HD/4K Integrated Camera Interface Specifications

AW-UE100
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Panasonic Connect Co., Ltd.

■Contents

1.Introduction

This manual describes the external interface specifications which are applicable when the AW-UE100 is operated.
This manual consists of an overview of the external interface and a description of each command of AW-UE100

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-UE100 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-UE100.
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
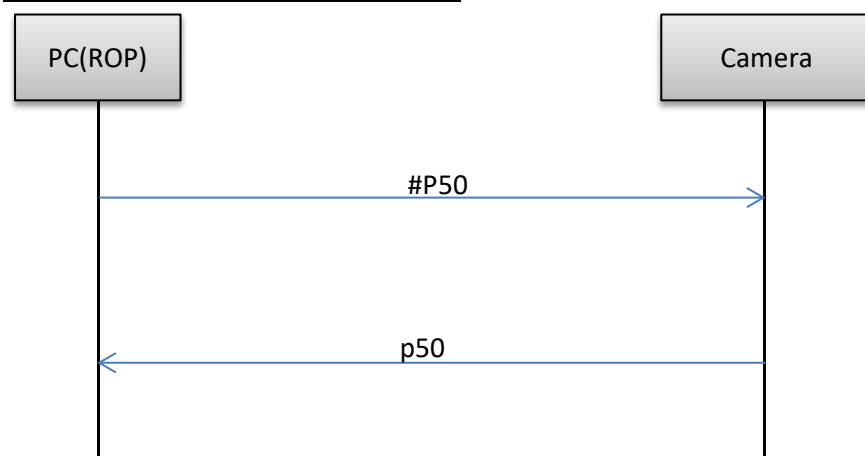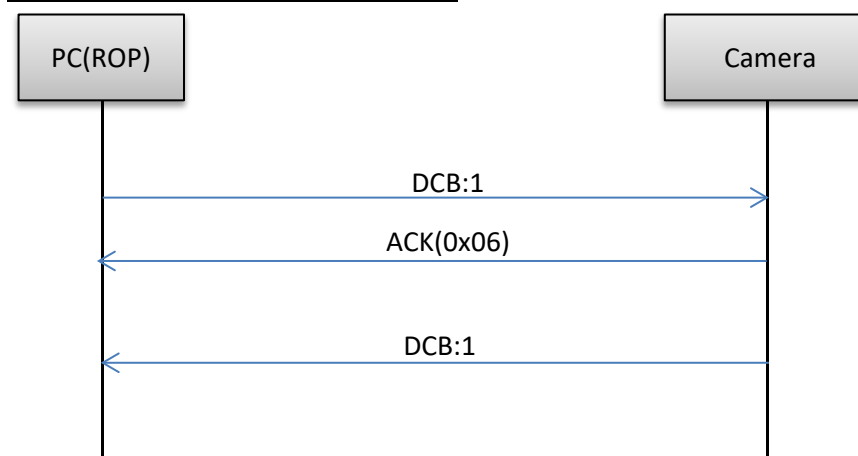
PC(ROP)		Camera
	#P50 →	
	← p50	

In case of Camera Control command

PC(ROP)		Camera
	DCB:1 →	
	← ACK(0x06)	
	← DCB:1	

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

2. 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

```
PC(ROP)                                          Camera

   ── http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23P50&res=1 ──►

   ◄────────────── 200 OK "p50" ──────────────
```

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

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"

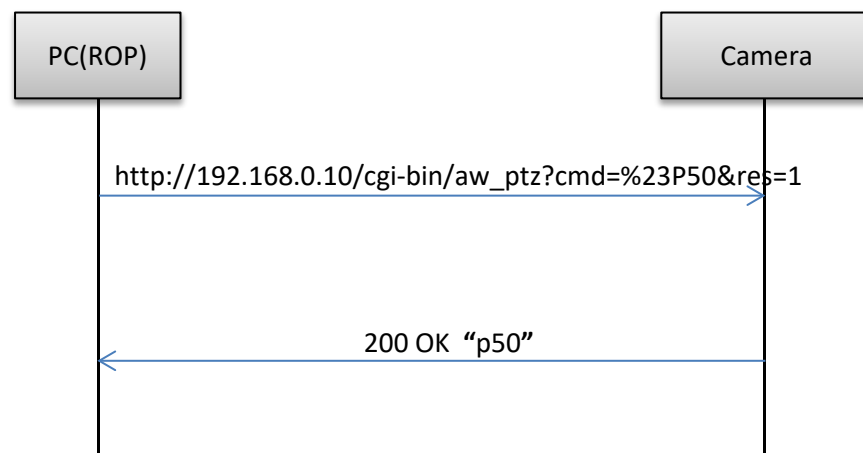▼Receive format
200 OK "Command"
　　　※Command・・・Response value of each command;
　　　　　　　　　　　　set in the HTTP message body
See more detail in Capter 7 for the error communication sequence
for the transmitted command

▼Sequence

```
PC(ROP)                                          Camera

   ── http://192.168.0.10/cgi-bin/aw_cam?cmd=DCB:1&res=1 ──►

   ◄────────────── 200 OK "DCB:1" ──────────────
```
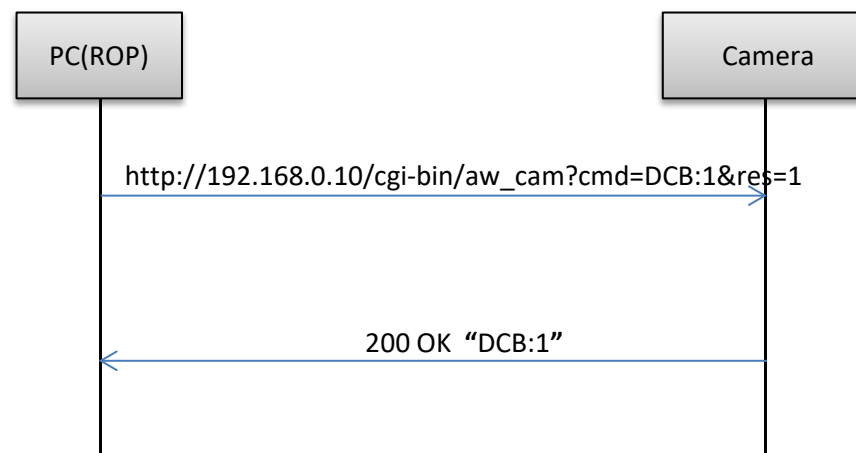
【Restrictions】
    1. When using the pan-tilt head control commands, send the commands with a gap of 40 ms between each command. Given below is the sequence.

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

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

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

5.Update notification

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

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

5-1.Update notification sequence

When the settings of the camera have been changed from the local terminal (PC1), the changes are also posted
by an update notification separately from the HTTP response to the command.
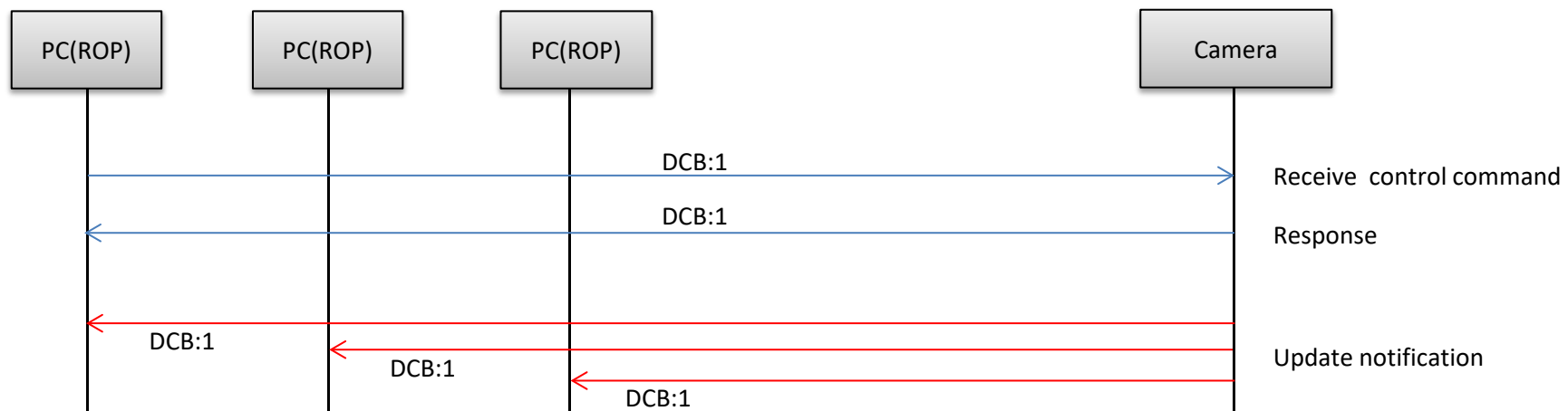
Some commands are not to be inicated as update notifications. See Chapter:9 for more detail

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" ー 8 bytes

【Update notification information format】

[CR][LF][Command response format][CR][LF]

※ [CR]:0x0d、[LF]:0x0a

ex1）Power: On

[CR][LF]p1[CR][LF]

ex2）Color bar: On

[CR][LF]DCB:1[CR][LF]

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

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

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

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

PC(ROP)		Camera

http://192.168.0.10/cgi-bin/event?connect=start&my_port=31004&uid=0 →

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

← **204 No Content**

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

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

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

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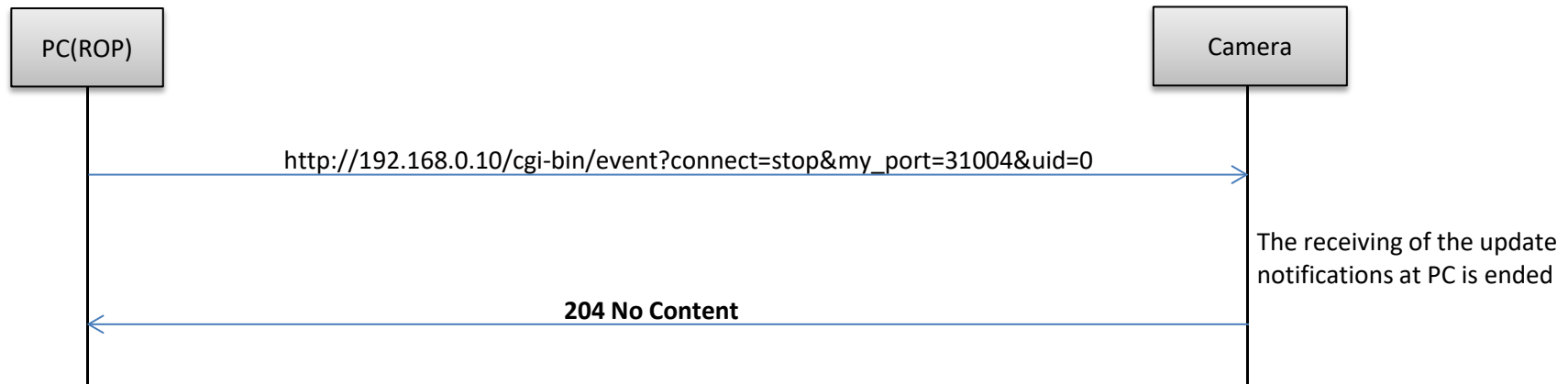
③　Registered number of update notifications
　　You can query the number of external devices (RP remote controller etc.) connected to the camera with the following command.
　　The number of connected device increases with the procedure to start receiving update notifications and decreases the procedure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

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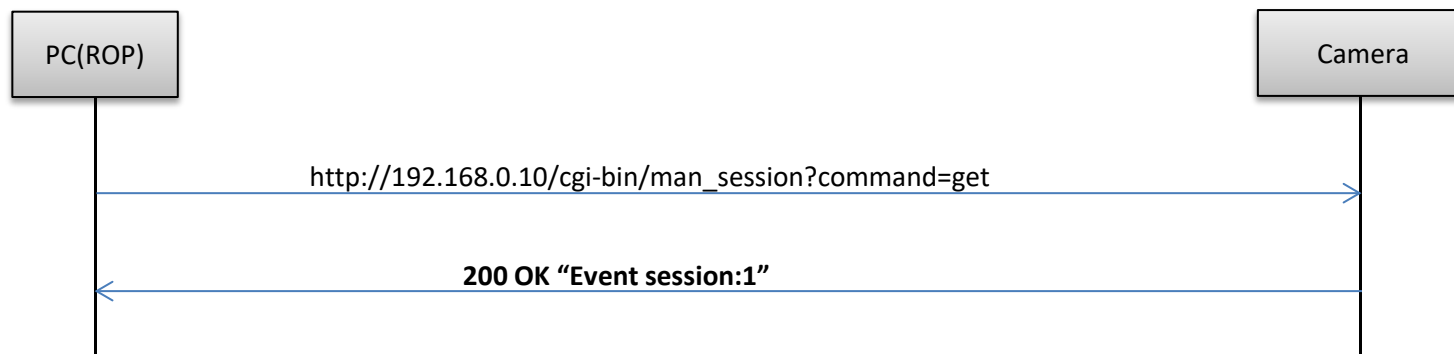
6.Special sequences

