



Grandstream Networks, Inc.

GXV3615



TABLE OF CONTENTS
GXV3615 User Manual

WELCOME.....	4
SAFETY COMPLIANCES.....	5
WARRANTY.....	6
CONNECT YOUR GXV3615	7
EQUIPMENT PACKAGE CONTENTS.....	7
CONNECTING THE GXV3615.....	7
PRODUCT OVERVIEW	8
GXV3615 FRONT AND BACK PANEL.....	8
GXV3615 SAMPLE CONNECTION DIAGRAM	10
GXV3615 SPECIFICATIONS.....	11
INSTALLATION GUIDE	12
MINIMUM RECOMMENDED COMPUTER SYSTEM REQUIREMENT.....	12
CONFIGURE THE GXV3615 VIA WEB BROWSER	12
GXV3615 HOME WEB PAGE.....	15
GXV3615 CONFIGURATION & LANGUAGE PAGE.....	16
BASIC SETTINGS EXPLANATION	17
SYSTEM SETTINGS PAGE	17
VIDEO & AUDIO SETTING PAGE	18
NETWORKING SETTING PAGE	20
WI-FI SETTINGS PAGE	21
DDNS SETTINGS PAGE	22
SIP SETTING PAGE.....	23
STATUS PAGE.....	25
ADVANCED SETTINGS EXPLANATION.....	26
USER MANAGEMENT PAGE.....	26
MAINTENANCE PAGE.....	27
SMTP SETTING PAGE (EMAIL ALARM).....	28
FTP SETTINGS PAGE (UPLOAD ALARM).....	29
ALARM SERVER SETTINGS PAGE (UPLOAD ALARM TO SUPPORTED VMS OR HTTP SERVER)	30
MOTION DETECTION CONFIGURATION PAGE (SET ALARM)	31
SYSLOG SETTINGS PAGE (TROUBLESHOOTING)	33
SOFTWARE UPGRADE.....	34
SOFTWARE UPGRADE VIA TFTP, HTTP OR HTTPS.....	34
INSTRUCTIONS FOR LOCAL FIRMWARE UPGRADE USING TFTP SERVER:	35
CONFIGURATION FILE DOWNLOAD	35
RESTORE FACTORY DEFAULT SETTING.....	36
RESET BUTTON	36
RESET FROM WEB INTERFACE.....	37

TABLE OF FIGURES
GXV3615 USER MANUAL

FIGURE 1: HOME PAGE OF GXV3615	15
FIGURE 2: WEB LANGUAGE SWITCH	16
FIGURE 3: SYSTEM SETTINGS PAGE.....	17
FIGURE 4-1: VIDEO & AUDIO SETTINGS PAGE.....	18
FIGURE 4-2: VIDEO & AUDIO SETTINGS PAGE.....	19
FIGURE 5: NETWORKING SETTING PAGE.....	20
FIGURE 6-1: WI-FI NETWORKING SETTING PAGE	21
FIGURE 6-2: WI-FI NETWORKING SETTING PAGE	21
FIGURE 7: DDNS SETTING PAGE.....	22
FIGURE 8-1: SIP SETTING PAGE.....	23
FIGURE 8-2: SIP SETTING PAGE.....	24
FIGURE 9: STATUS PAGE.....	25
FIGURE 10: USER MANAGEMENT PAGE	26
FIGURE 11: MAINTENANCE PAGE	27
FIGURE 12: SMTP SETTING PAGE	28
FIGURE 13: SMTP TESTING PAGE	28
FIGURE 14: FTP SETTING PAGE.....	29
FIGURE 15: ALARM HTTP SERVER SETTING PAGE	30
FIGURE 16-1: MOTION DETECTION CONFIGURATION PAGE.....	31
FIGURE 16-2: MOTION DETECTION SCHEDULE CONFIGURATION PAGE	32
FIGURE 17: ALARM SERVER SETTING PAGE	33
FIGURE 18: FIRMWARE UPGRADE AND PROVISIONING	34
FIGURE 19: FACTORY RESET FROM WEB INTERFACE	37

