



HTTP API Version 1.2

STARDOT NetCamLIVE2 Series



Table of Contents

Revision Log
Video Stream and Syntax
Network
Video
Camera
Date Time
Network Protocol
Account
Restart
Alarm
Motion Detection

Revision Log

Date	Revision Version	Session Number	Change Description
2014-15-Apr	1.0		Initial Release
2014-08-Dec	1.1		<p>Add RTSP Port</p> <p>Add event notification over HTTP including motion detection and wire input alarm.</p> <p>Add Alarm Parameter</p> <p>Add Dual H.264 720P + VGA Device Information</p> <p>Add alarm-flag into http stream</p> <p>Add motionblock192</p> <p>Add GOP Parameter</p>
2015-21-Sep	1.2		<p>*added all return information</p> <p>Add HTTP API Version</p> <p>Add Video Encoder Options</p> <p>Add HTTP audio multipart</p> <p>Add DateTime OSD format/position/color</p> <p>Add Text OSD position/color</p>

Note: For commands to be set, a reboot of the camera is required after changing a setting using an API command

Login

Where login is required, add the username and password just before the IP address as follows. This is not shown in the instructions for each api call; it assumes you are logged in.

<http://admin:admin@192.168.86.24/vb.htm?textenable1=1>

From inside the camera you can use the loopback address, with the answer going into a file:

```
wget http://admin:admin@127.0.0.1/vb.htm?textenable1
```

File vb.htm?textenable1 =

OK textenable1=1

Video Stream and Syntax

- HTTP authentication method
Digest or Basic.
- Video Stream:
 - HTTP Stream
 - HTTP mainstream http://<ip:http_port>/video0.m4v
Response: HTTP multipart video frames
Example: http://192.168.0.110/video0.m4v
 - HTTP substream http://<ip:http_port>/video1.m4v
Example: http://192.168.0.110/video1.m4v
 - HTTP Headers
Video Multipart:

Name	Value
Content-Type	video/h264 video/mpeg4 image/jpeg

X-Tag	serial no
X-Alarm	1:Motion 2:Input1 4:Input2
X-Framerate	frame rate
X-Resolution	resolution
X-Time	time, second
X-PTS	time, microsecond

Audio Multipart:

Name	Value
Content-Type	Audio/x-wav
X-Codec	U-LAW PCM A-LAW
X-Bitrate	Audio bit rate
X-AChannels	1 : mono, 2: stereo
X-SampleRate	Audio sample rate, 8000 16000 22050 44100
X-Tag	Serial no
X-Time	time, second
X-PTS	time, microsecond

- RTSP Stream
 - RTSP mainstream rtsp://<ip>/video0.sdp
Example: rtsp://192.168.0.110/video0.sdp
 - RTSP substream rtsp://<ip>/video1.sdp
Example: rtsp://192.168.0.110/video1.sdp
- Get snapshot:
 - Snapshot of mainstream:
Syntax: http://<IP>/ipcam/jpeg
Response: JPEG
Example: http://192.168.0.110/ipcam/jpeg
 - Snapshot of substream:
Syntax: http://<ip:http_port>/ipcam/jpegcif
Response: JPEG
Example: http://192.168.0.110/ipcam/jpegcif
- Set Parameter
Syntax: http://<ip:http_port>/vb.htm?parameter=value
Response: OK parameter
Example: http://192.168.0.110/vb.htm?wantype=1
OK wantype
- Get Parameter value
Syntax: http://<ip:http_port>/vb.htm?parameter
Response: OK parameter=value
Example: http://192.168.0.110/vb.htm?wantype
OK wantype=1
- Set multi-parameters in a single request
Syntax: http://<ip:http_port>/vb.htm?prmt=value1&prmt=value2&prmt=value3...
Response: OK prmt1 OK prmt2 OK prmt3

Example:

http://192.168.0.110/vb.htm?wantype=1&netip=192.168.0.110&netmask=255.255.255.0&gateway=192.168.0.1

OK wantype OK netip OK netmask OK gateway

- Get multi-parameters value in a single request

Syntax: http://<ipcam:http_port>/vb.htm?prmt1&prmt2&prmt3...

Response: OK prmt1=value1 OK prmt2=value2 OK prmt3=value3

Example: http://192.168.0.110/vb.htm?videocodec&videocodeccombo&videocodecres

OK videocodec=0 OK videocodeccombo=0 OK videocodecres=3

- Event notification over HTTP including motion detection and wire input alarm.