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

6-1.Version information notification

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

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

PC(ROP)	PC(ROP)		Camera

qSV3V01.00L.002

qSV3V01.00L.002

Notification posted in
60-second cycles

qSV3V01.00L.002

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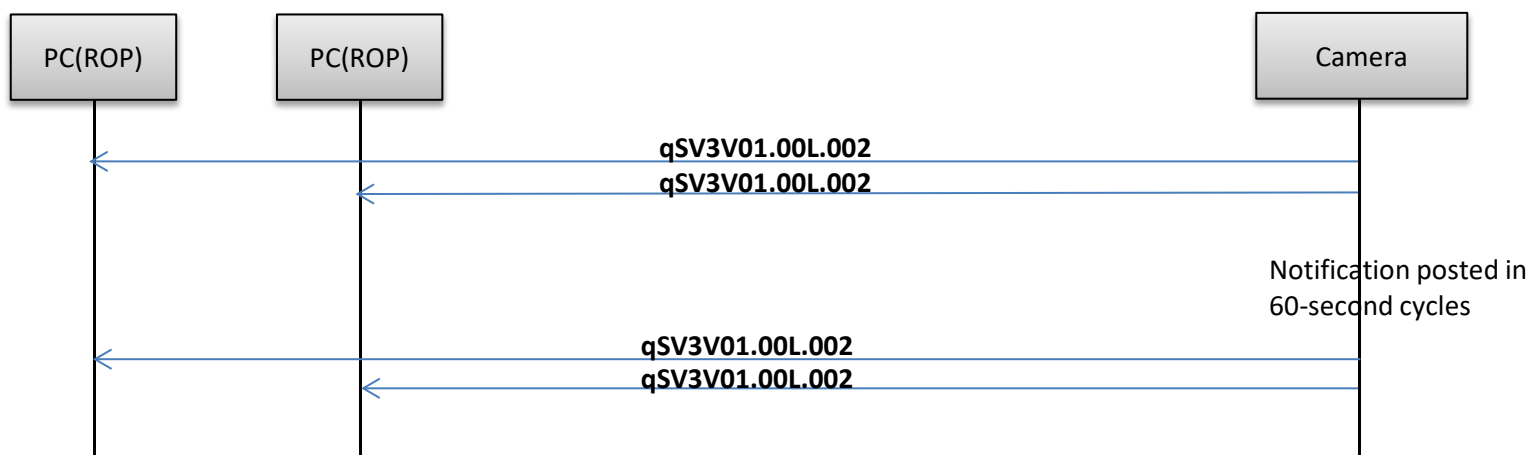
6-2.Error information

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

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

PC(ROP)	PC(ROP)		Camera
			Error generated
←	rER03		
	← rER03		
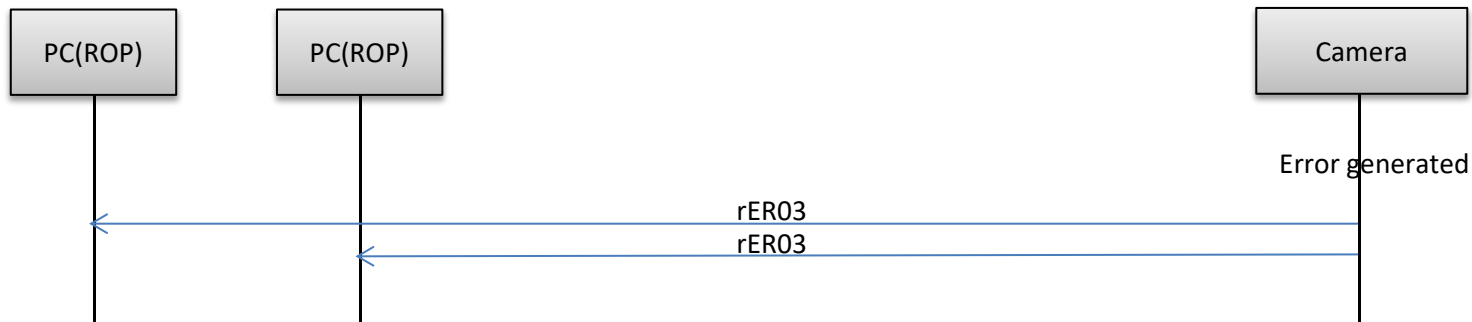
6-3.Lens Information

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

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

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

```
 ┌─────────┐   ┌─────────┐                              ┌─────────┐
 │ PC(ROP) │   │ PC(ROP) │                              │ Camera  │
 └─────────┘   └─────────┘                              └─────────┘
      │             │            #LPC1                       │
      │─────────────┼────────────────────────────────────────>│
      │             │                                        │
      │             │                    Start lens information notification
      │             │          lPI555666777                  │
      │<────────────┼────────────────────────────────────────│
      │             │          lPI555666777                  │   ┆
      │             │<────────────────────────────────────────│   ┆ Notification posted in
      │             │                                        │   ┆ 300ms cycles
      │             │          lPI555666777                  │   ┆
      │<────────────┼────────────────────────────────────────│
      │             │          lPI555666777                  │
      │             │<────────────────────────────────────────│
      │             │            #LPC0                       │
      │─────────────┼────────────────────────────────────────>│
      │             │                                        │
      │             │                    Stop lens information notification
```
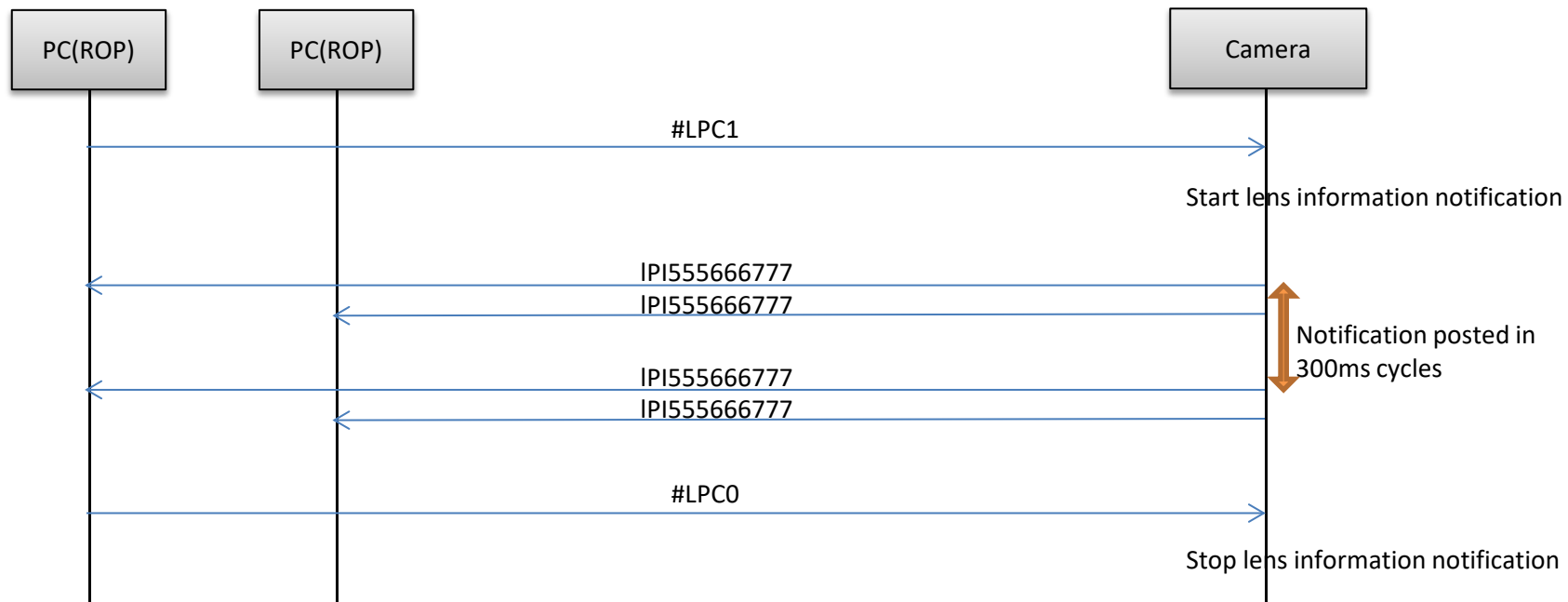
6-4.Preset playback

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

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

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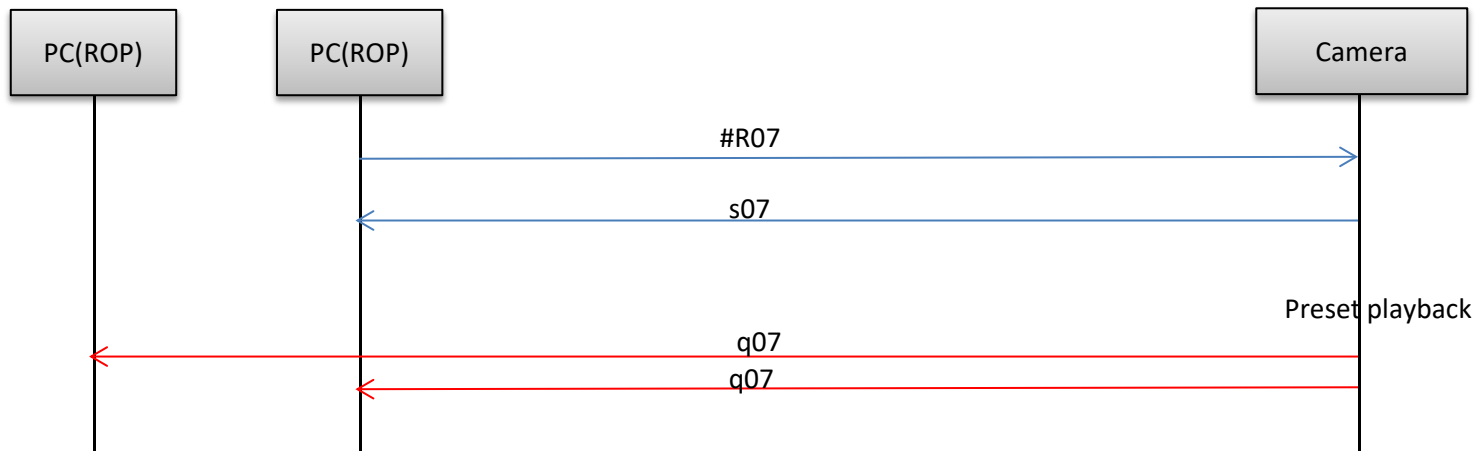
6-5.AWB/ABB execution

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

Notification	Remarks
OWS	AWB execution successful
OAS	ABB execution successful

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

Serial
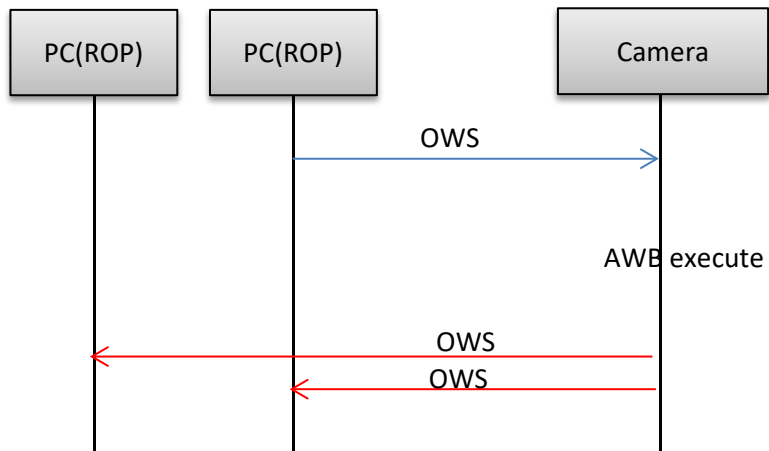
IP
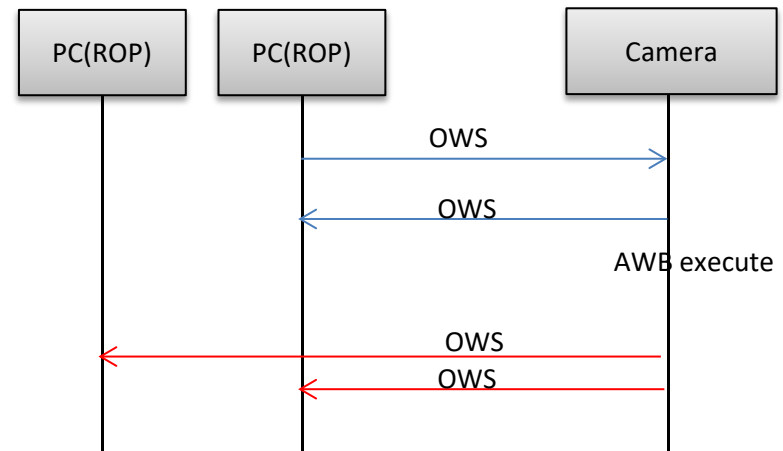
6-6.Camera information batch acquisition
All the information of the camera can be acquired together as a batch.

