



Sharx Security

HTNC Series PoE IP Camera
API Reference Manual

2018 Version

Introduction

This reference guide is for programmers wishing to send commands directly to a Sharx Security HTNC series PoE IP camera.

Some commands also return detailed status information from the camera.

To use this reference guide you'd need to have administrator login access to an HTNC series camera that is already set up for your network (or accessible to you remotely). It is also assumed that you know the basics of writing a program or a script to send commands via HTTP.

Many commands can be tested easily by copying and pasting the example into a browser, while of course substituting your own camera's IP address for the parameter shown as "camera ipaddress"

For example, let's assume your camera is set up on 192.168.0.54, and you wish to obtain the current settings for the camera's time, then change the time zone, and then verify that the change took effect.

Then, according to the section on setting time parameters on page 158 of this user's guide, you would construct the query string as follows, and you could test it by pasting into your browser:

<http://192.168.0.54/system/time.php?app=get>

Then once you provide the proper login credentials to the camera, you'd get a long result string starting with the following:

```
res=200&tsyncmode=2&dt=2018-07-29&tm=10:03:40&tzone=13&dst_enable=1
```

The res=200 means you got a valid result, and the rest of the response is explained on page 158

Should you wish to change a setting, such as setting time zone to Pacific Time, you'll find in the table that Pacific Time has the time zone code 4, and you'd set that with a command such as the following:

<http://192.168.0.54/system/time.php?app=set&tzone=4>

Again you'd be looking for a valid response as designated with the result code 200, and you can then double check that it took effect by issuing the query again:

<http://192.168.0.54/system/time.php?app=get>

And now the result is:

```
res=200&tsyncmode=2&dt=2018-07-29&tm=07:11:05&tzone=4&dst_enable=1
```

At times this manual refers to the Sony chipset name that is used in our cameras.

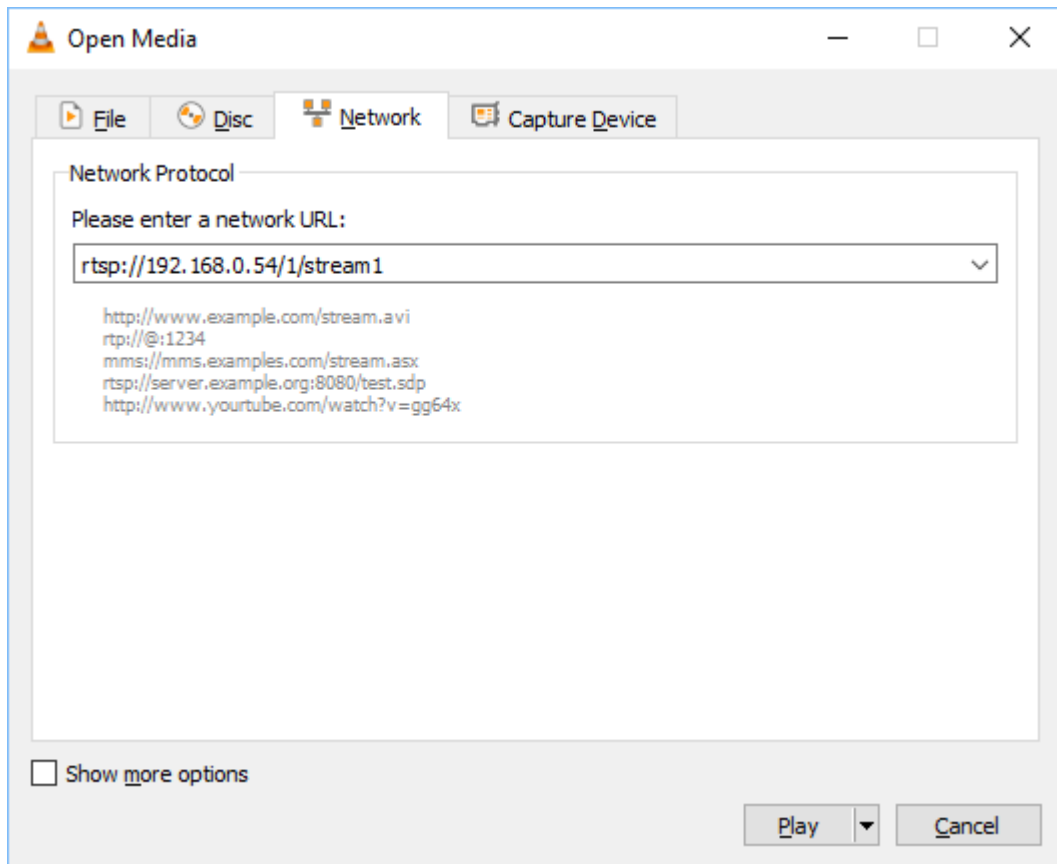
Xarina, also known as X2, is the chipset used in our HTNC4400 series of full HD 60 fps cameras while Xarina Pro, also known as X4, is used in our HTNC4500 series of 5 MP cameras.

Stream path summary

Quite often the most important piece of information that a programmer is looking for is the spelling of the camera's stream paths, so we summarized it up front.

Primary H264 RTSP stream:	/1/stream1
MJPEG RTSP stream:	/1/stream2
Third stream (H264 RTSP):	/1/stream3
JPEG snapshot:	/snapshot/1/snapshot.jpg
MJPEG HTTP stream:	/jpeg/1/jpeg.php

You can test the RTSP paths by entering `rtsp://` followed by the IP address of the camera and the path above into the VLC media player from www.videolan.org, as in the example below:



You can test the snapshot by adding `http://` and the IP address and the JPEG path above into any browser. For testing the HTTP MJPEG path you need a browser that supports MJPEG, such as Chrome. Or you can also use VLC for this. Internet Explorer does not support MJPEG.

Table of Contents

Stream path summary	3
Table of Contents	4
Audio	27
Revision History	27
Introduction	27
Audio URI	27
Back Channel Audio URI.....	27
Audio Parameter	27
Back Channel Audio Parameter.....	28
Examples	28
1) get the current setting	28
2) Audio Enable setup.....	28
3) Audio Codec setup	28
4) Audio Bitrate setup.....	28
5) Audio Sampling Rate setup	28
6) Audio Input setup	28
7) Audio Input Volume setup	28
8) Audio Input Mute setup.....	29
9) Back Channel Audio Enable setup	29
10) Back Channel Audio Volume setup	29
11) Back Channel Audio Mute setup.....	29
12) Audio Input Auto Enable setup	29
Caution.....	29
Config.txt	31
Revision History	31
Introduction	31
Config.txt URI.....	31
Config.txt Parameters	31
1) Parameters	31
2) Motorized options.....	33
3) RS-485 options	33
4) PTZ options	33
5) VCA options.....	34
6) Options	34
Example	36
1) get the current setting	36
Dome Configuration	37
Dome – Home Function:	37
Revision History	37
Introduction	37
Home Function URI	37
Home Function Parameter	37
Examples	38
1) get the current setting	38
2) Home Function setup.....	38
3) Home Function Waiting Time setup	38

4) Home Function Type setup.....	38
5) Home Function number setup.....	38
6) Home Function number set setup.....	38
Caution.....	38
Dome – Motor Setup:.....	40
Revision History	40
Introduction	40
Motor Setup URI	40
Motor Setup Parameter	40
Examples	40
1) get the current setting	40
2) Motor Setup Propotional setup.....	40
3) Motor Setup Max Pan Speed setup.....	40
4) Motor Setup Max Tilt Speed setup.....	41
Caution.....	41
Dome – Preset:	42
Revision History	42
Introduction	42
Preset URI.....	42
Preset Parameter	42
Examples	43
1) get configurable Preset value.....	43
2) get the current setting	43
3) Preset creation	43
4) Preset deletion	43
5) Preset modification.....	43
6) Preset movement	44
Caution.....	44
Dome – Privacy Zone:.....	45
Revision History	45
Introduction	45
Privacy Zone URI.....	45
Privacy Zone Parameter.....	45
Examples	45
1) get configurable privacy Zone List.....	45
2) Privacy Zone creation.....	46
3) Privacy Zone modification	46
4) Privacy Zone deletion.....	46
5) PTZ movement	46
Caution.....	46
Dome – RS485:	47
Revision History	47
Introduction	47
RS485 URI	47
RS485 Parameter	47
Examples	47
1) get the current setting	47
2) DOME ID setup.....	47
3) Protocol setup	47
4) Baudrate setup	47
5) Parity setup	48

6) Dome Answer setup.....	48
Caution.....	48
Dome – System Menu:.....	49
Revision History	49
Introduction	49
System Menu URI	49
System Menu Parameter.....	49
Examples	50
1) Get the current PTZ Camera information and settings.....	50
2) Check current Origin Check function status.....	50
3) Calibration setup.....	50
4) Origin Check start.....	50
5) Enable Schedule Origin Check setup	50
6) Schedule Origin Check setup	50
7) FA Module F/W Upgrade.....	51
F/W Upload	51
Caution.....	52
Dome – Tour:	53
Revision History	53
Introduction	53
Tour URI.....	53
Tour Parameter	53
Examples	54
1) get configurable Tour value.....	54
2) get configured Preset List.....	54
3) get configured Tour List.....	54
4) get specific configured Tour List	54
5) Tour creation	54
6) Tour deletion	56
7) Tour modification.....	56
8) Tour movement	56
Caution.....	56
Dome – View Angle:	57
Revision History	57
Introduction	57
View Angle URI.....	57
View Angle Parameter.....	57
Examples	58
1) get the current setting	58
2) Tilt Angle Limit setup	58
3) Flip setup	58
Caution.....	58
Event	59
Event – AIHM:.....	59
Revision History	59
Introduction	59
AIHM URI.....	59
AIHM Parameter	59
Examples	59
1) get the current setting	59

2) AIHM setup	59
3) AIHM record status check setup.....	59
4) AIHM format event setup.....	59
5) AIHM server setup	59
6) AIHM dwell time setup.....	60
Caution.....	60
Event – Alarm In:	61
Revision History	61
Introduction	61
Alarm In URI.....	61
Alarm In Parameter	61
Examples	61
1) get the current setting	61
2) Alarm In setup	61
3) Alarm In type setup	61
4) Alarm In dwell time setup	61
Caution.....	61
Event – Alarm Out:	62
Revision History	62
Introduction	62
Alarm Out URI	62
Alarm Out Parameter.....	62
Examples	62
1) get the current setting	62
2) Alarm Out setup	62
3) Alarm Out type setup.....	62
Caution.....	62
Event – Audio Alert:	63
Revision History	63
Introduction	63
Audio Alert URI	63
Audio Alert Parameter	63
Examples	63
1) get the current setting	63
2) Audio Alert setup	63
3) Audio file remove.....	63
4) Audio Alert Test method.....	63
Caution.....	63
1) Reminder for the Audio Alert file upload	64
Event – Audio detection:.....	65
Revision History	65
Introduction	65
Audio detection URI.....	65
Audio detection Parameter	65
Examples	65
1) get the current setting	65
2) Audio detection setup.....	65
3) Audio detection level setup	65
4) Audio detection Dwell time setup	65
Caution.....	65
Event – Boost:	67

Revision History	67
Introduction.....	67
Boost URI.....	67
Boost Parameter.....	67
Examples	67
1) get the current setting	67
2) Boost setup	67
3) Boost stream setup.....	67
4) Boost stream1 Normal Condition setup.....	67
5) Boost stream2 Normal Condition setup.....	68
6) Boost stream3 Normal Condition setup.....	68
7) Boost Condition setup	69
Caution.....	69
1) You must check the following values in the response to http:// <i>camera</i> <i>ipaddress</i> "/config.txt.....	69
2) Explanation on "ch#1_strm#2_○○○"	70
3) When you setup Boost stream Normal Condition, boost_enable value must be equal to 1.	70
Event – Map:	71
Revision History	71
Introduction	71
Event – Map.....	71
Video & Image – Image Parameter	71
Event In ID	72
Examples	73
1) get the current setting	73
2) Method setup	73
3) Event name setup.....	73
4) Event out SMTP setup.....	73
5) Event out alarm setup	73
6) Event out FTP setup	74
7) Event out FTP Server setup.....	74
8) Event out HTTP notification setup.....	74
9) Event out audio alert setup	74
10) Event out preset setup.....	75
11) Event out record setup.....	75
12) Event out event push setup	75
13) Event out light setup.....	75
14) Event out event notification setup	75
15) Event out boost setup.....	75
16) setup all Maps at once (in case of Error on individual Map setup)	75
Caution.....	76
Event – Event Push:	77
Revision History	77
Introduction	77
Event Push URI	77
Event Push Parameter.....	77
Examples	77
1) Get the current setting	77
2) Event Push setup	77
3) Event Push Stream Type setup.....	77

4) Event Push Pre-event setup	78
5) Event Push Post-event setup.....	78
6) Event Push URL setup.....	78
7) Event Push Port setup.....	78
8) Event Push User name setup	78
9) Event Push Password setup	78
Caution.....	78
Event – Face Detector:	79
Revision History	79
Introduction	79
Face Detector URI	79
Face Detector Parameter.....	79
Examples	79
1) get the current setting	79
2) face detector enable setup.....	79
3) threshold setup.....	79
4) setup face detector at once.....	79
Event – FTP & JPEG:	80
Revision History	80
Introduction	80
FTP & JPEG URI	80
FTP & JPEG Parameter	80
Examples	81
1) Get the current setting	81
2) FTP & JPEG setup	81
3) FTP Server usage setup	81
4) FTP & JPEG Server address setup	81
5) FTP & JPEG Port setup.....	82
6) FTP & JPEG Passive mode setup.....	82
7) FTP & JPEG User name setup	82
8) FTP & JPEG Password setup	82
9) FTP & JPEG Anonymous login setup.....	82
10) FTP & JPEG Remote directory setup.....	82
11) FTP & JPEG Time folder setup.....	83
12) FTP & JPEG JPEG Time folder type setup.....	83
13) FTP & JPEG JPEG Pre-event time setup	83
14) FTP & JPEG JPEG Pre-event FPS setup.....	83
15) FTP & JPEG JPEG Event FPS setup	83
16) FTP & JPEG JPEG Post-event time setup.....	84
17) FTP & JPEG JPEG Post-event FPS setup.....	84
18) FTP & JPEG JPEG Prefix file name setup.....	84
19) FTP & JPEG JPEG Additional suffix setup	84
Caution.....	84
Event – Light:.....	85
Revision History	85
Introduction	85
Light URI.....	85
Light Parameter	85
Examples	85
1) get the current setting	85
2) Light setup.....	85

3) Light brightness setup.....	85
4) Light mode & Light time setup	85
5) Operates only at night mode setup	86
6) Inactivate setup.....	86
Caution.....	86
Event – Manual Trigger:	87
Revision History	87
Introduction	87
Manual Trigger Setup & Operation URI	87
Manual Trigger Setup Parameter.....	87
Manual Trigger Operation Parameter.....	87
Example	87
1) Manual Trigger setup	87
Caution.....	87
Event – Motion:.....	89
Revision History	89
Introduction	89
Event – Motion URI	89
Event – Motion Parameter.....	89
Examples (latest F/W)	90
1) get the current setting	90
2) Motion setup.....	90
3) Motion Day & Night setup.....	90
4) Motion Region create	90
5) Motion Region Parameter modify	91
6) Motion Region remove.....	93
Examples (old F/W).....	94
1) get the current setting	94
2) Motion setup.....	94
3) Motion Day & Night setup.....	94
4) Motion Region create	94
5) Motion Region modify	94
6) Motion Region remove.....	94
7) Motion modify all.....	94
Event – Network Loss:.....	96
Revision History	96
Introduction	96
Network Loss URI.....	96
Network Loss Parameter.....	96
Examples	96
1) Get the current setting	96
2) Network Loss setup.....	96
3) Network Loss dwell time setup	96
Caution.....	96
Event –Notification Server:.....	97
Revision History	97
Introduction	97
Notification Server Parameter	97
Examples	97
1) get the current setting	97
2) Notification Server setup.....	97

3) Notification Server Type setup.....	97
4) Notification Server Method setup.....	98
5) Notification Server URL setup.....	98
6) Notification Server Port setup.....	98
7) Notification Server user setup.....	98
8) Notification Server password setup.....	98
7) Notification Server Test.....	98
Caution.....	98
Event – On Boot:.....	99
Revision History.....	99
Introduction.....	99
On Boot URI.....	99
On Boot Parameter.....	99
Examples.....	99
1) get the current setting.....	99
2) On Boot setup.....	99
3) On Boot dwell time setup.....	99
Caution.....	99
Event – PIR:.....	100
Revision History.....	100
Introduction.....	100
PIR URI.....	100
PIR Parameter.....	100
Examples.....	100
1) Get the current setting.....	100
2) PIR setup.....	100
3) PIR sensitivity level setup.....	100
4) PIR dwell time setup.....	100
Caution.....	100
Event – PTZ Preset:.....	101
Revision History.....	101
Introduction.....	101
PTZ Preset URI.....	101
PTZ Preset Parameter.....	101
Examples.....	101
1) get the current setting.....	101
2) PTZ Preset setup.....	101
3) PTZ Preset Home position setup.....	101
Caution.....	101
Event – Record:.....	102
Revision History.....	102
Introduction.....	102
Record URI.....	102
Record Parameter.....	102
Examples.....	103
1) get the current setting.....	103
2) record enable setup.....	103
3) record overwrite setup.....	103
4) record stream setup.....	104
5) record pre time setup.....	104
6) record post time setup.....	104

7) record audio setup.....	104
8) record schedule setup.....	104
9) record device type setup	105
10) record address setup	105
11) record remote directory setup.....	105
12) record capacity setup	105
13) record ID setup	105
13) record password setup	105
14) record device remove setup.....	105
15) record device check setup.....	105
16) How to setup record at once	105
Event – SMTP:.....	106
Revision History	106
Introduction	106
SMTP URI.....	106
SMTP Parameter.....	106
Examples	107
1) Get the current setting	107
2) SMTP setup	107
3) Sender’s Mail address setup	107
4) Interval setup	107
5) Aggregate events setup.....	107
6) Image attachment setup	107
7) Mail server usage setup	107
8) Mail server address setup	107
9) Mail server Port setup.....	107
10) Connection security setup.....	107
11) Mail server’s User name setup	107
12) Mail server’s Password setup	107
13) Mail server’s Login method setup.....	107
14) Receiver address setup	108
15) SMTP Test method.....	108
Caution.....	108
Event – Tampering:.....	109
Revision History	109
Introduction	109
Tampering URI.....	109
Tampering Parameter	109
Examples	109
1) Get the current setting	109
2) Tampering enable setup.....	109
3) Dwell time setup.....	109
4) Area rate setup.....	110
5) Setup tampering at once	110
Event – Time Trigger:.....	111
Revision History	111
Introduction	111
Time Trigger URI.....	111
Time Trigger Parameter.....	111
Examples	112
1) get the current setting	112

2) Time Trigger usage setup	112
3) Time Trigger # usage setup	112
4) Time Trigger # Specific Time usage setup.....	112
5) Time Trigger # Day usage setup	112
6) Time Trigger # Day Of Week usage setup	112
7) Time Trigger # Month usage setup.....	112
8) setup Date in Time Trigger # Specific Time	112
9) setup Time in Time Trigger # Specific Time	113
10) setup Time in Time Trigger # Day	113
11) setup Day in Time Trigger # Day Of Week	113
12) setup Date in Time Trigger # Day Of Week	113
13) setup Date in Time Trigger # Month.....	113
14) setup Time in Time Trigger # Month.....	113
Caution.....	113
Event – VCA:.....	114
Revision History	114
VCA URI.....	114
VCA Parameter.....	114
Examples	115
1) get the current setting of Fixed camera	115
2) get the current setting of PTZ camera	115
3) set Fixed camera rule number 1 to line detector.....	116
4) set PTZ camera “PRESET-1” rule number 1 to line detector	116
5) set Fixed camera rule number 2 to field detector	116
6) set PTZ camera “PRESET-1” rule number 2 to field detector	116
7) set Fixed camera rule number 3 to absent	117
8) set PTZ camera “PRESET-1” rule number 3 to absent	117
9) reset counter of line detector rule number 1	117
10) reset counter of line detector rule number 2	117
Caution.....	117
Event – Video Loss:	119
Revision History	119
Introduction	119
Video Loss URI	119
Video Loss Parameters	119
Examples	119
1) get the current setting	119
2) Video Loss setup	119
3) Video Loss dwell time setup	119
Caution.....	119
Event – XML Notification:	120
Revision History	120
Introduction	120
XML Notification URI	120
XML Notification Parameter.....	120
Examples	120
1) Get the current setting	120
2) XML Notification setup	120
3) XML Notification server URL setup.....	120
4) XML Notification Port setup.....	120
Caution.....	120

Event Stream	121
Revision History	121
Introduction	121
Event Stream URI.....	121
Event Stream Format	121
1) HTTP GET REQUEST	121
2) HTTP POST REQUEST	121
3) HTTP CONTINUES RESPONSE	122
Event Stream Request Parameter.....	122
Table 1. REQUEST PARAMETER	122
Event Stream Response Parameter	123
Table 2. BASIC RESPONSE PARAMETER	123
Table 3. NORMAL FULLTEXT RESPONSE PARAMETER	123
Table 4. MOTION FULLTEXT RESPONSE PARAMETER	123
Table 5. VIDEO LOSS FULLTEXT RESPONSE PARAMETER.....	124
Table 6. RECORD FULLTEXT RESPONSE PARAMETER.....	124
Table 7. VCA EVENT FULLTEXT RESPONSE PARAMETER.....	124
Table 8. VCA OBJECT FULLTEXT RESPONSE PARAMETER.....	125
Table 9. VCA RULE FULLTEXT RESPONSE PARAMETER	125
Examples	126
1) BASIC EVENT STREAM REQUEST	126
2) BASIC EVENT STREAM RESPONSE	126
3) BASIC EVENT STREAM REQUEST WITH ALARMIN FILTER.....	127
4). BASIC EVENT STREAM RESPONSE WITH ALARMIN FILTER.....	127
5) EVENT STREAM REQUEST WITH MOTION FILTER.....	127
6) EVENT STREAM RESPONSE WITH MOTION FILTER	127
7) EVENT STREAM REQUEST WITH VCA FILTER	128
8) EVENT STREAM RESPONSE WITH VCA FILTER.....	128
JPEG Push	131
Revision History	131
Introduction	131
JPEG Push URI	131
JPEG Push Parameter	131
Example	131
1) View JPEG Push	131
Caution.....	131
Live	132
Live – Motor, Smart Focus Control API.....	132
Revision History	132
Motor Control:	132
Introduction	132
Motor Control URI	132
Motor Control Parameter.....	132
Examples	132
1) zoom Control :	132
2) focus Control :	132
3) move Control :	132
Caution.....	132
Live – Smart Focus:	134
Revision History	134

Introduction.....	134
Smart Focus URI	134
Smart Focus Parameter	134
Example	134
Caution.....	134
Live – Light Control:	135
Revision History	135
Introduction	135
Light Control URI	135
Light Control Parameter	135
Examples	135
1) get the current setting	135
2) Light Control setup.....	135
3) Light Level setup.....	135
Caution.....	135
Live – PTZ Control:	136
Revision History	136
Introduction	136
PTZ Control URI.....	136
1) PTZ Control UI Open.....	136
2) PTZ Control API URL	136
PTZ Control Parameter.....	136
Example	137
1) PTZ Control UI load.....	137
2) Pan, Tilt Control	137
3) Pan, Tilt Speed Control	137
4) IRIS Control	137
5) ZOOM Control	137
6) ZOOM Speed Control	137
7) FOCUS Control.....	137
8) Preset Save	138
9) Preset Control.....	138
10) Tour Control	138
11) Pattern Control	138
12) Position Control.....	138
13) Position Speed Control.....	138
14) Device menu.....	138
15) Preset menu	138
16) Scan menu	138
17) Tour menu	138
18) Pattern menu.....	138
19) Esc menu	139
20) Stop menu.....	139
21) Up menu	139
22) Down menu	139
23) Left menu	139
24) Right menu	139
25) Enter menu	139
26) Ctrl control	139
27) shortcut on control.....	139
28) shortcut off control	139

Caution.....	139
Live – X1 Dome Configuration – Position:	140
Revision History	140
Introduction	140
PTZ Position URI	140
PTZ Position Parameter	140
Examples	140
1) Get the current setting	140
2) PTZ Position setup	140
3) PTZ Position setup (Degree)	141
4) Check whether the current PTZ Position is a Preset position or not.	141
Live View	142
Revision History	142
Introduction	142
Live View URI	142
LIVE View Parameter	142
Example	142
1) get the current setting	142
2) Video mode setup	142
3) Check response value after setup	142
Caution.....	142
Playback	143
Revision History	143
Introduction	143
Playback Parameter	143
Examples	145
1) get entire calendar information.....	145
2) get month information	145
3) get day information.....	145
4) get hour information	145
5) get minute information	146
6) get the first information of recording data.....	146
7) get the last information of recording data.....	146
8) get event list.....	146
9) get event information.....	146
10) get clipcopy	146
11) Number of connected Client.....	146
Playback-Replay Control(RTSP).....	146
1) Forward Step Play	147
2) Forward Step Forward.....	147
3) Forward Normal Play	147
4) Forward Double Speed Play	148
5) Forward Triple Speed Play	148
6) Forward Quadruple Speed Play.....	148
7) Forward play stop.....	149
8) Backward Step Play.....	149
9) Backward Step Backward.....	149
10) Backward Normal Play.....	149
11) Backward Double Speed Play	150
12) Backward Triple Speed Play	150

13) Backward Quadruple Speed Play	150
14) Backward play stop	150
15) Clipcopy	151
16) Only I Frame with interval 1 Sec(record time line).....	151
Caution.....	151
Snapshot	152
Revision History	152
Introduction	152
Snapshot URI.....	152
Snapshot Parameter	152
Example	152
1) View Snapshot.....	152
System.....	153
System – Bonjour:.....	153
Revision History	153
Introduction	153
Bonjour URI	153
Bonjour Parameter.....	153
Example	153
1) get the current setting	153
2) Bonjour setup	153
3) Friendly name setup	153
Caution.....	153
System – Date&Time:.....	154
Revision History	154
Introduction	154
Date&Time URI	154
Date&Time Parameter.....	154
Example	155
1) get the current setting	155
2) datetime mode setup.....	155
3) timezone setup.....	155
4) timezone daylight saving setup	155
5) timezone daylight saving user setup.....	155
6) timezone daylight saving start month setup	155
7) timezone daylight saving start week setup	155
8) timezone daylight saving start dayofweek setup	155
9) timezonedaylight saving start time setup.....	155
10) timezone daylight saving end month setup.....	155
11) timezone daylight saving end week setup	156
12) timezone daylight saving end dayofweek setup	156
13) timezone daylight saving end time setup.....	156
14) timezone daylight saving time gap setup.....	156
15) Date&Time setup.....	156
16) ntp server setup.....	156
17) ntp interval setup	156
18) date format setup	156
19) time format setup.....	156
20) How to setup date&time at once	156
Caution.....	157

System – DDNS:	160
Revision History	160
Introduction	160
DDNS URI	160
DDNS Parameter	160
Examples	160
1) get the current setting	160
2) DDNS setup	160
3) DDNS server URL setup	160
4) DDNS Host name setup	160
5) DDNS User name setup	160
6) DDNS Password setup	161
7) DDNS Confirm Password setup	161
8) DDNS Interval setup	161
9) DDNS Local setup	161
Caution	161
System – H/W check:	162
Revision History	162
Introduction	162
Hardware Check URI	162
Hardware Check Parameter	162
Examples	162
1) get the current setting	162
2) LED light Test	162
3) PIR Sensor Test	162
4) Speaker Test	162
Caution	162
1) Speaker Test	162
System – HTTPS:	163
Revision History	163
Introduction	163
HTTPS URI	163
HTTPS Parameter	163
Authentication key Upload	163
Examples	163
1) get the current setting	163
2) HTTPS Mode setup	163
Caution	164
System – Information:	165
Revision History	165
Introduction	165
Information URI	165
Information Parameter	165
Examples	165
1) get the current setting	165
2) Device name setup	165
3) Location setup	165
System – IP Filtering:	166
Revision History	166
Introduction	166
IP Filtering URI	166

IP Filtering Parameter.....	166
Examples.....	166
1) get the current setting	166
2) IP Filtering setup	166
3) IP Filtering Priority 1.....	166
4) IP Filtering Priority 2.....	167
5) IP Filtering Priority 3.....	167
6) IP Filtering Priority 4.....	167
7) IP Filtering Priority 5.....	167
Caution.....	168
System – Language:	169
Revision History	169
Introduction	169
Language URI.....	169
Language Parameter	169
Examples	169
1) get the current setting	169
2) Language setup.....	169
System – Live Push:.....	170
Revision History	170
Introduction	170
Live Push URI	170
Live Push Parameter.....	170
Examples	170
1) get the current setting	170
2) Live Push 1	170
3) Live Push 2.....	170
4) Live Push 3	171
Caution.....	171
System – Log:	172
Revision History	172
Introduction	172
Log URI.....	172
Log Parameter.....	172
Examples	172
1) Type.....	172
2) Start time	172
3) End time	173
4) Start time, End time.....	173
5) Start date.....	173
6) End date.....	173
7) Start date, End date.....	173
8) Start date, Start time, End date, End time.....	173
9) Type, Start date, Start time, End date, End time	173
Caution.....	173
System – Maintenance:	174
Revision History	174
Introduction	174
Maintenance URI.....	174
1) Restart.....	174
2) Reset	174

3) Default	174
4) Upgrade	174
5) VCA Upgrade.....	174
6) Backup.....	174
7) Restore.....	174
8) Calibrate	174
Examples	174
1) Restart.....	174
2) Reset	174
3) Default	175
4) Upgrade	175
5) VCA Upgrade.....	175
6) Backup.....	175
7) Restore.....	175
8) Calibrate	175
Caution.....	175
System – Media check:	177
Revision History	177
Introduction	177
Media Check URI.....	177
Media Check Parameter.....	177
Caution.....	177
1) Parameter - “media_a_snd# ³ _enable”	177
2) Parameter - “media_a_snd# ³ _in_gain”	177
System – NAT:.....	178
Revision History	178
Introduction	178
NAT URI.....	178
NAT Parameter.....	178
Examples	178
1) get the current setting	178
2) Wire NAT traversal setup.....	178
3) External wire HTTP port setup.....	178
4) External wire RTSP port setup	178
5) Wireless NAT traversal setup.....	178
6) External wireless HTTP port setup.....	178
7) External wireless RTSP port setup	179
8) Response wire HTTP&RTSP URL	179
9) Response wireless HTTP&RTSP URL	179
10) Response Error Code.....	179
Caution.....	179
System – Network:	180
Revision History	180
Introduction	180
System – Network URI.....	180
System – Network Parameter	180
Examples	181
1) get the current information	181
2) IP address assign method setup	181
3) fixed IP address setup.....	181
4) fixed Subnet Mask setup	181

5) fixed Gateway Address setup	181
6) IPv6 setup	181
7) DNS Address assign method setup.....	181
8) fixed DNS Server Domain Name setup.....	181
9) fixed Primary DNS Server Address setup	181
10) fixed Secondary DNS Server Address setup	181
11) Host Name setup	181
12) HTTP Port setup	181
13) HTTPS Port setup.....	181
14) RTSP Port setup	181
15) LAN Interface setup	181
16) Link Speed setup	182
Caution.....	182
System – Network check:.....	183
Revision History	183
Introduction	183
Network Check URI	183
Network Check Parameter.....	183
OpenVPN:.....	185
Revision History	185
Introduction	185
OpenVPN URI.....	185
OpenVPN Parameter	185
Example	186
1) get the current setting	186
2) openvpn enable setup	186
3) openvpn mode setup.....	186
4) openvpn server protocol setup.....	186
5) openvpn server port setup.....	186
6) openvpn server renegotiation setup	186
7) openvpn server lzo setup	186
8) openvpn client protocol setup.....	186
9) openvpn client port setup.....	186
10) openvpn client lzo setup	186
11) openvpn client renegotiation setup	186
12) openvpn_user_authentication_mode setup.....	187
13) openvpn_user_authentication_id setup	187
14) openvpn_user_authentication_passwd setup.....	187
15) openvpn_server_ipaddr setup.....	187
16) How to setup openvpn at once.....	187
Caution.....	187
1. Server's authentication time is longer than Client time.....	187
2. Server's authentication time is shorter Client time.....	187
3. Server's authentication time is 0 , Client time is not 0	187
4. Server's authentication time is not 0 , Client time is 0	187
System – QoS:.....	188
Revision History	188
Introduction	188
QoS Parameter	188
Example	188
1) get the current setting	188

2) DSCP Setting.....	188
3) Automatic Traffic Control.....	188
System – RTP:.....	190
Revision History.....	190
Introduction.....	190
RTP Parameter.....	190
Example.....	190
1) get the current setting.....	190
2) RTP Port Range.....	191
3) Multicast (Stream 1).....	191
4) Multicast (Stream 2).....	191
5) Multicast (Stream 3).....	191
6) Multicast (Audio).....	191
7) Multicast (Meta).....	192
Caution.....	192
System – System check:.....	193
Revision History.....	193
Introduction.....	193
System Check URI.....	193
System Check Parameter.....	193
Caution.....	193
System – UpnP:.....	194
Revision History.....	194
Introduction.....	194
UPnP URI.....	194
UPnP Parameter.....	194
Examples.....	194
1) get the current setting.....	194
2) UPnP setup.....	194
3) Friendly name setup.....	194
Caution.....	194
System – Users:.....	195
Revision History.....	195
Introduction.....	195
Users URI.....	195
Users Parameter.....	195
Example.....	196
1) get the current setting.....	196
2) add User.....	196
3) modify User.....	197
4) delete User.....	197
5) Anonymous login setup.....	197
Caution.....	197
Security – VPM:.....	198
Revision History.....	198
Introduction.....	198
VPM URI.....	198
VPM Parameter.....	198
Example.....	199
1) get the current setting.....	199
2) VPM setup.....	199

3) add Server	199
4) modify Server	199
5) remove Server.....	199
Caution.....	199
System – Network – Wireless:	200
Revision History	200
Introduction	200
Wireless URI	200
1) Wireless Network URI	200
2) Wireless Setup NRI	200
Wireless Parameter	200
1) Wireless Network	200
2) Wileress AP Setup.....	200
Example	201
1) get the current Wireless Network value	201
2) get the current Wireless AP value	201
3) Wireless Network setup.....	201
4) Wireless Network DHCP setup	201
5) Wireless Network IP setup	201
6) Wireless Network Mask setup.....	201
7) Wireless Network GateWay setup.....	201
8) Wireless Network DNS setup.....	201
9) Wireless AP Connect setup	201
10) Wireless AP Disconnect setup.....	201
11) Wireless AP Delete setup	202
System – Zeroconf:	203
Revision History	203
Introduction	203
Zeroconf URI.....	203
Zeroconf Parameter	203
Example	203
1) get the current setting	203
2) Zeroconf setup	203
3) Zeroconf IP address confirm	203
Caution.....	203
Video & Image	204
Video & Image – Camera Setup:	204
Revision History	204
Introduction	204
Video & Image – Camera Setup URI.....	204
Video & Image – Camera Setup Parameter.....	204
Example	208
1) get the current setting	208
2) Brightness setup	209
3) Contrast setup	209
4) Saturation setup	209
5) Hue setup.....	209
6) Sharpness setup	209
7) Flip setup	209
8) Mirror setup.....	209

9) Noise Reduction setup.....	209
10) Noise Reduction Level setup.....	209
11) WDR setup	209
12) WDR Level setup	209
13) Defog setup.....	209
14) Defog Strength setup	210
15) IRIS setup	210
16) Backlight Compensation setup	210
17) IR setup.....	210
18) Max Strength Value setup	210
19) Smart Focus setup.....	210
20) Digital Zoom setup	210
21) High Sensitivity setup.....	210
22) White Balance Mode setup.....	210
23) Blue Gain setup	210
24) Red Gain setup	210
25) Day & Night Mode setup	211
26) Day & Night Threshold setup.....	211
27) Exposure Value setup.....	211
28) Exposure Mode setup	211
29) Camera Max Gain setup	211
30) Camera Shutter Mode setup	211
31) Camera Shutter Value setup	211
32) Camera Iris Mode setup.....	211
33) Camera Iris Value setup	212
34) Camera Iris Value setup	212
35) Camera Manual Gain setup	212
36) IR Mode setup	212
37) IR On Level setup.....	212
38) IR Off Level setup.....	212
39) Fixed IR Bright setup	212
40) Moving IR Bright setup.....	212
41) Fixed IR Level setup	212
42) Moving IR Level setup.....	212
43) Delay Time setup.....	212
44) Moving IR Mode setup.....	212
45) Long Exposure setup	213
46) Max Shutter Value setup	213
47) Flicker Free setup	213
48) Flicker Mode setup	213
49) AGC DB setup.....	213
50) IRIS Type setup.....	213
51) Aisle setup	213
52) Aisle Degree setup.....	213
53) Digital Image Stabilization setup	213
54) Digital Image Stabilization Level setup	213
55) High Light Compensation setup.....	213
56) High Light Compensation Level setup.....	214
57) ANPR Multi Shutter setup.....	214
58) ANPR Multi Shutter Value setup	214
59) High Light Compensation Level setup.....	214

60) Dark Buster setup	214
61) Dark Buster Level setup	214
Caution.....	214
Video & Image – OSD:.....	216
Revision History	216
Introduction	216
OSD URI	216
OSD Parameter	216
Example	217
1) get the current setting	217
2) OSD setup for each stream	217
3) OSD transparency setup	217
4) OSD title setup	217
5) OSD title text setup	217
6) OSD subtitle text setup.....	217
7) OSD title coordinate setup.....	217
8) OSD date&time setup.....	217
9) OSD date&time coordinate setup.....	217
10) OSD background setup.....	217
Caution.....	217
Video & Image – Privacy Masking:.....	219
Revision History	219
Introduction	219
Video&Image – Privacy Masking URI	219
Video&Image – Privacy Masking Parameter	219
Example (Latest F/W)	220
1) get the current information	220
2) Privacy Masking setup	220
3) Privacy Masking Region setup.....	220
4) Privacy Masking Region Parameter modify.....	221
5) Privacy Masking Region remove	222
Example (Old F/W)	222
1) get the current information	222
2) Privacy Masking setup	222
3) Privacy Masking Region create.....	222
4) Privacy Masking Region modify.....	222
5) Privacy Masking Region remove	223
6) Privacy Masking all.....	223
Caution.....	223
Video & Image – Basic:	224
Revision History	224
Introduction	224
Video & Image – Basic URI.....	224
Video & Image – Basic Parameter	224
Example	225
1) get the current setting	225
2) Capture Resolution setup.....	226
3) Codec setup for each Stream	226
4) Resolution setup for each Stream	226
5) Frame per Second setup.....	227
6) Bitrate Control setup.....	227

7) Bitrate setup..... 227
8) Quality setup..... 227
 9) GOP (Group of Picture) setup 228
 Caution..... 228

Audio

Version: 1.02
Date: 2016. 12. 13

Revision History

Version	Date	Comment
1.00	2014-10-01	Initial version
1.01	2015-05-22	Added changes related to Xarina Entry
1.01e	2015-05-22	English Translation
1.02	2016-01-28	Add Xarina Entry Audio Codec AAC

Introduction

This Chapter defines the detailed setup procedure for the Audio and Back Channel Audio.

Audio URI

<http://camera ipaddress/audio/audio.php>

Back Channel Audio URI

http://camera ipaddress/audio/back_channel_audio.php

Audio Parameter

Parameter	Type	Value
total_snd_ch	integer (ro)	Number of available channels being set
snd#_enable	boolean	0 : Off, 1 : On
snd#_codec	string	G711A, G711U, AAC
snd#_bitrate	integer	Case G711- 64 Case AAC - 32, 48, 64, 96
snd#_samplerate	integer	Case G711- 8000: 8KHz Case AAC - 48000: 48KHz
snd#_in	integer	0 : Internal AMP, 1 : External AMP
snd#_in_gain	float	12, 9, 6, 3, 0, -3, -6, -9, -12 : Input Decibel 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 : Input Value
snd#_in_mute	boolean	0 : Off, 1 : On
snd#_out_gain	float	9, 6, 3, 0, -3, -6, -9, -12, -15, -18, -24 : Output Decibel 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 : Output Value
snd#_out_mute	boolean	0 : Off, 1 : On
snd#_2way	boolean	0 : Off, 1 : On
snd#_2way_use	boolean (ro)	0 : Free, 1 : Occupied
snd#_in_auto	boolean	0 : Off, 1 : On

* '#' : Audio Channel number

Back Channel Audio Parameter

Parameter	Type	Value
snd#_back_channel_audio_status	integer	0 : Free, 1 : Occupied

* '#' : Audio Channel number

Examples

1) get the current setting

get the Audio setting

- `http://"camera ipaddress"/audio/audio.php?app=get`

get the Back Channel Audio setting

- `http://"camera ipaddress"/audio/back_channel_audio.php?app=get`

2) Audio Enable setup

`http://"camera ipaddress"/audio/audio.php?app=set&snd1_enable=0`

`http://"camera ipaddress"/audio/audio.php?app=set&snd1_enable=1`

3) Audio Codec setup

Case G711

`http://"camera ipaddress"/audio/audio.php?app=set&snd1_codec=G711A`

`http://"camera ipaddress"/audio/audio.php?app=set&snd1_codec=G711U`

Case AAC

`http://"camera ipaddress"/audio/audio.php?app=set&snd1_codec=AAC`

4) Audio Bitrate setup

Case G711

`http://"camera ipaddress"/audio/audio.php?app=set&snd1_bitrate=64`

Case AAC

`http://"camera ipaddress"/audio/audio.php?app=set&snd1_bitrate=32`

`http://"camera ipaddress"/audio/audio.php?app=set&snd1_bitrate=48`

`http://"camera ipaddress"/audio/audio.php?app=set&snd1_bitrate=64`

`http://"camera ipaddress"/audio/audio.php?app=set&snd1_bitrate=96`

5) Audio Sampling Rate setup

Case G711

`http://"camera ipaddress"/audio/audio.php?app=set&snd1_samplerate=8000`

Case AAC

`http://"camera ipaddress"/audio/audio.php?app=set&snd1_samplerate=48000`

6) Audio Input setup

`http://"camera ipaddress"/audio/audio.php?app=set&snd1_in=0`

`http://"camera ipaddress"/audio/audio.php?app=set&snd1_in=1`

7) Audio Input Volume setup

a. Input Decibel setup

http://"camera ipaddress"/audio/audio.php?app=set&snd1_in_gain=12.0
 http://"camera ipaddress"/audio/audio.php?app=set&snd1_in_gain=-12

b. Input Value setup

http://"camera ipaddress"/audio/audio.php?app=set&snd1_in_gain=10
 http://"camera ipaddress"/audio/audio.php?app=set&snd1_in_gain=1

* Please refer to [Caution](#).

8) Audio Input Mute setup

http://"camera ipaddress"/audio/audio.php?app=set&snd1_in_mute=0
 http://"camera ipaddress"/audio/audio.php?app=set&snd1_in_mute=1

9) Back Channel Audio Enable setup

http://"camera ipaddress"/audio/audio.php?app=set&snd1_2way=0
 http://"camera ipaddress"/audio/audio.php?app=set&snd1_2way=1

10) Back Channel Audio Volume setup

a. Output Decibel setup

http://"camera ipaddress"/audio/audio.php?app=set&snd1_out_gain=9.0
 http://"camera ipaddress"/audio/audio.php?app=set&snd1_out_gain=-9

b. Output Value setup

http://"camera ipaddress"/audio/audio.php?app=set&snd1_out_gain=10
 http://"camera ipaddress"/audio/audio.php?app=set&snd1_out_gain=1

* Please refer to [Caution](#).

11) Back Channel Audio Mute setup

http://"camera ipaddress"/audio/audio.php?app=set&snd1_out_mute=0
 http://"camera ipaddress"/audio/audio.php?app=set&snd1_out_mute=1

12) Audio Input Auto Enable setup

http://"camera ipaddress"/audio/audio.php?app=set&snd1_in_auto=0
 http://"camera ipaddress"/audio/audio.php?app=set&snd1_in_auto=1

Caution

You can check the current setting by referring to following items in the response to http://"camera ipaddress"/config.txt.