Syntax: http://<ip:http_port>/event.cgi

Response: IPCam keeps sending continuous HTTP multipart contents every 2 seconds.

Name	Value	Description
md	0: off 1: on	Event motion detection is triggered or not.
input1	0: off 1: on	Event input 1 is triggered or not.
input2	0: off 1: on	Event input 2 is triggered or not.

Example: http://192.168.0.110/event.cgi

- Get device information.

Syntax: http://<ip:http_port>/vb.htm?DeviceInfo

Example: <http://192.168.0.110/vb.htm?DeviceInfo>

OK DeviceInfo=modelname="SQ Series" mac=00165508B71E ver="P129 VER 1.0.19-09-B772 (2015/05/13 15:05:06) PS(Startdot)" 5MP=0 AIO=1 ALI=3 AUO=0 PTZ=0 LED=0 uboot_desc="ALI=3 AUO=0 LVO=3 PTZ=0 IRR=1" CPU=800M

- Get HTTP API Version

Syntax: http://<ipcam:http_port>/vb.htm?HttpApiVer

Network

GUI Item	SDK Parameter	Value	Remark
WAN Type	wantype	1: Static IP 2: DHCP	
Hostname	dhcphostname		
MTU (DHCP)	mtu2		
IP Address	netip		Only works for manual IP. DHCP undefined.
Subnet Mask	netmask		
Default gateway IP	gateway		
MTU (Static IP)	mtu1		
Primary DNS Server	dnsip		<p>Get Value = http://192.168.86.24/vb.htm?dnsip</p> <p>Return: OK dnsip=8.8.8.8</p> <p>-----</p> <p>Set Value = http://192.168.86.24/vb.htm?dnsip=9.9.9.9</p> <p>Return: OK dnsip</p>
Secondary DNS Server	dnsip2		

Video

GUI Item	SDK Parameter	Value	Remark
N/A	VideoEncoderOpt	Main,C=H264,R=1920x1080,F=30;Sub,C=H264,R=640x480,F=30;Sub,C=H264,R=480x270,F=30;Sub,C=H264,R=352x240,F=30 Main,C=H264,R=1280x1024,F=30;Sub,C=H264,R=640x480,F=30;Sub,C	List of supported main/sub stream combinations. Ended with \r\n\r\n. C: Codec R: Resolution F: Max FPS

GUI Item	SDK Parameter	Value	Remark
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Camera	title	Upto 11 characters	
Video Source	videosource	0: 5MP 1: 1080P	
Stream 1			
Resolution	VideoResolution1	5MP: 2560x1920 3MP: 2048x1536 1080P: 1920x1080 SXGA: 1280x1024 720P: 1280x720 VGA: 640x480 SIF: 352x240	Depends on Video Source.
Framerate	framerate1	1-30	
GOP	VideoGop1	8-40	
Rate Control	ratecontrol1	1: VBR 2: CBR	
Bit Rate	bitrate1	Unit: Kbps	
Stream2			
Resolution	VideoResolution2	VGA: 640x480 270P: 480x270 SIF: 352x240	
Framerate	framerate2	1-30	
GOP	VideoGop2	8-40	
Rate Control	ratecontrol2	1: VBR 2: CBR	
Bit Rate	bitrate2	Unit: Kbps	
Date	datestampenable1	0: Disable 1: Enable	
Date Format	dateformat	0: YYYY-MM-DD 1: MM-DD-YYYY 2: DD-MM-YYYY	
Time	timestampenable1	0: Disable 1: Enable	
Time Format	timeformat	0: 12 Hours 1: 24 Hours	
Date Time Color	datefontcolor	aqua black blue brown dodgerblue gray green khaki lightgreen magenta orange pink red slateblue white yellow	
Date Position	dateposition	0: Bottom-Left 1: Bottom-Right 2: Bottom-Center 3: Top-Left 4: Top-Center 5: Top-Right	
Text	EnableTextForRaw	Same syntax as textenable1	Note: Used for phenology raw image upload with overlay disabled. Does not save to config (doesn't wear out flash memory)
Text	textenable1	0: Overlay off 1: Overlay on	Get Value = http://192.168.86.24/vb.h

			tm?textenable1 Return: OK textenable1=1 ----- Set Value = http://192.168.86.24/vb.h tm?textenable1=1 Return: OK textenable1
Text Color	textfontcolor1	aqua black blue brown dodgerblue gray green khaki lightgreen magenta orange pink red slateblue white yellow	
Text Position	textposition1	0: Bottom-Left 1: Bottom-Right 2: Bottom-Center 3: Top-Left 4: Top-Center 5: Top-Right	
Text Content	overlaytext1	Upto 20 characters	
Mirror	mirctrl	0: OFF 1: HORIZONTAL 2: VERTICAL 3: BOTH	