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

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

【Sequence】
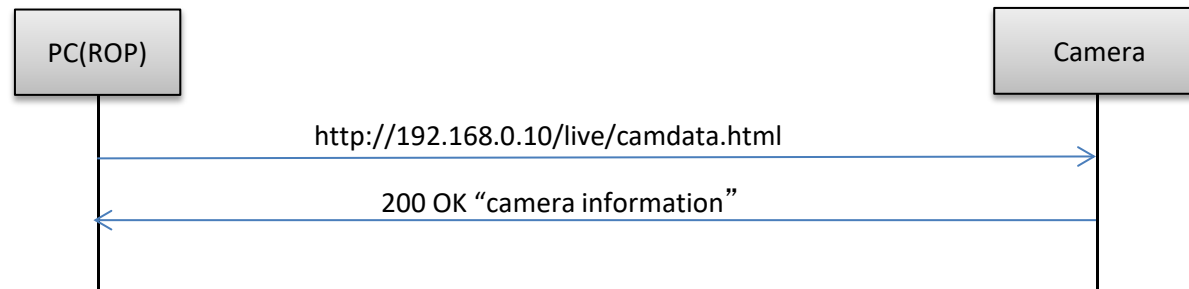
7.Error return

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
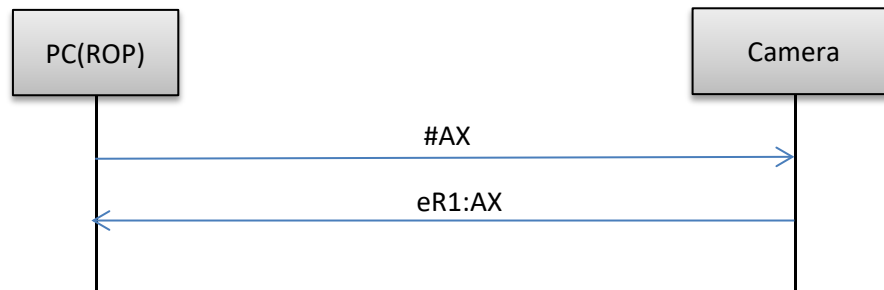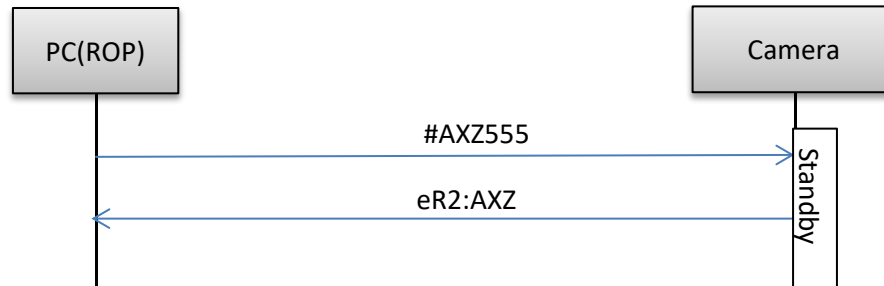
In the case of Camera control command
▼ER1 (unsupported command)
This error is generated when a command which is not supported
by the camera has been received by the camera
example) When the non existent "XF" command
is executed for the camera
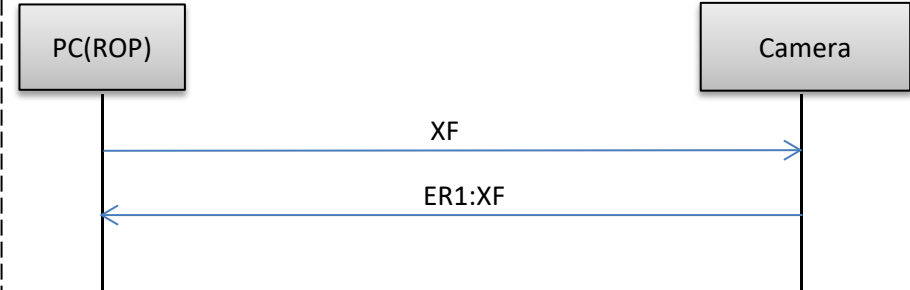
PC(ROP)		Camera
	#AX →	
	← eR1:AX	

PC(ROP)		Camera
	XF →	
	← ER1:XF	

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

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

PC(ROP)		Camera
	#AXZ555 →	Standby
	← eR2:AXZ	

PC(ROP)		Camera
	XSF:1 →	Standby
	← ER2:XSF	
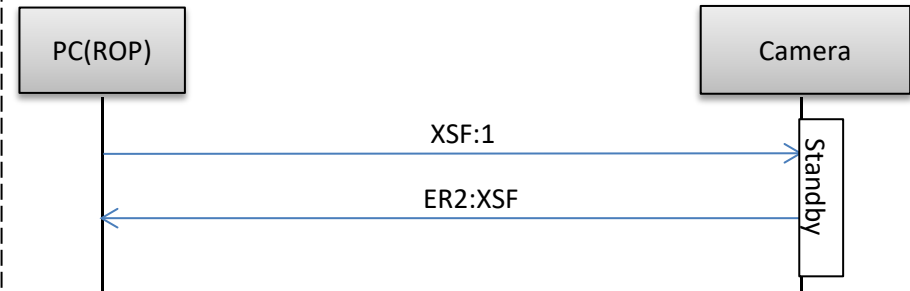
▼ER3 (outside acceptable range)
　This error is generated when the data value of a command
　is outside the acceptable range.
　example) The "#AXZ" command was executed with a data
　　　　　 value of "000" which is outside the acceptable range.
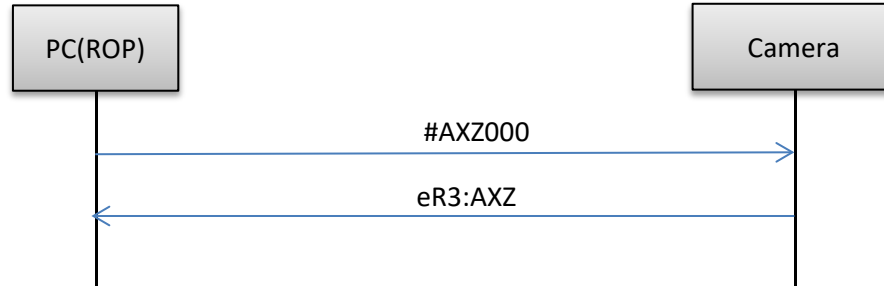
PC(ROP)　　　　　　　　　　　　　　　　　　　　　　Camera

#AXZ000 →

← eR3:AXZ

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

PC(ROP)　　　　　　　　　　　　　　　　　　　　　　Camera

OGU:90 →

← ER3:OGU
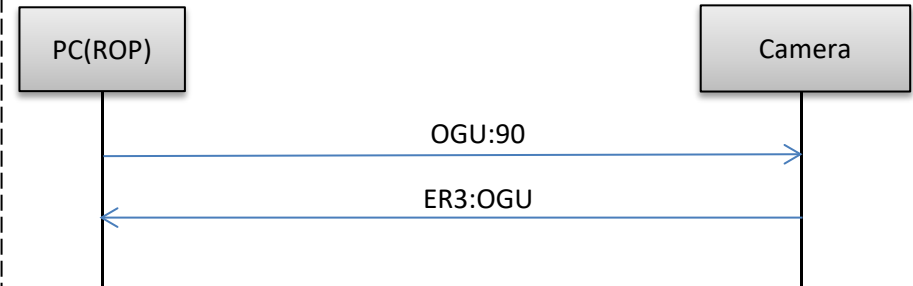
8. AW-UE100 Menu-Command Correspondance Table

Menu	Command	Remarks
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	
Auto Iris Speed	OSJ:01	
Auto Iris Wondow	OSJ:02	
Iris Limit	OSJ:90	
Shutter Mode	OSJ:03	
Step/Synchro	OSJ:04 OSJ:05 OSJ:06 OSJ:07 OSJ:08 OSJ:09	Available when Shutter Mode is Step or Synchro
ELC Limit	OSD:BF	Available when Shutter Mode is ELC
Gain	OGU	
Super Gain	OSI:28	
AGC Max Gain	OSD:69	
Frame mix	OSA:65	Available when Shutter Mode is Off/ELC and Format is 59.95p/59.94i/50p/50i
Auto F.Mix Max Gain	OSE:74	
ND Filter	OFT	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
Color TEMP. Setting		
Color Temperature	OSJ:48 OSJ:49 OSJ:4A	Available when White Balance Mode is AWB A/AWB B
R Gain	OSJ:4B	Available when White Balance Mode is AWB A/AWB B
B Gain	OSJ:4C	Available when White Balance Mode is AWB A/AWB B
G Axis	OSJ:4D	Available when White Balance Mode is AWB A/AWB B
AWB Gain Offset	OSJ:0C	
ATW Speed	OSI:25	Available when White Balance Mode is ATW
ATW Target R	OSJ:0D	Available when White Balance Mode is ATW
ATW Target B	OSJ:0E	Available when White Balance Mode is ATW
Chroma Level	OSD:B0	
Chroma Phase	OSJ:0B	
Master Pedestal	OSJ:0F	
R Pedestal	ORP	
G Pedestal	OSJ:10	
B Pedestal	OBP	
Pedestal Offset	OSJ:11	
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
Detail Frequency	OSD:A2	Available when Detail is On
Level Depend.	OSJ:13	Available when Detail is On
Knee Aperture Level	OCG:3F	Available when Detail is On
Detail Gain(+)	OSA:38	Available when Detail is On
Detail Gain(-)	OSA:39	Available when Detail is On
Skin Detail	OSA:40	Available when Detail is On
Skin Detail Effect	OSD:A3	Available when Skin Detail is On
Gamma Mode	OSE:72	
Gamma	OSA:6A	
Black Gamma	OSA:07	
Black Gamma Range	OSJ:1B	
DRS	OSE:33	
Knee mode	OSA:2D	
Auto Knee Response	OSG:97	
Knee Point	OSA:20	Available when Knee Mode is Manual
Knee Slope	OSA:24	Available when Knee Mode is Manual
White Clip	OSA:2E	
White Clip Level	OSA:2A	Available when White Clip is On
DNR	OSD:3A	

Menu	Command	Remarks
Matrix		
Matrix Type	OSE:31	
Adaptive Matrix	OSJ:4F	
R-G	OSD:A4	Available when Matrix Type is User
R-B	OSD:A5	Available when Matrix Type is User
G-R	OSD:A6	Available when Matrix Type is User
G-B	OSD:A7	Available when Matrix Type is User
B-R	OSD:A8	Available when Matrix Type is User
B-G	OSD:A9	Available when Matrix Type is User
B_Mg	OSD:80 OSD:81	Available when Matrix Type is User
Mg	OSD:82 OSD:83	Available when Matrix Type is User
Mg_R	OSD:84 OSD:85	Available when Matrix Type is User
Mg_R_R	OSD:9A OSD:9B	Available when Matrix Type is User
R	OSD:86 OSD:87	Available when Matrix Type is User
R_R_Yl	OSD:9C OSD:9D	Available when Matrix Type is User
R_Yl	OSD:88 OSD:89	Available when Matrix Type is User
R_Yl_Yl	OSD:9E OSD:9F	Available when Matrix Type is User
Yl	OSD:8A OSD:8B	Available when Matrix Type is User
Yl_Yl_G	OSD:1C OSD:1D	Available when Matrix Type is User
Yl_G	OSD:8C OSD:8D	Available when Matrix Type is User
G	OSD:8E OSD:8F	Available when Matrix Type is User
G_Cy	OSD:90 OSD:91	Available when Matrix Type is User
Cy	OSD:92 OSD:93	Available when Matrix Type is User
Cy_B	OSD:94 OSD:95	Available when Matrix Type is User
B	OSD:96 OSD:97	Available when Matrix Type is User
Lens		
Focus Mode	OAF #D1	
Crop AF	OSJ:91	Available when UHD Crop is Crop(1080)/Crop(720)
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
O.I.S. Mode	OIS	
System		
Frequency	OSE:77	
Format	OSA:87	
UHD Crop	OSJ:2E	Available when Format is 2160/○○
Crop Zoom	OSJ:92	Available when UHD Crop is Crop(1080)/Crop(720)
Shooting mode	OSI:30	
Genlock		
Hrizontal Phase	OHP	
Tracking Data Output		
Serial	OSJ:54	
IP	OSJ:55	
Invert Pan/Tilt Axis	OSJ:C1	
Camera ID	OSJ:F4	
Wireless Control	#WLC	
Fan	#FAN #FS1	