Item	Value	Description
aud_option	INNER_AMP	• snd#_in can be set to Internal AMP
	EXTERNAL_AMP	• snd#_in can be set to External AMP
	INPUT_GAIN_DECIBEL	• snd#_in_gain can be set Input Decibel
	OUTPUT_GAIN_DECIBEL	• snd#_out_gain can be set Output Decibel
	INPUT_GAIN_VALUE	• snd#_in_gain can be set Input Value

	<p>OUTPUT_GAIN_VALUE</p> <p>G711U, G711A</p> <p>AAC</p>	<ul style="list-style-type: none"> • snd#_out_gain can be set Output Value • snd#_codec can be set G711 Audio Codec • snd#_codec can be set AAC Audio Codec
option	AUD	<ul style="list-style-type: none"> • snd#_enable, snd#_codec, snd#_bitrate, snd#_samplerate, snd#_in, snd#_in_gain, snd#_in_mute items can be checked and set.
	AUD_OUT	<ul style="list-style-type: none"> • snd#_2way_use value can be check • snd#_out_gain, snd#_out_mute, snd#_2way items can be checked and set
	INNER_AUD	<ul style="list-style-type: none"> • snd#_in_auto item can be checked and set

Config.txt

Version: 1.06e
Date: 2015. 12. 17

Revision History

Version	Date	Comment
1.00	2015-01-16	Initial version
1.00e	2015-01-22	English Translation
1.01	2015-02-12	Add Manual White Balance
1.01e	2015-02-15	Apply Additional
1.03e	2015-06-15	Add AF Module, PT Module F / W information Added HLC and SLDC
1.04e	2015-07-20	Add VPM, LOG information AIHM adds Time Trigger information
1.05e	2015-07-24	Origin Check information added
1.06e	2015-12-17	Camera Series information added, Fisheye Model Code information added

Introduction

This chapter describes the overview of Config.txt and the meanings of the Parameters.

Config.txt URI

"camera ipaddress"/config.txt">http://"/"camera ipaddress"/config.txt

Config.txt Parameters

1) Parameters

Parameter	Type	Value
ver	integer	Config.txt file version
series	string	Camera series X2 : Sharx Security HTNC44xx series camera X4 : Sharx Security HTNC45xx series camera
name	string	Host name
ipv4	string	Camera IP ver. 4 address
ipv6	string	Camera IP ver. 6 address
device_name	string	Device name
input	string	Max resolution, ex) 704x576
firmware	string	Firmware version
model	string	Internal project name, not customer visible
customer	string	Manufacturer name as shown on customer packaging
model_customer	string	Model name as shown on customer packaging
mac	string	Camera MAC address
rtsp_port	integer	RTSP port number
http_port	integer	HTTP port number
https_mode	integer	HTTP(S) mode, ● 0 : HTTP ● 1 : HTTPS ● 2 : HTTP & HTTPS
tv_mode	string	TV out mode

		<ul style="list-style-type: none"> ● ntsc : NTSC ● pal : PAL
total_ch	integer	Number of video channels
total_strm	integer	Number of video streams
ch#_strm#_uri	string	RTSP stream URI
ch#_strm#_codec	string	RTSP video stream codec name <ul style="list-style-type: none"> ● H264BP : H.264 Baseline Profile ● H264MP : H.264 Main Profile ● H264HP : H.264 High Profile ● MPEG4SP : MPEG4 Simple Profile ● MPEG4ASP : MPEG4 Advanced Simple Profile ● MJPEG : Motion JPEG
ch#_strm#_res	integer	RTSP video stream resolution
ch#_strm#_fps	integer	RTSP video stream framerate
ch#_strm#_bitrate	integer	RTSP video stream bitrate
ch#_strm#_ratecontrol	string	RTSP video stream bitrate-control <ul style="list-style-type: none"> ● vbr : VBR, ● cbr : CBR
ch#_strm#_gop	integer	RTSP video stream GOP size
total_snd_ch	integer	Number of audio channels
snd#_codec	string	Audio codec name <ul style="list-style-type: none"> ● G726 : G.726 ● G711A : G.711 A-law ● G711U : G.711 U-law
snd#_bitrate	string	Audio bitrate
snd#_samplerate	string	Audio sampling rate
snd#_2way_use	boolean	Back channel audio availability
alarm_in	integer	Number of alarm in
alarm_out	integer	Number of alarm out
total_manual_trigger	integer	Number of manual trigger
onvif_service_uri	string	ONVIF service URI
mobile-stream	string	MJPEG stream for mobile streaming
m_ptz_option	string	Motorized function support description Description types are in 2) Motorized option
wire_dhcp	string	DHCP IP address usage in Wired network <ul style="list-style-type: none"> ● on : use ● off : not use
recored_ver	string	Playback API version
wireless_dhcp	string	DHCP IP address usage in Wireless network <ul style="list-style-type: none"> ● on : use ● off : not use
openvpn_ip	string	OpenVPN IP address
total_preset	integer	Number of presets
total_tour	integer	Number of tours
total_auto_scan	integer	Number of autoscans
total_pattern	integer	Number of patterns
total_privacy_zone	integer	Number of privacy zone

ptz_option	string	RS-485 support description, Description types are in 3) RS-485 option
builtin_ptz_option	string	function support description of PTZ camera, Description types are in 4) PTZ option
vca_option	string	VCA function support description, Description types are in 5) VCA option
vca_sw_ver	string	VCA software version
vca_hw_ver	string	VCA hardware version
camera_mod_sw_ver	string	AF Module Software Version
ptz_mod_sw_ver	string	PT Module Software Version
fisheye_lens_model	string	Fisheye Camera's lens model description <ul style="list-style-type: none"> ● IMV1-1/3 ● L1028KDRW
fisheye_lens_model_code	integer	Fisheye Camera's lens model code description <ul style="list-style-type: none"> ● IMV1-1/3 : 1 ● L1028KDRW : 2
options	string	Camera function support description, Description types are in 6) Option

2) Motorized options

Option	Description
ZOOM	Zoom in/out support
FOCUS	Focus control support
ZOOM_TRACKING	Zoom tracking support
PAN	Pan move support
TILT	Tilt move support
STOP	Move stop support
PRESET_GO	Preset go support
TOUR_GO	Tour go support
PRESET_SAVE	Preset save support

3) RS-485 options

Option	Description
RS485_IN	RS485 Input support
RS485_OUT	RS485 Output support
PRESET_GO	preset go support via RS485
PRESET_SAVE	preset save support via RS485
TOUR_GO	tour go support via RS485
AUTO_SCAN_GO	auto scan go support via RS485
PATTERN_GO	pattern save support via RS485
PTZ_POSITION	PTZ position Get/Set support via RS485

4) PTZ options

Option	Description
RS485_IN	RS485 Input support

RS485_OUT	RS485 Output support
PRESET_GO	preset go support
PRESET_SAVE	preset save support
PRESET_CTRL	preset control support
TOUR_GO	tour go support
TOUR_CTRL	tour modify support
AUTO_SCAN_GO	auto scan go support
AUTO_SCAN_CTRL	auto scan modify support
PATTERN_GO	pattern go support
PATTERN_CTRL	pattern modify support
PTZ_POSITION	PTZ position Get/Set support

5) VCA options

Option	Description
LINE_DETECTOR	Line detector support
FIELD_DETECTOR	Filed detector support
ABSENT	Absent support
UPDATE	VCA software update support

6) Options

Option	Description
BNC	BNC connector video output existence
ALARM_IN	Alarm in support
ALARM_OUT	Alarm out support
RELAY_OUTPUT	Alarm out Supply output
HW_RESET	Camera OK factory default button
LED	Status LED existence
LED_CTRL	Status LED control support
AEAWB	AE, AWB support
DAY_NIGHT	Day & Night Mode support
BRIGHTNESS	Brightness control support
CONTRAST	Contrast control support
SATURATION	Saturation control support
HUE	Hue control support
SHARPNESS	Sharpness control support
FLIP	Flip control support
MIRROR	Mirror control support
NR	Noise reduction support
WDR	Wide dynamic range support

DEFOG	Defog support
VMD	Video motion detection support
PTZ	PTZ control support via RS485
BUILTIN_PTZ	PTZ control support for Built-in PTZ camera
OSD_CTRL	on screen display control support at Video out
OSD_DISPLAY_CTRL	on screen display control support in Video stream
FTP	FTP&JPEG support at Event In
SMTP	SMTP support at Event In
MULTI_STREAM	multiple video stream support
MULTI_CODEC	Multiple video codec support
SSL	SSL support
MANUAL_TRIGGER	Manual Trigger support at Event In
IP_FILTER	IP filter support
DDNS	DDNS support
UPNP	UPNP support
ZEROCONF	Zero configuration IP support
BONJOUR	Bonjour support
ONBOOT	on boot support at Event In
VIDEO_LOSS	video loss support at Event In
INNER_AUD	audio support using Internal audio chip
AUD	audio support using External audio chip
AUD_OUT	Back channel audio support
INNER_MIC	Mic is internal or attached to the camera
AUD_ALERT	audio alert support in Event out
ONVIF	ONVIF support
RECORD	Event out record support
RECORD_SCHEDULE	Record record schedule support
HTTP_NOTIFY	Event out HTTP notification support
NETWORK_LOSS	network loss support at Event in
M_PTZ	Motorized function support
SMART_FOCUS	Smart focus support
IR	IR support
VMODE_CTRL	NTSC, PAL interchangeable
CAPTURE_CTRL	resolution change support for Sensor ISP
AUD_DETECTION	audio detection support at Event in

TAMPERING	tampering support at Event in
LIGHT	light support at Event out
PIR	PIR support at Event in
WIRELESS	Wireless network support
LIVE_PUSH	Live push support
EVENT_PUSH	Event push support
VSAAS	VSAAS support
EVENT_NOTI	XML notification support at Event out
BOOST	Boost support at Event out
NOTIFY_SERVER	Notification server support at Event out
FISHEYE	Fish-eye camera
FACE_DETECT	Face detector support
VCA	Video content analysis support, refer to VCA option for details
MASK	Privacy mask support
AISLE	Aisle support
PMASK_TYPE	masking type selectable for Privacy mask
CAM_MOD_UPDATE	AF Module firmware update support
PTZ_MOD_UPDATE	PTZ Module firmware update support
PRIVACY_ZONE	Privacy zone support
VMD_UNI_SENSITIVITY	sensitivity setup support for entire Motion detection area
MWB	Manual WB support
HLC	Support HLC function
SLDC	Support SLDC function
VPM	VPM support
LOG	Log support
AIHM	AIHM support
TIME_TRIGGER	Time trigger support
ORIGIN_CHECK	Schedule Origin check support

Example

1) get the current setting

<http://camera ipaddress/config.txt>

options	PTZ	RS485 available
---------	-----	-----------------

Dome Configuration

Dome – Home Function:

Version : 1.00
Date : 2014. 09. 26

Revision History

Version	Date	Comment
1.00	2014-09-26	Initial version

Introduction

This Chapter defines the detailed setup procedure for the Home Function.

Home Function URI

http://camera ipaddress/ptz/home_function.php

Home Function Parameter

Parameter	Type	Value
method	string	get_list
home_function	integer	0 : None, 1 : Preset, 2 : Tour
home_number_list	string (ro)	configured Preset number or Tour number
preset_home_number	integer (ro)	0 : Preset Home position number
home_number_set	boolean	0 : Preset, Tour Position Disable 1 : Preset, Tour position Enable
home_number	integer	[Preset] 0 ~ 16 : Xarina2 Box Camera 0 ~ 240 : Xarina2 PTZ Camera [Tour] 1 ~ 8 : Xarina2 PTZ Camera
home_wating_time	integer	10 ~ 600
home_function_use	boolean	0 : Home Function Off, 1 : Home Function On
home_function_list	string (ro)	none preset tour
home_function_val_list	string (ro)	0 1 2 0 : None 1 : Preset 2 : Tour
def_home_wating_time	integer (ro)	60
min_home_wating_time	integer (ro)	10
max_home_wating_time	integer (ro)	600

Examples

1) get the current setting

`http://"camera ipaddress"/ptz/home_function.php?app=get`

`http://"camera ipaddress"/ptz/home_function.php?app=get&method=get_list`

2) Home Function setup

`http://"camera ipaddress"/ptz/home_function.php?app=set&home_function_use=0`

`http://"camera ipaddress"/ptz/home_function.php?app=set&home_function_use=1`

3) Home Function Waiting Time setup

`http://"camera ipaddress"/ptz/home_function.php?app=set&home_waiting_time=10`

`http://"camera ipaddress"/ptz/home_function.php?app=set&home_waiting_time=60`

4) Home Function Type setup

`http://"camera ipaddress"/ptz/home_function.php?app=set&home_function=0`

`http://"camera ipaddress"/ptz/home_function.php?app=set&home_function=1`

`http://"camera ipaddress"/ptz/home_function.php?app=set&home_function=2`

5) Home Function number setup

“home_function” parameter 1 (Preset)...

`http://"camera ipaddress"/ptz/home_function.php?app=set&home_number=0`

`http://"camera ipaddress"/ptz/home_function.php?app=set&home_number=110`

“home_function” parameter = 2 (Tour)...

`http://"camera ipaddress"/ptz/home_function.php?app=set&home_number=1`

`http://"camera ipaddress"/ptz/home_function.php?app=set&home_number=8`

* if the “home_function” parameter is 1 (Preset) , the configurable minimum “home_number” parameter is 0 and,

* If the “home_function” parameter is 2 (Tour) , the configurable minimum “home_number” parameter is 1

6) Home Function number set setup

`http://"camera ipaddress"/ptz/home_function.php?app=set&home_number_set=0`

`http://"camera ipaddress"/ptz/home_function.php?app=set&home_number_set=1`

Caution

You must check the following values in the response to `http://"camera ipaddress"/config.txt`

Item	Value	Explanation
option	BUILTIN_PTZ	Home Function setup available
total_preset	0, 16, 241	number of configurable Preset 0 : None PTZ 16 : Xarina2 Box Camera 241 : Xarina2 PTZ Camera
total_tour	0, 8	number of configurable Tour 0 : None PTZ 8 : Xarina2 PTZ Camera

Dome – Motor Setup:

Version : 1.00
Date : 2014. 09. 29

Revision History

Version	Date	Comment
1.00	2014-09-29	Initial version

Introduction

This Chapter defines the detailed setup procedure for the Motor Setup

Motor Setup URI

`http://camera ipaddress/ptz/motor.php`

Motor Setup Parameter

Parameter	Type	Value
http_port	integer (ro)	HTTP port
https_port	integer (ro)	HTTPS port
propotional	boolean	0 : Not support, 1 : Support
def_propotional	integer	0 : Off, 1 : On
max_pan_speed	integer	1 ~ 38 : configured Max Pan Speed
min_max_pan_speed	integer (ro)	1 : configurable minimum Max Pan Speed
max_max_pan_speed	integer (ro)	38 : configurable maximum Max Pan Speed
def_max_pan_speed	integer (ro)	9 : Default Max Pan Speed
max_tilt_speed	integer	1 ~ 30 : configured Max Tilt Speed
min_max_tilt_speed	integer (ro)	1 : configured Minimum Max Tilt Speed
max_max_tilt_speed	integer (ro)	30 : configured Mazimum Max Tilt Speed
def_max_tilt_speed	integer (ro)	9 : Default Max Tilt Speed

Examples

1) get the current setting

`http://camera ipaddress/ptz/motor.php?app=get`

2) Motor Setup Propotional setup

`http://camera ipaddress/ptz/motor.php?app=set&propotional=0`

`http://camera ipaddress/ptz/motor.php?app=set&propotional=1`

3) Motor Setup Max Pan Speed setup

`http://camera ipaddress/ptz/motor.php?app=set&max_pan_speed=10`

4) Motor Setup Max Tilt Speed setup

http://camera_ipaddress/ptz/motor.php?app=set&max_tilt_speed=10

Caution

You must check the following values in the response to http://camera_ipaddress/config.txt

Item	Value	Explanation
option	BUILTIN_PTZ	Motor Setup available

Dome – Preset:

Version : 1.00
Date : 2014. 09. 18

Revision History

Version	Date	Comment
1.00	2014-09-18	Initial version

Introduction

This Chapter defines the detailed setup procedure for the Preset.

Preset URI

<http://camera ipaddress/ptz/preset.php>

Preset Parameter

Parameter	Type	Value
method	string	get_num : check setting value create : Preset creation and modification delete : Preset deletion preset_go : selected Preset working
preset_number	integer	0 ~ 241
preset_title	string	Preset title
preset_af_mode	integer	0 : Auto, 1 : Manual
preset_speed	integer	1 ~ 8 (Only available for FASTRAX5)
http_port	integer (ro)	HTTP port number
https_port	integer (ro)	HTTPS port number
min_preset_number	integer (ro)	0 : configurable minimum Preset number
max_preset_number	integer (ro)	Setable maximum Preset number 16 : Xarina2 Box Camera 240 : Xarina2 FASTRAX, MINITRAX Camera
preset_home	integer (ro)	0 : Preset Home Position number
preset_af_mode_list	string (ro)	Auto : Auto Focusing mode Manual : Manual Focusing mode Auto Manual : two mode selectable
preset_af_mode_val_list	string (ro)	0 : Auto, 1 : Manual
def_preset_af_mode	integer (ro)	Default Focusing mode value
def_preset_speed	integer (ro)	preset default speed
min_preset_speed	integer (ro)	preset min speed
max_preset_speed	integer (ro)	preset max speed
preset_list	integer (ro)	Preset number list

Examples

1) get configurable Preset value

`http://"camera ipaddress"/ptz/preset.php?app=get`
`http://"camera ipaddress"/ptz/preset.php?app=get&method=get_num`

2) get the current setting

`http://"camera ipaddress"/ptz/preset.php?app=get&preset_number=1`
`http://"camera ipaddress"/ptz/preset.php?app=get&method=get_num&preset_number=1`

3) Preset creation

create a Preset by using the "method=create" parameter

`http://"camera ipaddress"/ptz/preset.php?app=set&method=create`

- preset_number is configurable minimum number,
preset_title "PRESET 'preset_number'",
preset_af_mode is 0 (Auto : default),
preset_speed is 4 (default)

create a Preset by assigning a specific Preset Number

`http://"camera ipaddress"/ptz/preset.php?app=set&method=create&preset_number=3`

- preset_title is "PRESET 'preset_number'",
preset_af_mode is 0 (Auto : default),
preset_speed is 4 (default)

create a Preset by assigning a specific Preset title

`http://"camera ipaddress"/ptz/preset.php?app=set&method=create&preset_title=BASIC_PRESET`

- preset_number is configurable minimum number
preset_af_mode is 0 (Auto : default),
preset_speed is 4 (default)

create a Preset by assigning a preset_af_mode

`http://"camera ipaddress"/ptz/preset.php?app=set&method=create&preset_af_mode=0`

`http://"camera ipaddress"/ptz/preset.php?app=set&method=create&preset_af_mode=1`

- preset_number is configurable e minimum number,
preset_title is "PRESET 'preset_number'",
preset_speed is 4 (default)

create a Preset by assigning a preset_speed

`http://"camera ipaddress"/ptz/preset.php?app=set&method=create&preset_speed=8`

- preset_number is configurable minimum number
preset_title is "PRESET 'preset_number'",
preset_af_mode is 0 (Auto : default).

4) Preset deletion

`http://"camera ipaddress"/ptz/preset.php?app=set&method=delete&preset_number=2`

* the "preset_number" parameter should be included when deleting a preset

5) Preset modification

`http://"camera`

`ipaddress"/ptz/preset.php?app=set&method=create&preset_number=1&preset_title=MODIFY_P`
`RESET1&preset_af_mode=1`

** the “preset_number” parameter should be included when modifying a preset, pre-configured value also should be included .

6) Preset movement

http://camera_ipaddress/ptz/preset.php?app=set&method=preset_go&preset_number=3

http://camera_ipaddress/ptz/preset.php?app=set&method=preset_go&preset_number=4

* the “preset_number” parameter should be included when deleting a preset

Caution

You must check the following values in the response to http://camera_ipaddress/config.txt

item	Value	Explanation
option	BUILTIN_PTZ	Preset setup available
total_preset	max_preset_number value	The maximum number of configurable Preset

* The setup and test of the “preset_speed” parameters are only available in FASTRAX5 product.

Dome – Privacy Zone:

Version : 1.00
Date : 2014. 10. 06

Revision History

Version	Date	Comment
1.00	2014-10-06	Initial version

Introduction

This Chapter defines the detailed setup procedure for the Privacy Zone.

Privacy Zone URI

[http://camera ipaddress"/ptz/privacy_zone.php](http://camera ipaddress)

Privacy Zone Parameter

Parameter	Type	Value
http_port	integer (ro)	HTTP Port number
https_port	integer (ro)	HTTPS Port number
privacy_num_max	integer (ro)	configurable number of Privacy Zone
masking#_title	string (ro)	Privacy Zone title
masking#_set	boolean (ro)	0 : configured Privacy Zone "Off" 1 : configured Privacy Zone "On"
masking#_enable	boolean (ro)	0 : configured Privacy Zone- Masking Zone "Off" 1 : configured Privacy Zone- Masking Zone "On"
method	string	create : Privacy Zone creation modify : Privacy Zone modification delete : Privacy Zone deletion move : move to Privacy Zone
masking_number	integer	Preferred Privacy Zone number
masking_title	string	Preferred Privacy Zone title
masking_enable	Boolean	0 : Privacy Zone Off 1 : Privacy Zone On
masking_set	boolean (ro)	0 : Privacy Zone Setting Off 1 : Privacy Zone Setting On

* '#' means Privacy Zone List number(1~8).

Examples

1) get configurable privacy Zone List

[http://camera ipaddress"/ptz/privacy_zone.php?app=get](http://camera ipaddress)

2) Privacy Zone creation

http://"camera ipaddress"/ptz/privacy_zone.php?app=set&method=create&masking_number=1

- * the parameter for the creation of Privacy Zone are only "method" and "masking_number".
- * if Privacy Zone has been created, "masking_title", "masking_enable", "masking_set" parameter values will be automatically set and you will see a response like the one below
res=200&masking_number=1&masking_title=MASK-1&masking_enable=1&masking_set=1

3) Privacy Zone modification

http://"camera ipaddress"/ptz/privacy_zone.php?app=set&method=modify&masking_number=1&masking_title=Zone1&masking_enable=0

- * the parameters for the modification of Privacy Zone are only "method", "masking_number", "masking_title", "masking_enable"
- * when modifying the Privacy Zone, "masking_number" info should be included and it must be existing number.
- * when modifying "masking_title", you can input maximum 12 letter in alphabet or number

4) Privacy Zone deletion

http://"camera ipaddress"/ptz/privacy_zone.php?app=set&method=delete&masking_number=1

- * the parameter for deleting Privacy Zone are only "method" and "masking_number".
- * if Privacy Zone has been deleted, "masking_title", "masking_enable", "masking_set" parameter values will be automatically set and you will see a response like the one below
res=200&masking_number=1&masking_title=MASK-1&masking_enable=0&masking_set=0

5) PTZ movement

http://"camera ipaddress"/ptz/privacy_zone.php?app=set&method=move&masking_number=1

- * PTZ will move to the pointed position by the combination of "method=move" and configured "masking_number" parameter

Caution

You must check the following value in the response to http://"camera ipaddress"/config.txt

item	Value	Explanation
option	BUILTIN_PTZ	Privacy Zone setup available

Dome – RS485:

Version : 1.00
Date : 2014. 10. 01

Revision History

Version	Date	Comment
1.00	2014-10-01	Initial version

Introduction

This Chapter defines the detailed setup of the RS485.

RS485 URI

`http://"camera ipaddress"/ptz/comm.php`

RS485 Parameter

Parameter	Type	Value
min_comm_id	integer (ro)	1
max_comm_id	integer (ro)	3999
comm_id	integer	1 ~ 3999
comm_protocol	integer	0 : Auto 2 : PELCOPD
comm_baud	integer	0 : 2400 1 : 4800 2 : 9600 3 : 19200 4 : 38400
comm_parity	integer	0 : None 1 : Odd 2 : Even
comm_dome_answer	boolean	0 : Answer sending Off 1 : Answer sending On

Examples

1) get the current setting

`http://"camera ipaddress"/ptz/comm.php?app=get`

2) DOME ID setup

`http://"camera ipaddress"/ptz/comm.php?app=set&comm_id=1`

3) Protocol setup

`http://"camera ipaddress"/ptz/comm.php?app=set&comm_protocol=0`

`http://"camera ipaddress"/ptz/comm.php?app=set&comm_protocol=2`

4) Baudrate setup

`http://"camera ipaddress"/ptz/comm.php?app=set&comm_baud=0`

http://"camera ipaddress"/ptz/comm.php?app=set&comm_baud=1
http://"camera ipaddress"/ptz/comm.php?app=set&comm_baud=2
http://"camera ipaddress"/ptz/comm.php?app=set&comm_baud=3
http://"camera ipaddress"/ptz/comm.php?app=set&comm_baud=4

5) Parity setup

http://"camera ipaddress"/ptz/comm.php?app=set&comm_parity=0
http://"camera ipaddress"/ptz/comm.php?app=set&comm_parity=1
http://"camera ipaddress"/ptz/comm.php?app=set&comm_parity=2

6) Dome Answer setup

http://"camera ipaddress"/ptz/comm.php?app=set&comm_dome_answer=0
http://"camera ipaddress"/ptz/comm.php?app=set&comm_dome_answer=1

Caution

You must check the following values in the response to http://"camera ipaddress"/config.txt

item	Value	Explanation
option	BUILTIN_PTZ, PTZ	RS485 setup available (only for FASTRAX3)

Dome – System Menu:

Version: 1.01e
Date: 2015. 07. 24

Revision History

Version	Date	Comment
1.00	2014-10-02	Initial version
1.01	2015-07-22	Add Schedule Origin Check
1.01e	2015-07-24	English Translation

Introduction

This Chapter defines the detailed setup procedure for the System Menu.

System Menu URI

http://”camera ipaddress”/ptz/system_menu.php

System Menu Parameter

Parameter	Type	Value
status	string (wo)	“origin_check” : Origin Check status
origin_check	integer (ro)	0, 1, 2, 3 0 : STATUS_ERROR - error 1 : STATUS_IDLE - Origin Check idle 2 : STATUS_RUNNING - Origin Check running 3 : STATUS_DONE - Origin Check completed
method	string (wo)	“origin_check” : Origin Check start “update_camera” : upgrade AF Module
filename	string (wo)	HEXA file name for Upgrade
wait_time	integer (ro)	420(unit : second)
camera_type	string (ro)	PTZ Camera type
hw_ver	string (ro)	H/W version
sw_ver	string (ro)	S/W version
sys_calibration	boolean	0 : Not Support, 1 : Support
enable_origin_check	boolean (ro)	0 : Off, 1 : On
enable_camera_update	boolean (ro)	0 : Not Support, 1 : Support
enable_dome_update	boolean (ro)	0 : Not Support, 1 : Support
sys_enable_schedule	boolean	0 : Off, 1 : On
sys_enable_monthly	boolean	0 : Off, 1 : On
sys_enable_weekly	boolean	0 : Off, 1 : On
sys_enable_daily	boolean	0 : Off, 1 : On
sys_monthly_day	integer	Monthly day (1 ~ 31)

sys_weekly_dayofweek	integer	Weekly day of week (0 ~ 6) 0 : Sun, 1 : Mon, 2 : Tue, 3 : Wed, 4 : Thu, 5 : Fri, 6 : Sat
sys_monthly_time	string	Monthly time (HH:MM:SS)
sys_weekly_time	string	Weekly time (HH:MM:SS)
sys_daily_time	string	Daily time (HH:MM:SS)

- * In Type column, “ro” means Read-Only and “wo” means Write-Only.
- * In “app=get” Query transmission, if the “status” parameter is presents, you must use “origin_check” for the status parameter.
- * In “app=get” Query transmission, if the “status” parameter is not included, you can check the following parameters.
“camera_type”, “enable_origin_check”, “enable_camera_update”, “enable_dome_update”, “hw_ver”, “sw_ver”, “sys_calibration”
- * In “app=set” Query trsnamission, if the “method” parameter is presents, Origin Check or Upgrade function can only be used.
- * In “app=set” Query transmission, if the “method” parameter is not included, you can setup “sys_calibration” parameter.

Examples

1) Get the current PTZ Camera information and settings

http://camera ipaddress/ptz/system_menu.php?app=get

2) Check current Origin Check function status

http://camera ipaddress/ptz/system_menu.php?app=get&status=origin_check

3) Calibration setup

http://camera ipaddress/ptz/system_menu.php?app=set&sys_calibration=0

http://camera ipaddress/ptz/system_menu.php?app=set&sys_calibration=1

4) Origin Check start

http://camera ipaddress/ptz/system_menu.php?app=set&method=origin_check

5) Enable Schedule Origin Check setup

http://camera ipaddress/ptz/system_menu.php?app=set&sys_enable_schedule=0

http://camera ipaddress/ptz/system_menu.php?app=set&sys_enable_schedule=1

6) Schedule Origin Check setup

a. Enable Schedule Origin Check setup

http://camera ipaddress/ptz/system_menu.php?app=set&sys_enable_schedule=0

http://camera ipaddress/ptz/system_menu.php?app=set&sys_enable_schedule=1

b. Enable Monthly setup

http://camera ipaddress/ptz/system_menu.php?app=set&sys_enable_monthly=0

http://camera ipaddress/ptz/system_menu.php?app=set&sys_enable_monthly=1

c. Enable Weekly setup

http://camera ipaddress/ptz/system_menu.php?app=set&sys_enable_weekly=0

http://"camera ipaddress"/ptz/system_menu.php?app=set&sys_enable_weekly=1

d. Enable Daily setup

http://"camera ipaddress"/ptz/system_menu.php?app=set&sys_enable_daily=0

http://"camera ipaddress"/ptz/system_menu.php?app=set&sys_enable_daily=1

e. Monthly Day setup

http://"camera ipaddress"/ptz/system_menu.php?app=set&sys_monthly_day=20

f. Weekly Day of week setup

http://"camera ipaddress"/ptz/system_menu.php?app=set&sys_weekly_dayofweek=3

g. Monthly Time setup

http://"camera ipaddress"/ptz/system_menu.php?app=set&sys_monthly_time=23:50:00

h. Weekly Time setup

http://"camera ipaddress"/ptz/system_menu.php?app=set&sys_weekly_time=01:20:00

i. Daily Time setup

http://"camera ipaddress"/ptz/system_menu.php?app=set&sys_daily_time=05:31:00

7) FA Module F/W Upgrade

http://"camera

ipaddress"/ptz/system_menu.php?app=set&method=update_camera&filename="F/W file name"

* If you use the "method=update_camera" parameter, you must include the "filename" parameter.

* Please refer to "F/W Upload" for F/W Upload.

F/W Upload

File upload uses HTML POST method, specifically multipart/form-data type of MIME protocol for file transmission.

a. The following items must be defined in HTML POST type message.

Request URL

http://"camera

ipaddress"/ptz/system_menu.php?app=set&method=update_camera&filename="F/W file name"

Encoded Login account

Content-Type : multipart/form-data; boundary=-----"separator"

* boundary is a separator marking the start and end when uploading multiple files '-' in the above.

Content-Length : "uploading file size"

* Please refer to the following URL for further details of POST type.

POST message : <<http://tools.ietf.org/html/rfc2616>>

b. The following items must be defined in the MIME Protocol message for file transmission.

Content-Disposition : form-data; name=file_camera_upgrade; filename="uploading file path"

Content-Type : application/octet-stream

- c. For further information about multipart/form-data, please refer to the following URL's.
multipart/form-data : <<http://www.w3.org/TR/html401/interact/forms.html>>
multipart/form-data RFC : <<http://www.ietf.org/rfc/rfc2045.txt>>

Caution

You can check current settings by referring to the following values in the response to `http://"camera ipaddress"/config.txt`.

Item	Value	Description
options	BUILTIN_PTZ	System Menu setup available
	ORIGIN_CHECK	Schedule Origin Check setup available

Dome – Tour:

Version : 1.00
Date : 2014. 09. 25

Revision History

Version	Date	Comment
1.00	2014-09-25	Initial version

Introduction

This Chapter defines the detailed setup procedure for the Tour

Tour URI

`http://"camera ipaddress"/ptz/tour.php`

Tour Parameter

Parameter	Type	Value
method	string	get_num : check configured value get_preset : Preset creation and modification get_tour : deletion of configured Preset create : Tour creation delete : Tour deletion preset_go : Preset movement
tour_number	integer	1 ~ 8 : configurable Tour number
tour_title	string	Tour tile
tour_repeat_time	integer	0 : Tour continuous movement 1 ~ 90 : Tour number
tour_sequence	integer	0 : Tour in Forward direction 1 : Tour in Reverse direction
tour_tourlist	string	configured Tour List enable : '0' Non preset, '1' Set preset index : '0' ~ '241' Preset index dwell : '0' ~ '99' dwell time pan speed : '1' ~ '32' tilt speed : '1' ~ '32' zoom speed : '1' ~ '8'
http_port	integer (ro)	HTTP port number
https_port	integer (ro)	HTTPS port number
min_tour_number	integer (ro)	1 : configurable minimum Tour number
max_tour_number	integer (ro)	8 : configurable maximum Tour number
def_dwell	integer (ro)	3 : Defaut Dwell Time

dwll_min	integer (ro)	0 : configurable minimum Dwell Time
dwll_max	integer (ro)	99 : configurable maximum Dwell Time
def_pt_speed	integer (ro)	Default Pan/Tilt speed 5 : Xarina2 FASTRAX5 8 : Xarina2 PTZ Camera(FASTRAX5)
pt_speed_min	integer (ro)	1 : configurable minimum Pan/Tilt speed
pt_speed_max	integer (ro)	8 : configurable maximum Pan/Tilt speed
def_z_speed	integer (ro)	7 : default Zoom speed
z_speed_min	integer (ro)	1 : configurable minimum Zoom speed
z_speed_max	integer (ro)	8 : configurable maximum Zoom speed
tour_tourlist_max	integer (ro)	100 : Tour List number
def_tour_repeat_time	integer (ro)	0 : default Tour Repeat time
tour_repeat_time_max	integer (ro)	90 : maximum Tour Repeat time
def_tour_sequence	integer (ro)	1 : default Tour movement(Forward)
tour_list	string (ro)	usable Tour number list
preset_list	string (ro)	Preset number list available

Examples

1) get configurable Tour value

<http://camera ipaddress/ptz/tour.php?app=get>

http://camera ipaddress/ptz/tour.php?app=get&method=get_num

2) get configured Preset List

http://camera ipaddress/ptz/tour.php?app=get&method=get_preset

3) get configured Tour List

http://camera ipaddress/ptz/tour.php?app=get&method=get_tour

4) get specific configured Tour List

http://camera ipaddress/ptz/tour.php?app=get&method=get_num&tour_number=1

http://camera ipaddress/ptz/tour.php?app=get&method=get_num&tour_number=2

5) Tour creation

Tour creation by assigning specific Tour Number

http://camera ipaddress/ptz/tour.php?app=set&method=create&tour_number=2

- **tour_title “TOUR ‘tour_number’”,**

tour_repeat_time is 0 (Continuous : default)

tour_sequence is 0 (Forward : default).

tour_tourlist should be configured separately.

Tour creation by assigning specific Tour Title

http://camera

ipaddress"/ptz/tour.php?app=set&method=create&tour_number=1&tour_title=BASIC_TOUR

- tour_repeat_time is 0 (Continuous : default),
- tour_sequence is 0 (Forward : default)
- tour_tourlist should be configured separately
- * "tour_number" parameter should be stated when creating the Tour

Tour creation by assigning specific tour_repeat_time

http://camera

ipaddress"/ptz/tour.php?app=set&method=create&tour_number=3&tour_repeat_time=5

- tour_title "TOUR 'tour_number'",
- tour_sequence is 0 (Forward : default).
- tour_tourlist should be configured separately.
- * "tour_number" parameter should be stated when creating the Tour.

Tour creation by assigning specific tour_sequence

http://camera

ipaddress"/ptz/tour.php?app=set&method=create&tour_number=4&tour_sequence=1

- tour_title "TOUR 'tour_number'",
- tour_repeat_time is 0 (Continuous : default).
- tour_tourlist should be configured separately ..
- "tour_number" parameter should be stated when creating the Tour.

Tour creation by assigning specific tour_tourlist

- Preset "Home" position,

http://camera

ipaddress"/ptz/tour.php?app=set&method=create&tour_number=5&tour_tourlist=1|0|5|32|32|7

- tour_title = "TOUR 'tour_number'",
- tour_repeat_time is 0 (Continuous : default),
- tour_sequence is 0 (Forward : default).
- * "tour_number" parameter should be stated when creating the Tour.

- specific Preset position

http://camera

ipaddress"/ptz/tour.php?app=set&method=create&tour_number=5&tour_tourlist=1|1|5|32|32|7

- tour_title = "TOUR 'tour_number'",
- tour_repeat_time is 0 (Continuous : default),
- tour_sequence is 0 (Forward : default)
- * Preset position should be pre-configured to check proper tour functionality
- * "tour_number" parameter should be stated when creating the Tour..

- multiple Preset position

http://camera

ipaddress"/ptz/tour.php?app=set&method=create&tour_number=5&tour_tourlist=1|1|5|32|32|7,1|0|5|32|32|7,1|2|5|32|32|7

- tour_title "TOUR 'tour_number'",

tour_repeat_time is 0 (Continuous : default),

tour_sequence is (Forward : default)

* Preset position should be pre-configured to check proper tour functionality

* "tour_number" parameter should be stated when creating the Tour.

6) Tour deletion

http://"camera ipaddress"/ptz/tour.php?app=set&method=delete&tour_number=1

* the "tour_number" parameter should be included when deleting the Tour.

7) Tour modification

http://"camera

ipaddress"/ptz/tour.php?app=set&method=create&tour_number=1&tour_title=MODIFY_TOU

R1&tour_sequence=2&tour_repeat_time=1&tour_tourlist=1|0|3|32|32|7,1|1|3|32|32|7

* the "tour_number" parameter should be included when modifying the Tour..

8) Tour movement

http://"camera ipaddress"/ptz/control.php?tour=1

http://"camera ipaddress"/ptz/control.php?tour=2

* Tour can be controlled with ptz/control.php.

Caution

You must check the following values in the response to http://"camera ipaddress"/config.txt

item	Value	Explanation
option	BUILTIN_PTZ	Tour setup available
total_tour	max_tour_number value	Maximum number of configurable Tour

Dome – View Angle:

Version : 1.00
Date : 2014. 10. 02

Revision History

Version	Date	Comment
1.00	2014-10-02	Initial version

Introduction

This Chapter defines the detailed setup procedure for the View Angle.

View Angle URI

http://"camera ipaddress"/ptz/view_angle.php

View Angle Parameter

Parameter	Type	Value
http_port	integer (ro)	HTTP port number
https_port	integer (ro)	HTTPS port number
tiltoverangle	integer	-10 ~ 10 : configurable Tilt angle
min_tiltoverangle	integer (ro)	-10 : Minimum angle of Supported Tilt
max_tiltoverangle	integer (ro)	10 : Maximum angle of Supported Tilt angle
def_tiltoverangle	integer (ro)	0 : Default angle of Supported Tilt
ptz_flip	integer	0 ~ 5 : Supported PTZ Flip number
		FASTRAX5 0 : Off 1 : Auto
min_ptz_flip	integer (ro)	0 : Minimum number of Supported PTZ Flip
max_ptz_flip	integer (ro)	Maximum number of Supported PTZ Flip 1 : FASTRAX5
def_ptz_flip	integer (ro)	5 : FASTRAX3, MINITRAX3 Default number of Supported PTZ Flip 1 : FASTRAX5 2 : FASTRAX3, MINITRAX3
ptz_flip_label	string (ro)	Supported PTZ Flip List FASTRAX5 : "Off,Auto" FASTRAX3 : "Off,Auto,90,100,110,120"

		MINITRAX3 : "Off,Auto,90,100,110,120"
--	--	---------------------------------------

Examples

1) get the current setting

http://camera_ipaddress/ptz/view_angle.php?app=get

2) Tilt Angle Limit setup

http://camera_ipaddress/ptz/view_angle.php?app=set&tiltoverangle=10

http://camera_ipaddress/ptz/view_angle.php?app=set&tiltoverangle=-10

3) Flip setup

http://camera_ipaddress/ptz/view_angle.php?app=set&ptz_flip=0

http://camera_ipaddress/ptz/view_angle.php?app=set&ptz_flip=1

http://camera_ipaddress/ptz/view_angle.php?app=set&ptz_flip=2

* In case of FASTRAX5, only 0 or 1 value is allowed for "ptz_flip" parameter

Caution

You must check the following values in the response to http://camera_ipaddress/config.txt

Item	Value	Explanation
option	BUILTIN_PTZ	View Angle setup available

Event

Event – AIHM:

Version: 1.01e
Date: 2016. 12. 16

Revision History

Version	Date	Comment
1.00	2015-09-06	Initial version
1.00e	2015-09-06	English Translation
1.01	2016-12-16	Added Dwell Time, AIHM Server API

Introduction

This Chapter defines the detailed setup procedure for the AIHM.

AIHM URI

`http://"camera ipaddress"/event/aihm.php`

AIHM Parameter

Parameter	Type	Value
aihm_enable	boolean	0 : Disable, 1 : Enable
record_status_check	boolean	0 : Disable, 1 : Enable
format_event	boolean	0 : Disable, 1 : Enable
aihm_server_enable	boolean	0 : Disable, 1 : Enable
aihm_time	integer	1 ~ 180

Examples

1) get the current setting

`http://"camera ipaddress"/event/aihm.php?app=get`

2) AIHM setup

`http://"camera ipaddress"/event/aihm.php?app=set&aihm_enable=0`

`http://"camera ipaddress"/event/aihm.php?app=set&aihm_enable=1`

3) AIHM record status check setup

`http://"camera ipaddress"/event/aihm.php?app=set&record_status_check=0`

`http://"camera ipaddress"/event/aihm.php?app=set&record_status_check=1`

4) AIHM format event setup

`http://"camera ipaddress"/event/aihm.php?app=set&format_event=0`

`http://"camera ipaddress"/event/aihm.php?app=set&format_event=1`

5) AIHM server setup

`http://"camera ipaddress"/event/aihm.php?app=set&aihm_server_enable=0`

`http://"camera ipaddress"/event/aihm.php?app=set&aihm_server_enable=1`

6) AIHM dwell time setup

http://camera ipaddress/event/aihm.php?app=set&aihm_time=1

http://camera ipaddress/event/aihm.php?app=set&aihm_time=180

Caution

You must check the following values in the response to <http://camera ipaddress/config.txt>

Item	Value	Explanation
options	AIHM	AIHM function available

Event – Alarm In:

Version: 1.00e
Date: 2014. 03. 03

Revision History

Version	Date	Comment
1.00	2014-01-23	Initial version
1.00e	2014-03-03	English Translation

Introduction

This Chapter defines the detailed setup procedure for the Alarm In.

Alarm In URI

`http://camera ipaddress/event/alarm_in.php`

Alarm In Parameter

Parameter	Type	Value
alarm_in_count	integer(ro)	Number of alarm in available
alarm_in_#_enable	boolean	0 : Disable, 1 : Enable
alarm_in_#_type	string	NO : Normal Open, NC : Normal Close
alarm_in_#_time	integer	1 ~ 180

Examples

1) get the current setting

`http://camera ipaddress/event/alarm_in.php?app=get`

2) Alarm In setup

`http://camera ipaddress/event/alarm_in.php?app=set&alarm_in_1_enable=0`
`http://camera ipaddress/event/alarm_in.php?app=set&alarm_in_1_enable=1`

3) Alarm In type setup

`http://camera ipaddress/event/alarm_in.php?app=set&alarm_in_1_type=NO`
`http://camera ipaddress/event/alarm_in.php?app=set&alarm_in_1_type=NC`

4) Alarm In dwell time setup

`http://camera ipaddress/event/alarm_in.php?app=set&alarm_in_1_time=1`
`http://camera ipaddress/event/alarm_in.php?app=set&alarm_in_1_time=180`

Caution

You must check the following values in the response to `http://camera ipaddress/config.txt`.

Item	Value	Explanation
alarm_in	0 or 1 or 2 or	Number of Alarm In ports available
options	ALARM_IN	Alarm In available

Event – Alarm Out:

Version: 1.00e
Date: 2014. 03. 03

Revision History

Version	Date	Comment
1.00	2014-01-24	Initial version
1.00e	2014-03-03	English Translation

Introduction

This Chapter defines the detailed setup procedure for the Alarm Out.

Alarm Out URI

http://camera ipaddress/event/alarm_out.php

Alarm Out Parameter

Parameter	Type	Value
alarm_out_enable	boolean	0 : Disable, 1 : Enable
alarm_out_type	string	NO : Normal Open, NC : Normal Close

Examples

1) get the current setting

http://camera ipaddress/event/alarm_out.php?app=get

2) Alarm Out setup

http://camera ipaddress/event/alarm_out.php?app=set&alarm_out_enable=0

http://camera ipaddress/event/alarm_out.php?app=set&alarm_out_enable=1

3) Alarm Out type setup

http://camera ipaddress/event/alarm_out.php?app=set&alarm_out_type=NO

http://camera ipaddress/event/alarm_out.php?app=set&alarm_out_type=NC

Caution

You must check the following values in the response to <http://camera ipaddress/config.tx>

Item	Value	Explanation
alarm_out	0 or 1 or 2 or	Number of Alarm Out ports available
options	ALARM_OUT	Alarm Out available

Event – Audio Alert:

Version: 1.00e
Date: 2014. 03. 17

Revision History

Version	Date	Comment
1.00	2014-02-13	Initial version
1.00e	2014-03-17	English Translation

Introduction

This Chapter defines the detailed setup procedure for the Audio Alert.

