAC80008000FFFF10101010&res=1 □Pan : 2D09(-175deg) - D2F5(+175deg) □Tilt : 8E38(-30deg) - 5555(+90deg)
	Response	hAC[Data1][Data2][Data3][Data4][Data5][Data6][Data7][Data8]						
	Request	–						
	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 1秒 ～ 99秒	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 Only supported by AW-UE80
	Response	OSJ:A8:[Data]						
	Request	QSJ:A8						
	Response	OSJ:A8:[Data]						
Preset Rise S-Curve	Control	OSJ:A9:[Data]	00h – 1E	0 – 30	cam	OSJ:A9:[Data]	OSJ:A9:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:A9:00&res=1 Only supported by AW-UE80
	Response	OSJ:A9:[Data]						
	Request	QSJ:A9						
	Response	OSJ:A9:[Data]						
Preset Fall S-Curve	Control	OSJ:AA:[Data]	00h – 1E	0 – 30	cam	OSJ:AA:[Data]	OSJ:AA:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:AA:00&res=1 Only supported by AW-UE80
	Response	OSJ:AA:[Data]						
	Request	QSJ:AA						
	Response	OSJ:AA:[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 Only supported by AW-UE80
	Response	OSJ:AB:[Data]						
	Request	QSJ:AB						
	Response	OSJ:AB:[Data]						
Preset Fall Acceleration	Control	OSJ:AC:[Data]	01h – FFh	1 – 255	cam	OSJ:AC:[Data]	OSJ:AC:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:AC:01&res=1 Only supported by AW-UE80
	Response	OSJ:AC:[Data]						
	Request	QSJ:AC						
	Response	OSJ:AC:[Data]						
Preset Rise Ramp Time	Control	OSJ:AD:[Data]	01h – 64h	0.1s – 10.0s	cam	OSJ:AD:[Data]	OSJ:AD:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:AD:01&res=1 Only supported by AW-UE80
	Response	OSJ:AD:[Data]						
	Request	QSJ:AD						
	Response	OSJ:AD:[Data]						

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
Preset Fall Ramp Time	Control	OSJ:AE:[Data]	01h – 64h	0.1s – 10.0s	cam	OSJ:AE:[Data]	OSJ:AE:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:AE:01&res=1 Only supported by AW-UE80
	Response	OSJ:AE:[Data]						
	Request	QSJ:AE						
	Response	OSJ:AE:[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 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]						
Preset Name	Control	OSJ:2C:[Data]	0 1	Reset Hold	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						
	Response	OSJ:2C:[Data]						
Preset Iris	Control	OSJ:5B:[Data]	0 1	Off On	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						
	Response	OSJ:5B:[Data]						
Preset Shutter	Control	OSJ:D5:[Data]	0 1	Off On	cam	OSJ:D5:[Data]	OSJ:D5:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:D5:0&res=1
	Response	OSJ:D5:[Data]						
	Request	QSJ:D5						
	Response	OSJ:D5:[Data]						
Preset Zoom Mode	Control	OSE:7D:[Data]	0 1	Mode A Mode B	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						
	Response	OSE:7D:[Data]						
Freeze During Preset	Control	#PRF[Data]	0 1	Off On	ptz	pRF[Data]	pRF[Data]	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23PRF0&res=1
	Response	pRF[Data]						
	Request	#PRF						
	Response	pRF[Data]						
Recall Preset Memory	Control	#R[Data]	00 – 99	Preset001 – Preset100	ptz	–	–	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23R00&res=1
	Response	s[Data]						
	Request	–						
	Response	–						
Save Preset Memory	Control	#M[Data]	00 – 99	Preset001 – Preset100	ptz	–	–	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23M00&res=1
	Response	s[Data]						
	Request	–						
	Response	–						
Delete Preset Memory	Control	#C[Data]	00 – 99	Preset001 – Preset100	ptz	–	–	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23C00&res=1
	Response	s[Data]						
	Request	–						
	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 (bit1) 0 1 – (39bit) 0 1	[Data2] PRESET No.(Data1*40 +1) No Entry Entry PRESET No.(Data1*40 +2) No Entry Entry – PRESET No.(Data1*40 +40) No Entry Entry				
	Request	#PE[Data1]						
	Response	pE[Data1][Data2]						