TABLE OF TABLES
GXV3615 USER MANUAL

TABLE 1: GXV3615 TECHNICAL SPECIFICATIONS	11
---	----

WELCOME

Thank you for purchasing Grandstream's GXV3615 cube IP camera, an innovative powerful next generation network camera for remote monitoring and surveillance over the LAN or Internet. It features cutting edge H.264 real-time video compression with up to 30 frames per second in full D1 resolution, delivering rich image clarity at rapid transmission rates. Integrated SIP client can pass alarms to the PSTN, mobile phones, SIP IP phones, SIP videophones and enables 2-way VoIP communication. The GXV3615 series also support PoE(GXV3615 only) or WIFI (GXV3615W only).

The GXV3615 can be managed with GSurf_Pro, Grandstream's FREE VMS (video management systems) software that controls up to 36 cameras simultaneously. It is fully compliant with ONVIF standard and offers flexible HTTP API and an SDK for advanced integration.

The affordable, feature rich GXV3615 cube IP camera is an addition to the popular GXV3XXX series IP surveillance product family. It ensures ease of use, integration and deployment with a multilingual graphical user interface, provides powerful solution for small to medium sized offices, homes and storage facilities looking to safeguard their valuables.

This manual will help you to learn how to operate and manage your GXV3615 cube IP camera and make the best use of its rich features.

Safety Compliances

These instructions are intended to assist users with the operation of the GXV3615 and to instruct on how to avoid dangerous situations or damage to the device.

Warnings: Serious injury or death may be caused if any of the warnings below are neglected.
Cautions: Injury or damage to the equipment may occur if any of the following caution messages are neglected.



Warnings Follow these safeguards to prevent serious injury or death.



Cautions Follow these precautions to prevent potential injury or material damage.



Warnings:

Input voltage should meet both the SELV (Safety Extra Low Voltage) and the Limited Power Source with DC 12V according to the IEC60950-1 standard. Please refer to the technical specifications for more details.

Do not use a third-party power adapter or power cord

When the device is installed on the wall or ceiling, make sure that it is firmly attached.



Notice,

Make sure that the power supply voltage is correct before using the camera.

Do not drop the device or expose it to physical shock.

Do not expose the device to temperatures outside the range of -10°C to +60°C when the device is in operation.

Do not expose the device to damp/wet conditions or high electromagnetism radiation.

To avoid heat accumulation, make sure that your operating environment has proper ventilation.

Do not attempt to open, disassemble, or modify the device

A few parts (e.g. electrolytic capacitor) of the equipment shall be replaced regularly according to their average life time. The average life time varies from the differences between operating environments and usage history. Regular maintenance checks are recommended for all users. Please contact your dealer for more details.

Warranty

If you purchased your GXV3615 from a reseller, please contact the company where you purchased your device for replacement, repair or refund.

If you purchased the product directly from Grandstream, please contact your Grandstream Sales and Service Representative for a RMA (Return Materials Authorization) number before you return the product. Grandstream reserves the right to remedy warranty policy without prior notification.

Caution:

Changes or modifications to this product not expressly approved by Grandstream, or operation of this product in any way other than as detailed by this User Manual, could void your manufacturer warranty. Please do not use a different power adaptor with the GXV3615 as it may cause damage to the products and void the manufacturer warranty.