Menu	Command	Remarks
Output		
12G SDI		
Format	OSJ:1E	
3G SDI Out	OSJ:20	Available when 12G SDI>Format is 1080/59.94p / 1080/50p
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	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	
Tally Brightness	OSA:D3	
Status Lamp	#LMP	
External Output		
Output1	OSJ:41	
Output2	OSJ:42	
UHD Crop		
3G SDI Out	OSI:32	Available when UHD Crop is Crop(1080)/Crop(720)
NDI Out	OSJ:93	Available when UHD Crop is Crop(1080)/Crop(720)
IP Out1	OSI:33	Available when UHD Crop is Crop(1080)/Crop(720)
IP Out2	OSJ:94	Available when UHD Crop is Crop(1080)/Crop(720)
Crop Marker	OSI:1A	Available when UHD Crop is Crop(1080)/Crop(720)
Crop Out	OSI:16	Available when UHD Crop is Crop(1080)/Crop(720)
Crop Adjut	OSI:17	Available when UHD Crop is Crop(1080)/Crop(720)
Crop H Position	OSJ:AF OSJ:2F OSJ:31 OSJ:33	Available when UHD Crop is Crop(1080)/Crop(720)
Crop V Position	OSJ:B0 OSJ:30 OSJ:32 OSJ:34	Available when UHD Crop is Crop(1080)/Crop(720)
Crop Zoom Ratio	OSJ:B1 OSJ:98 OSJ:99 OSJ:9A OSJ:9B OSJ:9C OSJ:9D OSJ:9E OSJ:9F OSJ:A1	Available when UHD Crop is Crop(1080)/Crop(720)

Menu	Command	Remarks
Pan/Tilt		
Install Position	#INS	
Smart Picture Flip	#SPF QFS	
Flip Detect Angle	#FDA	Available when Smart Picture Flip is Auto
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	
Power On Poosition	OSJ:45	
Preset Number	OSJ:46	
Preset		
Preset Speed Unit	OSJ:29	
Preset Speed Table	#PST	
Preset Speed	#UPVS	
Preset Acceleration Setting		
Preset Acceleration	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 Crop	OSJ:2A	Available when Format is 2160/○○ and UHD Crop is Crop(1080)/Crop(720)
Preset Thumbnail Update	OSJ:2B	
Preset Name	OSJ:2C	
Preset Iris	OSJ:5B	Available when Preset Scope is Mode A/Mode B
Preset Zoom Mode	OSE:7D	
Freeze During Preset	#PRF	
Maintenance		
FW Version	QSV #QSV	
IP Network		
Hour Meter		
Operation	-	
Fan	-	
HDMI Status	-	
Error Status		
Lens	-	
Pan/Tilt	-	
Fan	-	
Temperature	-	

Commands not linked to menus

Menu	Command	Remarks
Menu control		
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
Crop		
Crop H/V Position command	OSJ:60 OSI:15 OSJ:5D OSJ:5E OSJ:5F OSJ:A0	Available when UHD Crop is Crop(1080)/Crop(720)
Crop Position / Crop Zoom Position Speed Control(YL/G/MG)	OSJ:C2	Available when UHD Crop is Crop(1080)/Crop(720)
Request Crop Position/Crop Zoom Position	OSJ:C3	Available when UHD Crop is Crop(1080)/Crop(720)
Pan/Tilt		
Pan Speed Control	#P	
Tilt Speed Control	#T	
P/T Speed Control	#PTS	
P/T Absolute Position Control	#APC	
P/T Relative Position Control	#RPC	
P/T Absolute Position Control with Speed	#APS	
P/T Relative Position Control with Speed	#RPS	
Limitation Control	#LC	
Limitation Control (toggle)	#L	
Lens		
Zoom Scale	OSJ:3D	
Digital Zoom Magnification	OSE:76	
Zoom Speed Control	#Z	
Zoom Position Control	#AXZ	
Focus Speed Control	#F	Available when Focus Mode is Manual
Focus Position Control	#AXF	Available when Focus Mode is Manual
Push Auto Focus	OSE:69	Available when Focus Mode is Manual
Toutch AF	OSJ:28	Available when Focus Mode is Manual and UHD Crop is Off
Iris Control	#AXI #I ORV	Available when Iris Mode is Manual
Iris Follow	OSD:4F	
Lens Position Information	#LPI	
Lens Position Information Control	#LPC	
Request Iris F No.	OIF	
Request Zoom Position	#GZ	
Request Focus Position	#GF	
Request Iris Position	#GI	
Preset		
Recall Preset Memory	#R	
Save Preset Memory	#M	
Delete Preset Memory	#C	
Preset Entry Confirmation	#PE	
Request Latest Recall Preset No.	#S	
Preset completion notification	q	
Save Preset Name	OSJ:35	
Delete Preset Name (Single)	OSJ:36	
Delete Preset Name (All)	OSJ:37	
Update Preset Thumbnail	OSJ:39	
Delete Preset Thumbnail (Single)	OSJ:3A	
Delete Preset Thumbnail (All)	OSJ:3B	
Preset Name/Preset Thumbnail Counter	OSJ:3C	
Convenient command		
Get Gain/Color Temperature/Shutter/ND	#PTG	
Get Pan/Tilt/Zoom/Focus/Iris	#PTV #PTD	
Operation Lock		
Operation Lock	OSJ:3E	
Release Operation Lock	OSJ:3F	
Operation Lock Status	OSJ:40	
Error		
Error Information	OER	
Error Information	OSI:46	
Latest Error Information	#RER	

Menu	Command	Remarks
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 Scene4	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 Scene4 –				
	Response	OSF:[Data]						

※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	Skin Detail	OSA:40
Picture Level	OSD:48	Skin Detail Effect	OSD:A3
Gamma Mode	OSE:72	Gamma	OSA:6A
Iris Mode	ORS #D3	Black Gamma	OSA:07
Auto Iris Speed	OSJ:01	Black Gamma Range	OSJ:1B
Auto Iris Wondow	OSJ:02	DRS	OSE:33
Iris Limit	OSJ:90	Knee mode	OSA:2D
Shutter Mode	OSJ:03	Auto Knee Response	OSG:97
Step/Synchro	OSJ:06 OSJ:09	Knee Point	OSA:20
ELC Limit	OSD:BF	Knee Slope	OSA:24
Gain	OGU	White Clip	OSA:2E
Super Gain	OSI:28	White Clip Level	OSA:2A
AGC MaxGain	OSD:69	DNR	OSD:3A
Frame mix	OSA:65	Matrix Type	OSE:31
ND Filter	OFT	R–G	OSD:A4
Day/Night	#D6	R–B	OSD:A5
Auto F.Mix Max Gain	OSE:74	G–R	OSD:A6
White Balance Mode	OAW	G–B	OSD:A7
Color Temperature	OSI:20	B–R	OSD:A8
R Gain	OSG:39	B–G	OSD:A9
B Gain	OSG:3A	Adaptive Matrix	OSJ:4F
AWB Gain Offset	OSJ:0C	B_Mg	OSD:80 OSD:81
ATW Speed	OSI:25	Mg	OSD:82 OSD:83
ATW Target R	OSJ:0D	Mg_R	OSD:84 OSD:85
ATW Target B	OSJ:0E	Mg_R_R	OSD:9A OSD:9B
Chroma Level	OSD:B0	R	OSD:86 OSD:87
Chroma Phase	OSJ:0B	R_R_Yl	OSD:9C OSD:9D
Master Pedestal	OSJ:0F	R_Yl	OSD:88 OSD:89
R Pedestal	ORP	R_Yl_Yl	OSD:9E OSD:9F
G Pedestal	OSJ:10	Yl	OSD:8A OSD:8B
B Pedestal	OBP	Yl_Yl_G	OSD:1C OSD:1D
Pedestal Offset	OSJ:11	Yl_G	OSD:8C OSD:8D

Item	Command	Item	Command
Detail	ODT	G	OSD:8E OSD:8F
Master Detail	OSA:30	G_Cy	OSD:90 OSD:91
Detail Coring	OSJ:12	Cy	OSD:92 OSD:93
V Detail Level	OSD:A1	Cy_B	OSD:94 OSD:95
Detail Frequency	OSD:A2	B	OSD:96 OSD:97
Level Depend.	OSJ:13	Color TEMP. Setting	OSJ:4A
Knee Aperture Level	OCG:3F	AWB R Gain	OSJ:4B
Detail Gain(+)	OSA:38	AWB B Gain	OSJ:4C
Detail Gain(-)	OSA:39	AWB G Axis	OSJ:4D

Brightness

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
Picture Level	Control	OSD:48:[Data]	00h	-50	cam	OSD:48:[Data]	OSD:48:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:48:32&res=1
	Response	OSD:48:[Data]	-	-				
	Request	QSD:48	32h	0				
	Response	OSD:48:[Data]	-	-				
			64h	50				
Iris Mode	Control	ORS:[Data]			cam	ORS:[Data]	ORS:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=ORS:1&res=1
	Response	ORS:[Data]	0	Manual				
	Request	QRS	1	Auto				
	Response	ORS:[Data]						
Iris Mode	Control	#D3[Data]			ptz	d3[Data]	d3[Data]	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23D30&res=1
	Response	d3[Data]	0	Manual				
	Request	#D3	1	Auto				
	Response	d3[Data]						
Auto Iris Speed	Control	OSJ:01:[Data]	0	Slow	cam	OSJ:01:[Data]	OSJ:01:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:01:0&res=1
	Response	OSJ:01:[Data]	1	Normal				
	Request	QSJ:01	2	Fast				
	Response	OSJ:01:[Data]						
Auto Iris Window	Control	OSJ:02:[Data]	0	Normal1	cam	OSJ:02:[Data]	OSJ:02:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:02:0&res=1
	Response	OSJ:02:[Data]	1	Normal2				
	Request	QSJ:02	2	Center				
	Response	OSJ:02:[Data]						
Iris Limit	Control	OSJ:90:[Data]	0	Off	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]	1	On				
	Request	QSJ:90						
	Response	OSJ:90:[Data]						
Shutter Mode	Control	OSJ:03:[Data]	0	Off	cam	OSJ:03:[Data]	OSJ:03:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:03:1&res=1
	Response	OSJ:03:[Data]	1	Step				
	Request	QSJ:03	2	Synchro				
	Response	OSJ:03:[Data]	3	ELC				
Step Inc	Control	OSJ:04:[Data]	01h	1	cam	-	-	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:04:01&res=1 Increase [Data] stage among selectable Shutter Steps Update notification of OSJ:06 is sent
	Response	OSJ:04:[Data]	-	-				
	Request	-	64h	100				
	Response	-						
Step Dec	Control	OSJ:05:[Data]	01h	1	cam	-	-	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:05:01&res=1 Decrease [Data] stage among selectable Shutter Steps Update notification of OSJ:06 is sent
	Response	OSJ:05:[Data]	-	-				
	Request	-	64h	100				
	Response	-						
Step VAL	Control	OSJ:06:[Data]	0001h	1/1	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	2710h	1/10000				
	Response	OSJ:06:[Data]						

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
Synchro Inc	Control	OSJ:07:[Data]	01h – 64h	1 – 100	cam	–	–	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:07:01&res=1 Increase [Data] stage among selectable Shutter Steps Update notification of OSJ:09 is sent
	Response	OSJ:07:[Data]						
	Request	–						
	Response	–						
Synchro Dec	Control	OSJ:08:[Data]	01h – 64h	1 – 100	cam	–	–	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:08:01&res=1 Decrease [Data] stage among selectable Shutter Steps Update notification of OSJ:09 is sent
	Response	OSJ:08:[Data]						
	Request	–						
	Response	–						
Synchro VAL	Control	OSJ:09:[Data]	00000h – 186A0h	0.0[Hz] – 10000.0[Hz]	cam	OSJ:09:[Data]	OSJ:09:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:09:00258&res=1 Specify a value that is 10 times the [Setting] for [Data] (hexadecimal number). Except for the effective shutter speed, round down ・59.94p / 59.94i mode 60.0Hz～7200Hz ・29.97p mode 30.0Hz～7200Hz ・23.98p / 24p mode 24.0Hz～7200Hz ・50p / 50i mode 50.0Hz～7200Hz ・25p mode 25.0Hz～7200Hz
	Response	OSJ:09:[Data]						
	Request	QSJ:09						
	Response	OSJ:09:[Data]						
ELC Limit (Auto Shutter Limit)	Control	OSD:BF:[Data]	2 3 4	1/100 1/120 1/250	cam	OSD:BF:[Data]	OSD:BF:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:BF:2&res=1
	Response	OSD:BF:[Data]						
	Request	QSD:BF						
	Response	OSD:BF:[Data]						

Gain	Control	OGU:[Data]	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]						
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	6dB 12dB 18dB	cam	OSD:69:[Data]	OSD:69:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:69:01&res=1
	Response	OSD:69:[Data]						
	Request	QSD:69						
	Response	OSD:69:[Data]						
Fram Mix	Control	OSA:65:[Data]	00h 06h 0Ch 12h 18h 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]						
ND Filter	Control	OFT:[Data]	0 1 2 3	Through 1/4 ND 1/16 ND 1/64 ND	cam	OFT:[Data]	OFT:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OFT:0&res=1
	Response	OFT:[Data]						
	Request	QFT						
	Response	OFT:[Data]						
Day/Night	Control	#D6[Data]	0 1	Off On	ptz	d6[Data]	d6[Data]	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23D60&res=1
	Response	d6[Data]						
	Request	#D6						
	Response	d6[Data]						