Audio Alert URI

`http://"camera ipaddress"/event/audio_alert.php`

Audio Alert Parameter

Parameter	Type	Value
method	string	save, test, remove
audio_alert_enable	boolean	0 : Off, 1 : On
audio_alert_index	integer	1, 2, 3
audio_alert_file#	string (ro)	file name
audio_alert_size#	integer (ro)	file size (max : 512KB)
audio_alert_time#	integer (ro)	play time
audio_alert_bitrate#	integer (ro)	bitrate (kbps)

* '#' in Parameters "audio_alert_XXX#" means the index number (1,2,3) of audio alert file.

Examples

1) get the current setting

`http://"camera ipaddress"/event/audio_alert.php?app=get`

2) Audio Alert setup

`http://"camera ipaddress"/event/audio_alert.php?app=set&method=save&audio_alert_enable=1`
`http://"camera ipaddress"/event/audio_alert.php?app=set&method=save&audio_alert_enable=0`

3) Audio file remove

`http://"camera ipaddress"/event/audio_alert.php?app=set&method=remove&audio_alert_index=1`
`http://"camera ipaddress"/event/audio_alert.php?app=set&method=remove&audio_alert_index=2`
`http://"camera ipaddress"/event/audio_alert.php?app=set&method=remove&audio_alert_index=3`

4) Audio Alert Test method

`http://"camera ipaddress"/event/audio_alert.php?app=set&method=test&audio_alert_index=1`

Caution

You must check the following values in the response to `http://"camera ipaddress"/config.txt`

Item	Value	Explanation
------	-------	-------------

options	AUD_ALERT	Audio Alert function available
---------	-----------	--------------------------------

* In order to use Audio Alert, both “Audio” and “bidirectional Audio” should be enabled.

1) Reminder for the Audio Alert file upload

a. File upload uses multipart/form-data of MIME protocol HTML tag. A prior knowledge of the file name is needed for uploading.

b. Be sure to review HTML “FORM” tag transmission for File upload. Please refer to the following URL for “FORM” tag.

FORM tag : <<http://www.w3.org/TR/html401/interact/forms.html>>

c. Figure 1 shows how to apply the multipart/form-data on HTML “FORM” tag.

```
<FORM action="...." enctype="multipart/form-data" method="post">
....
</FORM>
```

[Figure 1]

d. Figure 2 shows how to apply the upload filename.

```
<FORM ....>
  <INPUT type="file" name="filename">
</FORM>
```

[Figure 2]

* filename should include the extension.

e. HTTP message should be transmitted via POST form, and message example is Figure 3.

```
POST /event/audio_upload.php?audio_alert_index=3 HTTP/1.1\r\n
```

[Figure 3]

* “audio_alert_index” is an index number, and Figure 3 shows upload by index.

f. For more information about multipart/form-data, please refer the following URL.

multipart/form-data : <<http://www.w3.org/TR/html401/interact/forms.html>>

multipart/form-data RFC : <<http://www.ietf.org/rfc/rfc2045.txt>>

Event – Audio detection:

Version: 1.00e
Date: 2014. 03. 17

Revision History

Version	Date	Comment
1.00	2014-01-23	Initial version
1.00e	2014-03-17	English Translation

Introduction

This Chapter defines the detailed setup procedure for the Audio detection.

Audio detection URI

`http://"camera ipaddress"/event/audio_detection.php`

Audio detection Parameter

Parameter	Type	Value
<code>audio_detection_enable</code>	boolean	0 : Off, 1 : On
<code>audio_detection_level</code>	integer	1 : Low, 2 : Middle, 3 : High
<code>audio_detection_time</code>	integer	1 ~ 180

Examples

1) get the current setting

`http://"camera ipaddress"/event/audio_detection.php?app=get`

2) Audio detection setup

`http://"camera ipaddress"/event/audio_detection.php?app=set&audio_detection_enable=1`

`http://"camera ipaddress"/event/audio_detection.php?app=set&audio_detection_enable=0`

3) Audio detection level setup

`http://"camera ipaddress"/event/audio_detection.php?app=set&audio_detection_level=1`

`http://"camera ipaddress"/event/audio_detection.php?app=set&audio_detection_level=2`

`http://"camera ipaddress"/event/audio_detection.php?app=set&audio_detection_level=3`

4) Audio detection Dwell time setup

`http://"camera ipaddress"/event/audio_detection.php?app=set&audio_detection_time=3`

`http://"camera ipaddress"/event/audio_detection.php?app=set&audio_detection_time=0`

If the `audio_detection_time` is assigned to a value less than 1, the value is set to the minimum value (1).

`http://"camera ipaddress"/event/audio_detection.php?app=set&audio_detection_time=183`

* If `audio_detection_time` is assigned to a value bigger than 180, the value is set to the maximum value (180).

Caution

You must check the following values in the response to `http://"camera ipaddress"/config.txt`

Item	Value	Explanation
options	AUD_DETECTIO N	Audio Detection function available

Event – Boost:

Version: 1.00e
Date: 2014. 03. 17

Revision History

Version	Date	Comment
1.00	2014-02-26	Initial version
1.00e	2014-03-17	English Translation

Introduction

This Chapter defines the detailed setup procedure for the Boost.

Boost URI

`http://camera ipaddress/event/boost.php`

Boost Parameter

Parameter	Type	Value
<code>boost_enable</code>	boolean	0 : Off, 1 : On
<code>boost_stream</code>	integer	1 : stream1, 2 : stream2, 3 : stream3
<code>boost_framerate</code>	integer	1 ~ 30
<code>boost_bitrate</code>	integer	100 ~ 8000 (unit : 100Kbps)
<code>boost_quality</code>	integer	1 ~ 100
<code>ch#1_strm#2_maxfps</code>	integer (ro)	Max selectable Framerate value
<code>ch#1_strm#2_fps</code>	integer	1 ~ <code>ch#1_strm#2_maxfps</code>
<code>ch#1_strm#2_maxbr</code>	integer (ro)	Max selectable Bitrate value
<code>ch#1_strm#2_bitrate</code>	integer	100 ~ <code>ch#1_strm#2_maxbr</code>
<code>ch#1_strm#2_ratecontrol</code>	string	cbr : CBR, vbr : VBR
<code>ch#1_strm#2_quality</code>	integer	1 ~ 100

* Parameters with the prefix “boost” are for user setup, and Parameters with prefix “ch#1_strm#2” are current setting.

* ‘#1’ and ‘#2’ are explained in “Caution”

Examples

1) get the current setting

`http://camera ipaddress/event/boost.php?app=get`

2) Boost setup

`http://camera ipaddress/event/boost.php?app=set&boost_enable=0`

`http://camera ipaddress/event/boost.php?app=set&boost_enable=1`

3) Boost stream setup

`http://camera ipaddress/event/boost.php?app=set&boost_stream=3`

4) Boost stream1 Normal Condition setup

a. Framerate setup

`http://camera`

`ipaddress/event/boost.php?app=set&boost_enable=1&boost_stream=1&ch1_strm1_fps=25`

* If URI includes boost_stream, the value of boost_stream must match the number at the end of “ch1_strm” for proper operation.

http://”camera ipaddress”/event/boost.php?app=set&boost_enable=1&ch1_strm1_fps=5

* If URI does not include boost_stream, the current stream number must match the number at the end of “ch1_strm” for proper operation.

b. Bitrate control setup

http://”camera

ipaddress”/event/boost.php?app=set&boost_enable=1&boost_stream=1&ch1_strm1_ratecontrol=cbr

* If URI includes boost_stream, the value of boost_stream must match the number at the end of “ch1_strm” for proper operation.

http://”camera

ipaddress”/event/boost.php?app=set&boost_enable=1&ch1_strm1_ratecontrol=vbr

* If URI does not include boost_stream, the current stream number must match the number at the end of “ch1_strm” for proper operation.

c. Bitrate setup

http://”camera

ipaddress”/event/boost.php?app=set&boost_enable=1&boost_stream=1&ch1_strm1_bitrate=4000

* If URI includes boost_stream, the value of boost_stream must match the number at the end of “ch1_strm” for proper operation.

* ch1_strm1_bitrate should be set in order of 100.

http://”camera ipaddress”/event/boost.php?app=set&boost_enable=1&ch1_strm1_bitrate=4000

* If URI does not include boost_stream, the current stream number must match the number at the end of “ch1_strm” for proper operation.

5) Boost stream2 Normal Condition setup

a. Framerate setup

http://”camera

ipaddress”/event/boost.php?app=set&boost_enable=1&boost_stream=2&ch1_strm2_fps=25

* If URI includes boost_stream, the value of boost_stream must match the number at the end of “ch1_strm” for proper operation.

http://”camera ipaddress”/event/boost.php?app=set&boost_enable=1&ch1_strm2_fps=25

* If URI does not include boost_stream, the current stream number must match the number at the end of “ch1_strm” for proper operation.

b. Quality setup

http://”camera

ipaddress”/event/boost.php?app=set&boost_enable=1&boost_stream=2&ch1_strm2_quality=30

* If URI includes boost_stream, the value of boost_stream must match the number at the end of “ch1_strm” for proper operation.

http://”camera ipaddress”/event/boost.php?app=set&boost_enable=1&ch1_strm2_quality=50

* If URI does not include boost_stream, the current stream number must match the number at the end of “ch1_strm” for proper operation.

6) Boost stream3 Normal Condition setup

a. Framerate setup

http://"camera

ipaddress"/event/boost.php?app=set&boost_enable=1&boost_stream=3&ch1_strm3_fps=25

- * If URI includes boost_stream, the value of boost_stream must match the number at the end of "ch1_strm" for proper operation.

http://"camera ipaddress"/event/boost.php?app=set&boost_enable=1&ch1_strm3_fps=5

- * If URI does not include boost_stream, the current stream number must match the number at the end of "ch1_strm" for proper operation.

b. Bitrate control setup

http://"camera

ipaddress"/event/boost.php?app=set&boost_enable=1&boost_stream=3&ch1_strm3_ratecontrol=cbr

- * If URI includes boost_stream, the value of boost_stream must match the number at the end of "ch1_strm" for proper operation.

http://"camera

ipaddress"/event/boost.php?app=set&boost_enable=1&ch1_strm3_ratecontrol=vbr

- * If URI does not include boost_stream, the current stream number must match the number at the end of "ch1_strm" for proper operation.

c. Bitrate setup

http://"camera

ipaddress"/event/boost.php?app=set&boost_enable=1&boost_stream=3&ch1_strm3_bitrate=00

- * If URI includes boost_stream, the value of boost_stream must match the number at the end of "ch1_strm" for proper operation.

- * ch1_strm3_bitrate should be set in order of 100.

http://"camera ipaddress"/event/boost.php?app=set&boost_enable=1&ch1_strm3_bitrate=2000

- * If URI does not include boost_stream, the current stream number must match the number at the end of "ch1_strm" for proper operation.

7) Boost Condition setup

a. Framerate setup

http://"camera ipaddress"/event/boost.php?app=set&boost_framerate=20

b. Bitrate setup

http://"camera ipaddress"/event/boost.php?app=set&boost_bitrate=200

- * boost_bitrate should be set in order of 100.

c. Quality setup

http://"camera ipaddress"/event/boost.php?app=set&boost_quality=80

Caution

1) You must check the following values in the response to http://"camera ipaddress"/config.txt

Item	Value	Explanation
options	BOOST	Boost function available
total_ch	1 or 2 or 3 or ...	Total number of channels
total_strm	1 or 2 or 3 or ...	Total number of streams (1 ~ total_strm)
ch# ¹ _strm# ² _fps	1 ~ ch# ¹ _strm# ² _maxfps	current framerate setting

ch#1_strm#2_bitrate	1 ~ ch#1_strm#2_maxbr	* ch#1_strm#2_maxfps is explained below current bitrate setting
ch#1_strm#2_ratecontrol	cbr or vbr	* ch#1_strm#2_maxbr is explained below current bitrate control setting
ch#1_strm#2_quality	1 ~ 100	current Quality setting

2) Explanation on “ch#1_strm#2_○○○”

in Parameter column of table in “3. Boost Parameter”

- a. #1 is the channel number between 1 and total_ch.
- b. #2 is the stream number between 1 and total_strm.
- c. ○○○ can be fps, maxfps, bitrate, maxbr, ratecontrol, or quality, and used in combination with valid “#1” and “#2”. The followings are usage examples.
 - ch#1_strm#2_fps,
ch#1_strm#2_maxfps,
ch#1_strm#2_bitrate,
ch#1_strm#2_maxbr,
ch#1_strm#2_ratecontrol,
ch#1_strm#2_quality
 - * You can check ch#1_strm#2_maxfps via “4. Example” “1) get the current setting only if ch#1_strm#2_fps item exists in config.txt response.
 - * You can check ch#1_strm#2_maxbr via “4. Example” “1) get the current setting only if ch#1_strm#2_bitrate item exists in config.txt response.

3) When you setup Boost stream Normal Condition, boost_enable value must be equal to 1.

If you change Normal Condition setting, **Setup - Video & Image – Basic** settings will be changed accordingly.

Event – Map:

Version: 1.02e
Date: 2015. 07. 20

Revision History

Version	Date	Comment
1.00	2013-12-11	Initial version
1.00e	2014-03-18	English Translation
1.01e	2015-05-21	Event Map Renewal
1.02e	2015-07-20	AIHM, Time Trigger Update

Introduction

This Chapter defines the detailed setup procedure for the Event Map.

Event Map setup is divided into List retrieve, List add, List remove, and List modify.

Event – Map

<http://camera ipaddress/event/map.php>

http://camera ipaddress/event/event_pop.php

* In some F/W versions, map.php may cause an Error.

Video & Image – Image Parameter

Parameter	Type	Value
event_in_cnt	integer(ro)	Number of currently stored event
event_max_cnt	integer(ro)	Event of the maximum that can be stored
event_list	string	Event In ID Name Event In Event Out
method	string	add, modify, remove
event_name	string	Event name
event_in_id	integer(ro)	Please refer to Event In ID
event_in_name	string	Event In name
event_out_smtp	boolean	0(Disable), 1(Enable)
event_out_smtp_en#	boolean	0(Disable), 1(Enable)
event_out_smtp_list#	string(ro)	E-Mail Address for Event Out
event_out_smtp_title	string	E-Mail Title for that Event
event_out_smtp_msg	string	E-Mail Message for that Event
event_out_alarm	boolean	0(Disable), 1(Enable)
event_out_ftp	boolean	0(Disable), 1(Enable)
event_out_ftp_count	integer(ro)	Number of FTP server
event_out_ftp_server#	boolean	0(Disable), 1(Enable)
event_out_http	boolean	0(Disable), 1(Enable)

event_out_http_msg	string	Message String for HTTP Notification
event_out_audio	boolean	0(Disable), 1(Enable)
event_out_audio_file	integer	1 ~ 3
event_out_preset	boolean	0(Disable), 1(Enable)
event_out_preset_num	integer	1 ~ 255
event_out_preset_home	boolean	0(false), 1(true)
event_out_record	boolean	0(false), 1(true)
event_out_event_push	boolean	0(false), 1(true)
event_out_light	boolean	0(false), 1(true)
event_out_event_noti	boolean	0(false), 1(true)
event_out_boost	boolean	0(false), 1(true)

Event In ID

A B	Description	C D	Description
00	Motion Channel 1	00 ~ 07	Motion Region ID
01	Motion Channel 2		
02	Motion Channel 3		
03	Motion Channel 4		
05	Alarm Input	00	Alarm Input 1
		01	Alarm Input 2
06	Manual Trigger	00	Manual Trigger 1
		01	Manual Trigger 2
		02	Manual Trigger 3
		03	Manual Trigger 4
08	On Boot	00	N/A
09	Video Loss	00 ~ 04	Video Channel
10	Network Loss	00	N/A
11	Analytic	00	Motion
		01	Tracking
		02	Cross
		03	Abandon
		04	Removal
		05	Enter

12	PIR	00	N/A
13	Audio Detection	00	N/A
17	AIHM	00	N/A
18	Time Trigger	00	Time Trigger 1
		01	Time Trigger 2
		02	Time Trigger 3
		03	Time Trigger 4

Examples

1) get the current setting

`http://"camera ipaddress"/event/map.php?app=get`

2) Method setup

add : `http://"camera`

`ipaddress"/event/event_pop.php?app=set&method=add&event_in_id=1000&event_name=test`
`&event_out_alarm=1`

modify : `http://"camera`

`ipaddress"/event/event_pop.php?app=set&method=modify&event_in_id=1000&event_name=test2`

remove : `http://"camera`

`ipaddress"/event/event_pop.php?app=set&method=remove&event_in_id=1000`

3) Event name setup

`http://"camera`

`ipaddress"/event/event_pop.php?app=set&method=add&event_in_id=1000&event_name=test`
`&event_out_alarm=1`

`http://"camera`

`ipaddress"/event/event_pop.php?app=set&method=modify&event_in_id=1000&event_name=test2`

4) Event out SMTP setup

`http://"camera`

`ipaddress"/event/event_pop.php?app=set&method=add&event_in_id=0500&event_name=test`
`&event_out_smtp=1&event_out_smtp_en1=1&event_out_smtp_en2=1&event_out_smtp_title=test`
`&event_out_smtp_msg=testmsg`

`http://"camera`

`ipaddress"/event/event_pop.php?app=set&method=modify&event_in_id=0500&event_name=test`
`&event_out_smtp=1&event_out_smtp_en1=1&event_out_smtp_en2=1&event_out_smtp_title=test`
`&event_out_smtp_msg=testmsg`

5) Event out alarm setup

`http://"camera`

`ipaddress"/event/event_pop.php?app=set&method=add&event_in_id=0500&event_name=test`
`&event_out_alarm=1`

`http://"camera`

`ipaddress"/event/event_pop.php?app=set&method=modify&event_in_id=0500&event_name=test`
`&event_out_alarm=1`

6) Event out FTP setup

http://"camera
ipaddress"/event/event_pop.php?app=set&method=add&event_in_id=0500&event_name=test
&event_out_ftp=1

http://"camera
ipaddress"/event/event_pop.php?app=set&method=modify&event_in_id=0500&event_name=t
est&event_out_ftp=1

* If event_out_ftp is 1 and the camera is T-series, only event_out_ftp is set instead of
event_out_ftp_server1.

7) Event out FTP Server setup

http://"camera
ipaddress"/event/event_pop.php?app=set&method=add&event_in_id=0500&event_name=test
&event_out_ftp_server1=1

http://"camera
ipaddress"/event/event_pop.php?app=set&method=modify&event_in_id=0500&event_name=t
est&event_out_ftp_server1=1

http://"camera
ipaddress"/event/event_pop.php?app=set&method=add&event_in_id=0500&event_name=test
&event_out_ftp_server2=1

http://"camera
ipaddress"/event/event_pop.php?app=set&method=modify&event_in_id=0500&event_name=t
est&event_out_ftp_server2=1

http://"camera
ipaddress"/event/event_pop.php?app=set&method=add&event_in_id=0500&event_name=test
&event_out_ftp_server3=1

http://"camera
ipaddress"/event/event_pop.php?app=set&method=modify&event_in_id=0500&event_name=t
est&event_out_ftp_server3=1

http://"camera
ipaddress"/event/event_pop.php?app=set&method=add&event_in_id=0500&event_name=test
&event_out_ftp_server4=1

http://"camera
ipaddress"/event/event_pop.php?app=set&method=modify&event_in_id=0500&event_name=t
est&event_out_ftp_server4=1

8) Event out HTTP notification setup

http://"camera
ipaddress"/event/event_pop.php?app=set&method=add&event_in_id=0500&event_name=test
&event_out_http=1&event_out_http_msg=test

http://"camera
ipaddress"/event/event_pop.php?app=set&method=modify&event_in_id=0500&event_name=t
est&event_out_http=1&event_out_http_msg=test

9) Event out audio alert setup

http://"camera
ipaddress/event/event_pop.php?app=set&method=add&event_in_id=0500&event_name=test&
event_out_audio=1&event_out_audio_file=1

http://"camera
ipaddress/event/event_pop.php?app=set&method=modify&event_in_id=0500&event_name=te
st&event_out_audio=1&event_out_audio_file=2

10) Event out preset setup

http://"camera

ipaddress"/event/event_pop.php?app=set&method=add&event_in_id=0500&event_name=test
&event_out_preset=1&event_out_preset_num=10&event_out_preset_home=1

http://"camera

ipaddress"/event/event_pop.php?app=set&method=modify&event_in_id=0500&event_name=t
est&event_out_preset=1&event_out_preset_num=20&event_out_preset_home=0

11) Event out record setup

http://"camera

ipaddress"/event/event_pop.php?app=set&method=add&event_in_id=0500&event_name=test
&event_out_record=1

http://"camera

ipaddress"/event/event_pop.php?app=set&method=modify&event_in_id=0500&event_name=t
est&event_out_record=1

12) Event out event push setup

http://"camera

ipaddress"/event/event_pop.php?app=set&method=add&event_in_id=0500&event_name=test
&event_out_event_push=1

http://"camera

ipaddress"/event/event_pop.php?app=set&method=modify&event_in_id=0500&event_name=t
est&event_out_event_push=1

13) Event out light setup

http://"camera

ipaddress"/event/event_pop.php?app=set&method=add&event_in_id=0500&event_name=test
&event_out_light=1

http://"camera

ipaddress"/event/event_pop.php?app=set&method=modify&event_in_id=0500&event_name=t
est&event_out_light=1

14) Event out event notification setup

http://"camera

ipaddress"/event/event_pop.php?app=set&method=add&event_in_id=0500&event_name=test
&event_out_event_noti=1

http://"camera

ipaddress"/event/event_pop.php?app=set&method=modify&event_in_id=0500&event_name=t
est&event_out_event_noti=1

15) Event out boost setup

http://"camera

ipaddress"/event/event_pop.php?app=set&method=add&event_in_id=0500&event_name=test
&event_out_boost=1

http://"camera

ipaddress"/event/event_pop.php?app=set&method=modify&event_in_id=0500&event_name=t
est&event_out_boost=1

16) setup all Maps at once (in case of Error on individual Map setup)

In some F/W versions, individual Map setup may not be supported.

http://"camera

ipaddress"/event/event_pop.php?app=set&method=add&event_in_id=0500&event_name=test&event_out_smtp=1&event_out_smtp_en1=1&event_out_smtp_title=test&event_out_smtp_msg=testmsg&event_out_alarm=1&event_out_ftp=1&event_out_http=1&event_out_http_msg=test&event_out_audio=1&event_out_audio_file=1&event_out_preset=1&event_out_preset_num=10&event_out_preset_home=1&event_out_record=1&event_out_event_push=1&event_out_light=1&event_out_event_noti=1&event_out_boost=1

http://"camera

ipaddress"/event/event_pop.php?app=set&method=modify&event_in_id=0500&event_name=test&event_out_smtp=1&event_out_smtp_en1=1&event_out_smtp_title=test&event_out_smtp_msg=testmsg&event_out_alarm=1&event_out_ftp=1&event_out_http=1&event_out_http_msg=test&event_out_audio=1&event_out_audio_file=1&event_out_preset=1&event_out_preset_num=10&event_out_preset_home=1&event_out_record=1&event_out_event_push=1&event_out_light=1&event_out_event_noti=1&event_out_boost=1

Caution

You must check the following values in the response to http://"camera ipaddress"/config.txt

Item	Value	Explanation
alarm_in	integer	Number of Event In Alarm
alarm_out	integer	Number of Event Out Alarm
options	VMD	Event In Motion available
	ALARM_IN	Event In Alarm In available
	MANUAL_TRIGGER	Event In Manual Trigger available
	ONBOOT	Event In On Boot available
	VIDEO_LOSS	Event In Video Loss available
	NETWORK_LOSS	Event In Network Loss available
	PRI	Event In PIR available
	AUDIO_DETECTION	Event In Audio Detection available
	TIME_TRIGGER	Event In Time Trigger available
	AIHM	Event In AIHM available
	SMTP	Event Out SMTP available
	ALARM_OUT	Event Out Alarm Out available
	FTP	Event Out FTP available
	HTTP_NOTIFY	Event Out HTTP Notification available
	AUD_ALERT	Event Out Audio Alert available
PTZ, BUILTIN_PTZ	Event Out Preset available	
RECORD	Event Out Record available	
EVENT_PUSH	Event Out Event Push available	
LIGHT	Event Out Light available	
EVENT_NOTI	Event Out Event Notification available	
BOOST	Event Out Boost available	

Event – Event Push:

Version: 1.00e
Date: 2014. 03. 18

Revision History

Version	Date	Comment
1.00	2014-01-27	Initial version
1.00e	2014-03-18	English Translation

Introduction

This Chapter defines the detailed setup procedure for the Event Push.

Event Push URI

`http://"camera ipaddress"/event/event_push.php`

Event Push Parameter

Parameter	Type	Value
event_push_enable	boolean	0 : Off, 1 : On
event_push_stream	integer	1 : Stream1, 2 : Stream2, 3 : Stream3
event_push_pre_time	integer	0 – 10
event_push_post_time	integer	0 – 60
event_push_server	string	Server URL
event_push_port	integer	1 – 65535
event_push_user	string	User name
event_push_pass	string	User password

Examples

1) Get the current setting

`http://"camera ipaddress"/event/event_push.php?app=get`

2) Event Push setup

`http://"camera ipaddress"/event/event_push.php?app=set&event_push_enable=1`
`http://"camera ipaddress"/event/event_push.php?app=set&event_push_enable=0`

3) Event Push Stream Type setup

`http://"camera ipaddress"/event/event_push.php?app=set&event_push_stream=1`
`http://"camera ipaddress"/event/event_push.php?app=set&event_push_stream=2`
`http://"camera ipaddress"/event/event_push.php?app=set&event_push_stream=3`

4) Event Push Pre-event setup

http://"camera ipaddress"/event/event_push.php?app=set&event_push_pre_time=3

http://"camera ipaddress"/event/event_push.php?app=set&event_push_pre_time=11

* If the event_push_pre_time is assigned to a value bigger than 10, the value is set to the maximum value (10).

* If the event_push_pre_time is assigned to a value less than 0, the value is set to the minimum value (0).

5) Event Push Post-event setup

http://"camera ipaddress"/event/event_push.php?app=set&event_push_post_time=10

http://"camera ipaddress"/event/event_push.php?app=set&event_push_post_time=70

* If the event_push_post_time is assigned to a value bigger than 60, the value is set to the maximum value (60).

* If the event_push_post_time is assigned to a value less than 0, the value is set to the minimum value (0).

6) Event Push URL setup

http://"camera ipaddress"/event/event_push.php?app=set&event_push_server=10.0.2.12

7) Event Push Port setup

http://"camera ipaddress"/event/event_push.php?app=set&event_push_port=8080

http://"camera ipaddress"/event/event_push.php?app=set&event_push_port=62311

* If the event_push_port is assigned to a value bigger than 65535, (Error: 400) is returned.

* If the event_push_port is assigned to a value less than 1, (Error: 400) is returned.

8) Event Push User name setup

http://"camera ipaddress"/event/event_push.php?app=set&event_push_user=admin

9) Event Push Password setup

http://"camera ipaddress"/event/event_push.php?app=set&event_push_pass=admin

Caution

You must check the following values in the response to http://"camera ipaddress"/config.txt

Item	Value	Explanation
options	EVENT_PUSH	Event Push available

Event – Face Detector:

Version : 1.00e
Date : 2015. 01. 29

Revision History

Version	Date	Comment
1.00	2015-01-28	Initial version
1.00e	2015-01-29	English Translation

Introduction

This Chapter defines the setup procedure for the Face Detector.

Face Detector URI

`http://"ipaddress"/event/face_detector.php`

Face Detector Parameter

Parameter	Type	Value
<code>fdetect_enable</code>	boolean	0 : disable, 1 : enable
<code>fdetect_threshold</code>	integer	1 ~ 100

Examples

1) get the current setting

`http://"ipaddress"/event/face_detector.php?app=get`

2) face detector enable setup

`http://"ipaddress"/event/tampering.php?app=set&fdetect_enable=0 (disable)`

`http://"ipaddress"/event/tampering.php?app=set&fdetect_enable=1 (enable)`

3) threshold setup

`http://"ipaddress"/event/tampering.php?app=set&fdetect_threshold=1`

`http://"ipaddress"/event/tampering.php?app=set&fdetect_threshold=50`

`http://"ipaddress"/event/tampering.php?app=set&fdetect_threshold=100`

4) setup face detector at once

`http://"ipaddress"/event/tampering.php?app=set&fdetect_enable=1&fdetect_threshold=50`

Event – FTP & JPEG:

Version: 1.01e
Date: 2015. 05. 21

Revision History

Version	Date	Comment
1.00	2014-02-11	Initial version
1.00e	2014-03-18	English Translation
1.01e	2015-05-21	FTP&JPEG renewal

Introduction

This Chapter defines the detailed setup procedure for the FTP & JPEG.

FTP & JPEG URI

http://”camera ipaddress”/event/ftp.php

FTP & JPEG Parameter

Parameter	Type	Value
ftp_enable	boolean	0 : Off, 1 : On
ftp_server_count	integer(ro)	Number of affordable FTP Servers
ftp_server	string	Server address (Deprecated)
ftp_port	integer	1 ~ 65535 (Deprecated)
ftp_mode	boolean	0 : Active Mode, 1 : Passive Mode (Deprecated)
ftp_user	string	User name (Deprecated)
ftp_pass	string	Password (Deprecated)
ftp_anonymous	boolean	0 : Identified, 1 : Anonymous (Deprecated)
jpg_pre_timeout	integer	0 ~ 30 (Deprecated)
jpg_pre_fps	integer	1 ~ 2 (Deprecated)
jpg_pst_timeout	integer	0 ~ 30 (Deprecated)
jpg_pst_fps	integer	1 ~ 2 (Deprecated)
jpg_base_name	string	Prefix file name (Deprecated)
jpg_suffix_name	integer	1 : Date/Time, 2 : Sequence Number (Deprecated)
ftp_path	string	Directory for uploading JPEG images (Deprecated)
ftp#_enable	boolean	0 : Off, 1 : On
ftp#_server	string	Server address
ftp#_port	integer	1 ~ 65535

ftp#_mode	boolean	0 : Active Mode, 1 : Passive Mode
ftp#_user	string	User name
ftp#_pass	string	Password
ftp#_anonymous	boolean	0 : Identified, 1 : Anonymous
ftp#_path	string	Directory for uploading JPEG images
ftp#_enable_time_folder	boolean	0 : Off, 1 : On
ftp#_time_folder_type	integer	1: Day, 2: Hour, 3: Minute
jpg#_pre_timeout	integer	0 ~ 30
jpg#_pre_fps	integer	1 ~ 2
jpg#_event_fps	integer	1 ~ 2
jpg#_post_timeout	integer	0 ~ 30
jpg#_post_fps	integer	1 ~ 2
jpg#_base_name	string	Prefix file name
jpg#_suffix_name	integer	1 : Date/Time, 2 : Sequence Number

* In order to support older version API, API without Server number is set to be number 1 server.

Examples

1) Get the current setting

`http://camera ipaddress/event/ftp.php?app=get`

2) FTP & JPEG setup

`http://camera ipaddress/event/ftp.php?app=set&ftp_enable=0`

`http://camera ipaddress/event/ftp.php?app=set&ftp_enable=1`

* If ftp_server_count is 1 and the camera is T-series, ftp1_enable is set together.

3) FTP Server usage setup

`http://camera ipaddress/event/ftp.php?app=set&ftp1_enable=0`

`http://camera ipaddress/event/ftp.php?app=set&ftp1_enable=1`

`http://camera ipaddress/event/ftp.php?app=set&ftp2_enable=0`

`http://camera ipaddress/event/ftp.php?app=set&ftp2_enable=1`

`http://camera ipaddress/event/ftp.php?app=set&ftp3_enable=0`

`http://camera ipaddress/event/ftp.php?app=set&ftp3_enable=1`

`http://camera ipaddress/event/ftp.php?app=set&ftp4_enable=0`

`http://camera ipaddress/event/ftp.php?app=set&ftp5_enable=1`

4) FTP & JPEG Server address setup

`http://camera ipaddress/event/ftp.php?app=set&ftp_server=10.0.2.12`

`http://camera ipaddress/event/ftp.php?app=set&ftp1_server=10.0.2.12`

`http://camera ipaddress/event/ftp.php?app=set&ftp2_server=10.0.2.13`

`http://camera ipaddress/event/ftp.php?app=set&ftp3_server=10.0.2.14`

http://camera ipaddress/event/ftp.php?app=set&ftp4_server=10.0.2.15

5) FTP & JPEG Port setup

http://camera ipaddress/event/ftp.php?app=set&ftp_port=8079
http://camera ipaddress/event/ftp.php?app=set&ftp1_port=8080
http://camera ipaddress/event/ftp.php?app=set&ftp2_port=8081
http://camera ipaddress/event/ftp.php?app=set&ftp3_port=8082
http://camera ipaddress/event/ftp.php?app=set&ftp4_port=8083

6) FTP & JPEG Passive mode setup

http://camera ipaddress/event/ftp.php?app=set&ftp_mode=0
http://camera ipaddress/event/ftp.php?app=set&ftp_mode=1
http://camera ipaddress/event/ftp.php?app=set&ftp1_mode=0
http://camera ipaddress/event/ftp.php?app=set&ftp1_mode=1
http://camera ipaddress/event/ftp.php?app=set&ftp2_mode=0
http://camera ipaddress/event/ftp.php?app=set&ftp2_mode=1
http://camera ipaddress/event/ftp.php?app=set&ftp3_mode=0
http://camera ipaddress/event/ftp.php?app=set&ftp3_mode=1
http://camera ipaddress/event/ftp.php?app=set&ftp4_mode=0
http://camera ipaddress/event/ftp.php?app=set&ftp4_mode=1

7) FTP & JPEG User name setup

http://camera ipaddress/event/ftp.php?app=set&ftp_user=admin
http://camera ipaddress/event/ftp.php?app=set&ftp1_user=admin
http://camera ipaddress/event/ftp.php?app=set&ftp2_user=admin
http://camera ipaddress/event/ftp.php?app=set&ftp3_user=admin
http://camera ipaddress/event/ftp.php?app=set&ftp4_user=admin

8) FTP & JPEG Password setup

http://camera ipaddress/event/ftp.php?app=set&ftp_pass=admin
http://camera ipaddress/event/ftp.php?app=set&ftp1_pass=admin
http://camera ipaddress/event/ftp.php?app=set&ftp2_pass=admin
http://camera ipaddress/event/ftp.php?app=set&ftp3_pass=admin
http://camera ipaddress/event/ftp.php?app=set&ftp4_pass=admin

9) FTP & JPEG Anonymous login setup

http://camera ipaddress/event/ftp.php?app=set&ftp_anonymous=0
http://camera ipaddress/event/ftp.php?app=set&ftp_anonymous=1
http://camera ipaddress/event/ftp.php?app=set&ftp1_anonymous=0
http://camera ipaddress/event/ftp.php?app=set&ftp1_anonymous=1
http://camera ipaddress/event/ftp.php?app=set&ftp2_anonymous=0
http://camera ipaddress/event/ftp.php?app=set&ftp2_anonymous=1
http://camera ipaddress/event/ftp.php?app=set&ftp3_anonymous=0
http://camera ipaddress/event/ftp.php?app=set&ftp3_anonymous=1
http://camera ipaddress/event/ftp.php?app=set&ftp4_anonymous=0
http://camera ipaddress/event/ftp.php?app=set&ftp4_anonymous=1

10) FTP & JPEG Remote directory setup

http://camera ipaddress/event/ftp.php?app=set&ftp_path=/home1
http://camera ipaddress/event/ftp.php?app=set&ftp1_path=/home1
http://camera ipaddress/event/ftp.php?app=set&ftp2_path=/home2

http://camera ipaddress/event/ftp.php?app=set&ftp3_path=/home3
http://camera ipaddress/event/ftp.php?app=set&ftp4_path=/home4

11) FTP & JPEG Time folder setup

http://camera ipaddress/event/ftp.php?app=set&ftp1_enable_time_folder=0
http://camera ipaddress/event/ftp.php?app=set&ftp1_enable_time_folder=1
http://camera ipaddress/event/ftp.php?app=set&ftp2_enable_time_folder=0
http://camera ipaddress/event/ftp.php?app=set&ftp2_enable_time_folder=1
http://camera ipaddress/event/ftp.php?app=set&ftp3_enable_time_folder=0
http://camera ipaddress/event/ftp.php?app=set&ftp3_enable_time_folder=1
http://camera ipaddress/event/ftp.php?app=set&ftp4_enable_time_folder=0
http://camera ipaddress/event/ftp.php?app=set&ftp4_enable_time_folder=1

12) FTP & JPEG JPEG Time folder type setup

http://camera ipaddress/event/ftp.php?app=set&ftp1_time_folder_type=0
http://camera ipaddress/event/ftp.php?app=set&ftp1_time_folder_type=1
http://camera ipaddress/event/ftp.php?app=set&ftp1_time_folder_type=2
http://camera ipaddress/event/ftp.php?app=set&ftp2_time_folder_type=0
http://camera ipaddress/event/ftp.php?app=set&ftp2_time_folder_type=1
http://camera ipaddress/event/ftp.php?app=set&ftp2_time_folder_type=2
http://camera ipaddress/event/ftp.php?app=set&ftp3_time_folder_type=0
http://camera ipaddress/event/ftp.php?app=set&ftp3_time_folder_type=1
http://camera ipaddress/event/ftp.php?app=set&ftp3_time_folder_type=2
http://camera ipaddress/event/ftp.php?app=set&ftp4_time_folder_type=0
http://camera ipaddress/event/ftp.php?app=set&ftp4_time_folder_type=1
http://camera ipaddress/event/ftp.php?app=set&ftp4_time_folder_type=2

13) FTP & JPEG JPEG Pre-event time setup

http://camera ipaddress/event/ftp.php?app=set&jpg_pre_timeout=5
http://camera ipaddress/event/ftp.php?app=set&jpg1_pre_timeout=5
http://camera ipaddress/event/ftp.php?app=set&jpg2_pre_timeout=5
http://camera ipaddress/event/ftp.php?app=set&jpg3_pre_timeout=5
http://camera ipaddress/event/ftp.php?app=set&jpg4_pre_timeout=5

14) FTP & JPEG JPEG Pre-event FPS setup

http://camera ipaddress/event/ftp.php?app=set&jpg_pre_fps=1
http://camera ipaddress/event/ftp.php?app=set&jpg_pre_fps=2
http://camera ipaddress/event/ftp.php?app=set&jpg1_pre_fps=1
http://camera ipaddress/event/ftp.php?app=set&jpg1_pre_fps=2
http://camera ipaddress/event/ftp.php?app=set&jpg2_pre_fps=1
http://camera ipaddress/event/ftp.php?app=set&jpg2_pre_fps=2
http://camera ipaddress/event/ftp.php?app=set&jpg3_pre_fps=1
http://camera ipaddress/event/ftp.php?app=set&jpg3_pre_fps=2
http://camera ipaddress/event/ftp.php?app=set&jpg4_pre_fps=1
http://camera ipaddress/event/ftp.php?app=set&jpg4_pre_fps=2

15) FTP & JPEG JPEG Event FPS setup

http://camera ipaddress/event/ftp.php?app=set&jpg1_event_fps=1
http://camera ipaddress/event/ftp.php?app=set&jpg1_event_fps=2
http://camera ipaddress/event/ftp.php?app=set&jpg2_event_fps=1
http://camera ipaddress/event/ftp.php?app=set&jpg2_event_fps=2

http://camera ipaddress/event/ftp.php?app=set&jpg3_event_fps=1
http://camera ipaddress/event/ftp.php?app=set&jpg3_event_fps=2
http://camera ipaddress/event/ftp.php?app=set&jpg4_event_fps=1
http://camera ipaddress/event/ftp.php?app=set&jpg4_event_fps=2

16) FTP & JPEG JPEG Post-event time setup

http://camera ipaddress/event/ftp.php?app=set&jpg_pst_timeout=5
http://camera ipaddress/event/ftp.php?app=set&jpg1_post_timeout=5
http://camera ipaddress/event/ftp.php?app=set&jpg2_post_timeout=5
http://camera ipaddress/event/ftp.php?app=set&jpg3_post_timeout=5
http://camera ipaddress/event/ftp.php?app=set&jpg4_post_timeout=5

17) FTP & JPEG JPEG Post-event FPS setup

http://camera ipaddress/event/ftp.php?app=set&jpg_pst_fps=1
http://camera ipaddress/event/ftp.php?app=set&jpg_pst_fps=2
http://camera ipaddress/event/ftp.php?app=set&jpg1_post_fps=1
http://camera ipaddress/event/ftp.php?app=set&jpg1_post_fps=2
http://camera ipaddress/event/ftp.php?app=set&jpg2_post_fps=1
http://camera ipaddress/event/ftp.php?app=set&jpg2_post_fps=2
http://camera ipaddress/event/ftp.php?app=set&jpg3_post_fps=1
http://camera ipaddress/event/ftp.php?app=set&jpg3_post_fps=2
http://camera ipaddress/event/ftp.php?app=set&jpg4_post_fps=1
http://camera ipaddress/event/ftp.php?app=set&jpg4_post_fps=2

18) FTP & JPEG JPEG Prefix file name setup

http://camera ipaddress/event/ftp.php?app=set&jpg_base_name=prefix_
http://camera ipaddress/event/ftp.php?app=set&jpg1_base_name=prefix_
http://camera ipaddress/event/ftp.php?app=set&jpg2_base_name=prefix_
http://camera ipaddress/event/ftp.php?app=set&jpg3_base_name=prefix_
http://camera ipaddress/event/ftp.php?app=set&jpg4_base_name=prefix_

19) FTP & JPEG JPEG Additional suffix setup

http://camera ipaddress/event/ftp.php?app=set&jpg_suffix_name=1
http://camera ipaddress/event/ftp.php?app=set&jpg_suffix_name=2
http://camera ipaddress/event/ftp.php?app=set&jpg1_suffix_name=1
http://camera ipaddress/event/ftp.php?app=set&jpg1_suffix_name=2
http://camera ipaddress/event/ftp.php?app=set&jpg2_suffix_name=1
http://camera ipaddress/event/ftp.php?app=set&jpg2_suffix_name=2
http://camera ipaddress/event/ftp.php?app=set&jpg3_suffix_name=1
http://camera ipaddress/event/ftp.php?app=set&jpg3_suffix_name=2
http://camera ipaddress/event/ftp.php?app=set&jpg4_suffix_name=1
http://camera ipaddress/event/ftp.php?app=set&jpg4_suffix_name=2

Caution

You must check the following values in the response to <http://camera ipaddress/config.txt>

Item	Value	Explanation
options	FTP	FTP & JPEG available

Event – Light:

Version: 1.00e
Date: 2014. 03. 17

Revision History

Version	Date	Comment
1.00	2014-01-27	Initial version
1.00e	2014-03-17	English Translation

Introduction

This Chapter defines the detailed setup procedure for the Light.

Light URI

`http://"camera ipaddress"/event/light.php`

Light Parameter

Parameter	Type	Value
light_enable	boolean	0 : Disable, 1 : Enable
light_level	integer	1 ~ 10
light_mode	integer	1 : light on until the end of Event In 2 : light on until the pre-defined time
light_time_select	string	<i>second, minute</i> : time unit
light_time	integer	1 or 2 or 3 or ... : Light time
light_night_enable	boolean	0 : Disable, 1 : Enable
light_inactivate	integer	1 : Off, 2 : Fade to off

* light_time, light_time_select, and light_night_enable are used only when Light_mode=2.

Examples

1) get the current setting

`http://"camera ipaddress"/event/light.php?app=get`

2) Light setup

`http://"camera ipaddress"/event/light.php?app=set&light_enable=0`

`http://"camera ipaddress"/event/light.php?app=set&light_enable=1`

3) Light brightness setup

`http://"camera ipaddress"/event/light.php?app=set&light_level=1`

`http://"camera ipaddress"/event/light.php?app=set&light_level=5`

`http://"camera ipaddress"/event/light.php?app=set&light_level=10`

4) Light mode & Light time setup

* In case of 'Keep activate during event', the light turns on for the duration of event in, and light_mode=1.

* In case of 'Keep activate for *Time*', the light turns on for setting time duration, which is explained below, irrespective of event in duration, and light_mode=2.

* In case of 'Operate only at night mode', the light_mode=2 works only, and detail explanation is in section 5).

* If the light_mode=2, the light turn on time duration is set via light_time and light_time_select.