- This document is subject to change without notice. The latest electronic version of this user manual is available for download at:
http://www.grandstream.com/products/GXV3615_UserManual_EN.pdf

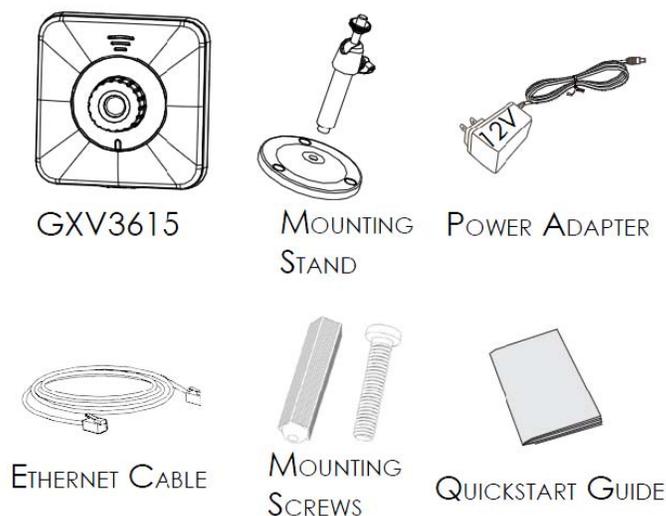
Reproduction or transmittal of the entire or any part, in any form or by any means, electronic or print, for any purpose is not permitted without the express written permission of Grandstream Networks, Inc.

CONNECT YOUR GXV3615

Equipment Package Contents

The GXV3615 package contains:

- GXV3615 IP Camera
- 12V DC Universal Power Adaptor
- Ethernet Cable
- Mount Stand
- Quick Installation Guide



Connecting the GXV3615

Using the Power Adapter as power supply

- Connect the RJ-45 Ethernet cable to the NETWORK port of the GXV3615
- Connect the other end of the RJ-45 cable to your network (switch or router or PC)
- Connect the power supply to the DC 12V power jack on the back of the GXV3615

Using PoE as power supply (GXV3615 PoE Model Only)

- Connect the RJ-45 Ethernet cable to the NETWORK port of GXV3615
- Connect the other end of the RJ-45 cable to your PoE switch.

NOTE:

If you are going to connect the device to a hub/switch/router, please use a straight-through cable. A cross over cable should be used if you are going to connect the device directly to a PC. Wi-Fi mode has to be initially configured via wired mode before switched to run in wireless mode.

PRODUCT OVERVIEW

GXV3615 Front and Back Panel

Front Panel:



- *Speaker* GXV3615 built-in speaker
- *LED Status Indicator* LED indicate device operation status (**)
- *Microphone* GXV3615 built-in microphone
- *Mounting stand* Stand to connect camera and mounting base
- *Mounting Base* Mounting base for desktop or wall installation

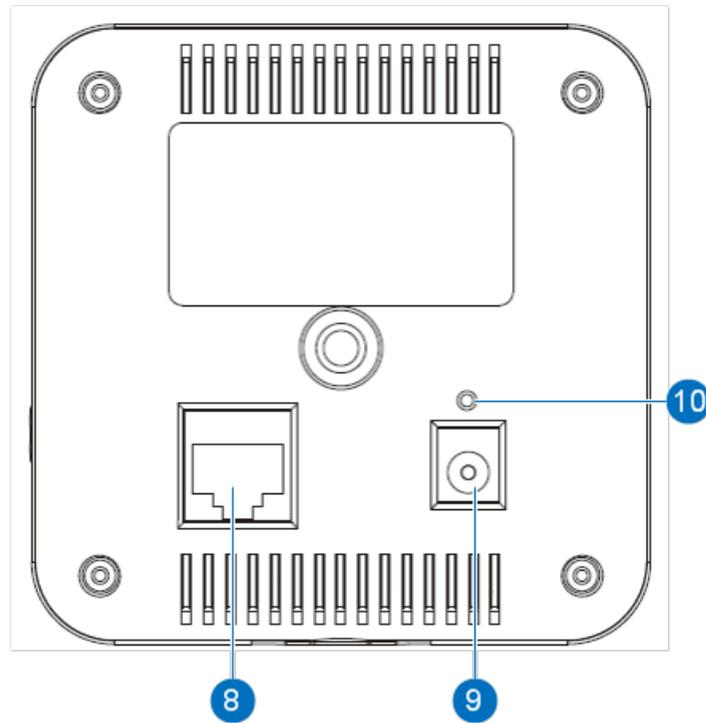
(**) LED Indication Status

- | | |
|---|--|
| <p>Red</p> <p>Solid Green</p> <p>Blink Green</p> | <p>Power connected but IP address not obtained</p> <p>IP address obtained, device in normal operation</p> <p>Device is transmitting data</p> |
|---|--|