Picture

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

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

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

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
Skin Tone Detail	Control	OSA:40:[Data]	0	Off	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]	1	On				
	Request	QSA:40						
	Response	OSA:40:[Data]						
Skin Detail Effect	Control	OSD:A3:[Data]	80h	0	cam	OSD:A3:[Data]	OSD:A3:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:A3:80&res=1
	Response	OSD:A3:[Data]	–	–				
	Request	QSD:A3	9Fh	+31				
	Response	OSD:A3:[Data]						
Gamma Mode	Control	OSE:72:[Data]	0	HD	cam	OSE:72:[Data]	OSE:72:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSE:72:0&res=1
	Response	OSE:72:[Data]	2	FILMLIKE1				
	Request	QSE:72	3	FILMLIKE2				
	Response	OSE:72:[Data]	4	FILMLIKE3				
Gamma	Control	OSA:6A:[Data]	67h	0.30	cam	OSA:6A:[Data]	OSA:6A:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSA:6A:67&res=1
	Response	OSA:6A:[Data]	– 6Ch	– 0.35				Step : 0.01
	Request	QSA:6A	– 80h	– 0.55				
	Response	OSA:6A:[Data]	– 94h	– 0.75				
Black Gamma	Control	OSA:07:[Data]	78h	−8	cam	OSA:07:[Data]	OSA:07:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSA:07:80&res=1
	Response	OSA:07:[Data]	– 80h	– 0				
	Request	QSA:07	– 88h	– 8				
	Response	OSA:07:[Data]						
B Gamma Range	Control	OSJ:1B:[Data]	1	1	cam	OSJ:1B:[Data]	OSJ:1B:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:1B:1&res=1
	Response	OSJ:1B:[Data]	2	2				
	Request	QSJ:1B	3	3				
	Response	OSJ:1B:[Data]						
DRS	Control	OSE:33:[Data]	0	OFF	cam	OSE:33:[Data]	OSE:33:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSE:33:1&res=1
	Response	OSE:33:[Data]	1	LOW				
	Request	QSE:33	2	MID				
	Response	OSE:33:[Data]	3	HIGH				
Knee Mode	Control	OSA:2D:[Data]	0	OFF	cam	OSA:2D:[Data]	OSA:2D:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSA:2D:0&res=1
	Response	OSA:2D:[Data]	1	MANUAL				
	Request	QSA:2D	2	AUTO				
	Response	OSA:2D:[Data]						
Auto Knee Response	Control	OSG:97:[Data]	1	1	cam	OSG:97:[Data]	OSG:97:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSG:97:1&res=1
	Response	OSG:97:[Data]	–	–				
	Request	QSG:97	8	8				
	Response	OSG:97:[Data]						
Knee Point	Control	OSA:20:[Data]	22h	70.00%	cam	OSA:20:[Data]	OSA:20:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSA:20:4A&res=1
	Response	OSA:20:[Data]	– 4Ah	– 80.00%				Step : 0.5%
	Request	QSA:20	– 80h	– 93.50%				
	Response	OSA:20:[Data]	– B6h	– 107.00%				
Knee Slope	Control	OSA:24:[Data]	00h	0	cam	OSA:24:[Data]	OSA:24:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSA:24:00&res=1
	Response	OSA:24:[Data]	–	–				
	Request	QSA:24	63h	99				
	Response	OSA:24:[Data]						
White Clip	Control	OSA:2E:[Data]	0	Off	cam	OSA:2E:[Data]	OSA:2E:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSA:2E:0&res=1
	Response	OSA:2E:[Data]	1	On				
	Request	QSA:2E						
	Response	OSA:2E:[Data]						
White Clip Level	Control	OSA:2A:[Data]	00h	90%	cam	OSA:2A:[Data]	OSA:2A:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSA:2A:00&res=1
	Response	OSA:2A:[Data]	–	–				Step : 1%
	Request	QSA:2A	13h	109%				
	Response	OSA:2A:[Data]						
DNR	Control	OSD:3A:[Data]	00	Off	cam	OSD:3A:[Data]	OSD:3A:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:3A:01&res=1
	Response	OSD:3A:[Data]	01	Low				
	Request	QSD:3A	02	High				
	Response	OSD:3A:[Data]						

Matrix

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

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
Color Correction Mg Saturation	Control	OSD:82:[Data]	41h	−63	cam	OSD:82:[Data]	OSD:82:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:82:80&res=1
	Response	OSD:82:[Data]	—	—				
	Request	QSD:82	80h	0				
	Response	OSD:82:[Data]	—	—				
			BFh	63				
Color Correction Mg Phase	Control	OSD:83:[Data]	41h	−63	cam	OSD:83:[Data]	OSD:83:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:83:80&res=1
	Response	OSD:83:[Data]	—	—				
	Request	QSD:83	80h	0				
	Response	OSD:83:[Data]	—	—				
			BFh	63				
Color Correction Mg_R Saturation	Control	OSD:84:[Data]	41h	−63	cam	OSD:84:[Data]	OSD:84:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:84:80&res=1
	Response	OSD:84:[Data]	—	—				
	Request	QSD:84	80h	0				
	Response	OSD:84:[Data]	—	—				
			BFh	63				
Color Correction Mg_R Phase	Control	OSD:85:[Data]	41h	−63	cam	OSD:85:[Data]	OSD:85:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:85:80&res=1
	Response	OSD:85:[Data]	—	—				
	Request	QSD:85	80h	0				
	Response	OSD:85:[Data]	—	—				
			BFh	63				
Color Correction Mg_R_R Saturation	Control	OSD:9A:[Data]	41h	−63	cam	OSD:9A:[Data]	OSD:9A:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:9A:80&res=1
	Response	OSD:9A:[Data]	—	—				
	Request	QSD:9A	80h	0				
	Response	OSD:9A:[Data]	—	—				
			BFh	63				
Color Correction Mg_R_R Phase	Control	OSD:9B:[Data]	41h	−63	cam	OSD:9B:[Data]	OSD:9B:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:9B:80&res=1
	Response	OSD:9B:[Data]	—	—				
	Request	QSD:9B	80h	0				
	Response	OSD:9B:[Data]	—	—				
			BFh	63				
Color Correction R Saturation	Control	OSD:86:[Data]	41h	−63	cam	OSD:86:[Data]	OSD:86:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:86:80&res=1
	Response	OSD:86:[Data]	—	—				
	Request	QSD:86	80h	0				
	Response	OSD:86:[Data]	—	—				
			BFh	63				
Color Correction R Phase	Control	OSD:87:[Data]	41h	−63	cam	OSD:87:[Data]	OSD:87:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:87:80&res=1
	Response	OSD:87:[Data]	—	—				
	Request	QSD:87	80h	0				
	Response	OSD:87:[Data]	—	—				
			BFh	63				
Color Correction R_R_Yl Saturation	Control	OSD:9C:[Data]	41h	−63	cam	OSD:9C:[Data]	OSD:9C:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:9C:80&res=1
	Response	OSD:9C:[Data]	—	—				
	Request	QSD:9C	80h	0				
	Response	OSD:9C:[Data]	—	—				
			BFh	63				
Color Correction R_R_Yl Phase	Control	OSD:9D:[Data]	41h	−63	cam	OSD:9D:[Data]	OSD:9D:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:9D:80&res=1
	Response	OSD:9D:[Data]	—	—				
	Request	QSD:9D	80h	0				
	Response	OSD:9D:[Data]	—	—				
			BFh	63				
Color Correction R_Yl Saturation	Control	OSD:88:[Data]	41h	−63	cam	OSD:88:[Data]	OSD:88:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:88:80&res=1
	Response	OSD:88:[Data]	—	—				
	Request	QSD:88	80h	0				
	Response	OSD:88:[Data]	—	—				
			BFh	63				
Color Correction R_Yl Phase	Control	OSD:89:[Data]	41h	−63	cam	OSD:89:[Data]	OSD:89:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:89:80&res=1
	Response	OSD:89:[Data]	—	—				
	Request	QSD:89	80h	0				
	Response	OSD:89:[Data]	—	—				
			BFh	63				

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	−63	cam	OSD:9E:[Data]	OSD:9E:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:9E:80&res=1
	Response	OSD:9E:[Data]	−	−				
	Request	QSD:9E	80h	0				
	Response	OSD:9E:[Data]	−	−				
			BFh	63				
Color Correction R_YI_YI Phase	Control	OSD:9F:[Data]	41h	−63	cam	OSD:9F:[Data]	OSD:9F:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:9F:80&res=1
	Response	OSD:9F:[Data]	−	−				
	Request	QSD:9F	80h	0				
	Response	OSD:9F:[Data]	−	−				
			BFh	63				
Color Correction YI Saturation	Control	OSD:8A:[Data]	41h	−63	cam	OSD:8A:[Data]	OSD:8A:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:8A:80&res=1
	Response	OSD:8A:[Data]	−	−				
	Request	QSD:8A	80h	0				
	Response	OSD:8A:[Data]	−	−				
			BFh	63				
Color Correction YI Phase	Control	OSD:8B:[Data]	41h	−63	cam	OSD:8B:[Data]	OSD:8B:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:8B:80&res=1
	Response	OSD:8B:[Data]	−	−				
	Request	QSD:8B	80h	0				
	Response	OSD:8B:[Data]	−	−				
			BFh	63				
Color Correction YI_YI_G Saturation	Control	OSJ:1C:[Data]	41h	−63	cam	OSJ:1C:[Data]	OSJ:1C:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:1C:80&res=1
	Response	OSJ:1C:[Data]	−	−				
	Request	QSJ:1C	80h	0				
	Response	OSJ:1C:[Data]	−	−				
			BFh	63				
Color Correction YI_YI_G Phase	Control	OSJ:1D:[Data]	41h	−63	cam	OSJ:1D:[Data]	OSJ:1D:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:1D:80&res=1
	Response	OSJ:1D:[Data]	−	−				
	Request	QSJ:1D	80h	0				
	Response	OSJ:1D:[Data]	−	−				
			BFh	63				
Color Correction YI_G Saturation	Control	OSD:8C:[Data]	41h	−63	cam	OSD:8C:[Data]	OSD:8C:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:8C:80&res=1
	Response	OSD:8C:[Data]	−	−				
	Request	QSD:8C	80h	0				
	Response	OSD:8C:[Data]	−	−				
			BFh	63				
Color Correction YI_G Phase	Control	OSD:8D:[Data]	41h	−63	cam	OSD:8D:[Data]	OSD:8D:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:8D:80&res=1
	Response	OSD:8D:[Data]	−	−				
	Request	QSD:8D	80h	0				
	Response	OSD:8D:[Data]	−	−				
			BFh	63				
Color Correction G Saturation	Control	OSD:8E:[Data]	41h	−63	cam	OSD:8E:[Data]	OSD:8E:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:8E:80&res=1
	Response	OSD:8E:[Data]	−	−				
	Request	QSD:8E	80h	0				
	Response	OSD:8E:[Data]	−	−				
			BFh	63				
Color Correction G Phase	Control	OSD:8F:[Data]	41h	−63	cam	OSD:8F:[Data]	OSD:8F:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:8F:80&res=1
	Response	OSD:8F:[Data]	−	−				
	Request	QSD:8F	80h	0				
	Response	OSD:8F:[Data]	−	−				
			BFh	63				
Color Correction G_Cy Saturation	Control	OSD:90:[Data]	41h	−63	cam	OSD:90:[Data]	OSD:90:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:90:80&res=1
	Response	OSD:90:[Data]	−	−				
	Request	QSD:90	80h	0				
	Response	OSD:90:[Data]	−	−				
			BFh	63				
Color Correction G_Cy Phase	Control	OSD:91:[Data]	41h	−63	cam	OSD:91:[Data]	OSD:91:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:91:80&res=1
	Response	OSD:91:[Data]	−	−				
	Request	QSD:91	80h	0				
	Response	OSD:91:[Data]	−	−				
			BFh	63				

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
Color Correction Cy Saturation	Control	OSD:92:[Data]	41h	−63	cam	OSD:92:[Data]	OSD:92:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:92:80&res=1
	Response	OSD:92:[Data]	− 80h	− 0				
	Request	QSD:92	−	−				
	Response	OSD:92:[Data]	BFh	63				
Color Correction Cy Phase	Control	OSD:93:[Data]	41h	−63	cam	OSD:93:[Data]	OSD:93:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:93:80&res=1
	Response	OSD:93:[Data]	− 80h	− 0				
	Request	QSD:93	−	−				
	Response	OSD:93:[Data]	BFh	63				
Color Correction Cy_B Saturation	Control	OSD:94:[Data]	41h	−63	cam	OSD:94:[Data]	OSD:94:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:94:80&res=1
	Response	OSD:94:[Data]	− 80h	− 0				
	Request	QSD:94	−	−				
	Response	OSD:94:[Data]	BFh	63				
Color Correction Cy_B Phase	Control	OSD:95:[Data]	41h	−63	cam	OSD:95:[Data]	OSD:95:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:95:80&res=1
	Response	OSD:95:[Data]	− 80h	− 0				
	Request	QSD:95	−	−				
	Response	OSD:95:[Data]	BFh	63				
Color Correction B Saturation	Control	OSD:96:[Data]	41h	−63	cam	OSD:96:[Data]	OSD:96:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:96:80&res=1
	Response	OSD:96:[Data]	− 80h	− 0				
	Request	QSD:96	−	−				
	Response	OSD:96:[Data]	BFh	63				
Color Correction B Phase	Control	OSD:97:[Data]	41h	−63	cam	OSD:97:[Data]	OSD:97:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:97:80&res=1
	Response	OSD:97:[Data]	− 80h	− 0				
	Request	QSD:97	−	−				
	Response	OSD:97:[Data]	BFh	63				

