VIM Camera HTTP API Manual

18 August 17

This manual explains how to use HTTP-based API of the VIM series. The HTTP-based interface supports the feature of setting internal values with a specific parameter.

Commands listed are compatible with Release 6 FW running the following Kernel Version:

- IP Camera (Fixed and VariFocal lens): NVSS_V8.1.6.06.00
- PTZ: NVSS_V8.1.11.06.00

Features Added

- Added step movement commands for PTZ models (move in a direction by 10 deg increments).
- Added Set/Get coordinates for PTZ models (get current X:Y:Z position, set an X:Y:Z position).
- Added IR command to control on/off/auto setting.
- Added White Light command to control on/off/auto setting (for PTZ models that support this).
- Added Privacy Mask command to enable / disable.
- Added SMTP command to enable / disable.
- Port Consolidation: The HTTP, API and ONVIF ports have now been combined into a single HTTP port. Previously used were HTTP (80), API (8090) and ONVIF (8080). You can now use HTTP Port 80 for all 3. If you change the HTTP port, the other services will follow to that new port number.

Special Notes

The default API credentials are admin / 1111. To change this, login into the camera using the API credentials, then go to Configuration > User Management. Check the box for the Admin account and choose "Modify Pwd". Change the password to the current admin account (default is admin / admin). Once you have done this, the local admin and API admin accounts will be merged and you can use the same admin account to authorize login and API commands.

Known Limitations

Commands provided in this manual are currently not compatible with the NVRs.

Snapshot Stream

Example Syntax:

http://ipaddress/snapshot.jpg

Valid entries

ENTRY	DATA FORMAT	DESCRIPTION	COMMENT
N/A	N/A	Provides a single static JPG image	Send command as-is, no additional entries needed

RTSP Stream

Example Syntax:

rtsp://username:password@ipaddress:**Port**/1/**StreamID**

Valid entries

ENTRY	DATA FORMAT	DESCRIPTION	COMMENT
Port	554	Default RTSP port, can be changed by going to Configuration > Network Management > Network Service > Other > RTSP Port	Must be a numeric value
StreamID	1 ~ 3	1st Stream, 2nd Stream or 3rd Stream	Must be a numeric value

VCA Events

Example Syntax:

http://username:password@ipaddress/ISAPI/SystemEx/Video/inputs/channels/1/Rule/**RuleID**/scenes/**SceneID**/VCA/**Action**

Valid entries

ENTRY	DATA FORMAT	DESCRIPTION	COMMENT
RuleID	1 ~ 8	Corresponds to the Rule ID	Must be a numeric value
SceneID	1 ~ 16	Corresponds to the Scene ID	Must be a numeric value
Action	enabled | disabled	Either enables or disables the VCA event	

Video Streams

Example Syntax:

http://username:password@ipaddress/ISAPI/streamingEx/channels/1/**Action**

Valid entries

ENTRY	DATA FORMAT	DESCRIPTION	COMMENT
Action	enabled | disabled	Enables or disables the video stream	This disables ONVIF/RTSP, Web UI will still show video

Digital Output

Example Syntax:

http://username:password@ipaddress/ISAPI/SystemEx/Output/**OutputID**/**Action**

Valid entries

ENTRY	DATA FORMAT	DESCRIPTION	COMMENT
OutputID	1 ~ 3	Corresponds to the Alarm Output	Some models differ on the amount of outputs available
Action	enabled | disabled	Either enables or disables	

		the Alarm Output	

Audio Input

Example Syntax:

http://username:password@ipaddress/ISAPI/SystemEx/Audio/1/**Action**

Valid entries

ENTRY	DATA FORMAT	DESCRIPTION	COMMENT
Action	enabled | disabled	Either enables or disables the Audio Input	

HTTP MJPEG Stream

Example Syntax:

http://username:password@ipaddress/ISAPI/MjpegStream/1/**StreamID**

Valid entries

ENTRY	DATA FORMAT	DESCRIPTION	COMMENT
StreamID	1 ~ 2	Corresponds to the 1st Stream and 2nd Stream	Video Encoding must be set to MotionJPEG for this to work

Send PTZ to Preset

Example Syntax:

http://username:password@ipaddress/PSIA/PTZCtrlEx/channels/1/presets/**PresetID**/goto

Valid entries

ENTRY	DATA FORMAT	DESCRIPTION	COMMENT
PresetID	1 ~ 60	Corresponds to the Preset number.	Must be a numeric value.

Send PTZ to Scene

Example Syntax:

http://username:password@ipaddress/PSIA/PTZCtrlEx/channels/1/scenes/**SceneID**/goto

Valid entries

ENTRY	DATA FORMAT	DESCRIPTION	COMMENT
SceneID	1 ~ 16	Corresponds to the Scene.	Must be a numeric value.