NOTE:

- *Green light status can be disabled via web configuration page*

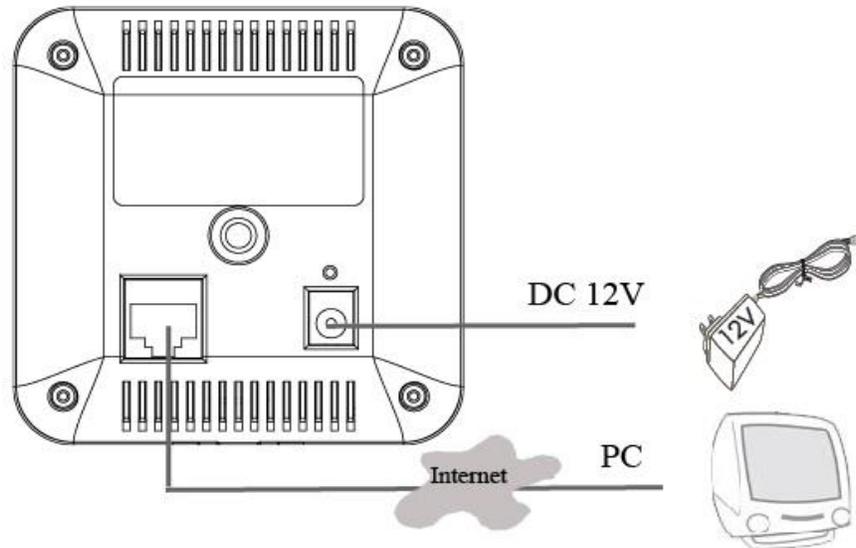
Back Panel:



- 8. Network Socket**
- 9. DC 12V Jack**
- 10. RESET Pinhole**

10/100 RJ-45 network port for connecting to Ethernet
12V DC power jack, UL Certified.
Press and hold for 30 seconds to **Factory Reset** the unit

GXV3615 Sample Connection Diagram



This diagram shows how the GXV3615 connected to Internet.

GXV3615W is Wi-Fi model and can use Wi-Fi for network connection. However, user has to use wired connection to configure the Wi-Fi parameter first before switch to use Wi-Fi connection.

GXV3615 Specifications

Table 1: GXV3615 Technical Specifications

Models	GXV3615 (PoE) or GXV3615W (Wi-Fi)
Video Compression	H.264, MJPEG , JPEG
Image Sensor	1/4", CMOS, 680H x 512V pixel resolution, excellent low noise levels and low-light sensitivity
Lens Type	1/4", M12, f=4.5mm, F1.5, View Angle = 64
Minimum Illumination	0.05Lux
Responsivity	11.5V/lux-sec (550nm)
Max Video Resolution	704x480, 352x240, 176x112; 704x576, 352x288, 176x144; 640x480, 480x272, 320x240, 256x192, 160x112.
Pixel Dynamic Range	82dB
Max Frame Rate in Max Resolution	30fps
Video Bit Rate	16 Kbps – 2 Mbps
Audio Input	Built-in Microphone
Audio Output	Built-in Speaker
Audio Compression	G.711u/a, G.726
Video Management System	ONVIF compliant, HTTP API for advanced integration
Pre/Post-Alarm Buffer	24MB
Snapshots	Triggered upon events, send via email/FTP
Multi-streaming-rate for Preview & Recording	Yes, Primary and Secondary Stream
Security	Login password, HTTPS for firmware upgrade
Network Port	10M/100M auto-sensing, RJ45
Network Protocol	TCP/UDP/IP, RTP/RTCP, RTSP, DHCP, DDNS, HTTP/HTTPS, SMTP, FTP, NTP, PPPoE
Power over Ethernet (PoE)	IEEE 802.3af class 0 (GXV3615 only)
Wi-Fi (802.11b/g/n)	Internal antenna (GXV3615W only)
SIP/VoIP Support	Yes, Voice & Video-over-IP
Dimensions (W x H x L)	90mm x 90mm x 45mm
Weight	GXV3615: 128 gram. GXV3615W: 133 gram (base only) Stand: 121 gram Package Weight: 568 gram
Temperature / Humidity	0°C – 45°C (32°F–113°F) Humidity 10–90% RH (non-condensing)
Power Adapter	Output: 12VDC/0.5A; Input:100–240VAC, 50–60Hz
Package Content	GXV3615 (or GXV3615W) Base Unit; Desk Stand (also as wall-mounting kit); Universal Power Supply; Network Cable; Quick Installation Guide
Regulatory Compliance	FCC, CE, C-tick