- * `light_time_select` sets the time unit and `light_time` sets the time duration.
- * For example, `light_time=60` and `light_time_select=second` means 60seconds.
- * If `light_time` and `light_time_select` are not determined but `light_mode=2`, the previous setting values are used.
- * For `light_mode=1`, `light_time`, `light_time_select`, and `light_night_enable` are restored but not used.
- * Light mode setup example
http://camera ipaddress/event/light.php?app=set&light_mode=1
- * For `light_mode=2`, `light_time` and `light_time_select` a setup example is as follows.
http://camera ipaddress/event/light.php?app=set&light_mode=2&light_time=60&light_time_select=second
- a. `light_time_select` setup
http://camera ipaddress/event/light.php?app=set&light_mode=2&light_time_select=second
http://camera ipaddress/event/light.php?app=set&light_mode=2&light_time_select=minute
- b. `light_time` setup
http://camera ipaddress/event/light.php?app=set&light_mode=2&light_time=60

5) Operates only at night mode setup

- * This function turns the light on at night mode only, and setup via `light_night_enable`.
- * If `light_mode=1` and setup `light_night_enable`, it is restored but not used.
- * This function works for `light_mode=2` only, and setup example is as follows.
http://camera ipaddress/event/light.php?app=set&light_mode=2&light_night_enable=1

6) Inactivate setup

- * This setup determines the operation when the light turns off. `light_inactivate=0` is shut off and `light_inactivate=1` is fade off. Setup example is as follows.
http://camera ipaddress/event/light.php?app=set&light_inactivate=0
http://camera ipaddress/event/light.php?app=set&light_inactivate=1

Caution

You must check the following values in the response to <http://camera ipaddress/config.txt>

Item	Value	Explanation
options	LIGHT	Light available

Event – Manual Trigger:

Version: 1.00e
Date: 2014. 03. 18

Revision History

Version	Date	Comment
1.00	2014-02-11	Initial version
1.00e	2014-03-18	English Translation

Introduction

This Chapter defines the detailed setup procedure and operation for the Manual Trigger.

Manual Trigger Setup & Operation URI

`http://"camera ipaddress"/event/trigger.php`

Manual Trigger Setup Parameter

Parameter	Type	Value
trigger#_enable	boolean	0 : Off, 1 : On
trigger#_time	integer	1 – 180

* '#' is the trigger number and has value among 1, 2, 3, and 4.

Manual Trigger Operation Parameter

Parameter	Type	Value
make_trigger	integer	1, 2, 3, 4

Example

1) Manual Trigger setup

a) get the current setting

`http://"camera ipaddress"/event/trigger.php?app=get`

b) Manual Trigger On / Off

`http://"camera ipaddress"/event/trigger.php?app=set&trigger1_enable=1`

`http://"camera ipaddress"/event/trigger.php?app=set&trigger1_enable=0`

c) Manual Trigger time setup

`http://"camera ipaddress"/event/trigger.php?app=set&trigger1_time=5`

2) Manual Trigger operation

`http://"camera ipaddress"/event/trigger.php?app=set&make_trigger=1`

`http://"camera ipaddress"/event/trigger.php?app=set&make_trigger=2`

`http://"camera ipaddress"/event/trigger.php?app=set&make_trigger=3`

`http://"camera ipaddress"/event/trigger.php?app=set&make_trigger=4`

Caution

You must check the following values in the response to `http://"camera ipaddress"/config.txt`

Item	Value	Explanation
------	-------	-------------

total_manual_trigger options	4 MANUAL_TRIGG ER	total manual triggers available Manual Trigger setup and operation available
---------------------------------	-------------------------	---

Event – Motion:

Version: 1.01e
Date: 2014. 03. 18

Revision History

Version	Date	Comment
1.00	2013-12-11	Initial version
1.01	2014-01-13	Detail menu set-up update
1.01e	2014-03-18	English Translation

Introduction

This Chapter defines the detailed setup procedure for the Motion.

Event – Motion URI

<http://camera ipaddress/event/motion.php>

Event – Motion Parameter

Parameter	Type	Value
method	string	create, delete, modify, save
md_max_width	integer(ro)	Maximum Width for Motion setup
md_max_height	integer(ro)	Maximum Height for Motion setup
md_enable	boolean	0(Disable), 1(Enable)
md_day_night_enable	boolean	0(All Day), 1(Day & Night)
md_rgn_count	integer(ro)	Number of current Motion Event setting
md_rgn#_id	integer(ro)	Region ID
md_rgn#_name	string	Region Name
md_rgn#_type	integer	1(Include), 2(Exclude)
md_rgn#_thre	integer	1 ~ 100
md_rgn#_sen	integer(1 ~ 100
md_rgn#_time	integer	1 ~ 180
md_rgn#_rgntype	string	roi(Pixel Type), grid(Grid Type)
md_rgn#_left	integer	Left Pixel Position or Grid Number
md_rgn#_top	integer	Top Pixel Position or Grid Number
md_rgn#_right	integer	Right Pixel Position or Grid Number
md_rgn#_bottom	integer	Bottom Pixel Position or Grid Number
md_rgn#_night_thre	integer	1 ~ 100
md_rgn#_night_sen	integer	1 ~ 100
md_rgn#_night_time	integer	1 ~ 180
md_rgn_id	integer	Region ID

md_rgn_name	string	Region Name
md_rgn_type	integer	1(Include), 2(Exclude)
md_rgn_thre	integer	1 ~ 100
md_rgn_sen	integer(1 ~ 100
md_rgn_time	integer	1 ~ 180
md_rgn_rgntype	string	roi(Pixel Type), grid(Grid Type)
md_rgn_left	integer	Left Pixel Position or Grid Number
md_rgn_top	integer	Top Pixel Position or Grid Number
md_rgn_right	integer	Right Pixel Position or Grid Number
md_rgn_bottom	integer	Bottom Pixel Position or Grid Number
md_rgn_night_thre	integer	1 ~ 100
md_rgn_night_sen	integer	1 ~ 100

Examples (latest F/W)

1) get the current setting

`http://"camera ipaddress"/event/motion.php?app=get`

2) Motion setup

`http://"camera ipaddress"/event/motion.php?app=set&md_enable=1`

`http://"camera ipaddress"/event/motion.php?app=set&md_enable=0`

3) Motion Day & Night setup

`http://"camera ipaddress"/event/motion.php?app=set&md_day_night_enable=1`

`http://"camera ipaddress"/event/motion.php?app=set&md_day_night_enable=0`

4) Motion Region create

`http://"camera ipaddress"/event/motion.php?app=set&method=create`

* If Parameters are null, a region is created as the whole area with default setting.

If md_day_night_enable=0, `http://"camera`

`ipaddress"/event/motion.php?app=set&method=create&md_rgn_name=test&md_rgn_type=1&md_rgn_thre=10&md_rgn_sen=30&md_rgn_time=5&md_rgn_left=2&md_rgn_top=2&md_rgn_right=6&md_rgn_bottom=6`

If md_day_night_enable=1, `http://"camera`

`ipaddress"/event/motion.php?app=set&method=create&md_rgn_name=test&md_rgn_type=1&md_rgn_thre=10&md_rgn_sen=30&md_rgn_time=5&md_rgn_left=2&md_rgn_top=2&md_rgn_right=6&md_rgn_bottom=6&md_rgn_night_thre=5&md_rgn_night_sen=10`

* You can create one region using method=create at a time.

* You should assign values for left, top, right, and bottom for region creation. (If any one of those values are missing, exceeds the maximum value, or violates the following condition, the created region becomes the whole area.)

** Condition: the value of left cannot exceed that of right, and the value of top cannot exceed that of bottom.

* The other values set to default if missing..

* If md_day_night_enable=0 and you assign values to md_rgn_night_thre and md_rgn_night_sen, the assigned values are restored but not used.

* Detail setting examples are as follows. They can be set individually as in the following example or can be set in combination as in the above.

a. Region Name setup while Motion Region Create

`http://camera ipaddress/event/motion.php?app=set&method=create&md_rgn_name=test`

b. Region Type setup while Motion Region Create

`http://camera ipaddress/event/motion.php?app=set&method=create&md_rgn_type=1`

`http://camera ipaddress/event/motion.php?app=set&method=create&md_rgn_type=2`

* md_rgn_type 1 means include region of Motion Event, and 2 means exclude region.

* region_type is defined at Create and cannot be changed.

c. Region Threshold setup while Motion Region Create

`http://camera ipaddress/event/motion.php?app=set&method=create&md_rgn_thre=25`

`http://camera ipaddress/event/motion.php?app=set&method=create&md_rgn_thre=100`

d. Region Sensitivity setup while Motion Region Create

`http://camera ipaddress/event/motion.php?app=set&method=create&md_rgn_sen=25`

`http://camera ipaddress/event/motion.php?app=set&method=create&md_rgn_sen=100`

e. Region Dwell time setup while Motion Region Create

`http://camera ipaddress/event/motion.php?app=set&method=create&md_rgn_time=60`

`http://camera ipaddress/event/motion.php?app=set&method=create&md_rgn_time=150`

f. Region Night Threshold setup while Motion Region Create

`http://camera ipaddress/event/motion.php?app=set&method=create&md_rgn_night_thre=25`

`http://camera ipaddress/event/motion.php?app=set&method=create&md_rgn_night_thre=100`

g. Region Night Sensitivity setup while Motion Region Create

`http://camera ipaddress/event/motion.php?app=set&method=create&md_rgn_night_sen=25`

`http://camera ipaddress/event/motion.php?app=set&method=create&md_rgn_night_sen=100`

5) Motion Region Parameter modify

Single Region Parameter modify : `http://camera`

`ipaddress/event/motion.php?app=set&method=modify&md_rgn_id=1&(Parameters to modify)`

* Each region is assigned a unique id when created.

* If you want to modify a region, you must make a request with the assigned id.

* If you change the position of a region, the value of left cannot exceed that of right, and the value of top cannot exceed that of bottom.

* For the single region modify, you should use Parameters without '#' like md_rgn_name.

Detail setting examples are as follows. They can be set individually as in the following example or can be set in combination as the above.

a. Region Name setup for single region modify

`http://camera`

`ipaddress/event/motion.php?app=set&method=modify&md_rgn_id=1&md_rgn_name=test`

`http://camera`

`ipaddress/event/motion.php?app=set&method=modify&md_rgn_id=3&md_rgn_name=test`

b. Region Threshold setup for single region modify

http://camera
ipaddress"/event/motion.php?app=set&method=modify&md_rgn_id=1&md_rgn_thre=25
http://camera
ipaddress"/event/motion.php?app=set&method=modify&md_rgn_id=3&md_rgn_thre=100

c. Region Sensitivity setup for single region modify

http://camera
ipaddress"/event/motion.php?app=set&method=modify&md_rgn_id=1&md_rgn_sen=25
http://camera
ipaddress"/event/motion.php?app=set&method=modify&md_rgn_id=3&md_rgn_sen=100

d. Region Dwell time setup for single region modify

http://camera
ipaddress"/event/motion.php?app=set&method=modify&md_rgn_id=1&md_rgn_time=60
http://camera
ipaddress"/event/motion.php?app=set&method=modify&md_rgn_id=4&md_rgn_time=150

e. Region Night Threshold setup for single region modify

http://camera
ipaddress"/event/motion.php?app=set&method=modify&md_rgn_id=1&md_rgn_night_thre
=25
http://camera
ipaddress"/event/motion.php?app=set&method=modify&md_rgn_id=2&md_rgn_night_thre
=100

f. Region Night Sensitivity setup for single region modify

http://camera
ipaddress"/event/motion.php?app=set&method=modify&md_rgn_id=1&md_rgn_night_sen
=25
http://camera
ipaddress"/event/motion.php?app=set&method=modify&md_rgn_id=4&md_rgn_night_sen
=100

Multi Region Parameter modify : http://camera

ipaddress"/event/motion.php?app=set&method=modify&md_rgn1_name=test2&md_rgn2_ti
me=150&md_rgn3_right=8

- * If you want to modify multiple regions, you must set with combination of the assigned id's.
- * If one of the IDs in set command is not an assigned an id, the operation excludes that id and set the rest.
- * For the multiple region modify, you should use Parameters with '#' like md_rgn#_name.
- * If you use Parameters for single region modify and multiple region modify at the same time, Parameters for single region modify are ignored.

Detail setting examples are as follows. They can be set individually as in the following example or can be set in combination as the above

a. Region Name setup for multiple region modify

http://camera
ipaddress"/event/motion.php?app=set&method=modify&md_rgn1_name=test&md_rgn3_na
me=first

http://camera
ipaddress"/event/motion.php?app=set&method=modify&md_rgn1_name=second&md_rgn4_name=first

b. Region Threshold setup for multiple region modify

http://camera
ipaddress"/event/motion.php?app=set&method=modify&md_rgn3_thre=25&md_rgn4_thre=50

http://camera
ipaddress"/event/motion.php?app=set&method=modify&md_rgn2_thre=100&md_rgn3_thre=15

c. Region Sensitivity setup for multiple region modify

http://camera
ipaddress"/event/motion.php?app=set&method=modify&md_rgn3_sen=25&md_rgn1_sen=50

http://camera
ipaddress"/event/motion.php?app=set&method=modify&md_rgn4_sen=100&md_rgn1_sen=27

d. Region Dwell Time setup for multiple region modify

http://camera
ipaddress"/event/motion.php?app=set&method=modify&md_rgn2_time=60&md_rgn1_time=20

http://camera
ipaddress"/event/motion.php?app=set&method=modify&md_rgn1_time=150&md_rgn2_time=50

e. Region Night Threshold setup for multiple region modify

http://camera
ipaddress"/event/motion.php?app=set&method=modify&md_rgn2_night_thre=25&md_rgn1_night_thre=76

http://camera
ipaddress"/event/motion.php?app=set&method=modify&md_rgn1_night_thre=100&md_rgn3_night_thre=70

f. Region Night Sensitivity setup for multiple region modify

http://camera
ipaddress"/event/motion.php?app=set&method=modify&md_rgn3_night_sen=25&md_rgn1_night_sen=66

http://camera
ipaddress"/event/motion.php?app=set&method=modify&md_rgn2_night_sen=100&md_rgn4_night_sen=25

6) Motion Region remove

http://camera ipaddress"/event/motion.php?app=set&method=delete&md_rgn_id=1

* Each region is assigned a unique id when created.

* If you want to delete a region, you must request it with the assigned id.

Examples (old F/W)

1) get the current setting

`http://"camera ipaddress"/event/motion.php?app=get`

2) Motion setup

`http://"camera ipaddress"/event/motion.php?app=set&method=save&md_enable=1`

`http://"camera ipaddress"/event/motion.php?app=set&method=save&md_enable=0`

3) Motion Day & Night setup

`http://"camera ipaddress"/event/motion.php?app=set&method=save&md_day_night_enable=1`

`http://"camera ipaddress"/event/motion.php?app=set&method=save&md_day_night_enable=0`

4) Motion Region create

`http://"camera`

`ipaddress"/event/motion.php?app=set&method=create&md_rgn_name=New&md_rgn_type=1&md_rgn_left=1&md_rgn_top=1&md_rgn_right=5&md_rgn_bottom=4`

5) Motion Region modify

`http://"camera`

`ipaddress"/event/motion.php?app=set&method=modify&md_rgn_id=4&md_rgn_thre=50&md_rgn_sen=20&md_rgn_time=30`

* Each region is assigned a unique id when created.

* If you want to modify a region, you must request it with the assigned id.

6) Motion Region remove

`http://"camera ipaddress"/event/motion.php?app=set&method=delete&md_rgn_id=1`

* Each region is assigned a unique id when created.

* If you want to delete a region, you must request it with the assigned id.

7) Motion modify all

(For old F/W, the following method is recommended than `method=modify`.)

Request :

`http://"ipaddress"/event/motion.php?app=get`

Response :

`res=200&http_port=80&https_port=443&md_enable=1&md_rgn_count=3&md_rgn1_id=2&md_rgn1_name=New(1)&md_rgn1_type=1&md_rgn1_thre=2&md_rgn1_sen=55&md_rgn1_time=3&md_rgn1_rgntype=grid&md_rgn1_left=1&md_rgn1_top=3&md_rgn1_right=3&md_rgn1_bottom=6&md_rgn2_id=3&md_rgn2_name=New(2)&md_rgn2_type=1&md_rgn2_thre=2&md_rgn2_sen=55&md_rgn2_time=3&md_rgn2_rgntype=grid&md_rgn2_left=7&md_rgn2_top=4&md_rgn2_right=9&md_rgn2_bottom=6&md_rgn3_id=4&md_rgn3_name=New&md_rgn3_type=1&md_rgn3_thre=50&md_rgn3_sen=20&md_rgn3_time=30&md_rgn3_rgntype=grid&md_rgn3_left=1&md_rgn3_top=1&md_rgn3_right=5&md_rgn3_bottom=4&`

Request :

`http://"ipaddress"/event/motion.php?app=set&method=save&md_enable=0&md_rgn_count=3&md_rgn1_id=2&md_rgn1_name=New(1)&md_rgn1_type=1&md_rgn1_thre=2&md_rgn1_sen=44&md_rgn1_time=3&md_rgn1_rgntype=grid&md_rgn1_left=1&md_rgn1_top=3&md_rgn1_right=3&md_rgn1_bottom=6&md_rgn2_id=3&md_rgn2_name=New(2)&md_rgn2_type=1&md_rgn2_thre=2&md_rgn2_sen=55&md_rgn2_time=3&md_rgn2_rgntype=grid&md_rgn2_left=7&md_rgn2_top=4&md_rgn2_right=9&md_rgn2_bottom=6&md_rgn3_id=4&md_rgn3_name=New(3)&md_rgn3_type=1&md_rgn3_thre=50&md_rgn3_sen=20&md_rgn3_time=30&md_rgn3_rgntype=grid&md_rgn3_left=1&md_rgn3_top=1&md_rgn3_right=5&md_rgn3_bottom=4&`

rgn3_name=New&md_rgn3_type=1&md_rgn3_thre=50&md_rgn3_sen=20&md_rgn3_time=30&md_rgn3_rgntype=grid&md_rgn3_left=1&md_rgn3_top=1&md_rgn3_right=4&md_rgn3_bottom=4&

Response :

res=200&ch=1&md_enable=0&md_rgn_count=3&md_rgn1_id=2&md_rgn1_name=New(1)&md_rgn1_type=1&md_rgn1_thre=2&md_rgn1_sen=44&md_rgn1_time=3&md_rgn1_rgntype=grid&md_rgn1_left=1&md_rgn1_top=3&md_rgn1_right=3&md_rgn1_bottom=6&md_rgn2_id=3&md_rgn2_name=New(2)&md_rgn2_type=1&md_rgn2_thre=2&md_rgn2_sen=55&md_rgn2_time=3&md_rgn2_rgntype=grid&md_rgn2_left=7&md_rgn2_top=4&md_rgn2_right=9&md_rgn2_bottom=6&md_rgn3_id=4&md_rgn3_name=New&md_rgn3_type=1&md_rgn3_thre=50&md_rgn3_sen=20&md_rgn3_time=30&md_rgn3_rgntype=grid&md_rgn3_left=1&md_rgn3_top=1&md_rgn3_right=4&md_rgn3_bottom=4&

- * As for the above, method=save means app=get and then set with response.
- * In the save operation, you must send current information as a whole, otherwise the parameter not transmitted will be deleted.
- * In Motion setup or Motion Day & Night setup, you need to use the save operation, so be careful not to delete current information.

Caution

You must check the following values in the response to http://camera_ipaddress/config.txt

Item	Value	Explanation
options	VMD	Motion Event function available
	DAY_NIGHT	Motion Day & Night function available

Event – Network Loss:

Version: 1.00e
Date: 2014. 03. 17

Revision History

Version	Date	Comment
1.00	2014-01-29	Initial version
1.00e	2014-03-17	English Translation

Introduction

This Chapter defines the detailed setup procedure for the Network Loss.

Network Loss URI

<http://camera ipaddress/event/netloss.php>

Network Loss Parameter

Parameter	Type	Value
netloss_enable	boolean	0 : Disable, 1 : Enable
netloss_time	integer	1~180

Examples

1) Get the current setting

<http://camera ipaddress/event/netloss.php?app=get>

2) Network Loss setup

http://camera ipaddress/event/netloss.php?app=set&netloss_enable=0

http://camera ipaddress/event/netloss.php?app=set&netloss_enable=1

3) Network Loss dwell time setup

http://camera ipaddress/event/netloss.php?app=set&netloss_time=1

http://camera ipaddress/event/netloss.php?app=set&netloss_time=180

Caution

You must check the following values in the response to <http://camera ipaddress/config.txt>

Item	Value	Explanation
options	NETWORK_LOSS	Network Loss function available

Event –Notification Server:

Version : 1.01e
Date : 2015. 08. 25

Revision History

Version	Date	Comment
1.00	2014-08-28	Initial version
1.00e	2015-02-06	English Translation
1.01e	2015-08-24	Method field add

Introduction

This Chapter defines the detailed setup procedure for the Notification Server.

Notification Server URI

`http://"camera ipaddress"/event/notification_server.php`

Notification Server Parameter

Parameter	Type	Value
noti_srv_enable	boolean	0 : Disable, 1 : Enable
noti_srv_type	string	HTTP, HTTPS, TCP, UDP
noti_srv_method	string	GET, SET
noti_srv_server	string	Server URL
noti_srv_port	integer	1 – 65535
noti_srv_user	string	User name
noti_srv_pass	string	User password
method	string	“test” : For use HTTP Server Test only
noti_srv_msg	string	Message

Examples

1) get the current setting

`http://"camera ipaddress"/event/notification_server.php?app=get`

2) Notification Server setup

`http://"camera ipaddress"/event/notification_server.php?app=set¬i_srv_enable=1`

`http://"camera ipaddress"/event/notification_server.php?app=set¬i_srv_enable=0`

3) Notification Server Type setup

`http://"camera ipaddress"/event/notification_server.php?app=set¬i_srv_type=HTTP`

`http://"camera ipaddress"/event/notification_server.php?app=set¬i_srv_type=HTTPS`

`http://"camera ipaddress"/event/notification_server.php?app=set¬i_srv_type=TCP`

`http://"camera ipaddress"/event/notification_server.php?app=set¬i_srv_type=UDP`

4) Notification Server Method setup

http://camera ipaddress/event/http_server.php?app=set¬i_srv_method=GET
http://camera ipaddress/event/http_server.php?app=set¬i_srv_method=POST

5) Notification Server URL setup

http://camera ipaddress/event/http_server.php?app=set¬i_srv_server=192.168.xxx.xxx
http://camera ipaddress/event/http_server.php?app=set¬i_srv_server=www.xxx.com
http://camera
ipaddress/event/http_server.php?app=set¬i_srv_server=http://192.168.xxx.xxx/
event.php

6) Notification Server Port setup

http://camera ipaddress/event/notification_server.php?app=set¬i_srv_port=80
* If event_noti_port is set to bigger number than 65535, (Error: 400) is returned.
* If event_noti_port is set to smaller number than 1, (Error: 400) is returned.

7) Notification Server user setup

http://camera ipaddress/event/http_server.php?app=set¬i_srv_user=user ID

8) Notification Server password setup

http://camera ipaddress/event/http_server.php?app=set¬i_srv_pass=user PW

7) Notification Server Test

In case of method=test, http://camera
ipaddress/event/http_server.php?app=set&method=test¬i_srv_enable=1¬i_srv_type=H
TTP¬i_srv_method=POST¬i_srv_server=192.168.xxx.xxx¬i_srv_port=80¬i_sr
v_msg=hello
* If the user included “method=test” in URI, the user must include noti_srv_enable,
noti_srv_server, noti_srv_port, and noti_srv_msg.
* If method=test, noti_srv_enable must be Enabled.
* On connecting Notification Server, the user may include noti_srv_user and noti_srv_pass if
necessary.

Caution

You must check the following values in the response in http://camera ipaddress/config.txt

Item	Value	Description
options	NOTIFY_SERVER	Notification Server available

Notification Server setup must include the “noti_srv_port” parameter.

“noti_srv_server” parameter does not allow expressions such as “http://10.0.2.12:port_number”.

“noti_srv_type” parameter can be composed of either upper case letter and/or lower case letter.

Event – On Boot:

Version: 1.00e
Date: 2014. 03. 18

Revision History

Version	Date	Comment
1.00	2014-01-23	Initial version
1.00e	2014-03-18	English Translation

Introduction

This Chapter defines the detailed setup procedure for the On boot.

On Boot URI

`http://"camera ipaddress"/event/onboot.php`

On Boot Parameter

Parameter	Type	Value
onboot_enable	boolean	0 : Disable, 1 : Enable
onboot_time	integer	1 ~ 180

Examples

1) get the current setting

`http://"camera ipaddress"/event/onboot.php?app=get`

2) On Boot setup

`http://"camera ipaddress"/event/onboot.php?app=set&onboot_enable=0`

`http://"camera ipaddress"/event/onboot.php?app=set&onboot_enable=1`

3) On Boot dwell time setup

`http://"camera ipaddress"/event/onboot.php?app=set&onboot_time=1`

`http://"camera ipaddress"/event/onboot.php?app=set&onboot_time=180`

Caution

You must check the following values in the response to `http://"camera ipaddress"/config.txt`

Item	Value	Explanation
options	ONBOOT	On Boot function available

Event – PIR:

Version: 1.00e
Date: 2014. 03. 17

Revision History

Version	Date	Comment
1.00	2014-02-05	Initial version
1.00e	2014-03-17	English Translation

Introduction

This Chapter defines the detailed setup procedure for the PIR.

PIR URI

`http://"camera ipaddress"/event/pir.php`

PIR Parameter

Parameter	Type	Value
pir_enable	boolean	0 : Disable, 1 : Enable
pir_level	integer	1 : Low, 2 : Middle, 3 : High
pir_time	integer	1~180

Examples

1) Get the current setting

`http://"camera ipaddress"/event/pir.php?app=get`

2) PIR setup

`http://"camera ipaddress"/event/pir.php?app=set&pir_enable=0`

`http://"camera ipaddress"/event/pir.php?app=set&pir_enable=1`

3) PIR sensitivity level setup

`http://"camera ipaddress"/event/pir.php?app=set&pir_level=1 (Low)`

`http://"camera ipaddress"/event/pir.php?app=set&pir_level=2 (Middle)`

`http://"camera ipaddress"/event/pir.php?app=set&pir_level=3 (High)`

4) PIR dwell time setup

`http://"camera ipaddress"/event/pir.php?app=set&pir_time=1`

`http://"camera ipaddress"/event/pir.php?app=set&pir_time=180`

Caution

You must check the following values in the response to `http://"camera ipaddress"/config.txt`

Item	Value	Explanation
options	PIR	PIR available

Event – PTZ Preset:

Version: 1.00e
Dat : 2014. 03. 18

Revision History

Version	Date	Comment
1.00	2014-01-28	Initial version
1.00e	2014-03-18	English Translation

Introduction

This Chapter defines detailed the setup procedure for the PTZ Preset.

PTZ Preset URI

`http://"camera ipaddress"/event/ptz_preset.php`

PTZ Preset Parameter

Parameter	Type	Value
preset_out_enable	boolean	0 : Off, 1 : On
preset_out_home	integer	0 ~ 256

Examples

1) get the current setting

`http://"camera ipaddress"/event/ptz_preset.php?app=get`

2) PTZ Preset setup

`http://"camera ipaddress"/event/ptz_preset.php?app=set&preset_out_enable=1`

`http://"camera ipaddress"/event/ptz_preset.php?app=set&preset_out_enable=0`

3) PTZ Preset Home position setup

`http://"camera ipaddress"/event/ptz_preset.php?app=set&preset_out_home=1`

`http://"camera ipaddress"/event/ptz_preset.php?app=set&preset_out_home=256`

* If preset_out_home is assigned to a value less than 0, the value is set to the minimum value (0).

* If preset_out_home is assigned to a value bigger than 256, the value is set to the maximum value (256).

* If preset_out_home is assigned to 0, it means 'None' and PTZ Preset does not operate.

Caution

You must check the following values in the response to `http://"camera ipaddress"/config.txt`

Item	Value	Explanation
options	PTZ	RS485 & PTZ available
	BUILTIN_PTZ	PTZ available

Event – Record:

Version : 1.00
Date : 2014. 09. 26

Revision History

Version	Date	Comment
1.00	2014-09-26	Initial version

Introduction

This chapter specifies how to set up the Record in detail.

Record URI

<http://?ipaddress?/event/record.php>

Record Parameter

Parameter	Type	Value
record_enable	integer	0 : disable, 1 : enable
record_overwrite	integer	0 : disable, 1 : enable
record_continuous	integer	0 : disable, 1 : enable
record_stream	integer	camera video stream(1 ~ 3)
record_pre_time	integer	0 ~ 10
record_post_time	integer	0 ~ 60
record_audio	integer	0 : disable, 1 : enable
record_schedule_value	integer	0 : No Recording, 1 : Recording
record_device_type	integer	0 : SD, 1 : CIFS, 2 : NFS
record_address	string	NAS IP:PORT
record_path	string	NAS path
record_size	string	storage capacity
record_id	string	NAS ID
record_password	string	NAS PW
method	string	check
record_device_status	integer (ro)	0 : no storage, 1 : unformatted, 2 : formatting 3 : formatted, 4 : remove, 6 : bad
record_device_status_cifs	integer (ro)	0 : no storage, 1 : unformatted, 2 : formatting 3 : formatted, 4 : remove, 6 : bad
record_device_status_nfs	integer (ro)	0 : no storage, 1 : unformatted, 2 : formatting 3 : formatted, 4 : remove, 6 : bad
record_device_format	integer (ro)	1 : available format, 0 : not available format
record_device_format_cifs	integer (ro)	0 : formatted, 1 : not formatted
record_device_format_nfs	integer (ro)	0 : formatted, 1 : not formatted
record_device_remove	integer	1 : available remove, 0 : not available remove

record_device_remove_cifs	integer (ro)	1 : available remove, 0 : not available remove
record_device_remove_nfs	integer (ro)	1 : available remove, 0 : not available remove
record_device_total	integer (ro)	Total storage (GB)
record_device_used	integer (ro)	Used (MB)
record_device_available	integer (ro)	Available (GB)
record_device_percent	integer (ro)	Used Percent (percent)
record_device_bad_percent	integer (ro)	Bad Sector (percent)

- * The 'record_overwrite' parameter indicates whether or not to overwrite the storage.
- * The 'record_continuous' parameter determines the continuous recording (Continuous recording can shorten the life of the SD card.)
- * The 'record_stream' parameter determines what video stream to record to.
- * If 'record_pre_time' parameter is set, recording starts from the point before recording start.
- * If 'record_post_time' parameter is set, recording will continue past the end of recording.
- * The 'record_audio' parameter indicates whether or not to include audio during recording.
- * The 'record_address', 'record_path', 'record_size', 'record_id', and 'record_password' parameters can only be set if the 'record_device_type' parameter is CIFS or NFS.
- * The 'method' parameter is only available if the 'record_device_type' parameter is NFS or CIFS, which indicates whether the corresponding storage is available at 'check'.
- * The 'record_device_status' parameter indicates the status of the SD card, and the 'record_device_status_cifs' and 'record_device_status_nfs' parameters indicate the respective status when the 'record_device_type' parameter is CIFS or NFS.
- * 'Record_device_format' Parameter indicates what format is available, and 'record_device_type' parameter is SD.
- * 'Record_device_format_cifs', 'record_device_format_nfs' Parameter indicates whether or not format is set, and 'record_device_type' parameter is CIFS or NFS.
- * The 'record_device_remove' parameter is used when the 'record_device_type' parameter is SD, and indicates whether it can be removed. The 'record_device_remove_cifs' and 'record_device_remove_nfs' parameters can be removed and the 'record_device_type' parameter is CIFS or NFS.
- * The parameter 'record_device_total' represents the total storage capacity.
- * The 'record_device_used' parameter indicates the amount of storage used, expressed in MB.
- * The 'record_device_available' parameter indicates the amount of available storage, in GB.
- * The 'record_device_percent' parameter indicates the amount of storage used, expressed in percent.

Examples

1) get the current setting

<http://ipaddress/event/record.php?app=get>

2) record enable setup

http://ipaddress/event/record.php?app=set&record_enable=0 (disable)

http://ipaddress/event/record.php?app=set&record_enable=1 (enable)

3) record overwrite setup

http://ipaddress/event/record.php?app=set&record_overwrite=0 (disable)

http://ipaddress/event/record.php?app=set&record_overwrite=1 (enable)

Event – SMTP:

Version: 1.01e
Date: 2015. 08. 25

Revision History

Version	Date	Comment
1.00	2014-02-13	Initial version
1.00e	2014-03-17	English Translation
1.01e	2015-08-24	“smtp_image_attachment” parameter add “smtp_auth_enable” parameter contents delete “5. Caution” modify

Introduction

This Chapter defines the detailed setup procedure for the SMTP.

SMTP URI

<http://camera ipaddress/event/smtp.php>

SMTP Parameter

Parameter	Type	Value
smtp_enable	boolean	0 : Off, 1 : On
smtp_sender	string	Sender's e-mail address
smtp_interval	integer	1 ~ 86400 (sec)
smtp_limit	integer	1 ~ 100
smtp_image_attachment	boolean	0 : Off, 1 : On
smtp_use_server	boolean	0 : Off, 1 : On
smtp_server	string	Mail server URL
smtp_server_port	integer	Mail server Port
smtp_server_security	integer	0 : None, 1 : Start TLS, 2 : SSL
smtp_user	string	Mail server User name
smtp_pass	string	Mail server Password
smtp_auth_type	integer	0 : AUTH LOGIN, 1 : AUTH PLAIN
smtp_receiver_list#	string	Receiver's e-mail address

smtp_receiver	string	Receiver's e-mail address : For use SMTP Test only
method	string	"test" : For use SMTP Test only

* smtp_receiver_list# : # is a number in the range of 1~8.

Examples

1) Get the current setting

http://camera_ipaddress/event/smtp.php?app=get

2) SMTP setup

http://camera_ipaddress/event/smtp.php?app=set&smtp_enable=1

http://camera_ipaddress/event/smtp.php?app=set&smtp_enable=0

3) Sender's Mail address setup

[http://camera_ipaddress/event/smtp.php?app=set&smtp_sender="e-mail address"](http://camera_ipaddress/event/smtp.php?app=set&smtp_sender=e-mail_address)

4) Interval setup

http://camera_ipaddress/event/smtp.php?app=set&smtp_interval=60

5) Aggregate events setup

http://camera_ipaddress/event/smtp.php?app=set&smtp_limit=80

6) Image attachment setup

http://camera_ipaddress/event/smtp.php?app=set&smtp_image_attachment=1

http://camera_ipaddress/event/smtp.php?app=set&smtp_image_attachment=0

7) Mail server usage setup

http://camera_ipaddress/event/smtp.php?app=set&smtp_use_server=1

http://camera_ipaddress/event/smtp.php?app=set&smtp_use_server=0

8) Mail server address setup

[http://camera_ipaddress/event/smtp.php?app=set&smtp_server="mail server address"](http://camera_ipaddress/event/smtp.php?app=set&smtp_server=mail_server_address)

9) Mail server Port setup

http://camera_ipaddress/event/smtp.php?app=set&smtp_server_port=8080

10) Connection security setup

[http://camera_ipaddress/event/smtp.php?app=set&smtp_server_security=0 \(None\)](http://camera_ipaddress/event/smtp.php?app=set&smtp_server_security=0)

[http://camera_ipaddress/event/smtp.php?app=set&smtp_server_security=1 \(Start TLS\)](http://camera_ipaddress/event/smtp.php?app=set&smtp_server_security=1)

[http://camera_ipaddress/event/smtp.php?app=set&smtp_server_security=2 \(SSL\)](http://camera_ipaddress/event/smtp.php?app=set&smtp_server_security=2)

11) Mail server's User name setup

http://camera_ipaddress/event/smtp.php?app=set&smtp_user=admin

12) Mail server's Password setup

http://camera_ipaddress/event/smtp.php?app=set&smtp_pass=admin

13) Mail server's Login method setup

http://camera_ipaddress/event/smtp.php?app=set&smtp_auth_type=0

14) Receiver address setup

http://camera ipaddress/event/smtp.php?app=set&smtp_receiver_list1="e-mail address"

15) SMTP Test method

a. Mail server is not used

http://camera

ipaddress/event/smtp.php?app=set&method=test&smtp_enable=1&smtp_sender="e-mail address"&smtp_receiver="e-mail address" &smtp_image_attachment=1

- * If you set method=test in URI, you must include smtp_enable, smtp_sender, and smtp_receiver.
- * In the case method=test, smtp_enable must be 1.
- * If smtp_image_attachment=1, an image is attached on mail transmission.
- * If smtp_image_attachment=0, a text only mail is transmitted.

b. Mail server is used

http://camera

ipaddress/event/smtp.php?app=set&method=test&smtp_enable=1&smtp_sender="e-mail address"&smtp_receiver="e-mail address"&smtp_use_server=1&smtp_server="mail server address"&smtp_server_port=25&smtp_user="user name"&smtp_pass="user password" &smtp_image_attachment=1

- * If you set method=test in URI, you must include smtp_enable, smtp_sender, and smtp_receiver.
- * In case of method=test, smtp_enable must be 1.
- * If you set smtp_use_server=1 in URI, you must include smtp_server, smtp_server_port, smtp_user, and smtp_pass.
- * If smtp_image_attachment=1, an image is attached on mail transmission.
- * If smtp_image_attachment=0, a text only mail is transmitted.

Caution

You must check the following values in the response to http://camera ipaddress/config.txt

Item	Value	Explanation
options	SMTP	SMTP available

- * If "smtp_image_attachment" parameter is set to "1", both "smtp_interval" and "smtp_limit" parameter are set to "1".
- * If "smtp_image_attachment" parameter is set to "0", both "smtp_interval" and "smtp_limit" parameter are set to previous stored value.

Event – Tampering:

Version : 1.02e
Date : 2016. 12. 16

Revision History

Version	Date	Comment
1.00	2014-09-26	Initial version
1.01	2015-01-28	tampering_threshold deletion tampering_event_time deletion
1.01e	2015-01-29	English Translation
1.02e	2016-12-16	Added area rate function

Introduction

This Chapter defines the setup procedure for the Tampering.

Tampering URI

<http://ipaddress/event/tampering.php>

Tampering Parameter

Parameter	Type	Value
tampering_enable	Boolean	0 : disable, 1 : enable
tampering_time	Integer	1 ~ 180 (sec) * Buyer Apollo : 1~86400 (sec)
tampering_area_rate	Integer	- Using value range : 1~100 (%) - Input value : Internal applied value + 0~10 : 10 (%) + 11~20 : 20 (%) + 21~30 : 30 (%) + 31~40 : 40 (%) + 41~50 : 50 (%) + 51~60 : 60 (%) + 61~70 : 70 (%) + 71~80 : 80 (%) + 81~90 : 90 (%) + 91~100 : 100 (%)

Examples

1) Get the current setting

<http://ipaddress/event/tampering.php?app=get>

2) Tampering enable setup

http://ipaddress/event/tampering.php?app=set&tampering_enable=0 (disable)

http://ipaddress/event/tampering.php?app=set&tampering_enable=1 (enable)

3) Dwell time setup

http://ipaddress/event/tampering.php?app=set&tampering_time=1

http://ipaddress/event/tampering.php?app=set&tampering_time=50

http://ipaddress/event/tampering.php?app=set&tampering_time=180

4) Area rate setup

`http://''ipaddress''/event/tampering.php?app=set&tampering_area_rate=10`
`http://''ipaddress''/event/tampering.php?app=set&tampering_area_rate=50`
`http://''ipaddress''/event/tampering.php?app=set&tampering_area_rate=100`

5) Setup tampering at once

`http://''ipaddress''/event/tampering.php?app=set&tampering_enable=1&tampering_time=50&tampering_area_rate=50`

Event – Time Trigger:

Version: 1.00e
Date: 2015. 7. 20

Revision History

Version	Date	Comment
1.00	2015-06-30	Initial version
1.00e	2015-07-20	English Translation

Introduction

This Chapter defines the detailed setup procedure for the Time Trigger.

Time Trigger URI

http://camera ipaddress/event/time_trigger.php

Time Trigger Parameter

Parameter	Type	Value
timetrigger_enable	boolean	Time Trigger usage 0 : Disable 1 : Enable
timetrigger_count	integer(ro)	Number of Time Triggers
timetrigger#_enable	boolean	Time Trigger # usage 0 : Disable 1 : Enable
timetrigger#_enable_specific_time	boolean	Time Trigger # Specific Time usage 0 : Disable 1 : Enable
timetrigger#_enable_day	boolean	Time Trigger # Day usage 0 : Disable 1 : Enable
timetrigger#_enable_day_of_week	boolean	Time Trigger # Day Of Week usage 0 : Disable 1 : Enable
timetrigger#_enable_month	boolean	Time Trigger # Month usage 0 : Disable 1 : Enable
timetrigger#_specific_time_date	string	YYYY-MM-DD ex) 2015-06-03
timetrigger#_specific_time_time	string	HH:MM 24 hour format ex) 14:23
timetrigger#_day_time	string	HH:MM 24 hour format ex) 14:23
timetrigger#_day_of_week_day	integer	1 : Sunday 2 : Monday 3 : Tuesday 4 : Wednesday 5 : Thursday

		6 : Friday 7 : Saturday
timetrigger#_day_of_week_time	string	HH:MM 24 hour format ex) 14:23
timetrigger#_month_date	integer	1~31
timetrigger#_month_time	string	HH:MM 24 hour format ex) 14:23

Examples

1) get the current setting

http://camera_ipaddress/event/time_trigger.php?app=get

2) Time Trigger usage setup

http://camera_ipaddress/event/time_trigger.php?app=set&timetrigger_enable=0

http://camera_ipaddress/event/time_trigger.php?app=set&timetrigger_enable=1

3) Time Trigger # usage setup

http://camera_ipaddress/event/time_trigger.php?app=set&timetrigger1_enable=0

http://camera_ipaddress/event/time_trigger.php?app=set&timetrigger1_enable=1

http://camera_ipaddress/event/time_trigger.php?app=set&timetrigger2_enable=0

http://camera_ipaddress/event/time_trigger.php?app=set&timetrigger2_enable=1

4) Time Trigger # Specific Time usage setup

http://camera_ipaddress/event/time_trigger.php?app=set&timetrigger1_enable_specific_time=0

http://camera_ipaddress/event/time_trigger.php?app=set&timetrigger1_enable_specific_time=1

http://camera_ipaddress/event/time_trigger.php?app=set&timetrigger2_enable_specific_time=0

http://camera_ipaddress/event/time_trigger.php?app=set&timetrigger2_enable_specific_time=1

5) Time Trigger # Day usage setup

http://camera_ipaddress/event/time_trigger.php?app=set&timetrigger1_enable_day=0

http://camera_ipaddress/event/time_trigger.php?app=set&timetrigger1_enable_day=1

http://camera_ipaddress/event/time_trigger.php?app=set&timetrigger2_enable_day=0

http://camera_ipaddress/event/time_trigger.php?app=set&timetrigger2_enable_day=1

6) Time Trigger # Day Of Week usage setup

http://camera_ipaddress/event/time_trigger.php?app=set&timetrigger1_enable_day_of_week=0

http://camera_ipaddress/event/time_trigger.php?app=set&timetrigger1_enable_day_of_week=1

http://camera_ipaddress/event/time_trigger.php?app=set&timetrigger2_enable_day_of_week=0

http://camera_ipaddress/event/time_trigger.php?app=set&timetrigger2_enable_day_of_week=1

7) Time Trigger # Month usage setup

http://camera_ipaddress/event/time_trigger.php?app=set&timetrigger1_enable_month=0

http://camera_ipaddress/event/time_trigger.php?app=set&timetrigger1_enable_month=1

http://camera_ipaddress/event/time_trigger.php?app=set&timetrigger2_enable_month=0

http://camera_ipaddress/event/time_trigger.php?app=set&timetrigger2_enable_month=1

8) setup Date in Time Trigger # Specific Time

http://"camera
ipaddress"/event/time_trigger.php?app=set&timetrigger1_specific_time_date=2015-06-30

9) setup Time in Time Trigger # Specific Time

http://"camera
ipaddress"/event/time_trigger.php?app=set&timetrigger1_specific_time_time=14:02

10) setup Time in Time Trigger # Day

http://"camera ipaddress"/event/time_trigger.php?app=set&timetrigger1_day_time=14:02

11) setup Day in Time Trigger # Day Of Week

http://"camera ipaddress"/event/time_trigger.php?app=set&timetrigger1_day_of_week_day=1
http://"camera ipaddress"/event/time_trigger.php?app=set&timetrigger1_day_of_week_day=2
http://"camera ipaddress"/event/time_trigger.php?app=set&timetrigger1_day_of_week_day=3
http://"camera ipaddress"/event/time_trigger.php?app=set&timetrigger1_day_of_week_day=4
http://"camera ipaddress"/event/time_trigger.php?app=set&timetrigger1_day_of_week_day=5
http://"camera ipaddress"/event/time_trigger.php?app=set&timetrigger1_day_of_week_day=6
http://"camera ipaddress"/event/time_trigger.php?app=set&timetrigger1_day_of_week_day=7

12) setup Date in Time Trigger # Day Of Week

http://"camera
ipaddress"/event/time_trigger.php?app=set&timetrigger1_day_of_week_time=14:02

13) setup Date in Time Trigger # Month

http://"camera ipaddress"/event/time_trigger.php?app=set&timetrigger1_month_date=1
http://"camera ipaddress"/event/time_trigger.php?app=set&timetrigger1_month_date=31

14) setup Time in Time Trigger # Month

http://"camera ipaddress"/event/time_trigger.php?app=set&timetrigger1_month_time=14:02

Caution

You must check the following values in the response to http://"camera ipaddress"/config.txt

Item	Value	Description
options	TIME_TRIGGER	Time Trigger available

Event – VCA:

Version: 1.01e
Date: 2015. 03. 26

Revision History

Version	Date	Comment
1.00	2015-01-28	Initial version
1.00e	2015-01-29	English Translation
1.01	2015-03-23	linedetector_reset API revision & sample project update
1.01e	2015-03-26	English vesion update

Introduction

This Chapter defines the setup procedure for the VCA.