Lens

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
Focus Mode	Control	OAF:[Data]	0	Manual	cam	OAF:[Data]	OAF:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OAF:0&res=1
	Response	OAF:[Data]	1	Auto				
	Request	QAF						
	Response	OAF:[Data]						
Focus Mode	Control	#D1[Data]	0	Manual	ptz	d1[Data]	d1[Data]	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23D10&res=1
	Response	d1[Data]	1	Auto				
	Request	#D1						
	Response	d1[Data]						
Crop AF	Control	OSJ:91:[Data]	0	Off	cam	OSJ:91:[Data]	OSJ:91:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:91:0&res=1
	Response	OSJ:91:[Data]	1	On				
	Request	QSJ:91						
	Response	OSJ:91:[Data]						
Digital Zoom	Control	OSE:70:[Data]	0	Disable	cam	OSE:70:[Data]	OSE:70:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSE:70:1&res=1 [Zoom Mode] 　-Opt Zoom 　　　OSE:70:0 　　　OSD:B3:0 　-i Zoom 　　　OSE:70:0 　　　OSD:B3:1 　-D Zoom 　　　OSE:70:1 　　　OSD:B3:0
	Response	OSE:70:[Data]	1	Enable				
	Request	QSE:70						
	Response	OSE:70:[Data]						
i.zoom	Control	OSD:B3:[Data]	0	Disable	cam	OSD:B3:[Data]	OSD:B3:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSD:B3:0&res=1
	Response	OSD:B3:[Data]	1	Enable				
	Request	QSD:B3						
	Response	OSD:B3:[Data]						
Max Digital Zoom	Control	OSE:7A:[Data]	02	x2	cam	OSE:7A:[Data]	OSE:7A:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSE:7A:10&res=1
	Response	OSE:7A:[Data]	–	–				
	Request	QSE:7A	10	x10				
	Response	OSE:7A:[Data]						
Digital Extender	Control	OSJ:4E:[Data]	0	OFF	cam	OSJ:4E:[Data]	OSJ:4E:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:4E:1&res=1
	Response	OSJ:4E:[Data]	1	x1.4				
	Request	QSJ:4E	2	x2.0				
	Response	OSJ:4E:[Data]						
Zoom Scale	Control	–	000h	0	cam	–	–	http://192.168.0.10/cgi-bin/aw_cam?cmd=QSJ:3D&res=1
	Response	–	–	–				
	Request	QSJ:3D	3E7h	999				
	Response	OSJ:3D:[Data]						
Digital Zoom Magnification	Control	OSE:76:[Data]	0100	x1.00	cam	OSE:76:[Data]	–	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSE:76:0100&res=1
	Response	OSE:76:[Data]	–	–				
	Request	QSE:76	9999	x99.99				
	Response	OSE:76:[Data]						
OIS	Control	OIS:[Data]	0	Off	cam	OIS:[Data]	OIS:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OIS:0&res=1
	Response	OIS:[Data]	1	O.I.S				
	Request	QIS	2	Hybrid (STABLE)				
	Response	OIS:[Data]	3	Hybrid (PAN/TILT)				

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 − 38h − A0h − FFh	F1.4 − F2.8 − F5.6 − F16 − CLOSE	cam	−	OIF:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=QIF&res=1
	Response	−						
	Request	QIF						
	Response	OIF:[Data]						
Request Zoom Position	Control	−	555h − FFFh − "−−−"	Wide − Tele − @Power OFF	ptz	−	−	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23GZ&res=1
	Response	−						
	Request	#GZ						
	Response	gz[Data]						
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	59.94Hz	cam	OSE:77:[Data]	OSE:77:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSE:77:1&res=1
	Response	OSE:77:[Data]	1	50.00Hz				Reboot after changing Frequency
	Request	QSE:77	2	24Hz				
	Response	OSE:77:[Data]	3	23.98Hz				
Format	Control	OSA:87:[Data]	1h	720/59.94p	cam	OSA:87:[Data]	OSA:87:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSA:87:1&res=1
			2h	720/50p				
			4h	1080/59.94i				
			5h	1080/50i				
			7h	1080/29.97psF				
	Response	OSA:87:[Data]	8h	1080/25psF				[59.94Hz]
			Ah	1080/23.98psF				2160/59.94p, 2160/29.97p, 1080/59.94p, 1080/59.94i,
			10h	1080/59.94p				1080/29.97p, 1080/29.97PsF, 1080/23.98p(59.94i), 720/59.94p
			11h	1080/50p				
			14h	1080/29.97				[50Hz]
			15h	1080/25p				2160/50p, 2160/25p, 1080/50p, 1080/50i, 1080/25p,
	Request	QSA:87	16h	1080/23.98p (over 59.94i/p)				1080/25PsF, 720/50p
			17h	2160/29.97p				[24.00Hz]
			18h	2160/25p				2160/24p, 1080/24p
			19h	2160/59.94p				
	Response	OSA:87:[Data]	1Ah	2160/50p				[23.98Hz]
			1Bh	2160/23.98p				2160/23.98p, 1080/23.98p, 1080/23.98PsF
			21h	2160/24p				
			22h	1080/24p				
			23h	1080/23.98p				
UHD Crop	Control	OSJ:2E:[Data]			cam	OSJ:2E:[Data]	OSJ:2E:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:2E:0&res=1
	Response	OSJ:2E:[Data]	0	Off				When Format is 2160/59.94p or 2160/50p
	Request	QSJ:2E	1	Crop(1080)				Off, Crop(1080) and Crop(720) are available
			2	Crop(720)				When Format is 2160/29.97p, 2160/25p, 2160/24p or
	Response	OSJ:2E:[Data]						2160/23.98p
								Off and Crop(1080) are available
Crop Zoom	Control	OSJ:92:[Data]			cam	OSJ:92:[Data]	OSJ:92:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:91:0&res=1
	Response	OSJ:92:[Data]	0	Off				
	Request	QSJ:92	1	On				
	Response	OSJ:92:[Data]						
Shooting Mode	Control	OSI:30:[Data]			cam	OSI:30:[Data]	OSI:30:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSI:30:0&res=1
	Response	OSI:30:[Data]	0	Normal				
	Request	QSI:30	1	High Sens.				
	Response	OSI:30:[Data]						
Horizontal Phase	Control	OHP:[Data]	000h	-206	cam	OHP:[Data]	-	http://192.168.0.10/cgi-bin/aw_cam?cmd=OHP:000&res=1
	Response	OHP:[Data]	-	-				
	Request	QHP	3FFh	+49				
	Response	OHP:[Data]						
Tracking data output Serial Out	Control	OSJ:54:[Data]			cam	OSJ:54:[Data]	OSJ:54:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:54:0&res=1
	Response	OSJ:54:[Data]	0	Off				
	Request	QSJ:54	1	On				
	Response	OSJ:54:[Data]						
Tracking data output IP Out	Control	OSJ:55:[Data]			cam	OSJ:55:[Data]	OSJ:55:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:55:0&res=1
	Response	OSJ:55:[Data]	0	Off				
	Request	QSJ:55	1	On				
	Response	OSJ:55:[Data]						
Tracking data output Invert P/T axis	Control	OSJ:C1:[Data]			cam	OSJ:C1:[Data]	OSJ:C1:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:C1:0&res=1
	Response	OSJ:C1:[Data]	0	Off				
	Request	QSJ:C1	1	On				
	Response	OSJ:C1:[Data]						
Tracking data output Camera ID	Control	OSJ:F4:[Data]	0x00	0x00	cam	OSJ:F4:[Data]	OSJ:F4:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:F4:00&res=1
	Response	OSJ:F4:[Data]	-	-				
	Request	QSJ:F4	0xFF	0xFF				
	Response	OSJ:F4:[Data]						

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
Wireless Control	Control	#WLC[Data1]	0	Disable	ptz	wLC[Data1]	−	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23WLC1&res=1
	Response	wLC[Data1]	1	Enable				
	Request	#WLC						
	Response	wLC[Data1]						
Fan	Control	#FAN[Data]	0	Auto	ptz	fAN[Data]	fAN[Data]	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23FAN0&res=1
	Response	fAN[Data]	1	High				
	Request	#FAN	2	Mid				
	Response	fAN[Data]	3	Low				
Fan Status	Control	−	0	Off	ptz	fS1[Data]	−	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23FS1&res=1
	Response	−	1	On				
	Request	#FS1	2	Error				
	Response	fS1[Data]						

Output

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

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
HDMI Video Sampling	Control	OSE:68:[Data]	2 4	YPbPr(422) YPbPr(420)	cam	OSE:68:[Data]	−	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSE:68:2&res=1
	Response	OSE:68:[Data]						
	Request	QSE:68						
	Response	OSE:68						
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 [Data2] 5Ch − 80h − 8Ch	[Data1] CH1 [Data2] −36dB − 0dB − 12dB	cam	OSA:D5:[Data1]:[Data2]	−	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSA:D5:0:5C&res=1
	Response	OSA:D5:[Data1]:[Data2]						
	Request	QSA:D5:[Data1]						
	Response	OSA:D5:[Data1]:[Data2]						
Audio Plugin Power	Control	OSA:D2:[Data]	0 1	Off On	cam	OSA:D2:[Data]	−	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSA:D2:0&res=1
	Response	OSA:D2:[Data]						
	Request	QSA:D2						
	Response	OSA:D2:[Data]						
OSD Mix	Control	OSE:7B:[Data]	00h 01h 02h 10h 20h 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
	Response	OSE:7B:[Data]						
	Request	QSE:7B						
	Response	OSE:7B:[Data]						
OSD Off With TALLY	Control	OSE:75:[Data]	0 1	Off On	cam	OSE:75:[Data]	−	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSE:75:1&res=1
	Response	OSE:75:[Data]						
	Request	QSE:75						
	Response	OSE:75:[Data]						
OSD Status	Control	OSA:88:[Data]	0 1	Off On	cam	OSA:88:[Data]	−	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSA:88:0&res=1
	Response	OSA:88:[Data]						
	Request	QSA:88						
	Response	OSA:88:[Data]						
TALLY Enable	Control	#TAE[Data]	0 1	Disable Enable	ptz	tAE[Data]	tAE[Data]	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23TAE1&res=1
	Response	tAE[Data]						
	Request	#TAE						
	Response	tAE[Data]						

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
Tally LED Limit R	制御	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
	応答	OSJ:D9:[Data]						
	要求	QSJ:D9						
	応答	OSJ:D9:[Data]						
Tally LED Limit G	制御	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
	応答	OSJ:DA:[Data]						
	要求	QSJ:DA						
	応答	OSJ:DA:[Data]						
Tally Brightness	Control	OSA:D3:[Data]	0 1 2	Low Mid High	cam	OSA:D3:[Data]	−	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSA:D3:0&res=1
	Response	OSA:D3:[Data]						
	Request	QSA:D3						
	Response	OSA:D3:[Data]						
R-Tally Control	Control	TLR:[Data]	0 1	Off On	cam	TLR:[Data]	TLR:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=TLR:1&res=1
	Response	TLR:[Data]						
	Request	QLR						
	Response	OLR:[Data]						
R-Tally Control	Control	#DA[Data]	0 1	Off On	ptz	dA[Data]	dA[Data]	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23DA1&res=1
	Response	dA[Data]						
	Request	#DA						
	Response	dA[Data]						
G-Tally Control	Control	TLG:[Data]	0 1	Off On	cam	TLG:[Data]	TLG:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=TLG:1&res=1
	Response	TLG:[Data]						
	Request	QLG						
	Response	OLG:[Data]						
Tally Information	Control	−	[Data1] 0 1 [Data2] 0 1 [Data3] 0 1 [Data4] 0 1 [Data5] 0 1 [Data6] 0 1 [Data7] 0 1 [Data8] 0 1 [Data9] 0 1	[Data1] R-Tally Off R-Tally On [Data2] Wired R-Tally In Off Wired R-Tally In On [Data3] Command R-Tally In Off Command R-Tally In On [Data4] G-Tally Off G-Tally On [Data5] Wired G-Tally In Off Wired G-Tally In On [Data6] Command G-Tally In Off Command G-Tally In On [Data7] Y-Tally Off Y-Tally On [Data8] Wired Y-Tally In Off Wired Y-Tally In On [Data9] Command Y-Tally In Off Command Y- Tally In On	ptz	tAA[Data1][Data2][Data3][Data4][Data5][Data6][Data7][Data8][Data9]	tAA[Data1][Data2][Data3][Data4][Data5][Data6][Data7][Data8][Data9]	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23TAA&res=1
	Response	−						
	Request	#TAA						
	Response	tAA[Data1][Data2][Data3][Data4][Data5][Data6][Data7][Data8][Data9]						
Status Lamp	Control	#LMP[Data]	0 1	Disable Enable	ptz	lMP[Data]	−	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23LMP0&res=1
	Response	lMP[Data]						
	Request	#LMP						
	Response	lMP[Data]						
External Output1	Control	OSJ:41:[Data]	0 1 2	Off R-Tally G-Tally	cam	OSJ:41:[Data]	−	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:41:0&res=1
	Response	OSJ:41:[Data]						
	Request	QSJ:41						
	Response	OSJ:41:[Data]						
External Output2	Control	OSJ:42:[Data]	0 1 2	Off R-Tally G-Tally	cam	OSJ:42:[Data]	−	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:42:0&res=1
	Response	OSJ:42:[Data]						
	Request	QSJ:42						
	Response	OSJ:42:[Data]						