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
Request Latest Recall Preset No.	Control	–	00 – 99	Preset001 – Preset100	ptz	s[Data]	s[Data]	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23S&res=1
	Response	–						
	Request	#S						
	Response	s[Data]						
Preset completion notification	Control	–	00 – 99	Preset001 – Preset100	ptz	q[Data]	–	
	Response	q[Data]						
	Request	–						
	Response	–						
Save Preset Name	Control	OSJ:35:[Data1]:[Data2]	[Data1] 00h – 99h [Data2] xxxxxxxxxxxxxxxx	[Data1] Preset001 – Preset100 [Data2] Preset Name (Fixed 15 Charactors)	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]						
	Response	OSJ:35:[Data1]:[Data2]						
Delete Preset Name (Single)	Control	OSJ:36:[Data1]	00 – 99	Preset001 – Preset100	cam	OSJ:36:[Data]	–	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:36:00&res=1
	Response	OSJ:36:[Data]						
	Request	–						
	Response	–						
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 – 99	Preset001 – Preset100	cam	OSJ:39:[Data]	–	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:39:00&res=1
	Response	OSJ:39:[Data]						
	Request							
	Response							
Delete Preset Thumbnail (Single)	Control	OSJ:3A:[Data1]	00 – 99	Preset001 – Preset100	cam	OSJ:3A:[Data]	–	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:3A:00&res=1
	Response	OSJ:3A:[Data]						
	Request	–						
	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 – FFFFFFFFh	[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 – FFFFFFFFh	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 Capter.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 [Data2] 00000h - 3A98h [Data3] 0h 1h 2h 3h [Data4] 0001h - 2710 h [Data5] 00000h - 186A0h [Data6] 0 1 2 3	[Data1] (Gain) 0dB - 9dB - 18dB - 42dB AGC ON [Data2] OK - 15000K [Data3] (Shutter Mode) Off step Syncro ELC [Data4] (Shutter Step) 1/1 - 1/10000 [Data5](Shutter Synchro) 0.0 [Hz] - 10000.0[Hz] [Data6] (ND) Throgh 1/4 ND 1/16 ND 1/64 ND	ptz	-	-	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23PTG&res=1
	Response	-						
	Request	#PTG						
	Response	pTG[Data1][Data2][Data3][Data4][Data5][Data6]						
Get Pan/Tilt/Zoom/Focus/Iris	Control	-	[Data1] 0000h - 8000h - FFFFh [Data2] 0000h - 8000h - FFFFh [Data3] 555h - FFFh [Data4] 555h - FFFh [Data5] 555h - FFFh	[Data1] (Pan) ccwLimit - Center - cwLimit [Data2] (Tilt) UpLimit - Center - DownLimit [Data3] (Zoom) Wide - Tele [Data4] (Focus) Near - Far [Data5] (Iris) Close - Open	ptz	-	-	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23PTV&res=1
	Response	-						
	Request	#PTV						
	Response	pTV[Data1][Data2][Data3][Data4][Data5]						

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][Data3][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 1	Off On	cam	-	OUS:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=DUS:1&res=1
	Response	DUS:[Data]						
	Request	QUS						
	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 1 2	Normal Fan Error(UE80) Other Error	cam	OER:[Data]	OER:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=QER&res=1
	Response	-						
	Request	QER						
	Response	OER:[Data]						
Error Information	Control	-	00000000h 00000001h 00000002h 00000004h 00000008h 00000010h	No Error Fan Error(UE80) High Temperature Lens Error Pan/Tilt Error Sensor Error ※bit0:Fan Error, bit1:High Temperature, bit2:Lens Error, bit3:Pan/Tilt Error, bit4:Sensor Error	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						
	Response	OSI:46:[Data]						
Latest Error Information	Control	-	00h 03h 21h 22h 24h 25h 29h 31h 33h 36h 40h 41h 42h 43h 45h 47h 50h 52h 57h 58h	No Error Motor Driver Error System Error Spec Limit Over NET Life-monitoring Error BE Life-monitoring Error CAM Life-monitoring Error Fan1 error(UE80) High Temp Low Temp Temp Sensor Error Lens Initialize Error PT. Initialize Error PoE++ Software auth. Timeout(UE80) PoE+ Software auth. Timeout(UE50/UE40) USB Streaming Error(UE50/UE40) MR Level Error MR Offset Error Gyro Error PT. Initialize 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-UE100	cam	-	OID:AW-UE100	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 example: 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 ZYNQ Network(UE80) Main/Network CPU ZYNQ Logic(UE80) / AVIO FPGA(UE50) reserve Lens CPU reserve ZYNQ Enc(UE80) 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]						