VCA URI

<http://ipaddress/event/vca.php>

VCA Parameter

Parameter	Type	Value
va_enable	boolean	0 : disable, 1 : enable
va_preset_name	string	preset name(used in Get only)
va_#_obj_min_width	integer	1 ~ 100 (percentage ratio)
va_#_obj_max_width	integer	1 ~ 100 (percentage ratio)
va_#_obj_min_height	integer	1 ~ 100 (percentage ratio)
va_#_obj_max_height	integer	1 ~ 100 (percentage ratio)
va_#_obj_sensitivity	integer	1 ~ 100
va_#_auto_tracking_enable	boolean	0 : disable, 1 : enable
va_#_#_name	string	default: AnalyticRule<index1><index2> index1 : preset number index2 : rule index
va_#_#_rule	integer	0: none 1: line detector 2: field detector 3: absent
va_#_#_linedetector_direction	integer	1: cw 2: ccw 3: any (advance VCA only)
va_#_#_linedetector_counter	integer	1: cross 2: counter
va_#_#_linedetector_base	integer	advance VCA only 1: top 2: bottom 3: center

va_#_#_linedetector_point_x#	integer	0~1919 (x coordinate)
va_#_#_linedetector_point_y#	integer	0~1079 (y coordinate)
va_#_#_linedetector_reset_time	integer	advance VCA only 1~86400 (second)
va_#_linedetector_reset	integer	1~3 (rule index of the counter to be reset) advance VCA doesn't support
va_#_#_linedetector_event_tracking_enable	boolean	0 : disable, 1 : enable
va_#_#_fielddetector_mode	integer	1: enter 2: exit (currently not supported) 3: appear (currently not supported) 4: disappear (currently not supported)
va_#_#_fielddetector_base	integer	advance VCA only 1: top 2: bottom 3: both
va_#_#_fielddetector_point_x#	integer	0~1919 (x coordinate)
va_#_#_fielddetector_point_y#	integer	0~1079 (y coordinate)
va_#_#_fielddetector_event_tracking_enable	boolean	0 : disable, 1 : enable
va_#_#_absent_dwell_time	integer	advance VCA only 1~10 (second)
va_#_#_absent_event_time	integer	advance VCA only 5~30 (second)
va_#_#_absent_point_x#	integer	advance VCA only 0~1919 (x coordinate)
va_#_#_absent_point_y#	integer	advance VCA only 0~1079 (y coordinate)

* first #: preset title (omitted for non-PTZ camera)

Please refer to [Dome Configuration Preset](#) document for bringing preset title.

* second #: rule index (VCA 1~3, advance VCA 1~4)

* third #: vertex coordinate index(line detector 1~2, field detector 1~4, absent 1~4)

Examples

1) get the current setting of Fixed camera

Request:

`http://?ipaddress?/event/vca.php?app=get`

Response:

`res=200&va_obj_min_width=8&va_obj_min_height=15&va_obj_max_width=16&va_obj_max_height=29&va_obj_sensitivity=75&va_auto_tracking_enable=0&va_1_name=AnalyticRule21&va_1_rule=0&va_2_name=AnalyticRule22&va_2_rule=0&va_3_name=AnalyticRule23&va_3_rule=0&va_4_name=AnalyticRule24&va_4_rule=0&va_1_exclusive_enable=0&va_2_exclusive_enable=0&va_3_exclusive_enable=0&va_4_exclusive_enable=0`

2) get the current setting of PTZ camera

Request:

http://ipaddress/event/vca.php?app=get&va_preset_name=PRESET-1

Response:

res=200&va_enable=1&va_PRESET-1_obj_min_width=2&va_PRESET-1_obj_min_height=3&va_PRESET-1_obj_max_width=40&va_PRESET-1_obj_max_height=50&va_PRESET-1_obj_sensitivity=75&va_PRESET-1_2_name=AnalyticRule22&va_PRESET-1_2_rule=0&va_PRESET-1_3_name=AnalyticRule23&va_PRESET-1_3_rule=0&va_PRESET-1_4_name=AnalyticRule24&va_PRESET-1_4_rule=0&va_PRESET-1_1_exclusive_enable=0&va_PRESET-1_2_exclusive_enable=0&va_PRESET-1_3_exclusive_enable=0&va_PRESET-1_4_exclusive_enable=0

3) set Fixed camera rule number 1 to line detector

Request:

http://ipaddress/event/vca.php?app=set&va_1_rule=1&va_1_name=LineDetector&va_1_linedetector_direction=3&va_1_linedetector_counter=2&va_1_linedetector_base=3&va_1_linedetector_point_x1=1&va_1_linedetector_point_y1=1&va_1_linedetector_point_x2=1919&va_1_linedetector_point_y2=1079&va_1_linedetector_reset_time=3600

Response:

res=200

4) set PTZ camera "PRESET-1" rule number 1 to line detector

Request:

http://ipaddress/event/vca.php?app=set&va_PRESET-1_1_rule=1&va_PRESET-1_1_name=LineDetector&va_PRESET-1_1_linedetector_direction=3&va_PRESET-1_1_linedetector_counter=2&va_PRESET-1_1_linedetector_base=3&va_PRESET-1_1_linedetector_point_x1=1&va_PRESET-1_1_linedetector_point_y1=1&va_PRESET-1_1_linedetector_point_x2=1919&va_PRESET-1_1_linedetector_point_y2=1079&va_PRESET-1_1_linedetector_reset_time=3600

Response:

res=200

5) set Fixed camera rule number 2 to field detector

Request:

http://ipaddress/event/vca.php?app=set&va_2_rule=2&va_2_name=FieldDetector&va_2_fieldddetector_mode=1&va_2_fieldddetector_base=3&va_2_fieldddetector_point_x1=1&va_2_fieldddetector_point_y1=1&va_2_fieldddetector_point_x2=1919&va_2_fieldddetector_point_y2=1&va_2_fieldddetector_point_x3=1919&va_2_fieldddetector_point_y3=1079&va_2_fieldddetector_point_x4=1&va_2_fieldddetector_point_y4=1079&

Response:

res=200

6) set PTZ camera "PRESET-1" rule number 2 to field detector

Request:

http://ipaddress/event/vca.php?app=set&va_PRESET-1_2_rule=2&va_PRESET-1_2_name=FieldDetector&va_PRESET-1_2_fieldddetector_mode=1&va_PRESET-1_2_fieldddetector_base=3&va_PRESET-1_2_fieldddetector_point_x1=1&va_PRESET-1_2_fieldddetector_point_y1=1&va_PRESET-1_2_fieldddetector_point_x2=1919&va_PRESET-1_2_fieldddetector_point_y2=1&va_PRESET-1_2_fieldddetector_point_x3=1919&va_PRESET-1_2_fieldddetector_point_y3=1079&va_PRESET-1_2_fieldddetector_point_x4=1&va_PRESET-1_2_fieldddetector_point_y4=1079&

1_2_fielddetector_point_y2=1&va_PRESET-1_2_fielddetector_point_x3=1919&va_PRESET-1_2_fielddetector_point_y3=1079&va_PRESET-1_2_fielddetector_point_x4=1&va_PRESET-1_2_fielddetector_point_y4=1079&

Response:
res=200

7) set Fixed camera rule number 3 to absent

Request:

http://"*ipaddress*"/event/vca.php?app=set&va_3_rule=3&va_3_name=Absent&va_3_absent_event_time=5&va_3_absent_dwell_time=5&va_3_absent_point_x1=1&va_3_absent_point_y1=1&va_3_absent_point_x2=1919&va_3_absent_point_y2=1&va_3_absent_point_x3=1919&va_3_absent_point_y3=1079&va_3_absent_point_x4=1&va_3_absent_point_y4=1079&

Response:
res=200

8) set PTZ camera "PRESET-1" rule number 3 to absent

Request:

http://"*ipaddress*"/event/vca.php?app=set&va_PRESET-1_3_rule=3&va_PRESET-1_3_name=Absent&va_PRESET-1_3_absent_event_time=5&va_PRESET-1_3_absent_dwell_time=5&va_PRESET-1_3_absent_point_x1=1&va_PRESET-1_3_absent_point_y1=1&va_PRESET-1_3_absent_point_x2=1919&va_PRESET-1_3_absent_point_y2=1&va_PRESET-1_3_absent_point_x3=1919&va_PRESET-1_3_absent_point_y3=1079&va_PRESET-1_3_absent_point_x4=1&va_PRESET-1_3_absent_point_y4=1079&

Response:
res=200

9) reset counter of line detector rule number 1

Request:

http://"*ipaddress*"/event/vca.php?app=set&va_linedetector_reset=1

Response:
res=200

10) reset counter of line detector rule number 2

Request:

http://"*ipaddress*"/event/vca.php?app=set&va_linedetector_reset=2

Response:
res=200

Caution

- * All parameters except va_enable use "va_<preset_name>_<rule_index>" for prefix, and if camera type is non-PTZ, <preset_name> and '_' are omitted.
- * User can find support of line detector, filed detector, absent by referring to the response to http://"*ipaddress*"/config.txt.

Item	Value	Description
------	-------	-------------

vca_option	LINE_DETECTOR	line detector support
	FIELD_DETECTOR	field detector support
	ABSENT	absent support

Event – Video Loss:

Version: 1.00e
Date: 2014. 03. 17

Revision History

Version	Date	Comment
1.00	2014-02-06	Initial version
1.00e	2014-03-17	English Translation

Introduction

This Chapter defines the detailed setup procedure for the Video Loss.

Video Loss URI

<http://camera ipaddress/event/loss.php>

Video Loss Parameters

Parameter	Type	Value
vloss#_enable	boolean	0 : Disable, 1 : Enable
vloss#_time	integer	1~180

Examples

1) get the current setting

<http://camera ipaddress/event/loss.php?app=get>

2) Video Loss setup

http://camera ipaddress/event/loss.php?app=set&vloss1_enable=0

http://camera ipaddress/event/loss.php?app=set&vloss1_enable=1

3) Video Loss dwell time setup

http://camera ipaddress/event/loss.php?app=set&vloss1_time=1

http://camera ipaddress/event/loss.php?app=set&vloss1_time=180

Caution

You must check the following values in the response to <http://camera ipaddress/config.txt>

Item	Value	Explanation
total_ch	1 or 2 or 3 or 4 or	Number of channels support Video Loss
options	VIDEO_LOSS	Video Loss function available

Event – XML Notification:

Version: 1.00e
Date: 2014. 03. 18

Revision History

Version	Date	Comment
1.00	2014-01-28	Initial version
1.00e	2014-03-18	English Translation

Introduction

This Chapter defines the detailed setup procedure for the XML Notification.

XML Notification URI

`http://"camera ipaddress"/event/notification.php`

XML Notification Parameter

Parameter	Type	Value
event_noti_enable	boolean	0 : Off, 1 : On
event_noti_server	string	Server URL
event_noti_port	integer	1 - 65535

Examples

1) Get the current setting

`http://"camera ipaddress"/event/notification.php?app=get`

2) XML Notification setup

`http://"camera ipaddress"/event/notification.php?app=set&event_noti_enable=1`

`http://"camera ipaddress"/event/notification.php?app=set&event_noti_enable=0`

3) XML Notification server URL setup

`http://"camera ipaddress"/event/notification.php?app=set&event_noti_server=10.0.2.12`

4) XML Notification Port setup

`http://"camera ipaddress"/event/notification.php?app=set&event_noti_port=8080`

`http://"camera ipaddress"/event/notification.php?app=set&event_noti_port=62311`

* If event_noti_port is assigned to a value bigger than 65535, (Error: 400) is returned.

* If event_noti_port is assigned to a value less than 1, (Error: 400) is returned.

Caution

You must check the following values in the response to `http://"camera ipaddress"/config.txt`

Item	Value	Explanation
options	XML_NOTI	XML Notification available

Event Stream

Version : 1.01e
Date : 2015. 01. 29

Revision History

Version	Date	Comment
1.00	2014-12-02	Initial version
1.01	2015-01-28	Deleted parameter - Request Filter(vca_event, vca_rule, vca_object) - VCA Reponse(object_timestamp) 2. Add parameter - Request Filter(vca, face_detect)
1.01e	2015-01-29	English Translation

Introduction

This API document describes the method to receive event information from a camera through Event Stream via HTTP.

Event Stream URI

http://"*ipaddress*"/stream/event_stream.php

Event Stream Format

Event Stream Server supports both Get/Post Request Methods, and Client can transfer detail parameters using URI or content depends on Method type.

1) HTTP GET REQUEST

GET /stream/event_stream.php?fulltext=1&trigger=1 HTTP/1.1

Accept: text/html, application/xhtml+xml, */*

Accept-Language: ko-KR

User-Agent: Mozilla/5.0 (Windows NT 6.3; WOW64; Trident/7.0; rv:11.0) like Gecko

Accept-Encoding: gzip, deflate

Host: <ipaddress>

Connection: Keep-Alive

Authorization: Basic YWRtaW46YWRtaW4=

2) HTTP POST REQUEST

POST /stream/event_stream.php HTTP/1.1

Accept: text/html, application/xhtml+xml, */*

Accept-Language: ko-KR

User-Agent: Mozilla/5.0 (Windows NT 6.3; WOW64; Trident/7.0; rv:11.0) like Gecko

Accept-Encoding: gzip, deflate

Host: <ipaddress>

Connection: Keep-Alive

Authorization: Basic YWRtaW46YWRtaW4=

Contents-Length: 20

fulltext=1&trigger=1

3) HTTP CONTINUES RESPONSE

HTTP/1.1 200 OK

MIME-Version: 1.0

Content-Type: multipart/mixed; boundary="1234567890"

--1234567890

Content-Type: application/ht-event; charset="UTF-8"

Content-Length: 91

event_time=2014-12-02 20:03:47

trigger=0

trigger1=0

trigger2=0

trigger3=0

trigger4=0

--1234567890

Content-Type: application/ht-event; charset="UTF-8"

Content-Length: 91

event_time=2014-12-02 20:03:47

trigger=0

trigger1=0

trigger2=0

trigger3=0

trigger4=0

* Event Stream Server transmits Event information via HTTP response, and uses multipart Content-Type boundary to differentiate Event Groups occurred at the same time.

* Each Event in an Event Group is differentiated by “\r\n”.

Event Stream Request Parameter

Request Parameter includes Channel number, Stream number, and Event Filter, and that information determines the event type to receive.

The Parameter Format is ‘<parameter_name>=<value>’, and each Parameter is separated by ‘&.’

Table 1. REQUEST PARAMETER

Parameter	Type	Description	Value
ch	integer	channel number	default : 1
strm	integer	stream number	default : 1
fulltext	boolean	Transmit event detail	1 : enable, 0 : disable
alarm	boolean	Transmit H/W Alarm-In event	1 : enable, 0 : disable
alarmout	boolean	Transmit H/W Alarm-Out event	1 : enable, 0 : disable
trigger	boolean	Transmit S/W Manual Trigger event	1 : enable, 0 : disable
netloss	boolean	Transmit Network Loss	1 : enable, 0 : disable
pir	boolean	Transmit PIR event	1 : enable, 0 : disable
audiodetect	boolean	Transmit Audio Detect event	1 : enable, 0 : disable

motion	boolean	Transmit Motion event	1 : enable, 0 : disable
tampering	boolean	Transmit Tampering event	1 : enable, 0 : disable
vloss	boolean	Transmit Video Loss event	1 : enable, 0 : disable
record	boolean	Transmit Record event	1 : enable, 0 : disable
vca	boolean	Transmit VCA information	1 : enable, 0 : disable
face_detect	boolean	Transmit Face Detector information	1 : enable, 0 : disable

Event Stream Response Parameter

Event Stream Server transmits Channel1/Stream1 event as a Default if Request Parameter does not include specific Channel number or Stream number. If Filtered event is none, it transmits all present events.

Event Stream consists of status information for each event type in Table2, and includes Fulltext of Table3,4,5,6,7,8,9 only for active events. But if fulltext is activated by Request Parameter, every event includes Fulltext including Inactive state events.

Parameter Format is '<parameter_name>=<value>', and each Parameters are separated by '\r\n.'

Table 2. BASIC RESPONSE PARAMETER

Parameter	Type	Description	Value
alarm	boolean	Any H/W Alarm-In	1 : active, 0 : inactive
alarmout	boolean	Any H/W Alarm-Out	1 : active, 0 : inactive
trigger	boolean	Any S/W Manual Trigger	1 : active, 0 : inactive
netloss	boolean	Both RJ45 and wifi Connection	1 : disconnect, 0 : connect
pir	boolean	Any PIR Detection	1 : active, 0 : inactive
audiodetect	boolean	Any Audio Detection	1 : active, 0 : inactive
motion	boolean	Any Motion Detection	1 : active, 0 : inactive
tampering	boolean	Tampering Detection	1 : active, 0 : inactive
vloss	boolean	Video Loss (Video Server only)	1 : loss, 0 : normal
record	boolean	Record status	1 : recording, 0 : not recording
vca_object	boolean	Any VCA Object(including face) Detection	1 : active, 0 : inactive
vca_event	boolean	Any VCA Event Detection	1 : active, 0 : inactive
vca_rule	boolean	Any VCA Rule Exist	1 : exist, 0 : not exist

Table 3. NORMAL FULLTEXT RESPONSE PARAMETER

Parameter	Type	Description	Value
alarm#	boolean	H/W Alarm-In of specified index	1 : active, 0 : inactive
alarmout#	boolean	H/W Alarm-Out of specified index	1 : active, 0 : inactive
trigger#	boolean	S/W Manual Trigger of specified index	1 : active, 0 : inactive
netloss#	boolean	ignore	-
pir#	boolean	PIR Detection of specified index	1 : active, 0 : inactive
audiodetect#	boolean	Audio Detection of specified index	1 : active, 0 : inactive
tampering#	boolean	ignore	-

* # in '<event_name>#' refers to index to differentiate each event when multiple events exist of the same type.

The 'motion' Event Stream transmits settings and Activity Values of each Channel, Stream, and Region if an Event occurred or Fulltext Parameter requested, and is made up of the following Parameters.

Table 4. MOTION FULLTEXT RESPONSE PARAMETER

Parameter	Type	Description	Value
-----------	------	-------------	-------

ch#_strm#_motion	integer	Motion Any Region	1 : active, 0 : inactive
ch#_strm#_motion_width	integer	Grid Count of Frame Width	-
ch#_strm#_motion_height	integer	Grid Count of Frame Height	-
ch#_strm#_motion_rgn#	integer	Motion Detection of the Region	1 : active, 0 : inactive
ch#_strm#_motion_rgn#_left	integer	Left Grid Number of the Region	1 ~ ch#_strm#_motion_width-1
ch#_strm#_motion_rgn#_right	integer	Right Grid Number of the Region	2 ~ ch#_strm#_motion_width
ch#_strm#_motion_rgn#_top	integer	Top Grid Number of the Region	1 ~ ch#_strm#_motion_height-1
ch#_strm#_motion_rgn#_bottom	integer	Bottom Grid Number of the Region	2 ~ ch#_strm#_motion_height
ch#_strm#_motion_rgn#_sen	integer	sensitivity of the Region	1 ~ 100
ch#_strm#_motion_rgn#_thre	integer	Threshold of the Region	1 ~ 100
ch#_strm#_motion_rgn#_act	integer	Activity of the Region	1 ~ 100

* # in 'ch#', *'strm#' means channel number and stream number, and # in 'rgn#' means region id.

The 'video loss' Event Stream transmits Loss status of each Channel and Stream, and is made up of the following Parameters

Table 5. VIDEO LOSS FULLTEXT RESPONSE PARAMETER

Parameter	Type	Description	Value
ch#_strm#_vloss	boolean	Video Loss State	1 : loss, 0 : normal

* # in 'ch#', *'strm#' means channel number and stream number.

The 'record' Event Stream transmits Recording status of each Channel, and is made up of the following Parameters.

Table 6. RECORD FULLTEXT RESPONSE PARAMETER

Parameter	Type	Description	Value
ch#record	boolean	Recording	1 : recording, 0 : not recording
record_bad	boolean	Record Failed	1 : bad, 0 : normal

* # in 'ch#' means channel number.

The 'vca_event' Event Stream is made up of the following Parameters.

Table 7. VCA EVENT FULLTEXT RESPONSE PARAMETER

Parameter	Type	Description	Value
event_total_count	integer	Total number of detected events	-
event_rule_type_#	integer	Rule type of detected event	1 : line detector 2 : field detector 3 : absent
event_rule_index_#	integer	Rule index of detected event	-
event_object_id_#	integer array[]	Object ID which triggered event	-
event_line_counter_#	integer array[2]	Number of objects crossed line (line detector/counter only)	array[0] : CW array[1] : CCW
event_enter_mode_#	integer	Field Detector Event mode	1 : ENTER 2 : EXIT 3 : APPEAR

			4 : DISAPPEAR
--	--	--	---------------

The 'vca_object' Event Stream has independent 'Event Group,' and transmitted with 'vca_rule' in case of Object detect.

Table 8. VCA OBJECT FULLTEXT RESPONSE PARAMETER

Parameter	Type	Description	Value
object_total_count	integer	Total number of detected Objects	-
object_id_#	integer	object id	-
object_point_size_#	integer	Number of apexes of object	default : 4
object_point_#_#	integer array[2]	Apex x,y coordinate separator ','	array[0] : x array[1] : y ex) 10,10
object_classify_#	integer	Object type	3 : other 4 : face
input_size	string	Video size	width x height ex)1920x1080

*'#' indicates object index.

Table 9. VCA RULE FULLTEXT RESPONSE PARAMETER

Parameter	Type	Description	Value
rule_total_count	integer	Total Rule count	
rule_type_#	integer	Rule type	0 : none 1 : line detector 2 : field detector 3 : absent 6 : exclusive area if line detector)
rule_mode_#	integer	Rule mode	1 : Cross Mode 2 : Counter Mode if field detector) 1 : ENTER 2 : EXIT 3 : APPEAR 4 : DISAPPEAR else -
rule_direction_#	integer	line detector direction	if line detector) 1 : CW 2 : CCW else -
rule_name_#	string	rule name	-
rule_point_size_#	integer	Number of apexes of Rule Region	-
rule_point_#_#	integer array[2]	Apex x,y coordinate separator ','	array[0] : x array[1] : y ex) 10,10

* '#' means rule index, and uses the same value as VCA Setup API.

Examples

1) BASIC EVENT STREAM REQUEST

http://camera ipaddress"/stream/event_stream.php

2) BASIC EVENT STREAM RESPONSE

--1234567890

Content-Type: application/ht-event; charset="UTF-8"

Content-Length: 208

event_time=2014-12-03 17:01:52

onboot=0

alarm=0

alarmout=0

trigger=0

netloss=0

analytics=0

pir=0

audiodetect=0

motion=0

tampering=0

vloss=0

preset=0

tour=0

vca_event=0

record=0

face_detect=0

--1234567890

Content-Type: application/ht-event; charset="UTF-8"

Content-Length: 256

event_time=2014-12-03 17:01:52

onboot=0

alarm=0

alarmout=0

trigger=1

trigger1=1

trigger2=0

trigger3=0

trigger4=0

netloss=0

analytics=0

pir=0

audiodetect=0

motion=0

tampering=0

vloss=0

preset=0

tour=0
vca_event=0
record=0
face_detect=0

...abbreviated...

3) BASIC EVENT STREAM REQUEST WITH ALARMIN FILTER

http://"camera ipaddress"/stream/event_stream.php?alarm=1

4). BASIC EVENT STREAM RESPONSE WITH ALARMIN FILTER

--1234567890

Content-Type: application/ht-event; charset="UTF-8"

Content-Length: 41

event_time=2014-12-02 16:39:09

alarm=1

--1234567890

Content-Type: application/ht-event; charset="UTF-8"

Content-Length: 41

event_time=2014-12-02 16:39:10

alarm=0

...abbreviated...

5) EVENT STREAM REQUEST WITH MOTION FILTER

http://"camera ipaddress"/stream/event_stream.php?motion=1

6) EVENT STREAM RESPONSE WITH MOTION FILTER

--1234567890

Content-Type: application/ht-event; charset="UTF-8"

Content-Length: 476

event_time=2014-12-03 17:09:11

motion=1

ch1_strm1_motion=1

ch1_strm1_motion_width=10

ch1_strm1_motion_height=8

ch1_strm1_rgn1=0

ch1_strm1_rgn1_left=2

ch1_strm1_rgn1_top=2

ch1_strm1_rgn1_right=5

ch1_strm1_rgn1_bottom=5

ch1_strm1_rgn1_sen=55

ch1_strm1_rgn1_thre=2

ch1_strm1_rgn1_act=0

ch1_strm1_rgn2=1

ch1_strm1_rgn2_left=6

ch1_strm1_rgn2_top=3

ch1_strm1_rgn2_right=9
ch1_strm1_rgn2_bottom=7
ch1_strm1_rgn2_sen=55
ch1_strm1_rgn2_thre=2
ch1_strm1_rgn2_act=1

--1234567890

Content-Type: application/ht-event; charset="UTF-8"
Content-Length: 476

event_time=2014-12-03 17:09:11
motion=1
ch1_strm1_motion=1
ch1_strm1_motion_width=10
ch1_strm1_motion_height=8
ch1_strm1_rgn1=0
ch1_strm1_rgn1_left=2
ch1_strm1_rgn1_top=2
ch1_strm1_rgn1_right=5
ch1_strm1_rgn1_bottom=5
ch1_strm1_rgn1_sen=55
ch1_strm1_rgn1_thre=2
ch1_strm1_rgn1_act=0
ch1_strm1_rgn2=1
ch1_strm1_rgn2_left=6
ch1_strm1_rgn2_top=3
ch1_strm1_rgn2_right=9
ch1_strm1_rgn2_bottom=7
ch1_strm1_rgn2_sen=55
ch1_strm1_rgn2_thre=2
ch1_strm1_rgn2_act=2

...abbreviated...

7) EVENT STREAM REQUEST WITH VCA FILTER

http://camera ipaddress/stream/event_stream.php?vca=1

8) EVENT STREAM RESPONSE WITH VCA FILTER

* The following example is a Field Detect Event of object_id 1 set to Rule Index 2.

--1234567890

Content-Type: application/ht-event; charset="UTF-8"
Content-Length: 881

vca_object=1
input_size=1920x1080
object_total_count=1
object_id_1=1
object_point_size_1=4
object_point_1_1=516,480
object_point_2_1=635,480
object_point_3_1=635,803

object_point_4_1=516,803
object_classify_1=3
object_timestamp_1=2000-01-14T07:10:57.582Z
object_event_type_1=0,2,0,0
vca_rule=1
rule_total_count=8
rule_type_1=1
rule_mode_1=1
rule_name_1=AnalyticRule0
rule_point_size_1=2
rule_point_1_1=983,1
rule_point_2_1=1002,1054
rule_type_2=2
rule_mode_2=1
rule_name_2=AnalyticRule2
rule_point_size_2=4
rule_point_1_2=207,557
rule_point_2_2=847,557
rule_point_3_2=847,917
rule_point_4_2=207,917
rule_type_3=0
rule_type_4=0
rule_type_5=6
rule_mode_5=1
rule_name_5=ExclusiveAreaRule4
rule_point_size_5=4
rule_point_1_5=192,108
rule_point_2_5=832,108
rule_point_3_5=832,468
rule_point_4_5=192,468
rule_type_6=0
rule_type_7=0
rule_type_8=0

--1234567890

Content-Type: application/ht-event; charset="UTF-8"
Content-Length: 738

event_time=2000-01-14 07:10:57
vca_event=1
event_total_count=1
event_rule_type_1=2
event_rule_index_1=2
event_object_id_1=1
event_enter_mode_1=1
vca_rule=1
rule_total_count=8
rule_type_1=1
rule_mode_1=1
rule_name_1=AnalyticRule0
rule_point_size_1=2

rule_point_1_1=983,1
rule_point_2_1=1002,1054
rule_type_2=2
rule_mode_2=1
rule_name_2=AnalyticRule2
rule_point_size_2=4
rule_point_1_2=207,557
rule_point_2_2=847,557
rule_point_3_2=847,917
rule_point_4_2=207,917
rule_type_3=0
rule_type_4=0
rule_type_5=6
rule_mode_5=1
rule_name_5=ExclusiveAreaRule4
rule_point_size_5=4
rule_point_1_5=192,108
rule_point_2_5=832,108
rule_point_3_5=832,468
rule_point_4_5=192,468
rule_type_6=0
rule_type_7=0
rule_type_8=0

...abbreviated...

JPEG Push

Version : 1.00
Date : 2014. 05. 30

Revision History

Version	Date	Comment
1.00	2014-05-30	Initial version

Introduction

This Chapter defines the detailed setup procedure for the JPEG Push.

JPEG Push URI

`http://"camera ipaddress"/jpeg/"ch"/jpeg.php`

* "ch" will be described in JPEG Push Parameter.

JPEG Push Parameter

Parameter	Type	Value
ch	integer	1 or 2 or 3 or ...

Example

1) View JPEG Push

`http://"camera ipaddress"/jpeg/1/jpeg.php`

Caution

JPEG Push does not work in Internet Explorer or Google Chrome web browser

Live

Live – Motor, Smart Focus Control API

Version: 1.00e
Date: 2014. 02. 16

Revision History

Version	Date	Comment
1.00	2013-12-11	Initial version
1.00e	2014-02-16	English Translation

Motor Control:

Introduction

This Chapter defines the Motor Control Method for Cameras which supports MPTZ Option.

Motor Control URI

`http://"camera ipaddress"/mptz/control.php`

Motor Control Parameter

Parameter	Type	Value
zoom	string	tele, wide, stop
focus	string	far, near, stop
move	string	up, down, left, right, stop

Examples

1) zoom Control :

zoom tele : `http://"camera ipaddress"/mptz/control.php?app=set&zoom=tele`

zoom wide : `http://"camera ipaddress"/mptz/control.php?app=set&zoom=wide`

zoom stop : `http://"camera ipaddress"/mptz/control.php?app=set&zoom=stop`

2) focus Control :

focus far : `http://"camera ipaddress"/mptz/control.php?app=set&focus=far`

focus near : `http://"camera ipaddress"/mptz/control.php?app=set&focus=near`

focus stop : `http://"camera ipaddress"/mptz/control.php?app=set&focus=stop`

3) move Control :

move left : `http://"camera ipaddress"/mptz/control.php?app=set&move=left`

move right : `http://"camera ipaddress"/mptz/control.php?app=set&move=right`

move up : `http://"camera ipaddress"/mptz/control.php?app=set&move=up`

move down : `http://"camera ipaddress"/mptz/control.php?app=set&move=down`

move stop : `http://"camera ipaddress"/mptz/control.php?app=set&move=stop`

Caution

You must check the following values in the response to `http://"ipaddress"/config.txt`.

Item	Value	Explanation
options	M_PTZ	Motor Control supported

m_ptz_option	ZOOM	zoom control available
	FOCUS	focus control available
	PAN	left, right move available
	TILT	up, down move available

* You need to maintain the Session after an HTTP Request for correct operation

* Once the Session is disconnected, it is recognized as a stop command and the operation is terminated

Live – Smart Focus:

Version: 1.00e
Date: 2014. 02. 16

Revision History

Version	Date	Comment
1.00	2013-12-11	Initial version
1.00e	2014-02-16	English Translation

Introduction

This Chapter defines the Smart Focus Method for Cameras which supports SMART_FOCUS Option.

Smart Focus URI

`http://"camera ipaddress"/live/live_control.php`

Smart Focus Parameter

Parameter	Type	Value
smart_focus	integer	1

Example

`http://"camera ipaddress"/live/live_control.php?app=set&smart_focus=1`

Caution

You must check the following values in the response to `http://"ipaddress"/config.txt`.

Item	Value	Explanation
options	SMART_FOCUS	Smart Focus available

Live – Light Control:

Version : 1.00
Date : 2014. 05. 30

Revision History

Version	Date	Comment
1.00	2014-05-30	Initial version

Introduction

This Chapter defines the detailed setup procedure for the Light Control..

Light Control URI

`http://"camera ipaddress"/live/light_control.php`

Light Control Parameter

Parameter	Type	Value
light_status	boolean	0 : Off, 1 : On
light_level	integer	1 – 10

Examples

1) get the current setting

`http://"camera ipaddress"/live/light_control.php?app=get`

2) Light Control setup

`http://"camera ipaddress"/live/light_control.php?app=set&light_status=0`

`http://"camera ipaddress"/live/light_control.php?app=set&light_status=1`

3) Light Level setup

`http://"camera ipaddress"/live/light_control.php?app=set&light_status=1&light_level=10`

* URI should contain light_status.

Caution

You must check the following values in the response to `http://"camera ipaddress"/config.txt`

Item	Value	Explanation
options	LIGHT	Light Control available

Live – PTZ Control:

Version : 1.00
Date : 2014. 09. 17

Revision History

Version	Date	Comment
1.00	2014-09-17	Initial version

Introduction

This Chapter defines the detailed setup procedure for the PTZ Control.

PTZ Control URI

1) PTZ Control UI Open

http://camera ipaddress/live/ptz_control.php

2) PTZ Control API URL

<http://camera ipaddress/ptz/control.php>

PTZ Control Parameter

Parameter	Type	Value
move	string	up, right, left, down, upright, upleft, downright, downleft, stop
pspd	integer	1 ~ 8
tspd	integer	1 ~ 8
zspd	integer	1 ~ 8
iris	string	open, close, stop
zoom	string	tele, wide, stop
focus	string	near, far, stop
presetsave	integer	0 : Home, 1 ~ 241 : Preset
preset	integer	0 : Home, 1 ~ 241 : Preset
tour	integer	1 ~ 241
pattern	integer	0 ~ 255
position	string	get, set
pan_pos	float	-0.1 ~ 1
tilt_pos	float	-0.1 ~ 1
zoom_pos	float	-0.1 ~ 1
pan_speed	float	0.0 ~ 1
tilt_speed	float	0.0 ~ 1
zoom_speed	float	0.0 ~ 1

menu	string	camera, preset, ascan, tour, pattern, esc, stop, up, down, left, right, enter
ctrl	integer	1 : ctrl on, 0 : ctrl off
shortcut_on	integer	0 ~ 255
shortcut_off	integer	0 ~ 255

* 'pspd', 'tspd', 'zspd' Parameters indicates the speed of continuous move and, 'pan_speed', 'tilt_speed', 'zoom_speed' Parameter means speed of absolute move.

Example

1) PTZ Control UI load

http://camera ipaddress/live/ptz_control.php

2) Pan, Tilt Control

<http://camera ipaddress/ptz/control.php?app=set&move=up>

<http://camera ipaddress/ptz/control.php?app=set&move=upright>

<http://camera ipaddress/ptz/control.php?app=set&move=down>

<http://camera ipaddress/ptz/control.php?app=set&move=stop>

3) Pan, Tilt Speed Control

<http://camera ipaddress/ptz/control.php?app=set&pspd=4&tspd=4&move=up>

<http://camera ipaddress/ptz/control.php?app=set&pspd=4&tspd=4&move=upright>

<http://camera ipaddress/ptz/control.php?app=set&pspd=8&tspd=8&move=down>

<http://camera ipaddress/ptz/control.php?app=set&move=stop>

4) IRIS Control

<http://camera ipaddress/ptz/control.php?app=set&iris=open>

<http://camera ipaddress/ptz/control.php?app=set&iris=close>

<http://camera ipaddress/ptz/control.php?app=set&iris=stop>

5) ZOOM Control

<http://camera ipaddress/ptz/control.php?app=set&zoom=tele>

<http://camera ipaddress/ptz/control.php?app=set&zoom=wide>

<http://camera ipaddress/ptz/control.php?app=set&zoom=stop>

6) ZOOM Speed Control

<http://camera ipaddress/ptz/control.php?app=set&zoom=tele&zspd=4>

<http://camera ipaddress/ptz/control.php?app=set&zoom=tele&zspd=7>

<http://camera ipaddress/ptz/control.php?app=set&zoom=wide&zspd=4>

<http://camera ipaddress/ptz/control.php?app=set&zoom=wide&zspd=7>

<http://camera ipaddress/ptz/control.php?app=set&zoom=stop>

7) FOCUS Control

<http://camera ipaddress/ptz/control.php?app=set&focus=near>

<http://camera ipaddress/ptz/control.php?app=set&focus=far>

<http://camera ipaddress/ptz/control.php?app=set&focus=stop>

8) Preset Save

http://camera_ipaddress/ptz/control.php?app=set&presetsave=0
http://camera_ipaddress/ptz/control.php?app=set&presetsave=10
http://camera_ipaddress/ptz/control.php?app=set&presetsave=240

9) Preset Control

http://camera_ipaddress/ptz/control.php?app=set&preset=0
http://camera_ipaddress/ptz/control.php?app=set&preset=10
http://camera_ipaddress/ptz/control.php?app=set&preset=240

10) Tour Control

http://camera_ipaddress/ptz/control.php?app=set&tour=10
http://camera_ipaddress/ptz/control.php?app=set&tour=240

11) Pattern Control

http://camera_ipaddress/ptz/control.php?app=set&pattern=10
http://camera_ipaddress/ptz/control.php?app=set&pattern=240

12) Position Control

http://cameraipaddress/ptz/control.php?app=set&app=set&position=set&pan_pos=-0.1&tilt_pos=-0.1&zoom_pos=-0.1
http://cameraipaddress/ptz/control.php?app=set&app=set&position=set&pan_pos=-0.5&tilt_pos=-0.5&zoom_pos=-0.5
http://cameraipaddress/ptz/control.php?app=set&app=set&position=set&pan_pos=0.5&tilt_pos=0.5&zoom_pos=0.5
http://cameraipaddress/ptz/control.php?app=set&app=set&position=set&pan_pos=1&tilt_pos=1&zoom_pos=1

13) Position Speed Control

http://cameraipaddress/ptz/control.php?app=set&app=set&position=set&pan_pos=-0.1&tilt_pos=-0.1&zoom_pos=-0.1&pan_speed=0.1&tilt_speed=0.1&zoom_speed=0.1
http://cameraipaddress/ptz/control.php?app=set&app=set&position=set&pan_pos=-0.5&tilt_pos=-0.5&zoom_pos=-0.5&pan_speed=0.5&tilt_speed=0.5&zoom_speed=0.5
http://cameraipaddress/ptz/control.php?app=set&app=set&position=set&pan_pos=0.5&tilt_pos=0.5&zoom_pos=0.5&pan_speed=1&tilt_speed=1&zoom_speed=1

14) Device menu

http://camera_ipaddress/ptz/control.php?app=set&menu=camera

15) Preset menu

http://camera_ipaddress/ptz/control.php?app=set&menu=preset

16) Scan menu

http://camera_ipaddress/ptz/control.php?app=set&menu=ascan

17) Tour menu

http://camera_ipaddress/ptz/control.php?app=set&menu=tour

18) Pattern menu

http://camera_ipaddress/ptz/control.php?app=set&menu=pattern

19) Esc menu

http://camera ipaddress/ptz/control.php?app=set&menu=esc

20) Stop menu

http://camera ipaddress/ptz/control.php?app=set&menu=stop

21) Up menu

http://camera ipaddress/ptz/control.php?app=set&menu=up

22) Down menu

http://camera ipaddress/ptz/control.php?app=set&menu=down

23) Left menu

http://camera ipaddress/ptz/control.php?app=set&menu=left

24) Right menu

http://camera ipaddress/ptz/control.php?app=set&menu=right

25) Enter menu

http://camera ipaddress/ptz/control.php?app=set&menu=enter

26) Ctrl control

http://camera ipaddress/ptz/control.php?app=set&ctrl=1

http://camera ipaddress/ptz/control.php?app=set&ctrl=0

27) shortcut on control

http://camera ipaddress/ptz/control.php?app=set&shortcut_on=10

http://camera ipaddress/ptz/control.php?app=set&shortcut_on=240

28) shortcut off control

http://camera ipaddress/ptz/control.php?app=set&shortcut_on=10

http://camera ipaddress/ptz/control.php?app=set&shortcut_on=240

Caution

You must check the following values in the response to http://camera ipaddress/config.txt

item	Value	Explanation
options	PTZ, BUILTIN_PTZ	PTZ available

Live – X1 Dome Configuration – Position:

Version: 1.05e
Date: 2016. 12. 14

Revision History

Version	Date	Comment
1.00	2014-04-02	Initial version
1.00e	2014-04-10	English Translation
1.01e	2014-06-30	Modify Get Position API Add PTZ Speed Modify PTZ Position setting
1.04e	2015-04-17	Add Get Preset Position Status (version number match for Korean version)
1.05e	2016-12-14	Add Degree Position

Introduction

This Chapter defines the detailed setup procedure for the PTZ Position.

PTZ Position URI

`http://"camera ipaddress"/ptz/control.php`

PTZ Position Parameter

Parameter	Type	Value
position_type	string	degree
pan_pos	float	Pan Position (decimal: 7) Degree of Pan Position (decimal: 3)
tilt_pos	float	Tilt Position (decimal: 7) Degree of Tilt Position (decimal: 3)
zoom_pos	float	Zoom Position (decimal: 7) Zoom Level
pan_speed	float	Pan Speed (decimal: 7)
tilt_speed	float	Tilt Speed (decimal: 7)
zoom_speed	float	Zoom Speed (decimal: 7)
ptz_status	string	PTZ Action Status Request API Parameter
preset_no	integer	1 ~ Max Preset Number 0: Not Preset Position

Examples

1) Get the current setting

`http://"camera ipaddress"/ptz/control.php?app=get`

`http://"camera ipaddress"/ptz/control.php?position=get&position_type=degree`

2) PTZ Position setup

`http://"camera ipaddress`

`"/ptz/control.php?position=set&pan_pos=0.003&tilt_pos=0.5&zoom_pos=-0.9`

`http://"camera ipaddress"/ptz/control.php?position=set&pan_pos=-0.15515&tilt_pos=-0.5&zoom_pos=-1`

http://"camera

ipaddress"/ptz/control.php?position=set&pan_pos=0.15515&tilt_pos=0.5&zoom_pos=0&pan_speed=0.5&tilt_speed=0.81&zoom_speed=0.015

- PTZ POSITION coordinate range is -1.0000000 ~ 1.0000000.
- PAN initial coordinate is 0
- TILT initial coordinate is 0
- ZOOM initial coordinate is -1 (x1)
- When you setup Position, pan, tilt, and zoom information should be set at once..
- PTZ의 SPEED range is 0.0000000 ~ 1.0000000.
- Depends on PTZ product, number after certain decimal point may be ignored for each Parameter.
- If you do not set Speed Parameter, Default Speed is used.

3) PTZ Position setup (Degree)

http://"camera ipaddress "/ptz/control.php?

position=set&position_type=degree&pan_pos=238&tilt_pos=24&zoom_pos=1

- Pan POSITION degree coordinate range is 0.000° ~ 360.000°.
- Tilt POSITION degree coordinate range is -10.000°(0.000°) ~ 190.000°(180.000°).
- Zoom POSITION degree coordinate range is 1 ~ Max Zoom.
- PAN initial coordinate is 0
- TILT initial coordinate is 0
- ZOOM initial coordinate is -1 (x1)
- When you setup Position, pan, tilt, and zoom information should be set at once..
- PTZ의 SPEED range is 0.0000000 ~ 1.0000000.
- Depends on PTZ product, number after certain decimal point may be ignored for each Parameter.
- If you do not set Speed Parameter, Default Speed is used.

4) Check whether the current PTZ Position is a Preset position or not.

http://"camera ipaddress"/ptz/control.php?ptz_status=get

* When you call this API, you can check whether the current PTZ Position is a Preset position or not.

Live View

Version : 1.00
Date : 2014. 06. 13

Revision History

Version	Date	Comment
1.00	2014-06-13	Initial version

Introduction

This Chapter defines the detailed setup procedure for the Live View..