Example:

<http://192.168.1.221/vb.htm?VideoResolution1=SXGA&framerate1=24&bitrate1=6144&datestampenable1=1>

Camera

GUI Item	SDK Parameter	Value	Remark
Brightness	brightness	0-255	
Contrast	contrast	0-255	
Saturation	saturation	0-255	
Sharpness	sharpness	0-255	
Hue	hue	0-255	
Back Light Compensation	blc	0 : OFF 1: ON	
Color Mode	colormode	0: Auto 1: day mode 2: night mode	
Privacy Mask	privacymaskenable	0: OFF 1: ON	
	privacymask	x,y,width,height, ex: 20,50,40,40	

Date Time

GUI Item	SDK Parameter	Value	Remark
Synchoize with Time Servers	ntpenable	0: Disable 1: Enable	
SNTP Server	sntpip	FQDN or IP of NTP Server	
Time Zone	timezone	0: +0 -60: -1 60: +1 -120: -2 120: +2 -180: -3 180: +3 -240: -4 240: +4 -300: -5 300: +5 -360: -6 360: +6 -420: -7 420: +7 -480: -8 480: +8 -540: -9 540: +9 -600: -10 600: +10 -660: -11 660: +11 -720: -12 720: +12	+
	newdate	yyyy/mm/dd Example: 2212/07/04	Set Date/Time with assigned value to IPCam
	newtime	hh:mm:ss Example: 13:10:30	
Local Time	gettime		Return format "yyyy-mm-dd hh:mm:ss"

Network Protocol

GUI Item	SDK Parameter	Value	Remark
HTTP Port	httpport	1-65535	
RTSP Port	rtspport	1-65535	
Sync With NVR	SyncWithNvr	0: Disable 1: Enable	If this option is set to be "0" that the IP Camera will not accept other HTTP API command anymore until you enable this option from web GUI.

Account

GUI Item	SDK Parameter	Value	Remark
Admin Username	adminid	Upto 30 characters	
Password	adminpwd	Upto 16 characters	
Operator username	operatorid	Upto 30 characters	
Password	operatorpwd	Upto 16 characters	
Viewer Username	viewerid	Upto 30 characters	
Password	viewerpwd	Upto 16 characters	

Restart

GUI Item	SDK Parameter		Remark
Restart	ipcamrestartcmd	Restart IPCam Please send this command later than 10 seconds after you send the last setting command.	

PTZ

GUI Item	SDK Parameter	Value	Remark
Protocol	ptzprotocol	0: OFF 1: PelcoP 2: PelcoD	
Device ID	ptzaddr	0-3	
Baud Rate	ptzbaud	0: 1200 1: 2400 2: 4800 3: 9600 4: 19200	
PTZ Speed	ptzspeed	0-23	
	ptzpreset=# presetname=xxx ipncptz=14	# >= 1 (Location #) Xxx give preset a name	Assign PTZ preset location
	ptzpreset=# ipncptz=17	# >= 1 (Location #)	Locate to a preset location.
	ptzpreset=# ipncptz=15	# >= 1 (Location #)	Clear a PTZ preset location
	ptzpresets	Without value	List all preset location
	ipncptz	16	Clear all preset location
	ipncptz	0: STOP 1: LEFT 2: RIGHT 3: UP 4: DOWN 5: IRISDEC 6: IRISINC 7: ZOOMDEC 8: ZOOMINC 9: FOCUSDEC 10: FOCUSINC 21: LEFT UP 22: LEFT DOWN 23: RIGHT UP 24: RIGHT DOWN Function for SpeedDome 41: OSD menu Show/Hidden 42: OSD menu left 43: OSD menu right 44: OSD menu up 45: OSD menu down 46: Auto Focus 47: Focus plus 48: Focus minus 49: Focus Stop	Move PTZ

Example:



Preset location #1 - http://192.168.1.221/vb.htm?ptzpreset=1&presetname=preset_01&ipncptz=14

Locate to location #1 - <http://192.168.1.221/vb.htm?ptzpreset=1&ipncptz=17>

Clear preset location #1 - <http://192.168.1.221/vb.htm?ptzpreset=1&ipncptz=15>

List all preset location <http://192.168.1.221/vb.htm?ptzpreset>

OK ptzpresets=

1,xxxx

2,yyyy

3,zzzz