UHD Crop

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
Crop 3G SDI Out	Control	OSI:32:[Data]	0 1	Full Crop	cam	OSI:32:[Data]	OSI:32:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSI:32:0&res=1
	Response	OSI:32:[Data]						
	Request	QSI:32						
	Response	OSI:32:[Data]						
Crop NDI Out	Control	OSJ:93:[Data]	0 1	Full Crop	cam	OSJ:93:[Data]	OSJ:93:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:93:0&res=1
	Response	OSJ:93:[Data]						
	Request	QSJ:93						
	Response	OSJ:93:[Data]						
Crop IP Out1	Control	OSI:33:[Data]	0 1	Full Crop	cam	OSI:33:[Data]	OSI:33:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSI:33:0&res=1
	Response	OSI:33:[Data]						
	Request	QSI:33						
	Response	OSI:33:[Data]						
Crop IP Out2	Control	OSJ:94:[Data]	0 1	Full Crop	cam	OSJ:94:[Data]	OSJ:94:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:94:0&res=1
	Response	OSJ:94:[Data]						
	Request	QSJ:94						
	Response	OSJ:94:[Data]						
Crop Marker	Control	OSI:1A:[Data1]	0 1 2 3 4 5 6 7	OFF YL G MG YL+G YL+MG G+MG YL+G+MG	cam	OSI:1A:[Data1]	OSI:1A:[Data1]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSI:1A:0&res=1
	Response	OSI:1A:[Data1]						
	Request	QSI:1A						
	Response	OSI:1A:[Data1]						
Crop out	Control	OSI:16:[Data1]	1 2 3	YL G MG	cam	OSI:16:[Data1]	OSI:16:[Data1]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSI:16:1&res=1
	Response	OSI:16:[Data1]						
	Request	QSI:16						
	Response	OSI:16:[Data1]						
Crop Adjust	Control	OSI:17:[Data1]	1 2 3	YL G MG	cam	OSI:17:[Data1]	OSI:17:[Data1]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSI:17:1&res=1
	Response	OSI:17:[Data1]						
	Request	QSI:17						
	Response	OSI:17:[Data1]						
Crop H Position	Control	OSJ:AF:[Data]	000h – C00h	0 – 3072	cam	OSJ:AF:[Data]	OSJ:AF:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:AF:000&res=1 [Data]:even only
	Response	OSJ:AF:[Data]						
	Request	QSJ:AF						
	Response	OSJ:AF:[Data]						
Crop H Position(Yl)	Control	OSJ:2F:[Data]	000h – C00h	0 – 3072	cam	OSJ:2F:[Data]	OSJ:2F:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:2F:000&res=1 [Data]:even only
	Response	OSJ:2F:[Data]						
	Request	QSJ:2F						
	Response	OSJ:2F:[Data]						
Crop H Position(G)	Control	OSJ:31:[Data]	000h – C00h	0 – 3072	cam	OSJ:31:[Data]	OSJ:31:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:31:000&res=1 [Data]:even only
	Response	OSJ:31:[Data]						
	Request	QSJ:31						
	Response	OSJ:31:[Data]						
Crop H Position(Mg)	Control	OSJ:33:[Data]	000h – C00h	0 – 3072	cam	OSJ:33:[Data]	OSJ:33:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:33:000&res=1 [Data]:even only
	Response	OSJ:33:[Data]						
	Request	QSJ:33						
	Response	OSJ:33:[Data]						
Crop V Position	Control	OSJ:B0:[Data]	000h – 6C0h	0 – 1728	cam	OSJ:B0:[Data]	OSJ:B0:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:B0:000&res=1
	Response	OSJ:B0:[Data]						
	Request	QSJ:B0						
	Response	OSJ:B0:[Data]						
Crop V Position(Yl)	Control	OSJ:30:[Data]	000h – 6C0h	0 – 1728	cam	OSJ:30:[Data]	OSJ:30:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:30:000&res=1
	Response	OSJ:30:[Data]						
	Request	QSJ:30						
	Response	OSJ:30:[Data]						
Crop V Position(G)	Control	OSJ:32:[Data]	000h – 6C0h	0 – 1728	cam	OSJ:32:[Data]	OSJ:32:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:32:000&res=1
	Response	OSJ:32:[Data]						
	Request	QSJ:32						
	Response	OSJ:32:[Data]						
Crop V Position(Mg)	Control	OSJ:34:[Data]	000h – 6C0h	0 – 1728	cam	OSJ:34:[Data]	OSJ:34:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:34:000&res=1
	Response	OSJ:34:[Data]						
	Request	QSJ:34						
	Response	OSJ:34:[Data]						

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
Get Crop H/V Position (Yl, G, Mg)	Control	OSJ:60:[Data1]:[Data2]:[Data3]:[Data4]:[Data5]:[Data6]	[Data1] 000h – C00h [Data2] 000h – 6C0 [Data3] 000h – C00h [Data4] 000h – 6C0 [Data5] 000h – C00h [Data6] 000h – 6C0h	[Data1] H POS (YL) 0 – 3072 [Data2] V POS (YL) 0 – 1728 [Data3] H POS (G) 0 – 3072 [Data4] V POS (G) 0 – 1728 [Data5] H POS (MG) 0 – 3072 [Data6] V POS (MG) 0 – 3072	cam	–	–	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:60:000:000:000:000:000:000&res=1 [Data1],[Data3],[Data5]:even only
	Response	OSJ:60:[Data1]:[Data2]:[Data3]:[Data4]:[Data5]:[Data6]						
	Request	QSJ:60						
	Response	OSJ:60:[Data1]:[Data2]:[Data3]:[Data4]:[Data5]:[Data6]						
Crop H/V Position Speed Control	Control	OSI:15:[Data1]:[Data2]	[Data1] 01 – 50 – 99 [Data2] 01 – 50 – 99	[Data1] Left Max. Speed – Stop – Right Max. Speed [Data2] Down Max. Speed – Stop – UP Max. Speed	cam	–	–	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSI:15:50:50&res=1
	Response	OSI:15:[Data1]:[Data2]						
	Request	―――						
	Response	―――						
Crop H/V Position Speed Control(Yl)	Control	OSJ:5D:[Data1]:[Data2]	[Data1] 01 – 50 – 99 [Data2] 01 – 50 – 99	[Data1] Left Max. Speed – Stop – Right Max. Speed [Data2] Down Max. Speed – Stop – UP Max. Speed	cam	–	–	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:5D:50:50&res=1
	Response	OSJ:5D:[Data1]:[Data2]						
	Request	―――						
	Response	―――						
Crop H/V Position Speed Control(G)	Control	OSJ:5E:[Data1]:[Data2]	[Data1] 01 – 50 – 99 [Data2] 01 – 50 – 99	[Data1] Left Max. Speed – Stop – Right Max. Speed [Data2] Down Max. Speed – Stop – UP Max. Speed	cam	–	–	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:5E:50:50&res=1
	Response	OSJ:5E:[Data1]:[Data2]						
	Request	―――						
	Response	―――						

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
Crop H/V Position Speed Control(Mg)	Control	OSJ:5F:[Data1]:[Data2]	[Data1] 01 – 50 – 99 [Data2] 01 – 50 – 99	[Data1] Left Max. Speed – Stop – Right Max. Speed [Data2] Down Max. Speed – Stop – UP Max. Speed	cam	–	–	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:5F:50:50&res=1
	Response	OSJ:5F:[Data1]:[Data2]						
	Request	---						
	Response	---						
Crop H/V Position Speed Control(Yl/G/Mg)	Control	OSJ:A0:[Data1]:[Data2]:[Data3]:[Data4]:[Data5]:[Data6]	[Data1] 01 50 99 [Data2] 01 50 99 [Data3] 01 50 99 [Data4] 01 50 99 [Data5] 01 50 99 [Data6] 01 50 99	[Data1] (YL) Left Max. Speed Stop Right Max. Speed [Data2] (YL) Down Max. Speed Stop UP Max. Speed [Data3] (G) Left Max. Speed Stop Right Max. Speed [Data4] (G) Down Max. Speed Stop UP Max. Speed [Data5] (MG) Left Max. Speed Stop Right Max. Speed [Data6] (MG) Down Max. Speed Stop UP Max. Speed	cam	–	–	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:A0:50:50:50:50:50:50&res=1
	Response	OSJ:A0:[Data1]:[Data2]:[Data3]:[Data4]:[Data5]:[Data6]						
	Request	---						
	Response	---						
Crop Zoom Ratio	Control	OSJ:B1:[Data]	02EE0h – 0C350h	120.00% – 500.00%	cam	OSJ:B1:[Data]	OSJ:B1:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:B1:02EE0&res=1
	Response	OSJ:B1:[Data]						
	Request	QSJ:B1						
	Response	OSJ:B1:[Data]						
Crop Zoom Ratio(Yl)	Control	OSJ:98:[Data]	02EE0h – 0C350h	120.00% – 500.00%	cam	OSJ:98:[Data]	OSJ:98:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:98:02EE0&res=1
	Response	OSJ:98:[Data]						
	Request	QSJ:98						
	Response	OSJ:98:[Data]						
Crop Zoom Ratio(G)	Control	OSJ:99:[Data]	02EE0h – 0C350h	120.00% – 500.00%	cam	OSJ:99:[Data]	OSJ:99:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:99:02EE0&res=1
	Response	OSJ:99:[Data]						
	Request	QSJ:99						
	Response	OSJ:99:[Data]						
Crop Zoom Ratio(Mg)	Control	OSJ:9A:[Data]	02EE0h – 0C350h	120.00% – 500.00%	cam	OSJ:9A:[Data]	OSJ:9A:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:9A:02EE0&res=1
	Response	OSJ:9A:[Data]						
	Request	QSJ:9A						
	Response	OSJ:9A:[Data]						

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
Crop Zoom Ratio (YL/G/MG)	Control	OSJ:9B:[Data1]:[Data2]:[Data3]	[Data1] 02EE0h － 0C350h	[Data1] Zoom Ratio (YL) 120.00% － 500.00%	cam	－	－	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:9B:02EE0:02EE0:02EE0&res=1
	Response	OSJ:9B:[Data1]:[Data2]:[Data3]	[Data2] 02EE0h － 0C350h	[Data2] Zoom Ratio (G) 120.00% － 500.00%				
	Request	QSJ:9B						
	Response	OSJ:9B:[Data1]:[Data2]:[Data3]	[Data3] 02EE0h － 0C350h	[Data3] Zoom Ratio (MG) 120.00% － 500.00%				
Crop Zoom Ratio Speed Control	Control	OSJ:9C:[Data]	01 － 49 50 51 － 99	Wide Max. Speed － Wide Min. Speed Stop Tele Min. Speed － Tele Max. Speed	cam	－	－	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:9C:50&res=1
	Response	OSJ:9C:[Data]						
	Request	―――						
	Response	―――						
Crop Zoom Ratio Speed Control(Yl)	Control	OSJ:9D:[Data]	01 － 49 50 51 － 99	Wide Max. Speed － Wide Min. Speed Stop Tele Min. Speed － Tele Max. Speed	cam	－	－	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:9D:50&res=1
	Response	OSJ:9D:[Data]						
	Request	―――						
	Response	―――						
Crop Zoom Ratio Speed Control(G)	Control	OSJ:9E:[Data]	01 － 49 50 51 － 99	Wide Max. Speed － Wide Min. Speed Stop Tele Min. Speed － Tele Max. Speed	cam	－	－	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:9E:50&res=1
	Response	OSJ:9E:[Data]						
	Request	―――						
	Response	―――						
Crop Zoom Ratio Speed Control(Mg)	Control	OSJ:9F:[Data]	01 － 49 50 51 － 99	Wide Max. Speed － Wide Min. Speed Stop Tele Min. Speed － Tele Max. Speed	cam	－	－	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:9F:50&res=1
	Response	OSJ:9F:[Data]						
	Request	―――						
	Response	―――						