Live View URI

`http://camera ipaddress/liveview/source.php`

LIVE View Parameter

Parameter	Type	Value
video_mode	string	ntsc : NTSC , pal : PAL, auto : Auto
reboot	string(ro)	0: not require rebooting, 1: require rebooting

* auto mode in video_mode is only available for Video Server.

Example

1) get the current setting

`http://camera ipaddress/liveview/source.php?app=get`

2) Video mode setup

`http://camera ipaddress/liveview/source.php?app=set&video_mode=ntsc`
`http://camera ipaddress/liveview/source.php?app=set&video_mode=pal`
`http://camera ipaddress/liveview/source.php?app=set&video_mode=auto`

3) Check response value after setup

With reboot value, you can check if camera is rebooting for video mode setup

The example as in the following:

`res=200&reboot=0`

`res=200&reboot=1`

Caution

You must check the following values in the response to `http://camera ipaddress/config.txt`

item	Value	Explanation
options	VMODE_CTRL	Video mode setup available

fps	integer (ro)	video frame count
max_client	integer (ro)	3
current_client	integer (ro)	current client count

* 'method' Parameter is as following

Parameter	Value	Explanation
method	get_calendar	entire calendar info
	get_month	Month's recording data
	get_day	day's recording data
	get_hour	hour's recording data
	get_minute	minute's recording data
	gotofirst	the first information of recording data
	Gotolast	the last information of recording data
	get_index	Recording data of event
	get_event	Recording list of event
	get_clipcopy	The size of recording data for export
get_clients	number of client that is currently connected to Camera Playback.	

Parameter	event type field	event info
event_list	0	entire event
	1	ONBOOT
	2	ALARM
	3	TRIGGER
	4	MOTION
	5	VIDEO LOSS
	6	NETWORK LOSS
	7	ANALYTIC
	8	PIR
	9	AUDIODETECT
10	LINEDETECT	

		clock='yyyymmdd'T'hmmss'-'yyyymmdd'T'hmmss'
Rate-Control	string	default yes yes : real time using standard RTP mechanisms no : as fast as possible
Scale	float	default 1.0
Frames	string	default all all : all frame intra : intra frame intra/<ms> : intra frame with minimum interval of <ms>
Refresh	boolean	default 1 1 : refresh date/time 0 : continuous date/time for step play

* 'Refresh' field is not defined in ONVIF spec . if Replay time is continuous, set to 0. And if not set to 1.

1) Forward Step Play

```
PLAY rtsp://<ip address>/<channel>/<date>/<time>/<time index>/to/recording RTSP/1.0
CSeq: 7
Session: 931380111
User-agent: eon-client
Authorization: Basic aGl0cm9uOmhpdHJvbjEyMzQ=
Connection: Keep-Alive
Content-Length: 0
Require: onvif-replay
Range: clock=YYYYMMSSTHHMMSS-
Rate-Control: yes
Refresh: <1 or 0>
Frames: all
Scale: 0.1
```

2) Forward Step Forward

```
PLAY rtsp://<ip address>/<channel>/<date>/<time>/<time index>/to/recording RTSP/1.0
CSeq: 5
Session: 931380111
User-agent: eon-client
Authorization: Basic aGl0cm9uOmhpdHJvbjEyMzQ=
Connection: Keep-Alive
Content-Length: 0
Require: onvif-replay
Range: clock=YYYYMMSSTHHMMSS-
Rate-Control: yes
Refresh: <1 or 0>
Frames: all
Scale: 0.1
```

3) Forward Normal Play

```
PLAY rtsp://<ip address>/<channel>/<date>/<time>/<time index>/to/recording RTSP/1.0
CSeq: 5
```

Session: 931380111
User-agent: eon-client
Authorization: Basic aGl0cm9uOmhpdHJvbjEyMzQ=
Connection: Keep-Alive
Content-Length: 0
Require: onvif-replay
Range: clock=YYYYMMSSTHHMMSS-
Rate-Control: yes
Frames: all
Scale: 1.0

4) Forward Double Speed Play

PLAY rtsp://<ip address>/<channel>/<date>/<time>/<time index>/to/recording RTSP/1.0
CSeq: 8
Session: 931380111
User-agent: eon-client
Authorization: Basic aGl0cm9uOmhpdHJvbjEyMzQ=
Connection: Keep-Alive
Content-Length: 0
Require: onvif-replay
Range: clock=YYYYMMSSTHHMMSS-
Rate-Control: yes
Frames: intra
Scale: 2.0

5) Forward Triple Speed Play

PLAY rtsp://<ip address>/<channel>/<date>/<time>/<time index>/to/recording RTSP/1.0
CSeq: 8
Session: 931380111
User-agent: eon-client
Authorization: Basic aGl0cm9uOmhpdHJvbjEyMzQ=
Connection: Keep-Alive
Content-Length: 0
Require: onvif-replay
Range: clock=YYYYMMSSTHHMMSS-
Rate-Control: yes
Frames: intra
Scale: 3.0

6) Forward Quadruple Speed Play

PLAY rtsp://<ip address>/<channel>/<date>/<time>/<time index>/to/recording RTSP/1.0
CSeq: 8
Session: 931380111
User-agent: eon-client
Authorization: Basic aGl0cm9uOmhpdHJvbjEyMzQ=
Connection: Keep-Alive
Content-Length: 0
Require: onvif-replay
Range: clock=YYYYMMSSTHHMMSS-
Rate-Control: yes
Frames: intra

Scale: 4.0

7) Forward play stop

PLAY rtsp://<ip address>/<channel>/<date>/<time>/<time index>/to/recording RTSP/1.0
CSeq: 5
Session: 63845242
User-agent: eon-client
Authorization: Basic aGl0cm9uOmhpdHJvbjEyMzQ=
Connection: Keep-Alive
Content-Length: 0
Require: onvif-replay
Range: clock=YYYYMMSSTHHMMSS-
Rate-Control: no

8) Backward Step Play

PLAY rtsp://<ip address>/<channel>/<date>/<time>/<time index>/to/recording RTSP/1.0
CSeq: 15
Session: 931380111
User-agent: eon-client
Authorization: Basic aGl0cm9uOmhpdHJvbjEyMzQ=
Connection: Keep-Alive
Content-Length: 0
Require: onvif-replay
Range: clock=YYYYMMSSTHHMMSS-
Rate-Control: yes
Refresh: 1 or 0
Frames: intra
Scale: -0.1

9) Backward Step Backward

PLAY rtsp://<ip address>/<channel>/<date>/<time>/<time index>/to/recording RTSP/1.0
CSeq: 15
Session: 931380111
User-agent: eon-client
Authorization: Basic aGl0cm9uOmhpdHJvbjEyMzQ=
Connection: Keep-Alive
Content-Length: 0
Require: onvif-replay
Range: clock=YYYYMMSSTHHMMSS-
Rate-Control: yse
Refresh: 1 or 0
Frames: intra
Scale: 0

10) Backward Normal Play

PLAY rtsp://<ip address>/<channel>/<date>/<time>/<time index>/to/recording RTSP/1.0
CSeq: 16
Session: 931380111
User-agent: eon-client
Authorization: Basic aGl0cm9uOmhpdHJvbjEyMzQ=
Connection: Keep-Alive

Content-Length: 0
Require: onvif-replay
Range: clock=YYYYMMSSTHHMMSS-
Rate-Control: yes
Frames: intra
Scale: -1.0

11) Backward Double Speed Play

PLAY rtsp://<ip address>/<channel>/<date>/<time>/<time index>/to/recording RTSP/1.0
CSeq: 18
Session: 931380111
User-agent: eon-client
Authorization: Basic aGl0cm9uOmhpdHJvbjEyMzQ=
Connection: Keep-Alive
Content-Length: 0
Require: onvif-replay
Range: clock=YYYYMMSSTHHMMSS-
Rate-Control: yes
Frames: intra
Scale: -2.0

12) Backward Triple Speed Play

PLAY rtsp://<ip address>/<channel>/<date>/<time>/<time index>/to/recording RTSP/1.0
CSeq: 18
Session: 931380111
User-agent: eon-client
Authorization: Basic aGl0cm9uOmhpdHJvbjEyMzQ=
Connection: Keep-Alive
Content-Length: 0
Require: onvif-replay
Range: clock=YYYYMMSSTHHMMSS-
Rate-Control: yes
Frames: intra
Scale: -3.0

13) Backward Quadruple Speed Play

PLAY rtsp://<ip address>/<channel>/<date>/<time>/<time index>/to/recording RTSP/1.0
CSeq: 18
Session: 931380111
User-agent: eon-client
Authorization: Basic aGl0cm9uOmhpdHJvbjEyMzQ=
Connection: Keep-Alive
Content-Length: 0
Require: onvif-replay
Range: clock=YYYYMMSSTHHMMSS-
Rate-Control: yes
Frames: intra
Scale: -4.0

14) Backward play stop

PLAY rtsp://<ip address>/<channel>/<date>/<time>/<time index>/to/recording RTSP/1.0

CSeq: 5
Session: 63845242
User-agent: eon-client
Authorization: Basic aGl0cm9uOmhpdHJvbjEyMzQ=
Connection: Keep-Alive
Content-Length: 0
Require: onvif-replay
Range: clock=YYYYMMSSTHHMMSS-
Rate-Control: no

15) Clipcopy

PLAY rtsp://<ip address>/<channel>/<date>/<time>/<time index>/to/recording RTSP/1.0
CSeq: 5
Session: 63845242
User-agent: eon-client
Authorization: Basic aGl0cm9uOmhpdHJvbjEyMzQ=
Connection: Keep-Alive
Content-Length: 0
Require: onvif-replay
Range: clock=YYYYMMSSTHHMMSS-YYYYMMSSTHHMMSS
Rate-Control: no
Frames: all
Scale: 1.0

16) Only I Frame with interval 1 Sec(record time line)

PLAY rtsp://<ip address>/<channel>/<date>/<time>/<time index>/to/recording RTSP/1.0
CSeq: 12
Session: 12345678
Authorization: Basic 3djklgreljp
Require: onvif-replay
Range: clock=YYYYMMSSTHHMMSS-
Rate-Control: no
Frame: intra/1000

Caution

These documents were made in reference to RTSP(Real Time Streaming Protocol) in ONVIF Streaming Spec. – Ver. 2.10.

Snapshot

Version : 1.00
Date : 2014. 05. 30

Revision History

Version	Date	Comment
1.00	2014-05-30	Initial version

Introduction

This Chapter defines the detailed setup procedure for the Snapshot.

Snapshot URI

`http://"camera ipaddress"/snapshot/"ch"/snapshot.jpg`

* "ch" will be described in [Snapshot Parameter](#).

Snapshot Parameter

Parameter	Type	Value
ch	integer	1 or 2 or 3 or ...

Example

1) View Snapshot

`http://"camera ipaddress"/snapshot/1/snapshot.jpg`

System

System – Bonjour:

Version: 1.00e
Date: 2014. 03. 17

Revision History

Version	Date	Comment
1.00	2014-02-07	Initial version
1.00e	2014-03-17	English Translation

Introduction

This Chapter defines the detailed setup procedure for the Bonjour.

Bonjour URI

`http://"camera ipaddress"/system/bonjour.php`

Bonjour Parameter

Parameter	Type	Value
<code>bonjour_enable</code>	boolean	0 : Disable, 1 : Enable
<code>bonjour_friendly_name</code>	string	Friendly name

Example

1) get the current setting

`http://"camera ipaddress"/system/bonjour.php?app=get`

2) Bonjour setup

`http://"camera ipaddress"/system/bonjour.php?app=set&bonjour_enable=0`

`http://"camera ipaddress"/system/bonjour.php?app=set&bonjour_enable=1`

3) Friendly name setup

`http://"camera ipaddress"/system/bonjour.php?app=set&bonjour_friendly_name=FRIENDLYNAME`

Caution

You must check the following values in the response to `http://"camera ipaddress"/config.txt`

Item	Value	Explanation
options	BONJOUR	Bonjour available

System – Date&Time:

Version : 1.00
Date : 2014. 06. 27

Revision History

Version	Date	Comment
1.00	2014-06-27	Initial version

Introduction

This Chapter defines the detailed setup procedure for the Date&Time.

Date&Time URI

<http://ipaddress/system/time.php>

Date&Time Parameter

Parameter	Type	Value
app	string	get, set
tsyncmode	integer	0 : manual , 1 : computer , 2 : NTP
tzone	integer	0 ~ 74
dst_enable	integer	1 : enable, 0 : disable
dst_user_enable	integer	1 : enable, 0 : disable
dt	string	YYYY-MM-DD
tm	string	HH:MM:SS
dst_smonth	integer	1 ~ 12
dst_sweek	integer	1 ~ 5
dst_sdayofweek	integer	0 ~ 6
dst_stm	string	hh:mm
dst_emonth	integer	1 ~ 12
dst_eweek	integer	1 ~ 5
dst_edayofweek	integer	0 ~ 6
dst_etm	string	hh:mm
dst_tm	integer	0 ~ 999
ntp_server	string	default : time.nist.gov
ntp_interval	integer	1 : 60, 2 : 120, 3 : 180, 6 : 360, 12 : 720, 24 : 1440
date_format	integer	1 : YYYY-MM-DD, 2 : MM-DD-YYYY, 3 : DD-MM-YYYY
time_format	integer	1 : 24 hour, 2 : 12 hour AM/PM

Example

1) get the current setting

`http://''ipaddress''/system/time.php?app=get`

2) datetime mode setup

`http://''ipaddress''/system/time.php?app=set&tsyncmode=0` (manual)

`http://''ipaddress''/system/time.php?app=set&tsyncmode=1` (computer)

`http://''ipaddress''/system/time.php?app=set&tsyncmode=2` (NTP)

3) timezone setup

`http://''ipaddress''/system/time.php?app=set&tz=1`

`http://''ipaddress''/system/time.php?app=set&tz=20`

`http://''ipaddress''/system/time.php?app=set&tz=40`

`http://''ipaddress''/system/time.php?app=set&tz=72`

Refer to Time Zone Table

4) timezone daylight saving setup

`http://''ipaddress''/system/time.php?app=set&dst_enable=0`

`http://''ipaddress''/system/time.php?app=set&dst_enable=1`

5) timezone daylight saving user setup

`http://''ipaddress''/system/time.php?app=set&dst_user_enable=0`

`http://''ipaddress''/system/time.php?app=set&dst_user_enable=1`

6) timezone daylight saving start month setup

`http://''ipaddress''/system/time.php?app=set&dst_smonth=1`

`http://''ipaddress''/system/time.php?app=set&dst_smonth=5`

`http://''ipaddress''/system/time.php?app=set&dst_smonth=12`

7) timezone daylight saving start week setup

`http://''ipaddress''/system/time.php?app=set&dst_sweek=1`

`http://''ipaddress''/system/time.php?app=set&dst_sweek=3`

`http://''ipaddress''/system/time.php?app=set&dst_sweek=5`

8) timezone daylight saving start dayofweek setup

`http://''ipaddress''/system/time.php?app=set&dst_sdayofweek=0` (Sunday)

`http://''ipaddress''/system/time.php?app=set&dst_sdayofweek=1` (Monday)

`http://''ipaddress''/system/time.php?app=set&dst_sdayofweek=2` (Tuesday)

`http://''ipaddress''/system/time.php?app=set&dst_sdayofweek=3` (Wednesday)

`http://''ipaddress''/system/time.php?app=set&dst_sdayofweek=4` (Thursday)

`http://''ipaddress''/system/time.php?app=set&dst_sdayofweek=5` (Friday)

`http://''ipaddress''/system/time.php?app=set&dst_sdayofweek=6` (Saturday)

9) timezonedaylight saving start time setup

`http://''ipaddress''/system/time.php?app=set&dst_stm=01:00`

`http://''ipaddress''/system/time.php?app=set&dst_stm=18:10`

`http://''ipaddress''/system/time.php?app=set&dst_stm=23:50`

10) timezone daylight saving end month setup

`http://''ipaddress''/system/time.php?app=set&dst_emonth=1`

`http://''ipaddress''/system/time.php?app=set&dst_emonth=5`

http://''ipaddress''/system/time.php?app=set&dst_emonth=12

11) timezone daylight saving end week setup

http://''ipaddress''/system/time.php?app=set&dst_eweek=1
http://''ipaddress''/system/time.php?app=set&dst_eweek=3
http://''ipaddress''/system/time.php?app=set&dst_eweek=5

12) timezone daylight saving end dayofweek setup

http://''ipaddress''/system/time.php?app=set&dst_edayofweek=0 (Sunday)
http://''ipaddress''/system/time.php?app=set&dst_edayofweek=1 (Monday)
http://''ipaddress''/system/time.php?app=set&dst_edayofweek=2 (Tuesday)
http://''ipaddress''/system/time.php?app=set&dst_edayofweek=3 (Wednesday)
http://''ipaddress''/system/time.php?app=set&dst_edayofweek=4 (Thursday)
http://''ipaddress''/system/time.php?app=set&dst_edayofweek=5 (Friday)
http://''ipaddress''/system/time.php?app=set&dst_edayofweek=6 (Saturday)

13) timezone daylight saving end time setup

http://''ipaddress''/system/time.php?app=set&dst_etm=01:00
http://''ipaddress''/system/time.php?app=set&dst_etm=18:20
http://''ipaddress''/system/time.php?app=set&dst_etm=23:45

14) timezone daylight saving time gap setup

http://''ipaddress''/system/time.php?app=set&dst_tm=30 (min)
http://''ipaddress''/system/time.php?app=set&dst_tm=60 (min)
http://''ipaddress''/system/time.php?app=set&dst_tm=90 (min)

15) Date&Time setup

<http://''ipaddress''/system/time.php?app=set&dt=2014-03-14> (date)
<http://''ipaddress''/system/time.php?app=set&tm=15:10:50> (time)

16) ntp server setup

http://''ipaddress''/system/time.php?app=set&ntp_server=time.kriss.re.kr

17) ntp interval setup

http://''ipaddress''/system/time.php?app=set&ntp_interval=1
http://''ipaddress''/system/time.php?app=set&ntp_interval=6
http://''ipaddress''/system/time.php?app=set&ntp_interval=24

18) date format setup

http://''ipaddress''/system/time.php?app=set&date_format=1 (YYYY-MM-DD)
http://''ipaddress''/system/time.php?app=set&date_format=2 (MM-DD-YYYY)
http://''ipaddress''/system/time.php?app=set&date_format=3 (DD-MM-YYYY)

19) time format setup

http://''ipaddress''/system/time.php?app=set&time_format=1 (24 hour)
http://''ipaddress''/system/time.php?app=set&time_format=2 (12 hour AM/PM)

20) How to setup date&time at once

http://''ipaddress''/system/time.php?app=set&tzone=72&dst_enable=1&tsyncmode=1&dst_user_erable=1&ntp_server=time.nist.gov&dt=2014-05-21&tm=12:25:55&dst_smonth=1&dst_sweek

=1&dst_sdayofweek=0&dst_stm=23:00&dst_emonth=10&dst_eweek=1&dst_edayofweek=0&dst_etm=22:00&dst_tm=60&ntp_interval=720&time_format=1&date_format=1

Caution

Refer to the table below 'tzone' Parameter for TimeZone setup.

tzone	Value
0	(GMT-12:00) International Date Line West
1	(GMT-11:00) Midway Island, Samoa
2	(GMT-10:00) Hawaii
3	(GMT-09:00) Alaska
4	(GMT-08:00) Pacific Time(US & Canada), Tijuana
5	(GMT-07:00) Arizona
6	(GMT-07:00) Chihuahua, La Paz, Mazatlán
7	(GMT-07:00) Mountain Time(US & Canada)
8	(GMT-06:00) Central America
9	(GMT-06:00) Central Time(US & Canada)
10	(GMT-06:00) Guadalajara, Mexico City, Monterrey
11	(GMT-06:00) Saskatchewan
12	(GMT-05:00) Bogota, Lima, Quito
13	(GMT-05:00) Eastern Time(US & Canada)
14	(GMT-05:00) Indiana(East)
15	(GMT-04:00) Atlantic Time(Canada)
16	(GMT-04:00) Caracas, La Paz
17	(GMT-04:00) Santiago
18	(GMT-03:30) Newfoundland
19	(GMT-03:00) Brasilia
20	(GMT-03:00) Buenos Aires, Georgetown
21	(GMT-03:00) Greenland
22	(GMT-02:00) Mid-Atlantic
23	(GMT-01:00) Azores
24	(GMT-01:00) Cape Verde Is.
25	(GMT) Casablanca, Monrovia
26	(GMT) Greenwich Mean Time : Dublin, Edinburgh, Lisbon, London
27	(GMT+01:00) Amsterdam, Berlin, Bern, Rome, Stockholm, Vienna
28	(GMT+01:00) Belgrade, Bratislava, Budapest, Ljubljana, Prague
29	(GMT+01:00) Brussels, Copenhagen, Madrid, Paris

30	(GMT+01:00) Sarajevo, Skopje, Warsaw, Zagreb
31	(GMT+01:00) West Central Africa
32	(GMT+02:00) Athens, Beirut, Istanbul, Minsk
33	(GMT+02:00) Bucharest
34	(GMT+02:00) Cairo
35	(GMT+02:00) Harare, Pretoria
36	(GMT+02:00) Helsinki, Kyiv, Riga, Sofia, Tallinn, Vilnius
37	(GMT+02:00) Jerusalem
38	(GMT+03:00) Baghdad
39	(GMT+03:00) Kuwait, Riyadh
40	(GMT+03:00) Moscow, St. Petersburg, Volgograd
41	(GMT+03:00) Nairobi
42	(GMT+03:30) Tehran
43	(GMT+04:00) Abu Dhabi, Muscat
44	(GMT+04:00) Baku, Tbilisi, Yerevan
45	(GMT+04:30) Kabul
46	(GMT+05:00) Yekaterinburg
47	(GMT+05:00) Islamabad, Karachi, Tashkent
48	(GMT+05:30) Chennai, Kolkata, Mumbai, New Delhi
49	(GMT+05:45) Kathmandu
50	(GMT+06:00) Almaty, Novosibirsk
51	(GMT+06:00) Astana, Dhaka
52	(GMT+06:00) Sri Jayewardenepura
53	(GMT+06:30) Rangoon
54	(GMT+07:00) Bangkok, Hanoi, Jakarta
55	(GMT+07:00) Krasnoyarsk
56	(GMT+08:00) Beijing, Chongqing, Hong Kong, Urumqi
57	(GMT+08:00) Irkutsk, Ulaanbaatar
58	(GMT+08:00) Kuala Lumpur, Singapore
59	(GMT+08:00) Perth
60	(GMT+08:00) Taipei
61	(GMT+09:00) Osaka, Sapporo, Tokyo
62	(GMT+09:00) Seoul
63	(GMT+09:00) Yakutsk

64	(GMT+09:30) Adelaide
65	(GMT+09:30) Darwin
66	(GMT+10:00) Brisbane
67	(GMT+10:00) Canberra, Melbourne, Sydney
68	(GMT+10:00) Guam, Port Moresby
69	(GMT+10:00) Hobart
70	(GMT+10:00) Vladivostok
71	(GMT+11:00) Magadan, Solomon Is., New Caledonia
72	(GMT+12:00) Auckland, Wellington
73	(GMT+12:00) Fiji, Kamchatka, Marshall Is.
74	(GMT+13:00) Nuku'alofa

[Time Zone]

System – DDNS:

Version : 1.00
Date : 2014. 06. 27

Revision History

Version	Date	Comment
1.00	2014-06-27	Initial version

Introduction

This Chapter defines the detailed setup procedure for the DDNS.

DDNS URI

<http://camera ipaddress/system/ddns.php>

DDNS Parameter

Parameter	Type	Value
net_ddns	boolean	0 : Off, 1 : On
ddns_server	string	cctv-network.co.kr, dyndns.org
ddns_host	string	Registered Host Name
ddns_user	string	Registered User Name
ddns_pwd	string	Registered User Password
ddns_pwdconfirm	string	Registered Confirm Password
ddns_interval	integer	600, 1800, 3600, 21600, 86400
ddns_local	boolean	0 : Not Register, 1 : Register
ddns_publicip	string (ro)	Registered IP Address

Examples

1) get the current setting

<http://camera ipaddress/system/ddns.php?app=get>

2) DDNS setup

http://camera ipaddress/system/ddns.php?app=set&net_ddns=1

http://camera ipaddress/system/ddns.php?app=set&net_ddns=0

3) DDNS server URL setup

http://camera ipaddress/system/ddns.php?app=set&ddns_server=cctv-network.co.kr

4) DDNS Host name setup

http://camera ipaddress/system/ddns.php?app=set&ddns_host=cube

5) DDNS User name setup

http://camera ipaddress/system/ddns.php?app=set&ddns_user=admin

6) DDNS Password setup

http://camera ipaddress/system/ddns.php?app=set&ddns_pwd=admin

7) DDNS Confirm Password setup

http://camera ipaddress/system/ddns.php?app=set&ddns_pwdconfirm=admin

8) DDNS Interval setup

http://camera ipaddress/system/ddns.php?app=set&ddns_interval=1800

http://camera ipaddress/system/ddns.php?app=set&ddns_interval=3600

9) DDNS Local setup

http://camera ipaddress/system/ddns.php?app=set&ddns_local=0

http://camera ipaddress/system/ddns.php?app=set&ddns_local=1

Caution

You must check the following values in the response to <http://camera ipaddress/config.txt>

Item data.	Value	Explanation
options	DDNS	DDNS available

System – H/W check:

Version : 1.00
Date : 2014. 03. 03

Revision History

Version	Date	Comment
1.00	2014-03-03	Initial version

Introduction

This Chapter defines the detailed setup procedure for the Hardware Check.

Hardware Check URI

http://camera ipaddress/system/check_hardware.php

Hardware Check Parameter

Parameter	Type	Value
light	boolean	0 : Off, 1 : On
pir_detect	boolean	0 : Off, 1 : On
play_audio	boolean	0 : Off, 1 : Play

Examples

1) get the current setting

http://camera ipaddress/system/check_hardware.php?app=get

2) LED light Test

http://camera ipaddress/system/check_hardware.php?app=set&light=1

http://camera ipaddress/system/check_hardware.php?app=set&light=0

3) PIR Sensor Test

http://camera ipaddress/system/check_hardware.php?app=set&pir_detect=1

http://camera ipaddress/system/check_hardware.php?app=set&pir_detect=0

4) Speaker Test

http://camera ipaddress/system/check_hardware.php?app=set&play_audio=1

http://camera ipaddress/system/check_hardware.php?app=set&play_audio=0

Caution

1) Speaker Test

This test is available after uploading an audio file on no1 index in the audio alert web menu[Setup – Event – Event Out – Audio Alert].

The Audio will be palyed when the following is executed.

http://cameraipaddress/system/check_hardware.php?app=set&play_audio=0 message has been sent

System – HTTPS:

Version : 1.00
Date : 2014. 06. 27

Revision History

Version	Date	Comment
1.00	2014-06-27	Initial version

Introduction

This Chapter defines the detailed setup procedure HTTPS.

HTTPS URI

`http://"camera ipaddress"/system/https.php`

HTTPS Parameter

Parameter	Type	Value
Method	string	update, remove
https_mode	integer	0 : HTTP, 1 : HTTPS, 2 : HTTP & HTTPS
private_cert_name	string (ro)	Authentication key file name
private_cert_time	string (ro)	Authentication key file upload time

Authentication key Upload

File upload is using HTML POST method, in detail. multipart/form-data format in MIME protocol is used for File transfer.

- a. The following should be defined in HTML POST method message.

Request URL

`http://"ip address"/system/https.php?app=set`

encoded Login account

Content-Type : multipart/form-data; boundary=-----"delimiter"

.

Content-Length : "File size for upload"

* For detailed explanation of POST method, please refer to the following URL. POST message : <<http://tools.ietf.org/html/rfc2616>>

- b. The following should be defined in MIME Protocol for file transfer.

Content-Disposition : form-data; name=private_cert_file; filename="uploading file path"

Content-Type : application/octet-stream

- c. For detailed explanation of multipart/form-data format, please refer to the following URL.

multipart/form-data : <<http://www.w3.org/TR/html401/interact/forms.html>>

multipart/form-data RFC : <<http://www.ietf.org/rfc/rfc2045.txt>>

Examples

1) get the current setting

`http://"camera ipaddress"/system/https.php?app=get`

2) HTTPS Mode setup

`http://"camera ipaddress"/system/https.php?app=set&https_mode=0`

http://"camera ipaddress"/system/https.php?app=set&https_mode=1
http://"camera ipaddress"/system/https.php?app=set&https_mode=2

Caution

You must check the following values in the response to http://"camera ipaddress"/config.txt

Item	Value	Explanation
https_port		Current https port value
https_mode	0, 1, 2	Current https mode value

System – Information:

Version : 1.00
Date : 2014. 06. 27

Revision History

Version	Date	Comment
1.00	2014-06-27	Initial version

Introduction

This Chapter defines the detailed setup procedure for the Information.

Information URI

http://camera_ipaddress/system/information.php

Information Parameter

Parameter	Type	Value
device_name	string	User defined device name
location1	string	User defined device location information
location2	string	User defined device location information
location3	string	User defined device location information
location4	string	User defined device location information

Examples

1) get the current setting

http://camera_ipaddress/system/information.php?app=get

2) Device name setup

http://camera_ipaddress/system/information.php?app=set&device_name=H.264 Network Camera

* you can check the device_name values in the response to http://camera_ipaddress/config.txt

3) Location setup

http://camera_ipaddress/system/information.php?app=set&location1=Korea

http://camera_ipaddress/system/information.php?app=set&location2=China

http://camera_ipaddress/system/information.php?app=set&location3=USA

http://camera_ipaddress/system/information.php?app=set&location4=India

System – IP Filtering:

Version : 1.00
Date : 2014. 05. 30

Revision History

Version	Date	Comment
1.00	2014-05-30	Initial version

Introduction

This Chapter defines the detailed setup procedure IP Filtering.

IP Filtering URI

<http://camera ipaddress/system/filtering.php>

IP Filtering Parameter

Parameter	Type	Value
ipfilter_enable	boolean	0 : Off, 1 : On
ipfilter_count	integer (ro)	5 : Max IP FILTER Priority count
ipfilter#_enable	boolean	0 : Off, 1 : On
ipfilter#_policy	integer	0 : ALLOW, 1 : DENY
ipfilter#_startip	string	start IP of group for Filtering
ipfilter#_endip	string	end ip of group for Filtering

* “ipfilter#_ooo” # have values of 1 ~ 5.

Examples

1) get the current setting

<http://camera ipaddress/system/filtering.php?app=get>

2) IP Filtering setup

http://camera ipaddress/system/filtering.php?app=set&ipfilter_enable=0

http://camera ipaddress/system/filtering.php?app=set&ipfilter_enable=1

3) IP Filtering Priority 1

a. IP Filtering Priority 1 setup

http://camera ipaddress/system/filtering.php?app=set&ipfilter1_enable=0

http://camera ipaddress/system/filtering.php?app=set&ipfilter1_enable=1

b. Policy setup

http://camera ipaddress/system/filtering.php?app=set&ipfilter1_policy=0

http://camera ipaddress/system/filtering.php?app=set&ipfilter1_policy=1

c. Start & End IP setup

http://"camera
ipaddress"/system/filtering.php?app=set&ipfilter1_startip=10.0.2.10&ipfilter1_endip=10.0.2.
20

4) IP Filtering Priority 2

a. IP Filtering Priority 2 setup

http://"camera ipaddress"/system/filtering.php?app=set&ipfilter2_enable=0
http://"camera ipaddress"/system/filtering.php?app=set&ipfilter2_enable=1

b. Policy setup

http://"camera ipaddress"/system/filtering.php?app=set&ipfilter2_policy=0
http://"camera ipaddress"/system/filtering.php?app=set&ipfilter2_policy=1

c. Start & End IP setup

http://"camera
ipaddress"/system/filtering.php?app=set&ipfilter2_startip=10.0.2.30&ipfilter2_endip=10.0.2.4
0

5) IP Filtering Priority 3

a. IP Filtering Priority 3 setup

http://"camera ipaddress"/system/filtering.php?app=set&ipfilter3_enable=0
http://"camera ipaddress"/system/filtering.php?app=set&ipfilter3_enable=1

b. Policy setup

http://"camera ipaddress"/system/filtering.php?app=set&ipfilter3_policy=0
http://"camera ipaddress"/system/filtering.php?app=set&ipfilter3_policy=1

c. Start & End IP setup

http://"camera
ipaddress"/system/filtering.php?app=set&ipfilter3_startip=10.0.2.30&ipfilter3_endip=10.0.2.
40

6) IP Filtering Priority 4

a. IP Filtering Priority 4 setup

http://"camera ipaddress"/system/filtering.php?app=set&ipfilter4_enable=0
http://"camera ipaddress"/system/filtering.php?app=set&ipfilter4_enable=1

b. Policy setup

http://"camera ipaddress"/system/filtering.php?app=set&ipfilter4_policy=0
http://"camera ipaddress"/system/filtering.php?app=set&ipfilter4_policy=1

c. Start & End IP setup

http://"camera
ipaddress"/system/filtering.php?app=set&ipfilter4_startip=10.0.2.50&ipfilter4_endip=10.0.2.
60

7) IP Filtering Priority 5

a. IP Filtering Priority 5 setup

http://"camera ipaddress"/system/filtering.php?app=set&ipfilter5_enable=0
http://"camera ipaddress"/system/filtering.php?app=set&ipfilter5_enable=1

b. Policy setup

http://"camera ipaddress"/system/filtering.php?app=set&ipfilter5_policy=0
http://"camera ipaddress"/system/filtering.php?app=set&ipfilter5_policy=1

c. Start & End IP setup

http://"camera
ipaddress"/system/filtering.php?app=set&ipfilter5_startip=10.0.2.70&ipfilter5_endip=10.0.2.
80

Caution

The ending IP address should have a larger value than starting IP address for all priority
You must check the following values in the response to http://"camera ipaddress"/config.txt

Item	Value	Explanation
options	IP_FILTER	IP Filtering available

System – Language:

Version: 1.00e
Date: 2014. 03. 18

Revision History

Version	Date	Comment
1.00	2014-01-23	Initial version
1.00e	2014-03-18	English Translation

Introduction

This Chapter defines the detailed setup procedure for the web page Language.

Language URI

`http://"camera ipaddress"/system/language.php`

Language Parameter

Parameter	Type	Value
language	string	English
language_list	string(ro)	English, Korean, Russian, Chinese

Examples

1) get the current setting

`http://"camera ipaddress"/system/language.php?app=get`

2) Language setup

`http://"camera ipaddress"/system/language.php?app=set&language=English`

`http://"camera ipaddress"/system/language.php?app=set&language=Korean`

* You may select one of the supported language in the return value of language_list via get the current setting.

* Response example of get the current setting is as follows.

`res=200&language=English&language_list=Korean|Russian|English|Chinese`

System – Live Push:

Version : 1.00
Date : 2014. 02. 27

Revision History

Version	Date	Comment
1.00	2014-02-27	Initial version

Introduction

This Chapter defines the detailed setup procedure for the Live Push..

Live Push URI

`http://"camera ipaddress"/system/live_push.php`

Live Push Parameter

Parameter	Type	Value
live_push#_enable	boolean	0 : Off, 1 : On
live_push#_server	string	Server URL
live_push#_port	integer	1 – 65535
live_push#_user	string	User name
live_push#_pass	string	User password

* “live_push#_ooo” # have number 1, 2, 3.

Examples

1) get the current setting

`http://"camera ipaddress"/system/live_push.php?app=get`

2) Live Push 1

a. Live Push 1 setup

`http://"camera ipaddress"/system/live_push.php?app=set&live_push1_enable=1`
`http://"camera ipaddress"/system/live_push.php?app=set&live_push1_enable=0`

b. Live Push 1 URL setup

`http://"camera ipaddress"/system/live_push.php?app=set&live_push1_server=10.0.2.12`

c. Live Push 1 Port setup

`http://"camera ipaddress"/system/live_push.php?app=set&live_push1_port=8080`

d. Live Push 1 User name setup

`http://"camera ipaddress"/system/live_push.php?app=set&live_push1_user=admin`

e. Live Push 1 Password setup

`http://"camera ipaddress"/system/live_push.php?app=set&live_push1_pass=admin`

3) Live Push 2

a. Live Push 2 setup

`http://"camera ipaddress"/system/live_push.php?app=set&live_push2_enable=1`
`http://"camera ipaddress"/system/live_push.php?app=set&live_push2_enable=0`

b. Live Push 2 URL setup

`http://camera ipaddress/system/live_push.php?app=set&live_push2_server=10.0.2.12`

c. Live Push 2 Port setup

`http://camera ipaddress/system/live_push.php?app=set&live_push2_port=8080`

d. Live Push 2 User name setup

`http://camera ipaddress/system/live_push.php?app=set&live_push2_user=admin`

e. Live Push 2 Password setup

`http://camera ipaddress/system/live_push.php?app=set&live_push2_pass=admin`

4) Live Push 3

a. Live Push 3 setup

`http://camera ipaddress/system/live_push.php?app=set&live_push3_enable=1`

`http://camera ipaddress/system/live_push.php?app=set&live_push3_enable=0`

b. Live Push 3 URL setup

`http://camera ipaddress/system/live_push.php?app=set&live_push3_server=10.0.2.12`

c. Live Push 3 Port setup

`http://camera ipaddress/system/live_push.php?app=set&live_push3_port=8080`

d. Live Push 3 User name setup

`http://camera ipaddress/system/live_push.php?app=set&live_push3_user=admin`

e. Live Push 3 Password setup

`http://camera ipaddress/system/live_push.php?app=set&live_push3_pass=admin`

Caution

You must check the following values in the response to `http://camera ipaddress/config.txt`

item	Value	Explanation
options	LIVE_PUSH	Live Push available

System – Log:

Version: 1.00e
Date: 2015. 07. 20

Revision History

Version	Date	Comment
1.00	2015-07-01	Initial version
1.00e	2015-07-20	English Translation

Introduction

This chapter describes the camera Log request method via URI.

Log URI

http://*"Camera IP Address"*/system/log.txt

Log Parameter

Parameter	Type	Value
type	integer	0 : All (Input number : Log type), 1 : Access, 2 : Event, 3 : Setup, 4 : Access + Event, 5 : Access + Setup, 6 : Event + Setup
sdate	String	Start date (YYYY-MM-DD)
stime	String	Start time (HH:MM:SS)
edate	String	End date (YYYY-MM-DD)
etime	String	End time (HH:MM:SS)

* If any of the parameters are null, the default start date and time is 1970-01-01 00:00:00 and the default end date and time is the current date and time.

Examples

1) Type

http://*"camera ipaddress"*/system/log.txt?type=0
http://*"camera ipaddress"*/system/log.txt?type=1
http://*"camera ipaddress"*/system/log.txt?type=2
http://*"camera ipaddress"*/system/log.txt?type=3
http://*"camera ipaddress"*/system/log.txt?type=4
http://*"camera ipaddress"*/system/log.txt?type=5
http://*"camera ipaddress"*/system/log.txt?type=6

2) Start time

http://*"camera ipaddress"*/system/log.txt?stime=12:30:52

3) End time

http://"camera ipaddress"/system/log.txt?etime=05:10:51

4) Start time, End time

http://"camera ipaddress"/system/log.txt?stime=13:00:00&etime=13:07:00

5) Start date

http://"camera ipaddress"/system/log.txt?sdate=2015-12-25

6) End date

http://"camera ipaddress"/system/log.txt?edate=2015-12-31

7) Start date, End date

http://"camera ipaddress"/system/log.txt?sdate=2015-12-25&edate=2015-12-31

8) Start date, Start time, End date, End time

http://"camera ipaddress"/system/log.txt?sdate=2015-02-28&stime=10:42:11&edate=2015-09-03&etime=18:23:45

9) Type, Start date, Start time, End date, End time

http://"camera ipaddress"/system/log.txt?type=2&sdate=2015-02-28&stime=10:42:11&edate=2015-09-03&etime=18:23:45

Caution

You must check the following values in the response to http://"camera ipaddress"/config.txt

Item	Value	Description
options	LOG	Log support

In cases of the followings, HTTP_400 is returned

- a. The start date is after the end date
- b. The start date and end date are the same, and start time is after the end time.

System – Maintenance:

Version : 1.01
Date : 2014. 09. 17

Revision History

Version	Date	Comment
1.01	2014-09-17	Initial version

Introduction

This Chapter defines the detailed setup procedure for the Maintenance.

Maintenance URI

1) Restart

Restart Camera system.

<http://camera ipaddress/system/restart.php>

2) Reset

Reset all parameter except the IP parameter.

<http://camera ipaddress/system/reset.php>

3) Default

Reset all parameter to the factory setting

<http://camera ipaddress/system/default.php>

4) Upgrade

Upgrade Camera system with new firmware.

<http://camera ipaddress/system/update.php>

5) VCA Upgrade

Upgrade Camera system VCA function with new VCA firmware.

http://camera ipaddress/system/vca_update.php

6) Backup

Save all parameters and user-defined script to a backup file.

<http://camera ipaddress/system/backup.cgi>

7) Restore

Reset current configuratuion to Backup file..

<http://camera ipaddress/system/restore.cgi>

8) Calibrate

Initialize Focus and Zoom.

Examples

1) Restart

<http://camera ipaddress/system/restart.php>

2) Reset

<http://camera ipaddress/system/reset.php>

3) Default

http://camera ipaddress/system/default.php

4) Upgrade

Refer to caution of File upload.

5) VCA Upgrade

Refer to caution of VCA upload.

6) Backup

http://camera ipaddress/system/backup.cgi

7) Restore

Refer to caution of File upload ..

8) Calibrate

Refer to detailed explanation of Move in [Motor Position Control](#) API.

Caution

File upload is done by HTML POST method, in detail. multipart/form-data format in MIME protocol is used for File transfer

a. The following should be defined in HTML POST method message.

· Request URL

F/W Upgrade: *http://camera ipaddress/system/update.php?app=set*

VCA Upgrade: *http://camera ipaddress/system/vca_update.php?app=set*

Restore: *http://camera ipaddress/system/restore?app=set*

· Encoding Login account

· Content-Type

multipart/form-data; boundary=-----“delimiter”

· Content-Length

File size for Upload

For detailed explanation of POST method, please refer to below URL..

POST message : <http://tools.ietf.org/html/rfc2616>

b. The following should be defined in MIME Protocol for file transfer..

· Content-Disposition

F/W Upgrade : *form-data; name="fimage"; filename="uploading file path"*

VCA Upgrade : *form-data; name="vcafimage"; filename=" uploading file path "*

Restore : *form-data; name="backupsaveformfile"; filename=" uploading file path "*

· Content-Type

- application/octet-stream

c. For detailed explanation of multipart/form-data format, please refer to below URL.

multipart/form-data : <<http://www.w3.org/TR/html401/interact/forms.html>>

multipart/form-data RFC : <http://www.ietf.org/rfc/rfc2045.txt>

You must check the following values at the response of <http://camera ipaddress/config.txt> for proper work of VCA Upgrade

Item	Value	Explanation
------	-------	-------------

vca_option	UPDATE	VCA Update available
------------	--------	----------------------

You must check the following values in the response to http://camera_ipaddress/config.txt for proper work of calibration

Item	Value	Explanation
Options	M_PTZ	Motor available Detailed support in m_ptz_option
m_ptz_option	ZOOM_TRACKING	Motor Position Control available

System – Media check:

Version : 1.00
Date : 2014. 03. 04

Revision History

Version	Date	Comment
1.00	2014-03-04	Initial version

Introduction

This Chapter defines the detailed setup for the Media Check.

Media Check URI

http://”camera ipaddress”/system/check_media.php

Media Check Parameter

Parameter	Type	Value
media_v_ch#1_strm#2_en	boolean (ro)	0 : Off, 1 : On
media_v_ch#1_strm#2_codec	string (ro)	Current codec
media_v_ch#1_strm#2_res	string (ro)	Current resolution
media_v_ch#1_strm#2_fps	integer (ro)	Current fps
media_v_ch#1_strm#2_bitrate	integer (ro)	Current bitrate
media_a_snd#3_enable	boolean (ro)	0 : Off, 1 : On
media_a_snd#3_codec	string (ro)	Current codec
media_a_snd#3_in_gain	string(ro) / integer(ro)	AUTO / Current Audio Input Volume
media_a_snd#3_samplerate	integer (ro)	Current Sampling rate
media_a_snd#3_bitrate	integer (ro)	Current bitrate

* #1 : Current channel / #2 : Current stream number / #3 : Current audio channel

Caution

1) Parameter - “media_a_snd#3_enable”

In the camera web page “**Setup – Audio**”, if audio is enabled it shows 1, and 0 in case of Disabled audio

With API “**Audio [Example - 2 Audio setup](#)**” you can setup audio disable or enable

2) Parameter - “media_a_snd#3_in_gain”

In the camera web page “**Setup - Audio - Audio Input –if Auto**” is checked,, it shows Auto, and Input Volume in case of unchecked.