PTZ Movement

Example Syntax:

http://username:password@ipaddress/PSIA/PTZCtrlEx/channels/1/controls/**Action**

Valid entries

ENTRY	DATA FORMAT	DESCRIPTION	COMMENT
Action	up	Moves the PTZ upward	Movement continues until

Action			stop command is received.
Action	down	Move the PTZ downward	Movement continues until stop command is received.
Action	Left	Moves the PTZ to the left	Movement continues until stop command is received.
Action	Right	Moves the PTZ to the right	Movement continues until stop command is received.
Action	Leftup	Moves the PTZ upward toward the left	Movement continues until stop command is received.
Action	Rightup	Moves the PTZ upward toward the right	Movement continues until stop command is received.
Action	Leftdown	Moves the PTZ downward toward the left	Movement continues until stop command is received.
Action	Rightdown	Moves the PTZ downward toward the right	Movement continues until stop command is received.
Action	Zoomin	Zooms the PTZ in	Movement continues until stopped or end is reached.
Action	Zoomout	Zooms the PTZ out	Movement continues until stopped or end is reached.
Action	stop	Stops all PTZ movement	

PTZ Step Movement

Example Syntax:

http://username:password@ipaddress/PSIA/PTZCtrlEx/channels/1/Minicontrols/**Action**

Valid entries

ENTRY	DATA FORMAT	DESCRIPTION	COMMENT
Action	up	Moves the PTZ up by 10 deg	Movement continues until stopped or end is reached.
Action	down	Moves the PTZ down by 10 deg	
Action	left	Moves the PTZ left by 10 deg	
Action	right	Moves the PTZ right by 10 deg	
Action	zoomin	Zooms the PTZ in increments	
Action	zoomout	Zooms the PTZ out in increments	
Action	focuson	Turn the auto focus of the PTZ on	
Action	focusoff	Turn the auto focus of the PTZ off	

Get PTZ Coordinates

Example Syntax:

http://username:password@ipaddress/PSIA/PTZCtrlEx/channels/1/GETXYZpoint

Valid entries

ENTRY	DATA FORMAT	DESCRIPTION	COMMENT
N/A	N/A	This command will provide the current XYZ coordinates of the PTZ	Send command as-is, no additional entries needed.

Set PTZ Coordinates

Example Syntax:

http://username:password@ipaddress/PSIA/PTZCtrlEx/channels/1/Xpoint/**XID**/Ypoint/**YID**/Zoom/**ZID**

Valid entries

ENTRY	DATA FORMAT	DESCRIPTION	COMMENT
XID	1 ~ 260	Sets the X position	Must be a numeric value.
YID	0 ~ 93	Sets the Y position	Must be a numeric value.
ZID	1 ~ 50	Sets the Zoom position	Must be a numeric value.

IR Control

Example Syntax:

http://username:password@ipaddress/PSIA/IRLamp/channels/1/**Action**

Valid entries

ENTRY	DATA FORMAT	DESCRIPTION	COMMENT
Action	on	off	auto	Sets the IR lamp settings	Default is auto. If you turn on, it will always be on.

White Light Control

Example Syntax:

http://username:password@ipaddress/PSIA/WhiteLight/channels/1/**Action**

Valid entries

ENTRY	DATA FORMAT	DESCRIPTION	COMMENT
Action	on	off	auto	Sets the White Light settings	Default is auto. If you turn on, it will always be on.

Privacy Mask

Example Syntax:

http://username:password@ipaddress/ISAPI/PrivacyMask/channels/1/**Action**

Valid entries

ENTRY	DATA FORMAT	DESCRIPTION	COMMENT
Action	enabled	disabled	Creates a privacy mask around the entire image	

SMTP Mail Server

Example Syntax:

http://username:password@ipaddress/ISAPI/SystemEx/Network/mailing/Holdonoff/channels/1/time/**TimeValue**/**Action**

Valid entries

ENTRY	DATA FORMAT	DESCRIPTION	COMMENT
TimeValue	0 ~ 300	Holds all VCA notifications until the time has expired	Must be a numeric value. Time is in seconds.
Action	enabled | disabled	Either enables or disables the Hold Time	

Email Delay Time

Example Syntax:

http://username:password@ipaddress/ISAPI/SystemEx/Network/mailing/Delayonoff/channels/1/time/**TimeValue**/**Action**

Valid entries

ENTRY	DATA FORMAT	DESCRIPTION	COMMENT
TimeValue	0 ~ 300	Sends the first VCA notification, and delays all subsequent notifications until time has expired.	Must be a numeric value.
Action	enabled | disabled	Either enables or disables the Delay Time.	

Cancel All Emails

Example Syntax:

http://username:password@ipaddress/ISAPI/System/Network/mailing/DelayTimeReset

Valid entries

ENTRY	DATA FORMAT	DESCRIPTION	COMMENT
N/A	N/A	This command will cancel all pending emails and purge from memory.	Send command as-is, no additional entries needed.

SMTP Server

Example Syntax:

http://username:password@ipaddress/ISAPI/SetSMTPState/channels/1/SMTP/**Server**/**Action**

Valid entries

ENTRY	DATA FORMAT	DESCRIPTION	COMMENT
Server	1 ~ 2	Listed under Alarm Management > Email Alarm	Must be a numeric value.
Action	enabled | disabled	Enables or disables the Email Alarm SMTP server	

Success Response Example

```xml
<ResponseStatus xmlns="http://www.isapi.org/ver20/XMLSchema" version="2.0">

<requestURL>/ISAPI/streamingEx/channels/1/enabled</requestURL>

<statusCode>1</statusCode>

<statusString>OK</statusString>

<subStatusCode>ok</subStatusCode>

</ResponseStatus>
```