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
Crop Zoom Ratio Speed Control(Yl/G/Mg)	Control	OSJ:A1:[Data1]:[Data2]:[Data3]	[Data1] 01 － 49 50 51 － 99 [Data2] 01 － 49 50 51 － 99 [Data3] 01 － 49 50 51 － 99	[Data1] (YL) Wide Max. Speed － Wide Min. Speed Stop Tele Min. Speed － Tele Max. Speed [Data2] (G) Wide Max. Speed － Wide Min. Speed Stop Tele Min. Speed － Tele Max. Speed [Data3] (MG) Wide Max. Speed － Wide Min. Speed Stop Tele Min. Speed － Tele Max. Speed	cam	－	－	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:A1:50:50:50&res=1
	Response	OSJ:A1:[Data1]:[Data2]:[Data3]						
	Request	---						
	Response	---						
Crop Position / Crop Zoom Position Speed Control (YL/G/MG)	Control	OSJ:C2:[Data1]:[Data2]:[Data3]:[Data4]:[Data5]:[Data6]:[Data7]:[Data8]:[Data9]	[Data1] 01~50~99 [Data2] 01~50~99 [Data3] 01~50~99 [Data4] 01~50~99 [Data5] 01~50~99 [Data6] 01~50~99 [Data7] 01~50~99 [Data8] 01~50~99 [Data9] 01~50~99	[Data1]YL H Crop Position Left Max. Spd － Stop － Right Max. Spd [Data2]YL V Crop Position Down Max. Spd － Stop － UP Max. Spd [Data3]G H Crop Position Left Max. Spd － Stop － Right Max. Spd [Data4]G V Crop Position Down Max. Spd － Stop － UP Max. Spd [Data5]MG H Crop Position Left Max. Spd － Stop － Right Max. Spd [Data6]MG V Crop Position Down Max. Spd － Stop － UP Max. Spd [Data7] YL Crop Zoom Position Wide Max. Spd － Stop － Tele Max. Spd [Data8] G Crop Zoom Position Wide Max. Spd － Stop － Tele Max. Spd [Data9]MG Crop Zoom Position	cam	－	－	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:C2:01:01:50:50:99:99:30:50:70&res=1
	Response	OSJ:C2:[Data1]:[Data2]:[Data3]:[Data4]:[Data5]:[Data6]:[Data7]:[Data8]:[Data9]						
	Request	－						
	Response	－						

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
Request Crop Position / Crop Zoom Position	Control	–	[Data1] 000h – C00h	[Data1] H POS (YL) 0 – 3072	cam	–	–	http://192.168.0.10/cgi-bin/aw_cam?cmd=QSJ:C3&res=1
			[Data2] 000h – 6C0h	[Data2] V POS (YL) 0 – 1728				
	Response	–	[Data3] 000h – C00h	[Data3] H POS (G) 0 – 3072				
			[Data4] 000h – 6C0h	[Data4] V POS (G) 0 – 1728				
			[Data5] 000h – C00h	[Data5] H POS (MG) 0 – 3072				
	Request	QSJ:C3	[Data6] 000h – 6C0h	[Data6] V POS (MG) 0 – 1728				
			[Data7] 02EE0h – 0C350h	[Data7] Zoom Ratio (YL) 120.00% – 500.00%				
	Response	OSJ:C3:[Data1]:[Data2]:[Data3]:[Data4]:[Data5]:[Data6]:[Data7]:[Data8]:[Data9]	[Data8] 02EE0h – 0C350h	[Data8] Zoom Ratio (G) 120.00% – 500.00%				
			[Data9] 02EE0h – 0C350h	[Data9] Zoom Ratio (MG) 120.00% – 500.00%				

Pan/Tilt

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
Install Positon	Control	#INS[Data]	0	Desktop	ptz	iNS[Data]	iNS[Data]	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23INS1&res=1
	Response	#INS[Data]	1	Hanging				
	Request	#INS						
	Response	iNS[Data]						
Smart Picture Flip	Control	#SPF[Data]	0	Off	ptz	sPF[Data]	–	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23SPF1&res=1
	Response	sPF[Data]	1	Auto				
	Request	#SPF						
	Response	sPF[Data]						
Flip Status	Control	–	0	Normal	cam	–	–	http://192.168.0.10/cgi-bin/aw_cam?cmd=QFS&res=1
	Response	–	1	Flip				
	Request	QFS						
	Response	OFS:[Data]						
Flip Detect Angle	Control	#FDA[Data]	3Ch	60deg	ptz	fDA[Data]	–	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23SPF5A&res=1
	Response	fDA[Data]	–	–				
	Request	#FDA	78h	120deg				
	Response	fDA[Data]						
P/T Speed Mode	Control	OSJ:2D:[Data]	0	Normal(60deg/s)	cam	OSJ:2D:[Data]	OSJ:2D:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:2D:0&res=1
	Response	OSJ:2D:[Data]	1	Fast1(90deg/s)				
	Request	QSJ:2D	2	Fast2(180deg/s)				
	Response	OSJ:2D:[Data]						
P/T Acceleration	Control	OSJ:A2:[Data]	0	Manual	cam	OSJ:A2:[Data]	OSJ:A2:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:A2:0&res=1
	Response	OSJ:A2:[Data]	1	Auto				
	Request	QSJ:A2						
	Response	OSJ:A2:[Data]						
P/T Rise S-Curve	Control	OSJ:A3:[Data]	00h	0	cam	OSJ:A3:[Data]	OSJ:A3:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:A3:00&res=1
	Response	OSJ:A3:[Data]	–	–				
	Request	QSJ:A3	1E	30				
	Response	OSJ:A3:[Data]						
P/T Fall S-Curve	Control	OSJ:A4:[Data]	00h	0	cam	OSJ:A4:[Data]	OSJ:A4:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:A4:00&res=1
	Response	OSJ:A4:[Data]	–	–				
	Request	QSJ:A4	1E	30				
	Response	OSJ:A4:[Data]						
P/T Rise Acceleration	Control	OSJ:A5:[Data]	01h	1	cam	OSJ:A5:[Data]	OSJ:A5:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:A5:01&res=1
	Response	OSJ:A5:[Data]	–	–				
	Request	QSJ:A5	FFh	255				
	Response	OSJ:A5:[Data]						
P/T Fall Acceleration	Control	OSJ:A6:[Data]	01h	1	cam	OSJ:A6:[Data]	OSJ:A6:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:A6:01&res=1
	Response	OSJ:A6:[Data]	–	–				
	Request	QSJ:A6	FFh	255				
	Response	OSJ:A6:[Data]						
Speed With Zoom Position	Control	#SWZ[Data]	0	Off	ptz	sWZ[Data]	sWZ[Data]	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23SWZ1&res=1
	Response	sWZ[Data]	1	On				
	Request	#SWZ						
	Response	sWZ[Data]						
Focus Adjust With PTZ.	Control	OAZ:[Data]	0	Off	cam	OAZ:[Data]	OAZ:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OAZ:0&res=1
	Response	OAZ:[Data]	1	On				
	Request	QAZ						
	Response	OAZ:[Data]						
Privacy Mode	Control	OSJ:A7:[Data]	0	Off	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]	1	On				
	Request	QSJ:A7						
	Response	OSJ:A7:[Data]						
Power On Position	Control	OSJ:45:[Data]	1	Standby	cam	OSJ:45:[Data]	OSJ:45:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:45:1&res=1
	Response	OSJ:45:[Data]	2	Home				
	Request	QSJ:45	3	Preset				
	Response	OSJ:45:[Data]						
Power On Preset Number	Control	OSJ:46:[Data]	00	Preset001	cam	OSJ:46:[Data]	OSJ:46:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:46:00&res=1
	Response	OSJ:46:[Data]	–	–				
	Request	QSJ:46	99	Preset100				
	Response	OSJ:46:[Data]						

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
Pan Speed Control	Control	#P[Data]	01	Left Max. Speed	ptz	–	–	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23P50&res=1
	Response	pS[Data]	–	–				
	Request	–	50	Stop				
	Response	–	–	–				
			99	Right Max. Speed				
Tilt Speed Control	Control	#T[Data]	01	Down Max. Speed	ptz	–	–	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23T50&res=1
	Response	tS[Data]	–	–				
	Request	–	50	Stop				
	Response	–	–	–				
			99	UP Max. Speed				
P/T Speed Control	Control	#PTS[Data1][Data2]	[Data1] 01 – 50 – 99	[Data1] Left Max. Speed – Stop – Right Max. Speed	ptz	–	–	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23PTS5050&res=1
	Response	pTS[Data1][Data2]						
	Request	–	[Data2] 01 – 50 – 99	[Data2] Down Max. Speed – Stop – UP Max. Speed				
	Response	–						
P/T Absolute Position Control	Control	#APC[Data1][Data2]	[Data1] 0000h – 8000h – FFFFh	[Data1]Pan Position CCW Limit – Center – CW Limit	ptz	–	aPC[Data1][Data2]	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23APC80008000&res=1
	Response	aPC[Data1][Data2]						Pan : 2D09(–175deg) – D2F5(+175deg) Tilt : 5555(–30deg) – 8E38(+90deg)
	Request	–	[Data2] 0000h – 8000h – FFFFh	[Data2]Tilt Position UP Limit – Center – DOWN Limit				
	Response	–						
P/T Relative Position Control	Control	#RPC[Data1][Data2]	[Data1] 0000h – 8000h – FFFFh	[Data1]Pan Position CCW Limit – Center – CW Limit	ptz	–	–	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23RPC80008000&res=1
	Response	rPC[Data1][Data2]						
	Request	–	[Data2] 0000h – 8000h – FFFFh	[Data2]Tilt Position UP Limit – Center – DOWN Limit				
	Response	–						

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
P/T Absolute Position Control with Speed	Control	#APS[Data1][Data2][Data3][Data4]	[Data1] 0000h − 8000h − FFFFh	[Data1]Pan Position CCW Limit − Center − CW Limit	ptz	−	−	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23APS800080001D0&res=1 Pan : 2D09(−175deg) − D2F5(+175deg) Tilt : 5555(−30deg) − 8E38(+90deg)
	Response	aPS[Data1][Data2][Data3][Data4]	[Data2] 0000h − 8000h − FFFFh	[Data2]Tilt Position UP Limit − Center − DOWN Limit				
	Request	−	[Data3] 00h − 1Dh	[Data3]Preset Speed 1 − 30				
	Response	−	[Data4] 0 1 2	[Data4]Preset Speed Table SLOW MID FAST				
P/T Relative Position Control with Speed	Control	#RPS[Data1][Data2][Data3][Data4]	[Data1] 0000h − 8000h − FFFFh	[Data1]Pan Position CCW Limit − Center − CW Limit	ptz	−	−	http://192.168.0.10/cgi-bin/aw_ptz?cmd=%23RPS800080001D0&res=1
	Response	rPS[Data1][Data2][Data3][Data4]	[Data2] 0000h − 8000h − FFFFh	[Data2]Tilt Position UP Limit − Center − DOWN Limit				
	Request	−	[Data3] 00h − 1Dh	[Data3]Preset Speed 1 − 30				
	Response	−	[Data4] 0 1 2	[Data4]Preset Speed Table SLOW MID FAST				

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
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	-						

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
	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
	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
	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
	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
	Response	OSJ:AC:[Data]						
	Request	QSJ:AC						
	Response	OSJ:AC:[Data]						

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
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
	Response	OSJ:AD:[Data]						
	Request	QSJ:AD						
	Response	OSJ:AD:[Data]						
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
	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 Crop	Control	OSJ:2A:[Data]	0 1	Off On	cam	OSJ:2A:[Data]	OSJ:2A:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:2A:0&res=1
	Response	OSJ:2A:[Data]						
	Request	QSJ:2A						
	Response	OSJ:2A:[Data]						
Preset Thumbnail Update	Control	OSJ:2B:[Data]	0 1	Off On	cam	OSJ:2B:[Data]	OSJ:2B:0x[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=OSJ:2B:0&res=1
	Response	OSJ:2B:[Data]						
	Request	QSJ:2B						
	Response	OSJ:2B:[Data]						
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 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	–						

Command name	Category	Command	Data value	Setting	Comand type	Update notification	camdata.html	Usage example / Remarks
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]						
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] xxxxxxxxxxxxxx	[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	–						

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

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

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	Off	cam	–	OUS:[Data]	http://192.168.0.10/cgi-bin/aw_cam?cmd=DUS:1&res=1
	Response	DUS:[Data]	1	On				
	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:xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx&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 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 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	–	03h 21h 22h 24h 29h 31h 33h 36h 40h 41h 42h 43h 50h 52h 57h 58h	Motor Driver Error System Error Spec Limit Over NET Life-monitoring Error CAM Life-monitoring Error Fan1 error High Temp Low Temp Temp Sensor Error Lens Initialize Error PT. Initialize Error PoE++ Software auth. Timeout 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 ※例 V01.00	cam	–	–	http://192.168.0.10/cgi-bin/aw_cam?cmd=QSV&res=1
	Response							
	Request	QSV						
	Response	OSV:[Data1]						
Software Version	Control	–	[Data1] 0 1 2 3 4 5 6 7 8 9 [Data2] 00-99 [Data3] 00-99 [Data4] E L [Data5] 00-99 [data6] 0 1	[Data1] Servo CPU Camera CPU ZYNQ Network Main/Network CPU ZYNQ Logic ZYNQ R5T Lens CPU ZYNQ R5R ZYNQ Enc 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	#0[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	#0						
	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]						