With API “**Audio [Example - 9 Audio enable=1, AUTO GAIN setup](#)**” you can check or uncheck the Auto item when Auto is unchecked , With API “**Audio [Example - 7 Audio enable=, GAIN setting](#)**” you can setup Audio Input Volume.

System – NAT:

Version : 1.00
Date : 2014. 05. 26

Revision History

Version	Date	Comment
1.00	2014-05-26	Initial version

Introduction

This Chapter defines the detailed setup procedure for the NAT

NAT URI

<http://camera ipaddress/system/nat.php>

NAT Parameter

Parameter	Type	Value
nat_enable_wire	integer	0 : Disable, 1 : Enable
nat_wire_http_port	integer	1024 ~ 65535 : External wired HTTP port
nat_wire_rtsp_port	integer	1024 ~ 65535 : External wired RTSP port
nat_wire_http_address	string(ro)	External wired HTTP network address
nat_wire_rtsp_address	string(ro)	External wired RTSP network address
nat_enable_wireless	integer	0 : Disable, 1 : Enable
nat_wireless_http_port	integer	1024 ~ 65535 : External wireless HTTP port
nat_wireless_rtsp_port	integer	1024 ~ 65535 : External wireless RTSP port
nat_wireless_http_address	string(ro)	External wireless HTTP network address
nat_wireless_rtsp_address	string(ro)	External wireless RTSP network address

Examples

1) get the current setting

<http://camera ipaddress/system/nat.php?app=get>

2) Wire NAT traversal setup

http://camera ipaddress/system/nat.php?app=set&nat_enable_wire=1

3) External wire HTTP port setup

http://camera ipaddress/system/nat.php?app=set&nat_wire_http_port=11234

If it is set to “0”, it will be defined to available random port..

4) External wire RTSP port setup

http://camera ipaddress/system/nat.php?app=set&nat_wire_rtsp_port=11234

If it is set to “0”, it will be defined to available random port...

5) Wireless NAT traversal setup

http://camera ipaddress/system/nat.php?app=set&nat_enable_wireless=1

6) External wireless HTTP port setup

http://camera ipaddress/system/nat.php?app=set&nat_wireless_http_port=11234

If it is set to “0”, it will be defined to available random port...

7) External wireless RTSP port setup

http://”camera ipaddress”/system/nat.php?app=set&nat_wireless_rtsp_port=11234

If it is set to “0” ,it will be defined to available random port.

8) Response wire HTTP&RTSP URL

nat_enable_wire, nat_wire_http_port, nat_wire_rtsp_port, port mapping HTTP URL and RTSP

URL will be responded. Below is proper example of response..

res=200&nat_wire_http_address=115.95.240.151:11234&nat_wire_rtsp_address=115.95.240.151:10001

9) Response wireless HTTP&RTSP URL

nat_enable_wire, nat_wire_http_port, nat_wire_rtsp_port, port mapping HTTP URL and RTSP --

URL will be responded. Below is proper example of response

res=200&nat_wireless_http_address=115.95.240.151:11234&nat_wireless_rtsp_address=115.95.240.151:10001

10) Response Error Code

nat_enable_wire, nat_wire_http_port, nat_wire_rtsp_port, nat_enable_wireless,

When nat_wireless_http_port, nat_wireless_rtsp_port port mapping fails, an Error Code will be generated. Below are eamples of Error Codes.

res=200&nat_wire_http_address=Error Code 1&nat_wire_rtsp_address= Error Code 1

res=200&nat_wireless_http_address=Error Code 2&nat_wireless_rtsp_address= Error Code 2

Each error code means :

- a. Error Code 1 : NAT do not support UPnP feature.
- b. Error Code 2 : when Port number has been setup, all HTTP and RTSP port is using by NAT
- c. Error Code 3 : when Port number has been setup, HTTP port is using by NAT
- d. Error Code 4 : Port when Port number has been setup, RTSP port is using by NAT
- e. rror Code 5 : port setup error except above

Caution

You must check the following values if the response to http://”camera ipaddress”/config.txt.

option	Value	Explanation
options	WIRELESS	Wireless Network available

System – Network:

Version: 1.01e
Date: 2017. 1. 10

Revision History

Version	Date	Comment
1.00	2015-06-16	Initial version
1.00e	2015-06-26	English Translation
1.01e	2017-01-10	DHCP API error modify

Introduction

This Chapter defines the detailed setup procedure for the Network.

System – Network URI

<http://camera ipaddress/system/network.php>

System – Network Parameter

Parameter	Type	Value
net_dhcp	boolean	IP address assign method 0 : use DHCP, 1 : use fixed Address
net_ip	string	fixed IP Address
net_mask	string	fixed Subnet Mask
net_gateway	string	fixed Gateway Address
net_ipv6	boolean	Use IPv6 0 : Disable, 1 : Enable
net_ipv6addr	string(ro)	IPv6 address
dns_dhcp	boolean	DNS Server address assign method 0 : use fixed Address, 1 : use DHCP
dns_domain	string	fixed DNS domain Address
net_dns	string	fixed Primary DNS Server Address
net_dns2	string	fixed Secondary DNS Server Address
net_hostname	string	Host name
http_port	integer	HTTP Port
https_port	integer	HTTPS Port
rtsp_port	integer	RTSP Port
net_link_speed_control	integer	Link Speed setting 1 : 10M, 2 : 100M
net_link_speed_lan_interface	integer	LAN Interface setting 1 : Auto, 2 : Half, 3 : Full

Examples

1) get the current information

<http://camera ipaddress/system/network.php?app=get>

2) IP address assign method setup

http://camera ipaddress/system/network.php?app=set&net_dhcp=0

http://camera ipaddress/system/network.php?app=set&net_dhcp=1

3) fixed IP address setup

http://camera ipaddress/system/network.php?app=set&net_ip=192.168.35.44

4) fixed Subnet Mask setup

http://camera ipaddress/system/network.php?app=set&net_mask=255.255.255.0

5) fixed Gateway Address setup

http://camera ipaddress/system/network.php?app=set&net_gateway=192.168.35.1

6) IPv6 setup

http://camera ipaddress/system/network.php?app=set&net_ipv6=0

http://camera ipaddress/system/network.php?app=set&net_ipv6=1

7) DNS Address assign method setup

http://camera ipaddress/system/network.php?app=set&dns_dhcp=0

http://camera ipaddress/system/network.php?app=set&dns_dhcp=1

8) fixed DNS Server Domain Name setup

http://camera ipaddress/system/network.php?app=set&dns_domain=www.test.com

9) fixed Primary DNS Server Address setup

http://camera ipaddress/system/network.php?app=set&net_dns=168.126.63.1

10) fixed Secondary DNS Server Address setup

http://camera ipaddress/system/network.php?app=set&net_dns2=168.126.63.1

11) Host Name setup

http://camera ipaddress/system/network.php?app=set&net_hostname=NDT-63310007D81777FD

12) HTTP Port setup

http://camera ipaddress/system/network.php?app=set&http_port=80

13) HTTPS Port setup

http://camera ipaddress/system/network.php?app=set&https_port=443

14) RTSP Port setup

http://camera ipaddress/system/network.php?app=set&rtsp_port=554

15) LAN Interface setup

http://camera ipaddress/system/network.php?app=set&net_link_speed_lan_interface=1

http://camera ipaddress/system/network.php?app=set&net_link_speed_lan_interface=2

http://camera ipaddress/system/network.php?app=set&net_link_speed_lan_interface=3

16) Link Speed setup

http://camera ipaddress/system/network.php?app=set&net_link_speed_control =1

http://camera ipaddress/system/network.php?app=set&net_link_speed_control =2

Caution

You must check the following values in the response to <http://camera ipaddress/config.txt>

Item	Value	Description
name	String	Host Name
ipv4	IP Address	IPv4 Address
ipv6	IP Address	IPv6 Address
http_port	Integer	HTTP Port Number
https_port	Integer	HTTPS Port Number
rtsp_port	Integer	RTSP Port Number

System – Network check:

Version : 1.00
Date : 2014. 03. 04

Revision History

Version	Date	Comment
1.00	2014-03-04	Initial version

Introduction

This Chapter defines the detailed setup procedure for the Network Check.

Network Check URI

http://camera ipaddress/system/check_network.php

Network Check Parameter

Parameter	Type	Value
wired_status	boolean (ro)	0 : Disconnected, 1 : Connected
net_dhcp	boolean (ro)	0 : Off, 1 : On
net_ip	string (ro)	Camera IP address
net_gateway	string (ro)	Camera gateway address
net_dns	string (ro)	DNS sever address
wireless_status	boolean (ro)	0 : Disconnected, 1 : Connected
wireless_dhcp	boolean (ro)	0 : Off, 1 : On
wireless_ip	string (ro)	Camera wireless IP address
wireless_mask	string (ro)	Camera wireless Subnet Mask address
wireless_gateway	string (ro)	Camera wireless gateway address
wireless_dns	string (ro)	Camera DNS sever address
traffic_net	integer (ro)	ETH0 transmitter,receiver traffic
traffic_wireless	integer (ro)	WLAN0 transmitter,receiver traffic
live_streaming_cnt	integer (ro)	0 or 1 or 2 or 3 ...
playback_streaming_cnt	integer (ro)	0 or 1 or 2 or 3 ...

lpush_session	boolean (ro)	0 : Disconnected, 1 : Connected
epush_session	boolean (ro)	0 : Disconnected, 1 : Connected

OpenVPN:

Version : 1.00
Date : 2014. 09. 26

Revision History

Version	Date	Comment
1.00	2014-09-26	Initial version

Introduction

This Chapter defines the detailed setup procedure for the OpenVPN.

OpenVPN URI

`http://"ipaddress"/system/openvpn.php`

OpenVPN Parameter

Parameter	Type	Value
openvpn_enable	integer	0 : disable, 1 : enable
openvpn_mode	integer	0 : client mode, 1 : server mode
openvpn_server_protocol	integer	0 : UDP, 1 : TCP
openvpn_server_port	integer	default : 1194
openvpn_server_reneg	integer	default : 3600[sec]
openvpn_server_lzo	integer	0 : disable, 1 : enable
openvpn_client_protocol	integer	0 : UDP, 1 : TCP
openvpn_client_port	integer	default : 1194
openvpn_client_lzo	integer	0 : disable, 1 : enable
openvpn_client_reneg	integer	default : 3600[sec]
openvpn_user_authentication_mode	integer	0 : Machine authentication, 1 : User authentication
openvpn_user_authentication_id	string	openvpn server ID
openvpn_user_authentication_passwd	string	openvpn server password
openvpn_server_ipaddr	string	openvpn server URL
openvpn_ip	string (ro)	tun IP

- * the openvpn_mode' Parameter is for the selection of operation as client or server
- * the openvpn_server_reneg', 'openvpn_client_reneg' Parameter means the Renegotiation time. You can setup re-authentication time. The Default time is 3600 sec.. If it is set to 0, Re-authentication will .not executed
- * the openvpn_server_lzo', 'openvpn_client_lzo' Parameter is used to select encrypted compression when accessing a VPN .
- * the Suffix 'authentication_mode' Parameter is the way of authentication. If it's set to User authentication, authentication will be done by ID/PW. If it's set to Machine authentication,

authentication will be done by uploading client cert, client key which are provided by openvpn server.

- * the openvpn_user_authentication_id', 'openvpn_user_authentication_passwd' parameter setup are available when 'openvpn_user_authentication_mode' Parameter is set to 'User authentication'
- * the Suffix 'ipaddr' Parameter means openvpn server URL.
- * the openvpn_ip' Parameter indicates allocated imaginary IP from openvpn server

Example

1) get the current setting

`http://"ipaddress"/system/openvpn.php?app=get`

2) openvpn enable setup

`http://"ipaddress"/system/openvpn.php?app=set&openvpn_enable=0 (disable)`

`http://"ipaddress"/system/openvpn.php?app=set&openvpn_enable=1 (enable)`

3) openvpn mode setup

`http://"ipaddress"/system/openvpn.php?app=set&openvpn_mode=0 (client mode)`

`http://"ipaddress"/system/openvpn.php?app=set&openvpn_mode=1 (server mode)`

4) openvpn server protocol setup

`http://"ipaddress"/system/openvpn.php?app=set&openvpn_server_protocol=0 (UDP)`

`http://"ipaddress"/system/openvpn.php?app=set&openvpn_server_protocol=1 (TCP)`

5) openvpn server port setup

`http://"ipaddress"/system/openvpn.php?app=set&openvpn_server_port=1194`

6) openvpn server renege setup

`http://"ipaddress"/system/openvpn.php?app=set&openvpn_server_reneg=3600 (sec)`

7) openvpn server lzo setup

`http://"ipaddress"/system/openvpn.php?app=set&openvpn_server_lzo=0 (disable)`

`http://"ipaddress"/system/openvpn.php?app=set&openvpn_server_lzo=1 (enable)`

8) openvpn client protocol setup

`http://"ipaddress"/system/openvpn.php?app=set&openvpn_client_protocol=0 (UDP)`

`http://"ipaddress"/system/openvpn.php?app=set&openvpn_client_protocol=1 (TCP)`

9) openvpn client port setup

`http://"ipaddress"/system/openvpn.php?app=set&openvpn_client_port=1194`

10) openvpn client lzo setup

`http://"ipaddress"/system/openvpn.php?app=set&openvpn_client_lzo=0 (disable)`

`http://"ipaddress"/system/openvpn.php?app=set&openvpn_client_lzo=1 (enable)`

11) openvpn client renege setup

`http://"ipaddress"/system/openvpn.php?app=set&openvpn_client_reneg=3600 (sec)`

12) **openvpn_user_authentication_mode setup**

`http://''ipaddress''/system/openvpn.php?app=set&openvpn_user_authentication_mode=1`

(User Authentication)

`http://''ipaddress''/system/openvpn.php?app=set&openvpn_user_authentication_mode=0` (

Machine Authentication)

13) **openvpn_user_authentication_id setup**

`http://''ipaddress''/system/openvpn.php?app=set&openvpn_user_authentication_id=test`

14) **openvpn_user_authentication_passwd setup**

`http://''ipaddress''/system/openvpn.php?app=set&openvpn_user_authentication_passwd=test`

15) **openvpn_server_ipaddr setup**

`http://''ipaddress''/system/openvpn.php?app=set&openvpn_server_ipaddr=192.168.1.1`

16) **How to setup openvpn at once**

`http://''ipaddress''/system/openvpn.php?app=set&openvpn_enable=1&openvpn_mode=1&openvpn_server_protocol=1&openvpn_server_port=1194&openvpn_server_lzo=1&openvpn_server_ipaddr=192.168.1.1&openvpn_client_protocol=1&openvpn_client_port=1194&openvpn_client_lzo=1&openvpn_user_authentication_mode=0&openvpn_user_authentication_id=&openvpn_user_authentication_passwd=&openvpn_server_reneg=3600&openvpn_client_reneg=3600`

Caution

* List of reference for 'openvpn_server_reneg', 'openvpn_client_reneg' Parameter setup

1. Server's authentication time is longer than Client time

Client configured time has expired, Client will disconnect

2. Server's authentication time is shorter Client time

Maintain connection

3. Server's authentication time is 0 , Client time is not 0

Client configured time has expired, Client will disconnect

4. Server's authentication time is not 0 , Client time is 0

Server configured time has expired, Server will disconnect

* When openvpn client and openvpn server's date, times are different,

TSL authentication will faile. So it should be synchronized with openvpn server's date, time.

System – QoS:

Version : 1.00
Date : 2014. 06. 27

Revision History

Version	Date	Comment
1.00	2014-06-27	Initial version

Introduction

This Chapter defines the detailed setup procedure for the QoS.

QoS URI

<http://camera ipaddress/system/qos.php>

QoS Parameter

Parameter	Type	Value
dscp_stream	integer	0 ~ 63
dscp_event	integer	0 ~ 63
dscp_management	integer	0 ~ 63
net_ctrl_enable	boolean	0 : Automatic traffic ctrl Off, 1 : Automatic traffic ctrl On
net_ctrl_mode	integer	1 : Maximum bandwidth, 2 : Automatic framerate ctrl
net_limit	integer	10 ~ 102400 (kbps)
control_method	integer	1 : Bitrate, 2 : Framerate, 3 : Both

Example

1) get the current setting

<http://camera ipaddress/system/qos.php?app=get>

2) DSCP Setting

a. Live stream DSCP value setup

http://camera ipaddress/system/qos.php?app=set&dscp_stream=63

b. Event/Alarm DSCP value setup

http://camera ipaddress/system/qos.php?app=set&dscp_event=63

c. Management DSCP value setup

http://camera ipaddress/system/qos.php?app=set&dscp_management=63

3) Automatic Traffic Control

a. Automatic traffic control setup

http://camera ipaddress/system/qos.php?app=set&net_ctrl_enable=0

http://camera ipaddress/system/qos.php?app=set&net_ctrl_enable=1

b. Automatic traffic control mode setup

http://camera ipaddress/system/qos.php?app=set&net_ctrl_mode=1

http://camera ipaddress/system/qos.php?app=set&net_ctrl_mode=2

c. net_ctrl_mode=1 , bandwidth setup

http://camera ipaddress/system/qos.php?app=set&net_limit=1024

d. net_ctrl_mode=1, Priority setup

http://camera ipaddress/system/qos.php?app=set&control_method=1

http://camera ipaddress/system/qos.php?app=set&control_method=2

http://camera ipaddress/system/qos.php?app=set&control_method=3

System – RTP:

Version : 1.00
Date : 2014. 05. 30

Revision History

Version	Date	Comment
1.00	2014-05-30	Initial version

Introduction

This Chapter defines the detailed setup procedure for the RTP.

RTP URI

<http://camera ipaddress/system/rtp.php>

RTP Parameter

Parameter	Type	Value
rtp_start_port	integer	30000 ~ 39800
rtp_end_port	integer (ro)	available number of client per stream + rtp_start_port -1
rtp_mcast#_ip	string	224.0.0.0 - 239.255.255.255 (D-class IP address)
rtp_mcast#_port	integer	1024 ~ 65530
rtp_mcast#_ttl	integer	1 ~ 255
rtp_mcast#_always_enable	boolean	0 : Off, 1 : On
rtp_mcast_audio_ip	string	224.0.0.0 - 239.255.255.255 (D-class IP address)
rtp_mcast_audio_port	integer	1024 ~ 65530
rtp_mcast_audio_ttl	integer	1 ~ 255
rtp_mcast_audio_always_enable	boolean	0 : Off, 1 : On
rtp_mcast_meta_ip	string	224.0.0.0 - 239.255.255.255 (D-class IP address)
rtp_mcast_meta_port	integer	1024 ~ 65530
rtp_mcast_meta_ttl	integer	1 ~ 255
rtp_mcast_meta_always_enable	boolean	0 : Off, 1 : On

* “rtp_mcast#_ooo” #have 1~3

Example

1) get the current setting

<http://camera ipaddress/system/rtp.php?app=get>

2) RTP Port Range

a. Start Port setup

`http://"camera ipaddress"/system/rtp.php?app=set&rtp_start_port=30500`

3) Multicast (Stream 1)

a. Multicast destination IP setup

`http://"camera ipaddress"/system/rtp.php?app=set&rtp_mcast1_ip=231.1.1.128.23`

b. RTP Port setup

`http://"camera ipaddress"/system/rtp.php?app=set&rtp_mcast1_port=40000`

c. RTP TTL setup

`http://"camera ipaddress"/system/rtp.php?app=set&rtp_mcast1_ttl=5`

d. Always enable multicast setup

- `http://"camera ipaddress"/system/rtp.php?app=set&rtp_mcast1_always_enable=0`

- `http://"camera ipaddress"/system/rtp.php?app=set&rtp_mcast1_always_enable=1`

4) Multicast (Stream 2)

a. Multicast destination IP setup

`http://"camera ipaddress"/system/rtp.php?app=set&rtp_mcast2_ip=231.1.1.128.24`

b. RTP Port setup

`http://"camera ipaddress"/system/rtp.php?app=set&rtp_mcast2_port=40000`

c. RTP TTL setup

`http://"camera ipaddress"/system/rtp.php?app=set&rtp_mcast2_ttl=5`

d. Always enable multicast setup

`http://"camera ipaddress"/system/rtp.php?app=set&rtp_mcast2_always_enable=0`

`http://"camera ipaddress"/system/rtp.php?app=set&rtp_mcast2_always_enable=1`

5) Multicast (Stream 3)

a. Multicast destination IP setup

`http://"camera ipaddress"/system/rtp.php?app=set&rtp_mcast3_ip=231.1.1.128.25`

b. RTP Port setup

`http://"camera ipaddress"/system/rtp.php?app=set&rtp_mcast3_port=40000`

c. RTP TTL setup

`http://"camera ipaddress"/system/rtp.php?app=set&rtp_mcast3_ttl=5`

d. Always enable multicast setup

`http://"camera ipaddress"/system/rtp.php?app=set&rtp_mcast3_always_enable=0`

`http://"camera ipaddress"/system/rtp.php?app=set&rtp_mcast3_always_enable=1`

6) Multicast (Audio)

a. Multicast destination IP setup

`http://"camera ipaddress"/system/rtp.php?app=set&rtp_mcast_audio_ip=231.1.1.128.26`

b. RTP Port setup

http://"camera ipaddress"/system/rtp.php?app=set&rtp_mcast_audio_port=40000

c. RTP TTL setup

http://"camera ipaddress"/system/rtp.php?app=set&rtp_mcast_audio_ttl=5

d. Always enable multicast setup

http://"camera ipaddress"/system/rtp.php?app=set&rtp_mcast_audio_always_enable=0

http://"camera ipaddress"/system/rtp.php?app=set&rtp_mcast_audio_always_enable=1

7) Multicast (Meta)

a. Multicast destination IP setup

http://"camera ipaddress"/system/rtp.php?app=set&rtp_mcast_meta_ip=231.1.128.27

b. RTP Port setup

http://"camera ipaddress"/system/rtp.php?app=set&rtp_mcast_meta_port=40000

c. RTP TTL setup

http://"camera ipaddress"/system/rtp.php?app=set&rtp_mcast_meta_ttl=5

d. Always enable multicast setup

http://"camera ipaddress"/system/rtp.php?app=set&rtp_mcast_meta_always_enable=0

http://"camera ipaddress"/system/rtp.php?app=set&rtp_mcast_meta_always_enable=1

Caution

You must check the following values in the response to http://"camera ipaddress"/config.txt

item	Value	Explanation
options	AUD INNER_AUD	Multicast (Audio) setup available

*when setting up the RTP Port Range" Start Port, rtp_start_port value should be even number

System – System check:

Version : 1.00
Date : 2014. 03. 04

Revision History

Version	Date	Comment
1.00	2014-03-04	Initial version

Introduction

This Chapter defines the detailed setup procedure for the System Check.

System Check URI

http://”camera ipaddress”/system/check_system.php

System Check Parameter

Parameter	Type	Value
model	string (ro)	Model name
firmware	string (ro)	Firmware version
dt	string (ro)	year-month-date
tm	string (ro)	Hour:minute:sec
date_format	integer (ro)	1 : YYYY-MM-DD 2 : MM-DD-YYYY 3 : DD-MM-YYYY
time_format	integer (ro)	1 : 24 Hour 2 : 12 Hour AM/PM
runtime_day	string (ro)	Runtime (day)
runtime_hour	integer(ro)	Runtime (hour)
runtime_min	integer (ro)	Runtime (minute)
cpuload	integer (ro)	CPU load

Caution

1) Parameter - “date_format”, “time_format”

In the camera webpage “Setup – Date & Time” you can setup Date, Time Format

With API "[Data Time](#) Example" you can setup [Date](#), [Time](#) Format

System – UpnP:

Version: 1.00e
Dat : 2014. 03. 17

Revision History

Version	Date	Comment
1.00	2014-02-07	Initial version
1.00e	2014-03-17	English Translation

Introduction

This Chapter defines the detailed setup procedure for the UPnP.

UPnP URI

`http://"camera ipaddress"/system/upnp.php`

UPnP Parameter

Parameter	Type	Value
net_upnp	boolean	0 : Disable, 1 : Enable
friendly_name	string	Friendly name

Examples

1) get the current setting

`http://"camera ipaddress"/system/upnp.php?app=get`

2) UPnP setup

`http://"camera ipaddress"/system/upnp.php?app=set&net_upnp=0`

`http://"camera ipaddress"/system/upnp.php?app=set&net_upnp=1`

3) Friendly name setup

`http://"camera ipaddress"/system/upnp.php?app=set&friendly_name=FRIENDLYNAME`

Caution

You must check the following values in the response to `http://"camera ipaddress"/config.txt`

Item	Value	Explanation
options	UPNP	UPnP function available

System – Users:

Version: 1.00e
Date: 2014. 03. 17

Revision History

Version	Date	Comment
1.00	2014-02-21	Initial version
1.00e	2014-03-17	English Translation

Introduction

This Chapter defines the detailed setup procedure for the Users.

Users URI

<http://camera ipaddress/system/user.php>

Users Parameter

Parameter	Type	Value
method	string	add, modify, remove
user	string	User ID
pass	string	User password
level	integer	1 : guest, 2 : operator, 3 : administrator
ptz_enable	boolean	0 : Off, 1 : On
motor_enable	boolean	0 : Off, 1 : On
anonymous	boolean	0 : Off, 1 : On
remove_user	string	User ID
ptz_use	boolean (ro)	0 : PTZ not support, 1 : PTZ support
user_count	integer (ro)	1 ~ 10

list	string (ro)	<ul style="list-style-type: none"> • list[3] * format : list[0] list[1] list[2] ('' : differentiator) list[0] = user list[1] = level list[2] = 0 : Motor & PTZ not support list[2] = 1 : PTZ support list[2] = 2 : Motor support
------	-------------	---

Example

1) get the current setting

`http://"camera ipaddress"/system/user.php?app=get`

2) add User

a. User ID/Password generation and level setup

`http://"camera`

`ipaddress"/system/user.php?app=set&method=add&user=myadmin1&pass=1234&level=1`

`http://"camera`

`ipaddress"/system/user.php?app=set&method=add&user=myadmin2&pass=1234&level=2`

`http://"camera`

`ipaddress"/system/user.php?app=set&method=add&user=myadmin3&pass=1234&level=3`

b. PTZ control setup

`http://"camera`

`ipaddress"/system/user.php?app=set&method=add&user=myadmin4&pass=1234&level=3&ptz_enable=1`

`http://"camera`

`ipaddress"/system/user.php?app=set&method=add&user=myadmin5&pass=1234&level=1&ptz_enable=0`

c. Motor control setup

`http://"camera`

`ipaddress"/system/user.php?app=set&method=add&user=myadmin6&pass=1234&level=3&motor_enable=1`

`http://"camera`

`ipaddress"/system/user.php?app=set&method=add&user=myadmin7&pass=1234&level=1&motor_enable=0`

* If you add a user when the user_count=10, it will cause error.

* In case the method=add, you must include user, pass, and level.

3) modify User

a. Password change

http://"camera
ipaddress"/system/user.php?app=set&method=modify&user=myadmin1&pass=myadmin1

b. level change

http://"camera
ipaddress"/system/user.php?app=set&method=modify&user=myadmin2&pass=1234&level=1

c. PTZ control change

http://"camera
ipaddress"/system/user.php?app=set&method=modify&user=myadmin2&pass=1234&ptz_enable=0

http://"camera
ipaddress"/system/user.php?app=set&method=modify&user=myadmin2&pass=1234&ptz_enable=1

d. Motor control change

http://"camera
ipaddress"/system/user.php?app=set&method=modify&user=myadmin2&pass=1234&motor_enable=0

http://"camera
ipaddress"/system/user.php?app=set&method=modify&user=myadmin2&pass=1234&motor_enable=1

* In the case method=modify, you must include user and pass.

4) delete User

http://"camera ipaddress"/system/user.php?app=set&method=remove&remove_user=myadmin1

* the remove_user value must match one of the registered user ID's.

5) Anonymous login setup

http://"camera ipaddress"/system/user.php?app=set&anonymous=1

http://"camera ipaddress"/system/user.php?app=set&anonymous=0

Caution

User "admin" cannot be added or deleted.

The User, "admin" is only allowed when changing the password.

You must check the following values in the response to http://"camera ipaddress"/config.txt

Item	Value	Explanation
options	PTZ	PTZ control setup, PTZ control modifiable
	M_PTZ	Motor control setup, Motor control modifiable

Security – VPM:

Version: 1.01e
Date: 2015. 07. 20

Revision History

Version	Date	Comment
1.00	2015-05-20	Initial version
1.01	2015-07-02	Modify the server add API
1.01e	2015-07-20	English Translation

Introduction

This Chapter defines the detailed setup procedure for the VPM.

VPM URI

`http://"camera ipaddress"/system/vpm.php`

VPM Parameter

Parameter	Type	Value
method	string	add, modify, remove
id	integer	Server ID (1 ~ 10)
title	string	Server title
addr	string	Server address
port	integer	Server port (1 ~ 65535)
vpm_enable	boolean	0 : Off, 1 : On
vpm_count	integer (ro)	0 ~ 10 (number of registered servers)
list	string (ro)	ID, Title, Address, Port List of registered Server id title addr port\nid title addr port\n

Example

1) get the current setting

http://"camera ipaddress"/system/vpm.php?app=get

* Response :

res=200&vpm_enable=0&vpm_count=6&list=4|server3|13.12.132.122|162\n5|server123|153.12.132.122|162\n6|server4|153.112.132.122|162\n7|server5|153.120.132.122|162\n8|server6|153.120.131.177|162\n9|server7|153.121.31.1|162

2) VPM setup

http://"camera ipaddress"/system/vpm.php?app=set&vpm_enable=1

http://"camera ipaddress"/system/vpm.php?app=set&vpm_enable=0

* Response : res=200

3) add Server

http://"camera

ipaddress"/system/vpm.php?app=set&method=add&title=server_title&addr=1.0.0.1&port=162

* Response : res=200&id=1&title=server_title&addr=1.0.0.1&port=162

* For Server addition, you must input addr.

* In Server addition, id is assigned and returned.

4) modify Server

a. change Title

http://"camera ipaddress"/system/vpm.php?app=set&method=modify&id=1&title=sample

* Response : res=200&id=1&title=sample&addr=1.0.0.1&port=162

b. change Address

http://"camera ipaddress"/system/vpm.php?app=set&method=modify&id=2&addr=1.0.1.0

* Response : res=200&id=1&title=sample&addr=1.0.1.0&port=162

c. change Port

http://"camera ipaddress"/system/vpm.php?app=set&method=modify&id=3&port=163

* Response : res=200&id=1&title=sample&addr=1.0.1.0&port=163

5) remove Server

http://"camera ipaddress"/system/vpm.php?app=set&method=remove&id=4

* Response : res=200

Caution

You must check the following values in the response to http://"camera ipaddress"/config.txt

Item	Value	Description
options	VPM	VPM available

The maximum number of VPM Servers for registration is 10.

System – Network – Wireless:

Version : 1.00
Date : 2014. 05. 22

Revision History

Version	Date	Comment
1.00	2014-05-22	Initial version

Introduction

This Chapter defines the detailed setup procedure for the Wireless

Wireless URI

1) Wireless Network URI

<http://camera ipaddress/system/wireless.php>

2) Wireless Setup NRI

http://camera ipaddress/system/wireless_setup.php

Wireless Parameter

1) Wireless Network

Parameter	Type	Value
wireless_dhcp	boolean	0 : Off, 1 : On
wireless_ip	string	IP Address
wireless_mask	String	Subnet Mask Address
wireless_gateway	String	Network Gateway
wireless_dns	String	Network DNS

2) Wileress AP Setup

Parameter	Type	Value	
wireless_ap_count	int	Wireless Access Point Count	
wireless_ap_list	Separator	“,” AP list “ ” parameter list	
	SSID	String	AP Name
	Security	boolean	0 : open , 1 : Need Security
	Signal Level	int	0~100
	Connected	boolean	0 : Disconnect , 1 : Current Connected
	Save AP	boolean	0 : None , 1 : Save AP Parameter
	Security Type	String	OPEN, WPA, WPA2, WEP

	BSSID	String	AP Mac Address
method		String	connect, disconnect, delete
wireless_ssid		String	AP Name
wireless_bssid		String	AP Mac Address
wireless_password		String	AP Password

Example

1) get the current Wireless Network value

http://camera_ipaddress/system/wireless.php?app=get

2) get the current Wireless AP value

http://camera_ipaddress/system/wireless_setup?app=get

3) Wireless Network setup

http://camera_ipaddress/system/wireless.php?app=set&wireless_dhcp=1
http://camera_ipaddress/system/wireless.php?app=set&wireless_dhcp=0
http://camera_ipaddress/system/wireless.php?app=set&wireless_ip=192.168.0.220&wireless_mask=255.255.255.0&wireless_gateway=192.168.0.1&wireless_dns=168.123.63.1

4) Wireless Network DHCP setup

http://camera_ipaddress/system/wireless.php?app=set&wireless_dhcp=1
http://camera_ipaddress/system/wireless.php?app=set&wireless_dhcp=0

5) Wireless Network IP setup

http://camera_ipaddress/system/wireless.php?app=set&wireless_ip=192.168.0.220

6) Wireless Network Mask setup

http://camera_ipaddress/system/wireless.php?app=set&wireless_mask=255.255.255.0

7) Wireless Network GateWay setup

http://camera_ipaddress/system/wireless.php?app=set&wireless_gateway=192.168.0.1

8) Wireless Network DNS setup

http://camera_ipaddress/system/wireless.php?app=set&wireless_dns=168.123.63.1

9) Wireless AP Connect setup

http://camera_ipaddress/system/wireless_setup?app=set&method=connect&wireless_ssid=IPTIME&wireless_bssid=00:26:66:c0:09:bc&wireless_password=iptimepw12

10) Wireless AP Disconnect setup

http://camera_ipaddress/system/wireless_setup?app=set&method=disconnect&wireless_ssid=IPTIME&wireless_bssid=00:26:66:cc:09:bc

11) Wireless AP Delete setup

http://"camera ipaddress"/system/

wireless_setup?app=set&method=delete&wireless_ssid=IPTIME&wireless_bssid=00:26:66:cc:
09:bc

System – Zeroconf:

Version: 1.00e
Date: 2014. 03. 17

Revision History

Version	Date	Comment
1.00	2014-02-06	Initial version
1.00e	2014-03-17	English Translation

Introduction

This Chapter defines the detailed setup procedure for the Zeroconf.

Zeroconf URI

`http://"camera ipaddress"/system/zeroconf.php`

Zeroconf Parameter

Parameter	Type	Value
zeroconf_enable	boolean	0 : Disable, 1 : Enable
zeroconf_ip	string(ro)	IP address

Example

1) get the current setting

`http://"camera ipaddress"/system/zeroconf.php?app=get`

2) Zeroconf setup

`http://"camera ipaddress"/system/zeroconf.php?app=set&zeroconf_enable=0`

`http://"camera ipaddress"/system/zeroconf.php?app=set&zeroconf_enable=1`

3) Zeroconf IP address confirm

* You can check the zeroconf IP address in the response to get the current setting.

* A response example for get the current setting is as follows:

`res=200&zeroconf_enable=1&zeroconf_ip=169.254.48.105`

Caution

You must check the following values in the response to `http://"camera ipaddress"/config.txt`

Item	Value	Explanation
options	ZEROCONF	Zeroconf available

Video & Image

Video & Image – Camera Setup:

Version : 1.03e
Date : 2016. 06. 21

Revision History

Version	Date	Comment
1.00	2014-09-18	Initial version
1.01	2015-02-03	AIP update
1.01e	2015-02-04	English Translation
1.02	2015-02-12	Manual White Balance Control update,
1.02e	2015-02-15	English version updatea
1.03	2016-06-21	AIP update - dis - dis_level - hlc_enable - hlc_level - hlc_color - min_hlc_level - max_hlc_level - def_hlc_level - anpr_max - anpr_list - anpr_count - anpr_val - dark_buster_enable - dark_buster_level - dnn_enable
1.03e	2016-06-21	English version updatea

Introduction

This Chapter defines the detailed setup procedure for the Camera Setup.
Since reference values depend on Sensor, the user must check Min, Max, List, and Default values.

Video & Image – Camera Setup URI

http://camera ipaddress/video/setup_camea.php

Video & Image – Camera Setup Parameter

Parameter	Type	Value
min_brightness	integer(ro)	Min. Brightness Value
max_brightness	integer(ro)	Max. Brightness Value
min_contrast	integer(ro)	Min. Contrast Value
max_contrast	integer(ro)	Max. Contrast Value
min_saturation	integer(ro)	Min. Saturation Value

max_saturation	integer(ro)	Max. Saturation Value
min_hue	integer(ro)	Min. Hue Value
max_hue	integer(ro)	Max. Hue Value
min_sharpness	integer(ro)	Min. Sharpness Value
max_sharpness	integer(ro)	Max. Sharpness Value
def_brightness	integer(ro)	Default brightness
def_contrast	integer(ro)	Default contrast
def_saturation	integer(ro)	Default saturation
def_hue	integer(ro)	Default hue
def_sharpness	integer(ro)	Default sharpness
brightness	integer	min_brightness ~ max_brightness
contrast	integer	min_contrast ~ max_contrast
Saturation	integer	min_saturation ~ max_saturation
hue	integer	min_hue ~ max_hue
sharpness	integer	min_sharpness ~ max_sharpness
flip	boolean	0(false), 1(true)
mirror	boolean	0(false), 1(true)
nr	boolean	0(false), 1(true)
nr_level	integer	1(Low), 2(Middle), 3(High)
ae_wdr	boolean	0(false), 1(true)
ae_wdr_level	integer	1(Low), 2(Middle), 3(High)
defog	boolean	0(false), 1(true)
defog_strength	integer	0(Low), 1(Middle), 2(High)
enable_auto_iris	boolean	0(false), 1(true)
bic_enable	boolean	0(false), 1(true)
enable_ir	boolean	0(false), 1(true)
min_ir	integer(ro)	Min. IR Value
max_ir	integer(ro)	Max. IR Value
max_strength_value	integer	min_ir ~ max_ir
smart_foucs_enable	boolean	0(false), 1(true)
d_zoom	boolean	0(false), 1(true)
high_sensitivity	boolean	0(false), 1(true)
wb_mode	integer	0 (Automatic), 6 (Fixed incandescent), 7 (Fixed fluorescent), 8 (Fixed outdoor) 9 (Fixed sodiumlamp), 10 (Manual)
min_wb_cb_gain	integer(ro)	Min. White Balance Blue Gain Value
max_wb_cb_gain	integer(ro)	Max. White Balance Blue Gain Value
min_wb_cr_gain	integer(ro)	Min. White Balance Red Gain Value
max_wb_cr_gain	integer(ro)	Max. White Balance Red Gain Value

def_wb_cb_gain	integer(ro)	Default White Balance Blue Gain Value
def_wb_cr_gain	integer(ro)	Default White Balance Red Gain Value
wb_cb_gain	integer	min_wb_cb_gain ~ max_wb_cb_gain
wb_cr_gain	integer	min_wb_cr_gain ~ max_wb_cr_gain
dnn_mode	integer(ro)	0(Low), 3(Middle), 4(High)
dnn_thres	integer(ro)	T series, X2 Fixed : 1(Low), 0(High) X2 PTZ : 0(Low), 1(Middle), 2(High)
min_exposure_value	integer(ro)	Min. Exposure Value
max_exposure_value	integer(ro)	Max. Exposure Value
def_exposure_value	integer(ro)	Default Exposure Value
exposure_value	integer	min_exposure_value ~ max_exposure_value
exposure_mode	integer	0(Automatic), 1(Flicker-free 50Hz), 2(Flicker-free 60Hz)
camera_auto_auto_shutter_list	string(ro)	List for Exposure Mode “Automatic” and Shutter “Automatic”
camera_auto_fixed_shutter_list	string(ro)	List for Exposure Mode “Automatic” and Shutter “Fixed”
camera_f50_fixed_shutter_list	string(ro)	List for Exposure Mode “Flicker-free 50Hz” and Shutter “Fixed”
camera_f60_fixed_shutter_list	string(ro)	List for Exposure Mode “Flicker-free 60Hz” and Shutter “Fixed”
camera_f50_auto_shutter_list	string(ro)	List for Exposure Mode “Flicker-free 50Hz” and Shutter “Automatic”
camera_f60_auto_shutter_list	string(ro)	List for Exposure Mode “Flicker-free 50Hz” and Shutter “Automatic”
camera_manual_fixed_shutter_list	string(ro)	List for Exposure Mode “Manual” and Shutter “Automatic”
camera_max_gain	integer	1(Low), 2(Middle), 3(High)
camera_shutter_mode	integer	1(Automatic), 2(Fixed)
camera_shutter_value	string	camera_auto_auto_shutter_list for Exposure Mode “Automatic” and Shutter “Automatic” camera_auto_fixed_shutter_list for Exposure Mode “Automatic” and Shutter “Fixed” camera_f50_fixed_shutter_list for Exposure Mode “Flicker-free 50Hz” and Shutter “Fixed” camera_f60_fixed_shutter_list for Exposure Mode “Flicker-free 60Hz” and Shutter “Fixed” camera_f50_auto_shutter_list for Exposure Mode “Flicker-free 50Hz” and Shutter “Automatic”

		camera_f60_auto_shutter_list for Exposure Mode “Flicker-free 50Hz” and Shutter “Automatic” camera_manual_fixed_shutter_list for Exposure Mode “Manual” and Shutter “Automatic”
camera_iris_mode	integer	1(Automatic), 2(Fixed)
camera_auto_fixed_iris_list	string(ro)	List for Exposure Mode “Automatic” and Iris “Fixed”
camera_manual_fixed_iris_list	string(ro)	List for Exposure Mode “Manual” and Iris “Fixed”
camera_iris_value	string	camera_auto_fixed_iris_list for Exposure Mode “Automatic” and Iris “Fixed” camera_manual_fixed_iris_list for Exposure Mode “Manual” and Iris “Fixed”
camera_manual_gain	string	camera_manual_gain_list for Exposure Mode “Manual”
camera_manual_gain_list	string(ro)	List for Exposure Mode “Manual”
ir_mode	integer	1(Always), 2(Day & Night), 3(Sensor)
min_ir_on_level	integer(ro)	Min. IR On Level Value
max_ir_on_level	integer(ro)	Max. IR On Level Value
min_ir_off_level	integer(ro)	Min. IR Off Level Value
max_ir_off_level	integer(ro)	Max. IR Off Level Value
min_fixed_ir_bright	integer(ro)	Min. Fixed IR Bright Value
max_fixed_ir_bright	integer(ro)	Max. Fixed IR Bright Value
min_moving_ir_bright	integer(ro)	Min. Moving IR Bright Value
max_moving_ir_bright	integer(ro)	Max. Moving IR Bright Value
min_fixed_ir_level	integer(ro)	Min. Fixed IR Level Value
max_fixed_ir_level	integer(ro)	Max. Fixed IR Level Value
min_moving_ir_level	integer(ro)	Min. Moving IR Level Value
max_moving_ir_level	integer(ro)	Max. Moving IR Level Value
min_delay_time	integer(ro)	Min. Delay Time Value
max_delay_time	integer(ro)	Max. Delay Time Value
def_ir_on_level	integer(ro)	Default IR On Level Value
def_ir_off_level	integer(ro)	Default IR Off Level Value
def_fixed_ir_bright	integer(ro)	Default Fixed IR Bright Value
def_moving_ir_bright	integer(ro)	Default Moving IR Bright Value
def_fixed_ir_level	integer(ro)	Default Fixed IR Level Value
def_moving_ir_level	integer(ro)	Default Moving IR Level Value
def_delay_time	integer(ro)	Default Delay Time Value
ir_on_level	integer	min_ir_on_level ~ max_ir_on_level
ir_off_level	integer	min_ir_off_level ~ max_ir_off_level
fixed_ir_bright	integer	min_fixed_ir_bright ~ max_fixed_ir_bright

moving_ir_bright	integer	min_moving_ir_bright ~ max_moving_ir_bright
fixed_ir_level	integer	min_fixed_ir_level ~ max_fixed_ir_level
moving_ir_level	integer	min_moving_ir_level ~ max_moving_ir_level
delay_time	integer	min_delay_time ~ max_delay_time
moving_ir_mode	integer	1(Low), 2(Middle), 3(High)
enable_long_exposure	boolean	0(false), 1(true)
max_shutter_value	integer	0(1/15), 1(1/8), 2(1/4)
flicker_free	boolean	0(false), 1(true)
flicker_mode	integer	0(50Hz), 1(50Hz)
agc_db	integer	0(32 db), 1(32 db), 2(42 db)
iris_type	integer	0 : M13VG308 (Tamron) 1 : M13VG550 (Tamron) 2 : YV2.8x2.8SA-SA2L (Fujinon) 3 : AG3Z3112FCS-MPIR (Computar) 4 : TG3Z0312FCS-MPIR (Computar)
rotation	boolean	0(false), 1(true)
rotation_degree	integer	90(90。), 270(270。)
dis	boolean	0(false), 1(true)
dis_level	integer	1(Low), 2(Middle), 3(High)
hlc_enable	integer	0(false), 1(true)
hlc_level	integer	Min. HLC Level ~ Max. HLC Level
min_hlc_level	integer(ro)	Min. High Light Compensation Level Value
max_hlc_level	integer(ro)	Max. High Light Compensation Level Value
def_hlc_level	integer(ro)	Default High Light Compensation Level Value
anpr_max	integer(ro)	Max. Multi Shutter
anpr_list	string(ro)	Option List Of Multi Shutter Speed Example : 1/250 1/500 1/1000 1/2000 1/4000 1/10000 1/20000 1/40000
anpr_count	integer	1 ~ Max. Multi Shutter
anpr_val	string	Value List Of Each Multi Shutter Speed LV. Min value : 1 Max value : Number of Multi Shutter Speed Example(If max count 5): 1 2 1 4 3
dark_buster_enable	integer	0(false), 1(true)
dark_buster_level	integer	1: low 2: middle 3: high only
dnn_enable	boolean(ro)	0(false), 1(true)

Example

1) get the current setting

http://camera_ipaddress/video/setup_camera.php?app=get

2) Brightness setup

<http://camera ipaddress/video/image.php?app=set&brightness=10>

<http://camera ipaddress/video/image.php?app=set&brightness=1>

3) Contrast setup

<http://camera ipaddress/video/image.php?app=set&contrast=10>

<http://camera ipaddress/video/image.php?app=set&contrast=1>

4) Saturation setup

<http://camera ipaddress/video/image.php?app=set&saturation=10>

<http://camera ipaddress/video/image.php?app=set&saturation=1>

5) Hue setup

<http://camera ipaddress/video/image.php?app=set&hue=10>

<http://camera ipaddress/video/image.php?app=set&hue=1>

6) Sharpness setup

<http://camera ipaddress/video/image.php?app=set&sharpness=10>

<http://camera ipaddress/video/image.php?app=set&sharpness=1>

7) Flip setup

<http://camera ipaddress/video/image.php?app=set&flip=0>

<http://camera ipaddress/video/image.php?app=set&flip=1>

8) Mirror setup

<http://camera ipaddress/video/image.php?app=set&mirror=0>

<http://camera ipaddress/video/image.php?app=set&mirror=1>

9) Noise Reduction setup

<http://camera ipaddress/video/image.php?app=set&nr=0>

<http://camera ipaddress/video/image.php?app=set&nr=1>

10) Noise Reduction Level setup

http://camera ipaddress/video/image.php?app=set&nr_level=1

http://camera ipaddress/video/image.php?app=set&nr_level=2

http://camera ipaddress/video/image.php?app=set&nr_level=2

11) WDR setup

http://camera ipaddress/video/image.php?app=set&ae_wdr=0

http://camera ipaddress/video/image.php?app=set&ae_wdr=1

* WDR and Defog cannot be used at the same time

12) WDR Level setup

http://camera ipaddress/video/image.php?app=set&ae_wdr_level=1

http://camera ipaddress/video/image.php?app=set&ae_wdr_level=2

http://camera ipaddress/video/image.php?app=set&ae_wdr_level=3

13) Defog setup

<http://camera ipaddress/video/image.php?app=set&defog=0>

<http://camera ipaddress/video/image.php?app=set&defog=1>

* WDR and Defog cannot be used at the same time

14) Defog Strength setup

http://camera_ipaddress/video/image.php?app=set&defog_strength=0
http://camera_ipaddress/video/image.php?app=set&defog_strength=1
http://camera_ipaddress/video/image.php?app=set&defog_strength=2

15) IRIS setup

http://camera_ipaddress/video/image.php?app=set&enable_auto_iris=0
http://camera_ipaddress/video/image.php?app=set&enable_auto_iris=1

16) Backlight Compensation setup

http://camera_ipaddress/video/image.php?app=set&bhc_enable=0
http://camera_ipaddress/video/image.php?app=set&bhc_enable=1

17) IR setup

http://camera_ipaddress/video/image.php?app=set&enable_ir=0
http://camera_ipaddress/video/image.php?app=set&enable_ir=1

18) Max Strength Value setup

http://camera_ipaddress/video/image.php?app=set&max_strength_value=1
http://camera_ipaddress/video/image.php?app=set&max_strength_value=2
http://camera_ipaddress/video/image.php?app=set&max_strength_value=3
http://camera_ipaddress/video/image.php?app=set&max_strength_value=4
http://camera_ipaddress/video/image.php?app=set&max_strength_value=5

19) Smart Focus setup

http://camera_ipaddress/video/image.php?app=set&smart_focus_enable=0
http://camera_ipaddress/video/image.php?app=set&smart_focus_enable=1

20) Digital Zoom setup

http://camera_ipaddress/video/image.php?app=set&d_zoom=0
http://camera_ipaddress/video/image.php?app=set&d_zoom=1

21) High Sensitivity setup

http://camera_ipaddress/video/image.php?app=set&high_sensitivity=0
http://camera_ipaddress/video/image.php?app=set&high_sensitivity=1

22) White Balance Mode setup

http://camera_ipaddress/video/image.php?app=set&wb_mode=0
http://camera_ipaddress/video/image.php?app=set&wb_mode=6
http://camera_ipaddress/video/image.php?app=set&wb_mode=7
http://camera_ipaddress/video/image.php?app=set&wb_mode=8
http://camera_ipaddress/video/image.php?app=set&wb_mode=9
http://camera_ipaddress/video/image.php?app=set&wb_mode=10

23) Blue Gain setup

http://camera_ipaddress/video/image.php?app=set&wb_cb_gain=1
http://camera_ipaddress/video/image.php?app=set&wb_cb_gain=255

24) Red Gain setup

http://camera_ipaddress/video/image.php?app=set&wb_cr_gain=1

http://camera_ipaddress/video/image.php?app=set&wb_cr_gain=255

25) Day & Night Mode setup

http://camera_ipaddress/video/image.php?app=set&dnn_mode=0

http://camera_ipaddress/video/image.php?app=set&dnn_mode=3

http://camera_ipaddress/video/image.php?app=set&dnn_mode=4

26) Day & Night Threshold setup

Day & Night Threshold input and output values depend on the contents of Config.txt.

For X2 series, if BUILTIN_PTZ item exists in options, the following setup commands are applied.

http://camera_ipaddress/video/image.php?app=set&dnn_thres=0

http://camera_ipaddress/video/image.php?app=set&dnn_thres=1

http://camera_ipaddress/video/image.php?app=set&dnn_thres=2

For T2, T3, T4, T5, T6, T7, T8, and X2 series, if BUILTIN_PTZ items which don't exist in options, the following setup commands are applied.

http://camera_ipaddress/video/image.php?app=set&dnn_thres=1

http://camera_ipaddress/video/image.php?app=set&dnn_thres=0

27) Exposure Value setup

http://camera_ipaddress/video/image.php?app=set&exposure_value=1

http://camera_ipaddress/video/image.php?app=set&exposure_value=10

28) Exposure Mode setup

http://camera_ipaddress/video/image.php?app=set&exposure_mode=0

http://camera_ipaddress/video/image.php?app=set&exposure_mode=1

http://camera_ipaddress/video/image.php?app=set&exposure_mode=2

29) Camera Max Gain setup

http://camera_ipaddress/video/image.php?app=set&camera_max_gain=1

http://camera_ipaddress/video/image.php?app=set&camera_max_gain=2

http://camera_ipaddress/video/image.php?app=set&camera_max_gain=3

30) Camera Shutter Mode setup

http://camera_ipaddress/video/image.php?app=set&camera_shutter_mode=1

http://camera_ipaddress/video/image.php?app=set&camera_shutter_mode=2

31) Camera Shutter Value setup

http://camera_ipaddress/video/image.php?app=set&camera_shutter_value=1/120

http://camera_ipaddress/video/image.php?app=set&camera_shutter_value=1/100

http://camera_ipaddress/video/image.php?app=set&camera_shutter_value=1/30

http://camera_ipaddress/video/image.php?app=set&camera_shutter_value=1/10

http://camera_ipaddress/video/image.php?app=set&camera_shutter_value=1/2

http://camera_ipaddress/video/image.php?app=set&camera_shutter_value=1

32) Camera Iris Mode setup

http://camera_ipaddress/video/image.php?app=set&camera_iris_mode=1

http://camera_ipaddress/video/image.php?app=set&camera_iris_mode=2

33) Camera Iris Value setup

http://camera_ipaddress/video/image.php?app=set&camera_iris_value=F14
http://camera_ipaddress/video/image.php?app=set&camera_iris_value=F2.1

34) Camera Iris Value setup

http://camera_ipaddress/video/image.php?app=set&camera_iris_value=F14
http://camera_ipaddress/video/image.php?app=set&camera_iris_value=F2.1

35) Camera Manual Gain setup

http://camera_ipaddress/video/image.php?app=set&camera_manual_gain=0db
http://camera_ipaddress/video/image.php?app=set&camera_manual_gain=42db

36) IR Mode setup

http://camera_ipaddress/video/image.php?app=set&ir_mode=1
http://camera_ipaddress/video/image.php?app=set&ir_mode=2
http://camera_ipaddress/video/image.php?app=set&ir_mode=3

37) IR On Level setup

http://camera_ipaddress/video/image.php?app=set&ir_on_level=1
http://camera_ipaddress/video/image.php?app=set&ir_on_level=20

38) IR Off Level setup

http://camera_ipaddress/video/image.php?app=set&ir_off_level=1
http://camera_ipaddress/video/image.php?app=set&ir_off_level=20

39) Fixed IR Bright setup

http://camera_ipaddress/video/image.php?app=set&fixed_ir_bright=1
http://camera_ipaddress/video/image.php?app=set&fixed_ir_bright=5

40) Moving IR Bright setup

http://camera_ipaddress/video/image.php?app=set&moving_ir_bright=1
http://camera_ipaddress/video/image.php?app=set&moving_ir_bright=5

41) Fixed IR Level setup

http://camera_ipaddress/video/image.php?app=set&fixed_ir_level=1
http://camera_ipaddress/video/image.php?app=set&fixed_ir_level=12

42) Moving IR Level setup

http://camera_ipaddress/video/image.php?app=set&moving_ir_level=1
http://camera_ipaddress/video/image.php?app=set&moving_ir_level=9

43) Delay Time setup

http://camera_ipaddress/video/image.php?app=set&delay_time=1
http://camera_ipaddress/video/image.php?app=set&delay_time=61

44) Moving IR Mode setup

http://camera_ipaddress/video/image.php?app=set&moving_ir_mode=1
http://camera_ipaddress/video/image.php?app=set&moving_ir_mode=2
http://camera_ipaddress/video/image.php?app=set&moving_ir_mode=3

45) Long Exposure setup

http://camera ipaddress/video/image.php?app=set&enable_long_exposure=0

http://camera ipaddress/video/image.php?app=set&enable_long_exposure=1

46) Max Shutter Value setup

http://camera ipaddress/video/image.php?app=set&max_shutter_value=0

http://camera ipaddress/video/image.php?app=set&max_shutter_value=1

http://camera ipaddress/video/image.php?app=set&max_shutter_value=2

47) Flicker Free setup

http://camera ipaddress/video/image.php?app=set&flicker_free=0

http://camera ipaddress/video/image.php?app=set&flicker_free=1

48) Flicker Mode setup

http://camera ipaddress/video/image.php?app=set&flicker_mode=0

http://camera ipaddress/video/image.php?app=set&flicker_mode=1

49) AGC DB setup

http://camera ipaddress/video/image.php?app=set&agc_db=0

http://camera ipaddress/video/image.php?app=set&agc_db=1

http://camera ipaddress/video/image.php?app=set&agc_db=2

50) IRIS Type setup

http://camera ipaddress/video/image.php?app=set&iris_type=0

http://camera ipaddress/video/image.php?app=set&iris_type=1

http://camera ipaddress/video/image.php?app=set&iris_type=2

http://camera ipaddress/video/image.php?app=set&iris_type=3

http://camera ipaddress/video/image.php?app=set&iris_type=4

51) Aisle setup

<http://camera ipaddress/video/image.php?app=set&rotation=0>

<http://camera ipaddress/video/image.php?app=set&rotation=1>

52) Aisle Degree setup

http://camera ipaddress/video/image.php?app=set&rotation_degree=90

http://camera ipaddress/video/image.php?app=set&rotation_degree=270

53) Digital Image Stabilization setup

http://camera ipaddress/video/setup_camera.php?app=set&dis=0

http://camera ipaddress/video/setup_camera.php?app=set&dis=1

54) Digital Image Stabilization Level setup

http://camera ipaddress/video/setup_camera.php?app=set&dis_level=1

http://camera ipaddress/video/setup_camera.php?app=set&dis_level=2

http://camera ipaddress/video/setup_camera.php?app=set&dis_level=3

55) High Light Compensation setup

http://camera ipaddress/video/setup_camera.php?app=set&hlc_enable=0

http://camera ipaddress/video/setup_camera.php?app=set&hlc_enable=1

56) High Light Compensation Level setup

http://camera ipaddress/video/setup_camera.php?app=set&hlc_level=1
http://camera ipaddress/video/setup_camera.php?app=set&hlc_level=2
http://camera ipaddress/video/setup_camera.php?app=set&hlc_level=3

57) ANPR Multi Shutter setup

http://camera ipaddress/video/setup_camera.php?app=set&anpr_count=1
http://camera ipaddress/video/setup_camera.php?app=set&anpr_count=2
http://camera ipaddress/video/setup_camera.php?app=set&anpr_count=3
http://camera ipaddress/video/setup_camera.php?app=set&anpr_count=4
http://camera ipaddress/video/setup_camera.php?app=set&anpr_count=5

58) ANPR Multi Shutter Value setup

http://camera ipaddress/video/setup_camera.php?app=set&anpr_count=1|2|1|4|3
http://camera ipaddress/video/setup_camera.php?app=set&anpr_count=2|4|3|1|5

59) High Light Compensation Level setup

http://camera ipaddress/video/setup_camera.php?app=set&hlc_level=1
http://camera ipaddress/video/setup_camera.php?app=set&hlc_level=2
http://camera ipaddress/video/setup_camera.php?app=set&hlc_level=3

60) Dark Buster setup

http://camera ipaddress/video/setup_camera.php?app=set&dark_buster_enable=0
http://camera ipaddress/video/setup_camera.php?app=set&dark_buster_enable=1

61) Dark Buster Level setup

http://camera ipaddress/video/setup_camera.php?app=set&dark_buster_level=1
http://camera ipaddress/video/setup_camera.php?app=set&dark_buster_level=2
http://camera ipaddress/video/setup_camera.php?app=set&dark_buster_level=3

Caution

You must check the following values in the response to <http://camera ipaddress/config.txt>

Item series	Value	Description
options	Tx, Xx	Camera series
	BRIGHTNESS	Brightness available
	CONTRAST	Contrast available
	SATURATION	Saturation available
	HUE	Hue available
	SHARPNESS	Sharpness available
	FLIP	Flip available
	MIRROR	Mirror available
	NR	Noise Reduction available
	WDR	WDR available
	DEFOG	Defog available
	AEAWB	Exposure Control and White Balance Control available
	IR	IR LED available
	DAY_NIGHT	DAY & Night available
	SMART_FOCUS	Smart Focus available
BUILTIN_PTZ	Built-in PTZ Camera	

	AISLE	Aisle available
	MWB	Manual White Balance Control available

Video & Image – OSD:

Version: 1.02e
Date: 2015. 11. 24

Revision History

Version	Date	Comment
1.00	2015-03-18	Initial version
1.00e	2015-03-26	English translation
1.01e	2015-06-26	Added osd_background, Changed osd_title_text
1.02e	2015-11-24	Added osd_subtitle_text

Introduction

This Chapter defines detailed setup procedure of OSD.

OSD URI

http://camera_ipaddress/video/osd.php

OSD Parameter

Parameter	Type	Value
osd_stream1_enable	boolean	0 : Disable, 1 : Enable
osd_stream2_enable	boolean	0 : Disable, 1 : Enable
osd_stream3_enable	boolean	0 : Disable, 1 : Enable
osd_min_transparency	integer(ro)	Minimum transparency level of OSD
osd_max_transparency	integer(ro)	Maximum transparency level of OSD
osd_transparency	integer	transparency level of OSD
osd_max_width	integer(ro)	Maximum width of OSD coordinate
osd_max_height	integer(ro)	Maximum height of OSD coordinate
osd_title_enable	boolean	0 : Disable, 1 : Enable
osd_title_text	string	Text displayed as OSD Title (UTF8 encoding) Transferred after URL encoding (refer to Caution) Max String : 25
osd_subtitle_text	string	Text (UTF8 encoding) to be displayed as OSD SubTitle URL encoding and forwarding (refer to Cautions) Max String : 25
osd_title_x	integer	X coordinate of OSD Title
osd_title_y	integer	Y coordinate of OSD Title
osd_datetime_enable	boolean	0 : Disable, 1 : Enable
osd_datetime_x	integer	X coordinate of OSD Date&Time
osd_datetime_y	integer	Y coordinate of OSD Date&Time
osd_background	boolean	0 : Disable, 1 : Enable

Example

1) get the current setting

`http://camera ipaddress/video/osd.php?app=get`

2) OSD setup for each stream

`http://camera ipaddress/video/osd.php?app=set&osd_stream1_enable=0`

`http://camera ipaddress/video/osd.php?app=set&osd_stream1_enable=1`

`http://camera ipaddress/video/osd.php?app=set&osd_stream2_enable=0`

`http://camera ipaddress/video/osd.php?app=set&osd_stream2_enable=1`

`http://camera ipaddress/video/osd.php?app=set&osd_stream3_enable=0`

`http://camera ipaddress/video/osd.php?app=set&osd_stream3_enable=1`

3) OSD transparency setup

* check `osd_min_transparency`, `osd_max_transparency` before setup.

`http://camera ipaddress/video/osd.php?app=set&osd_transparency=3`

4) OSD title setup

`http://camera ipaddress/video/osd.php?app=set&osd_title_enable=0`

`http://camera ipaddress/video/osd.php?app=set&osd_title_enable=1`

5) OSD title text setup

If you want to set OSD title as “#@NVX-4306R@#”

`http://camera ipaddress/video/osd.php?app=set&osd_title_text=%23%40NVX-4306R%40%23`

6) OSD subtitle text setup

If you want to set OSD subtitle as “#@NVX-4306R”

`http://camera ipaddress/video/osd.php?app=set&osd_subtitle_text=%23%40NVX-4306R`

7) OSD title coordinate setup

* check `osd_max_width`, `osd_max_height` before setup.

* top left corner is defined as coordinate (0, 0).

`http://camera ipaddress/video/osd.php?app=set&osd_title_x=302`

`http://camera ipaddress/video/osd.php?app=set&osd_title_y=409`

8) OSD date&time setup

`http://camera ipaddress/video/osd.php?app=set&osd_datetime_enable=0`

`http://camera ipaddress/video/osd.php?app=set&osd_datetime_enable=1`

9) OSD date&time coordinate setup

* check `osd_max_width`, `osd_max_height` before setup.

* top left corner is defined as coordinate (0, 0).

`http://camera ipaddress/video/osd.php?app=set&osd_datetime_x=302`

`http://camera ipaddress/video/osd.php?app=set&osd_datetime_y=409`

10) OSD background setup

`http://camera ipaddress/video/osd.php?app=set&osd_background=1`

Caution

You must check the following values in the response to `http://camera ipaddress/config.txt`

Item	Value	Description
------	-------	-------------

options	OSD_DISPLAY_CTRL	OSD available
---------	------------------	---------------

URL Encoding

All characters except 0~9, a~z, A~Z, '@', '.', '/', '\', '-', '_', ':' use %HH format.

'HH' means 1byte Hex value.

ex) \$ABC@ = %24ABC%40

Video & Image – Privacy Masking:

Version: 1.01e
Date: 2015. 06. 26

Revision History

Version	Date	Comment
1.00	2014-07-08	Initial version
1.00e	2014-08-05	English Translation
1.01e	2015-06-26	Add API

Introduction

This Chapter defines the detailed setup procedure for the Privacy Masking.

Video&Image – Privacy Masking URI

<http://camera ipaddress/video/masking.php>

Video&Image – Privacy Masking Parameter

Parameter	Type	Value
method	string	create, delete, modify, save
masking_max_width	integer(ro)	Maximum Width for Masking setup
masking_max_height	integer(ro)	Maximum Height for Masking setup
masking_enable	boolean	0 : Disable, 1 : Enable
masking_count	integer(ro)	Number of current Maskings
masking#_id	integer(ro)	Region ID
masking#_name	string	Region name
masking#_left	integer	Left pixel position
masking#_top	integer	Top pixel position
masking#_right	integer	Right pixel position
masking#_bottom	integer	Bottom pixel position
masking_id	integer	Region ID
masking_name	string	Region name
masking_left	integer	Left pixel position
masking_top	integer	Top pixel position

masking_right	integer	Right pixel position
masking_bottom	integer	Bottom pixel position
masking_type	string	Color, Mosaic, ColorMosaic
masking_type_list	string(ro)	Color Mosaic ColorMosaic

Example (Latest F/W)

1) get the current information

http://camera_ipaddress/video/masking.php?app=get

2) Privacy Masking setup

http://camera_ipaddress/video/masking.php?app=set&masking_enable=1

http://camera_ipaddress/video/masking.php?app=set&masking_enable=0

3) Privacy Masking Region setup

http://camera_ipaddress/video/masking.php?app=set&method=create

* If a Parameter is null, a Region is created as the whole area with Default setting.

http://camera_ipaddress/video/masking.php?app=set&method=create&masking_name=test&masking_left=20&masking_top=20&masking_right=600&masking_bottom=600&masking_type=Color

* You can create a regions using method=create one at a time.

* You should assign values for left, top, right, and bottom for region creation.

*¹ If any one of those values is missing, exceeds maximum value, or violates the following condition, the created region becomes the whole area.

*² the value of left cannot exceed that of right, and the value of top cannot exceed that of bottom.

a. Region Name setup for Privacy Masking Region Create

http://camera_ipaddress/video/masking.php?app=set&method=create&masking_name=test

b. Region Left setup for Privacy Masking Region Create

http://camera_ipaddress/video/masking.php?app=set&method=create&masking_left=100

c. Region Top setup for Privacy Masking Region Create

http://camera_ipaddress/video/masking.php?app=set&method=create&masking_top=100

d. Region Right setup for Privacy Masking Region Create | Region Right setup

http://camera_ipaddress/video/masking.php?app=set&method=create&masking_right=800

e. Region Bottom setup for Privacy Masking Region Create

http://camera_ipaddress/video/masking.php?app=set&method=create&masking_bottom=800

f. Region Type setup for Privacy Masking Region Create

http://camera_ipaddress/video/masking.php?app=set&method=create&masking_type=Color

http://camera_ipaddress/video/masking.php?app=set&method=create&masking_type=Mosaic

http://camera_ipaddress/video/masking.php?app=set&method=create&masking_type=ColorMosaic

4) Privacy Masking Region Parameter modify

single region modify

`http://camera_ipaddress/video/masking.php?app=set&method=modify&masking_id=1&modify_desired_parameter`

- * You must send an assigned id to request a change in a parameter value.
- * If you change a coordinate, the value of left cannot exceed that of right, and the value of top cannot exceed that of bottom.
- * In single region modify, you should use Parameters without '#' such as `masking_name`.

a. Region Name setup for Privacy Masking single Region Modify

`http://camera_ipaddress/video/masking.php?app=set&method=modify&masking_id=1&masking_name=Test2`

b. Region Left setup for Privacy Masking single Region Modify

`http://camera_ipaddress/video/masking.php?app=set&method=modify&masking_id=1&masking_left=0`

c. Region Top setup for Privacy Masking single Region Modify

`http://camera_ipaddress/video/masking.php?app=set&method=modify&masking_id=1&masking_top=0`

d. Region Right setup for Privacy Masking single Region Modify

`http://camera_ipaddress/video/masking.php?app=set&method=modify&masking_id=1&masking_right=500`

e. Region Bottom setup for Privacy Masking single Region Modify

`http://camera_ipaddress/video/masking.php?app=set&method=modify&masking_id=1&masking_bottom=500`

f. Region Type setup for Privacy Masking single Region Modify

`http://camera_ipaddress/video/masking.php?app=set&method=modify&masking_id=1&masking_type=Color`

`http://camera_ipaddress/video/masking.php?app=set&method=modify&masking_id=1&masking_type=Mosaic`

`http://camera_ipaddress/video/masking.php?app=set&method=modify&masking_id=1&masking_type=ColorMosaic`

multiple region modify

`http://camera_ipaddress/video/masking.php?app=set&method=modify&masking1_name=Test2&masking2_right=850&masking3_bottom=700`

- * If you want to modify multiple regions, you must modify them using a combination of the assigned ids.
- * If one of the ids in the set command is not an assigned id, the operation excludes that id and set the rest.
- * For the multiple region modify, you should use Parameters with '#' such as `masking#_name`.
- * If you use Parameters for a single region modify and multiple region modify at once, the Parameters for single region modify are ignored.

a. Region Name setup for Privacy Masking multiple Region Modify

`http://camera_ipaddress/video/masking.php?app=set&method=modify&masking1_name=Test2&masking3_name=First4`

b. Region Left setup for Privacy Masking multiple Region Modify

`http://"camera`

`ipaddress"/video/masking.php?app=set&method=modify&masking1_left=0&masking2_left=500`

c. Region Top setup for Privacy Masking multiple Region Modify

`http://"camera`

`ipaddress"/video/masking.php?app=set&method=modify&masking1_Top=0&masking2_Top=50`

d. Region Right setup for Privacy Masking multiple Region Modify

`http://"camera`

`ipaddress"/video/masking.php?app=set&method=modify&masking1_right=900&masking3_right=100`

e. Region Bottom setup for Privacy Masking multiple Region Modify

`http://"camera`

`ipaddress"/video/masking.php?app=set&method=modify&masking1_bottom=500&masking3_bottom=100`

f. Region Type setup for Privacy Masking multiple Region Modify

`http://"camera_ipaddress"/video/masking.php?app=set&method=modify&masking_type=Color`

`http://"camera_ipaddress"/video/masking.php?app=set&method=modify&masking_type=Mosaic`

`http://"camera_ipaddress"/video/masking.php?app=set&method=modify&masking_type=ColorMosaic`

5) Privacy Masking Region remove

`http://"camera_ipaddress"/video/masking.php?app=set&method=delete&masking_id=1`

* If you want to delete a region, you must make the request using the assigned id.

Example (Old F/W)

1) get the current information

`http://"camera_ipaddress"/video/masking.php?app=get`

2) Privacy Masking setup

`http://"camera_ipaddress"/video/masking.php?app=set&method=save&masking_enable=1`

`http://"camera_ipaddress"/video/masking.php?app=set&method=save&masking_enable=0`

3) Privacy Masking Region create

`http://"camera_ipaddress"/video/masking.php?app=set&method=create&masking_name=New
&masking_left=0&masking_top=0&masking_right=500&masking_bottom=400&masking_type=Color`

4) Privacy Masking Region modify

`http://"camera`

`ipaddress"/video/masking.php?app=set&method=modify&masking_id=4&masking_left=50&masking_top=20&masking_bottom=300&masking_type=Mosaic`

* If you want to modify a region, you must make the request using the assigned id.

5) Privacy Masking Region remove

http://*camera ipaddress*/video/masking.php?app=set&method=delete&masking_id=1

* If you want to delete, you must make the request using the assigned id..

6) Privacy Masking all

* For old F/W, the following method is recommended rather than the method=modify.

Request : http://*ipaddress*/video/masking.php?app=get

Response :

```
res=200&masking_enable=1&masking_count=3&masking1_id=2&masking1_name=New(1)&
masking1_left=0&masking1_top=0&masking1_right=600&masking1_bottom=300&masking2
_id=3&masking2_name=New(2)&masking2_left=70&masking2_top=40&masking2_right=90
0&masking2_bottom=600&masking3_id=4&masking3_name=New(3)&masking3_left=100&
masking3_top=100&masking3_right=200&masking3_bottom=200&masking_type=Color&ma
sking_type_list=Color|Mosaic|ColorMosaic&
```

Request :

```
http://ipaddress/video/masking.php?app=set&method=save&md_enable=0&masking_count=3
&masking1_id=2&masking1_name=New(1)&masking1_left=0&masking1_top=0&masking1_
right=600&masking1_bottom=300&masking2_id=3&masking2_name=New(2)&masking2_lf
t=70&masking2_top=40&masking2_right=900&masking2_bottom=600&masking3_id=4&ma
sking3_name=New(3)&masking3_left=100&masking3_top=100&masking3_right=200&maski
ng3_bottom=200&masking_type=Mosaic
```

Response :

```
res=200&ch=1&md_enable=0&masking_count=3&masking1_id=2&masking1_name=New(1)
&masking1_left=0&masking1_top=0&masking1_right=600&masking1_bottom=300&maskin
g2_id=3&masking2_name=New(2)&masking2_left=70&masking2_top=40&masking2_right=
900&masking2_bottom=600&masking3_id=4&masking3_name=New(3)&masking3_left=100
&masking3_top=100&masking3_right=200&masking3_bottom=200&masking_type=Mosaic&
masking_type_list=Color|Mosaic|ColorMosaic&
```

* As for the above, method=save means app=get and then set with response.

* In the save operation, you must send current information as a whole, otherwise the parameter not transmitted will be deleted.

* In Privacy Masking setup, you need to use save operation, so be careful not to delete current information.

Caution

You must check the following values in the response to http://*camera ipaddress*/config.txt.

Item	Value	Description
Options	MASK	Privacy Masking available

Video & Image – Basic:

Version: 1.03e
Date: 2015. 10. 08

Revision History

Version	Date	Comment
1.00	2013-12-11	Initial version
1.00e	2014-03-17	English Translation
1.01e	2014-04-29	Add Capture Resolution List option Add Capture Resolution value Add Resolution List option Add supported Frame List Add supported maximum Bitrate Change Framerate value description Change Bitrate value description
1.02e	2015-09-07	Add Resolution List option for each Stream Add Resolution value for each Stream Modify “4. Example” Add “5. Caution”
1.03e	2015-10-08	Modyfi “3. Video & Image – Basic Parameter” Add “5. Caution”

Introduction

This Chapter defines the detailed setup procedure for the Video, Image Stream.

Video & Image – Basic URI

<http://camera ipaddress/video/video.php>

Video & Image – Basic Parameter

Parameter	Type	Value
input_mode	string(ro)	Current input Resolution
video_mode	string(ro)	NTSC or PAL
total_ch	integer(ro)	Maximum number of video channels
total_strm	integer(ro)	Maximum number of Streams
ch#_cap_res_list	string(ro)	NTSC : 2048x1536 Max. 20fps 1920x1080 Max. 30fps 1600x1200 Max. 15fps 1280x720 Max. 30fps 800x600 Max. 30fps 1920x1080 Max. 60fps PAL : 2048x1536 Max. 20fps 1920x1080 Max. 25fps 1600x1200 Max. 12fps 1280x720 Max. 25fps 800x600 Max. 25fps 1920x1080 Max. 50fps
ch#_cap_res	string	QXGA : 2048 x 1536 1080P : 1920 x 1080
		UXGA : 1600 x 1200 720P : 1280 x 720
		SVGA : 800x 600 1080P_5060 : 1920 x 1080 (50/60)
ch#_strm#_codec_list	string(ro)	H264HP H264MP H264BP MPEG4ASP MPEG4SP MJPEG
ch#_strm#_codec	string	H264HP : H.264 High Profile H264MP : H.264 Main Profile

		H264BP : H.264 Baseline Profile MPEG4ASP : MPEG4 Advanced Simple Profile MPEG4SP : MPEG4 Simple Profile MJPEG : Motion Jpeg
ch#_strm#_res_list	string(ro)	1944P QXGA 1944FE 1440FE 1080P QUADVGA 1024FE UXGA SXGA 720P XGA 720FE SVGA 576P 480P VGA 480FE VGAWIDE CIFP CIFN QVGA 4CIF 2CIF CIF QCIF QQVGA stream1 stream2
ch#_strm#_res	string	1944P,QXGA,1944FE,1440FE,1080P,QUADVGA,1024FE, UXGA,SXGA,720P,XGA,720FE,SVGA,576P,480P,VGA,480FE, VGAWIDE,4CIF,2CIF,VGA,CIF,CIFP,CIFN,QCIF,QVGA, QQVGA, stream1(same as Stream 1), stream2(same as Stream 2)
ch#_strm#_fps_list	string (ro)	Supported Framerate List 30 29 28 27 ... 4 3 2 1 (differentiator " ")
ch#_strm#_fps	integer	Refer to ch#_strm#_fps_list
ch#_strm#_maxbr	integer (ro)	Supported maximum Bitrate
ch#_strm#_bitrate	integer	100 ~ ch#_strm#_maxbr
ch#_strm#_ratecontrol	string	cbr, vbr
ch#_strm#_gov	int	1 ~ 60
ch#_strm#_quality	int	1 ~ 100

* "ch#_strm#_res_list", "ch#_strm#_res" reference caution.

Example

1) get the current setting

<http://camera ipaddress/video/video.php?app=get>

The followings are responses for each camera series.

- Sharx Security HTNC44xx full HD 60 fps series (Sony Xarina / X2)

```
res=200&input_mode=1920x1080&video_mode=NTSC&total_ch=1&total_strm=3&
ch1_cap_res_list=1920x1080 Max. 60fps|1920x1080 Max. 30fps&ch1_cap_res=1080P&
ch1_strm1_codec_list=H264HP|H264MP|H264BP&ch1_strm1_res_list=1080P|SXGA|QUADV
GA|720P|XGA|576P|480P|VGA|VGAWIDE|QVGA&ch1_strm1_fps_list=30|25|20|15|12|10|6
|5|4|3|2|1&ch1_strm2_codec_list=MJPEG&ch1_strm2_res_list=1080P|SXGA|QUADVGA|72
0P|XGA|576P|480P|VGA|VGAWIDE|QVGA&ch1_strm2_fps_list=30|25|20|15|12|10|6|5|4|3
|2|1&ch1_strm3_codec_list=H264HP|H264MP|H264BP&ch1_strm3_res_list=1080P|SXGA|Q
UADVGA|720P|XGA|576P|480P|VGA|VGAWIDE|QVGA&ch1_strm3_fps_list=30|25|20|15|
12|10|6|5|4|3|2|1&ch1_strm1_enable=1&ch1_strm1_codec=H264BP&ch1_strm1_res=1080P
&ch1_strm1_fps=30&ch1_strm1_maxfps=30&ch1_strm1_bitrate=4000&ch1_strm1_maxbr=
8000&ch1_strm1_ratecontrol=cbr&ch1_strm1_gov=30&ch1_strm2_enable=1&ch1_strm2_co
dec=MJPEG&ch1_strm2_res=VGA&ch1_strm2_fps=30&ch1_strm2_maxfps=30&ch1_strm2
_quality=50&ch1_strm3_enable=1&ch1_strm3_codec=H264BP&ch1_strm3_res=VGA&ch1
_strm3_fps=30&ch1_strm3_maxfps=30&ch1_strm3_bitrate=2000&ch1_strm3_maxbr=8000
&ch1_strm3_ratecontrol=cbr&ch1_strm3_gov=30&
```

- Sharx Security HTNC45xx 5 MP camera series (Sony Xarina Pro / X4)

res=200&input_mode=2592x1944&video_mode=NTSC&total_ch=1&total_strm=3&ch1_strm1_codec_list=H264HP|H264MP|H264BP&ch1_strm1_res_list=1944P|QXGA|1944FE|1440FE|SXGA|QUADVGA|1024FE|XGA|720FE|576P|VGA|480FE&ch1_strm1_fps_list=15|12|10|6|5|4|3|2|1&ch1_strm2_codec_list=MJPEG&ch1_strm2_res_list=1440FE|SXGA|QUADVGA|1024FE|XGA|720FE|576P|VGA|480FE&ch1_strm2_fps_list=15|12|10|6|5|4|3|2|1&ch1_strm3_codec_list=H264HP|H264MP|H264BP&ch1_strm3_res_list=1944P|QXGA|1944FE|1440FE|SXGA|QUADVGA|1024FE|XGA|720FE|576P|VGA|480FE&ch1_strm3_fps_list=15|12|10|6|5|4|3|2|1&ch1_strm1_enable=1&ch1_strm1_codec=H264BP&ch1_strm1_res=1944P&ch1_strm1_fps=15&ch1_strm1_maxfps=15&ch1_strm1_bitrate=6000&ch1_strm1_maxbr=12000&ch1_strm1_ratecontrol=cbr&ch1_strm1_gov=15&ch1_strm1_vbr_quality=1&ch1_strm1_vbr_quality_min=1&ch1_strm1_vbr_quality_max=5&ch1_strm2_enable=1&ch1_strm2_codec=MJPEG&ch1_strm2_res=VGA&ch1_strm2_fps=15&ch1_strm2_maxfps=15&ch1_strm2_quality=50&ch1_strm3_enable=1&ch1_strm3_codec=H264BP&ch1_strm3_res=480FE&ch1_strm3_fps=15&ch1_strm3_maxfps=15&ch1_strm3_bitrate=500&ch1_strm3_maxbr=12000&ch1_strm3_ratecontrol=cbr&ch1_strm3_gov=15&ch1_strm3_vbr_quality=1&ch1_strm3_vbr_quality_min=1&ch1_strm3_vbr_quality_max=5&

- * The User can check the above response values via “[Video & Image – Basic Parameter](#)”.
 - * Among the above parameters, the user can check “ch1_cap_res_list” and “ch1_cap_res” parameters at “X2 2M Camera”.
- Please refer to “[Caution](#)” for detail information of “ch1_cap_res_list” and “ch1_cap_res” parameters.

2) Capture Resolution setup

http://”camera ipaddress”/video/video.php?app=set&ch1_cap_res=QXGA
 http://”camera ipaddress”/video/video.php?app=set&ch1_cap_res=1080P
 http://”camera ipaddress”/video/video.php?app=set&ch1_cap_res=UXGA
 http://”camera ipaddress”/video/video.php?app=set&ch1_cap_res=720P
 http://”camera ipaddress”/video/video.php?app=set&ch1_cap_res=SVGA

- * Supported Capture Resolutions are listed in ch#_cap_res_list.
- * If you change Capture Resolution, other setting may vary accordingly.

3) Codec setup for each Stream

http://”camera ipaddress”/video/video.php?app=set&ch1_strm1_codec=H264HP
 http://”camera ipaddress”/video/video.php?app=set&ch1_strm1_codec=H264MP
 http://”camera ipaddress”/video/video.php?app=set&ch1_strm1_codec=H264BP
 http://”camera ipaddress”/video/video.php?app=set&ch1_strm1_codec=MPEG4ASP
 http://”camera ipaddress”/video/video.php?app=set&ch1_strm1_codec=MPEG4SP
 http://”camera ipaddress”/video/video.php?app=set&ch1_strm3_codec=H264HP
 http://”camera ipaddress”/video/video.php?app=set&ch1_strm3_codec=H264MP
 http://”camera ipaddress”/video/video.php?app=set&ch1_strm3_codec=H264BP
 http://”camera ipaddress”/video/video.php?app=set&ch1_strm3_codec=MPEG4ASP
 http://”camera ipaddress”/video/video.php?app=set&ch1_strm3_codec=MPEG4SP

- * Supported Codec’s are listed in ch#_strm#_codec_list.
- * Stream 2 Codec is fixed to MJPEG.

4) Resolution setup for each Stream

http://”camera ipaddress”/video/video.php?app=set&ch1_strm#_res=1944P
 http://”camera ipaddress”/video/video.php?app=set&ch1_strm#_res=1944FE

http://"camera ipaddress"/video/video.php?app=set&ch1_strm#_res=QXGA
http://"camera ipaddress"/video/video.php?app=set&ch1_strm#_res=1080P
http://"camera ipaddress"/video/video.php?app=set&ch1_strm#_res=UXGA
http://"camera ipaddress"/video/video.php?app=set&ch1_strm#_res=SXGA
http://"camera ipaddress"/video/video.php?app=set&ch1_strm#_res=720P
http://"camera ipaddress"/video/video.php?app=set&ch1_strm#_res=SVGA
http://"camera ipaddress"/video/video.php?app=set&ch1_strm#_res=576P
http://"camera ipaddress"/video/video.php?app=set&ch1_strm#_res=480P
http://"camera ipaddress"/video/video.php?app=set&ch1_strm#_res=VGA
http://"camera ipaddress"/video/video.php?app=set&ch1_strm#_res=CIFP
http://"camera ipaddress"/video/video.php?app=set&ch1_strm#_res=CIFN
http://"camera ipaddress"/video/video.php?app=set&ch1_strm#_res=QVGA
http://"camera ipaddress"/video/video.php?app=set&ch1_strm#_res=4CIF
http://"camera ipaddress"/video/video.php?app=set&ch1_strm#_res=2CIF
http://"camera ipaddress"/video/video.php?app=set&ch1_strm#_res=CIF
http://"camera ipaddress"/video/video.php?app=set&ch1_strm#_res=QCIF
http://"camera ipaddress"/video/video.php?app=set&ch1_strm#_res=QQVGA

* Supported Resolutions are listed in ch#_strm#_res_list.

* Please refer Resolution Table for Resolution setting.

5) Frame per Second setup

http://"camera ipaddress"/video/video.php?app=set&ch1_strm#_fps=30

http://"camera ipaddress"/video/video.php?app=set&ch1_strm#_fps=21

http://"camera ipaddress"/video/video.php?app=set&ch1_strm#_fps=12

http://"camera ipaddress"/video/video.php?app=set&ch1_strm#_fps=3

* MAX. FPS is confined by the value of ch#_cap_res_list.

* If the model does not have ch#_cap_res_list, in general, MAX. FPS of NTSC is 30 and that of PAL is 25.

* FPS can vary by 1.

6) Bitrate Control setup

http://"camera ipaddress"/video/video.php?app=set&ch1_strm1_ratecontrol=vbr

http://"camera ipaddress"/video/video.php?app=set&ch1_strm1_ratecontrol=cbr

http://"camera ipaddress"/video/video.php?app=set&ch1_strm3_ratecontrol=vbr

http://"camera ipaddress"/video/video.php?app=set&ch1_strm3_ratecontrol=cbr

* Stream 2 does not support Bitrate since the Codec is MJPEG.

7) Bitrate setup

http://"camera ipaddress"/video/video.php?app=set&ch1_strm#_bitrate=500

http://"camera ipaddress"/video/video.php?app=set&ch1_strm#_bitrate=3000

http://"camera ipaddress"/video/video.php?app=set&ch1_strm#_bitrate=6000

http://"camera ipaddress"/video/video.php?app=set&ch1_strm#_bitrate=8000

* Stream 2 does not support Bitrate since the Codec is MJPEG.

* Bitrate can vary by 100.

8) Quality setup

http://"camera ipaddress"/video/video.php?app=set&ch1_strm2_quality=10

http://"camera ipaddress"/video/video.php?app=set&ch1_strm2_quality=50

http://"camera ipaddress"/video/video.php?app=set&ch1_strm2_quality=80

* Only Stream 2 support Quality setup.

* Quality can vary by 1.

9) GOP (Group of Picture) setup

- http://”camera ipaddress”/video/video.php?app=set&ch1_strm#_gov=1
- http://”camera ipaddress”/video/video.php?app=set&ch1_strm#_gov=30
- http://”camera ipaddress”/video/video.php?app=set&ch1_strm#_gov=60
- * Stream 2 does not support GOP setup since the Codec is MJPEG.
- * GOP Size is confined to twice the current FPS setting.

Caution

If the response of http://”camera ipaddress”/config.txt is the same as described in the table below, the user can setup “ch#_cap_res” parameter and can read “ch#_cap_res_list” parameter value.

Item option	Value	Description
	CAPTURE_CTRL	capture control available

“ch#_strm#_res” and “ch#_strm#_res_list” parameter value.

Parameter	Value	Description
ch#_strm#_res_list ch#_strm#_res	1944P	2592 x 1944
	QXGA	2048 x 1536
	1944FE	1944 x 1944
	1440FE	1440 x 1440
	1080P	1920 x 1080
	QUADVGA	1280 x 960
	1024FE	1024 x 1024
	UXGA	1600 x 1200
	SXGA	1280 x 1024
	720P	1280 x 720
	XGA	1024 x 768
	720FE	720 x 720
	SVGA	800 x 600
	576P	704 x 576
	480P	704 x 480
	VGA	640 x 480
	480FE	480 x 480
	VGAWIDE	640 x 360
	4CIF	704 x 480
	2CIF	704 x 288
	CIF	352 x 240
	CIFP	352 x 288
	CIFN	352 x 240
	QCIF	176 x 144
QVGA	320 x 240	
QQVGA	160 x 120	