INSTALLATION GUIDE

Minimum Recommended Computer System Requirement

To install GXV3615, you have to have a computer, PC recommend. The minimum recommended PC system requirement listed below:

- Windows 2000, XP, Windows Vista, Windows 7 (32bit or 64bit)
- CPU: Intel Pentium 4 or higher, 2 GHz
- RAM: 1 GB (4 GB recommended for larger systems)
- Support for DirectX 8.0 and above.

Configure the GXV3615 via Web Browser

The GXV3615 has embedded Web server to respond to HTTP GET/POST requests. Embedded HTML pages allow user to configure the IP camera through Microsoft Internet Explorer (7.0 or above) or Firefox (plug-in from Grandstream required).

- Download Active-X Control for IE(32bit) from Grandstream website:
http://www.grandstream.com/products/tools/surveillance/activex_control_manual_install_3.1.0.32.rar
- Download Firefox Plug-in from Grandstream website:
http://www.grandstream.com/products/tools/surveillance/firefox_plugin.exe

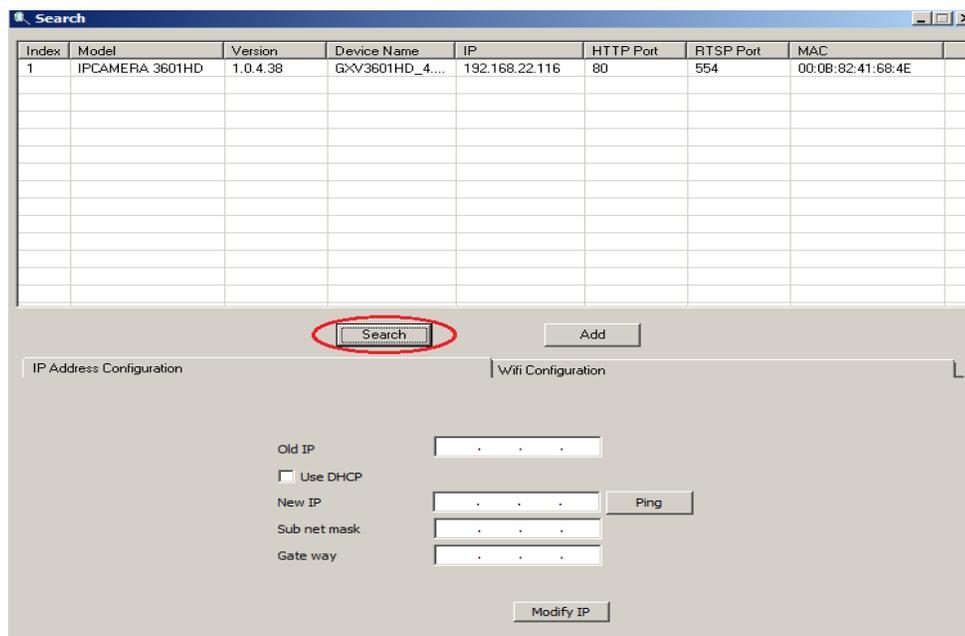
NOTE:

- *Google Chrome and Apple Safari support is NOT yet supported and status pending.*
- *Please temporarily disable Antivirus or Internet Security Software when download and install the Grandstream Firefox plug-in for video or “GSViewerX.cab” for Microsoft Internet Explorer.*

Connect the Camera to network with DHCP server (Recommended)

The GXV3615 by default enabled as DHCP client, it will automatically get IP address from the network with DHCP server running. User can know the IP address assigned to the camera from DHCP server log or using “SearchTool” from Grandstream GSurf_Pro free VMS software.

1. Download and install the GSurf_Pro software from Grandstream website:
http://www.grandstream.com/products/tools/surveillance/gsurf_pro.zip
2. Run the “Search Tool” in the pull down Menu of “Manage Tool” tag
3. Click on  button to begin device detection
4. The detected devices will appear in the Output field like below



5. Double click the column of the detected camera, the browser will automatically open and link to the device IP and the web configuration page.
6. The browser will ask for plug-in or ActiveX if not installed, otherwise it will get to Home page and start to show the video captured by the camera (by default the camera enabled anonymous access)
7. Click “Configuration”, the browser will ask credentials to authorize configuration.
8. Enter the administrator user name and password to access the Web Configuration Interface, the default user name and password are both set to **admin**.
9. In step 6, IE will indicate that “This website wants to install the following add-on: GSViewerX.cab from Grandstream Networks Inc.”, allow the installation.
10. Firefox user need to download and install the plug-in to see the video, the plug-in for Firefox is here:
http://www.grandstream.com/products/tools/surveillance/firefox_plugin.exe

NOTE:

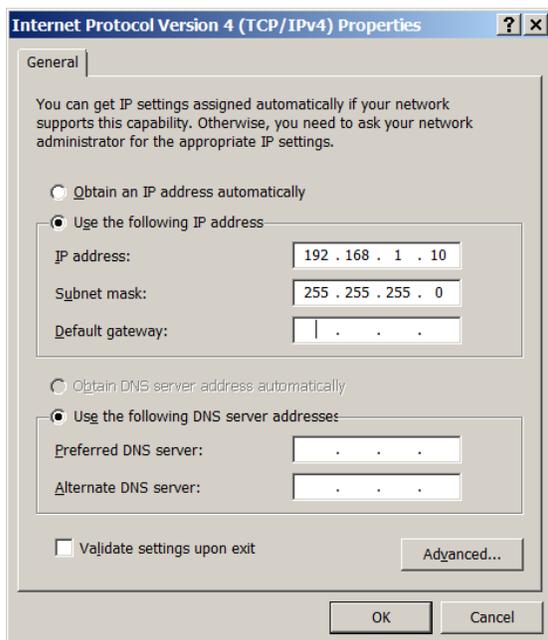
- Please temporarily disable Antivirus or Internet Security Software when download and install the Grandstream Firefox plug-in for video or “GSViewerX.cab” for Microsoft Internet Explorer.

Connect to the Camera using Static IP

If no DHCP server in the network, or the camera does not get IP from DHCP server, user can connect the camera to a computer via cross-over cable, using static IP to configure the camera.

The default IP, if no DHCP server; or DHCP offer time out (3 minutes), is **192.168.1.168**

1. Connect the computer via cross-over Ethernet cable directly to the IP camera GXV3615
2. Configure the computer using Static IP: 192.168.1.XXX (1<XXX<255, but NOT 168) and configure the “Subnet mask” to “255.255.255.0”. Leave the “Default Gateway” to “Blank” like below:



3. Power on the GXV3615.
4. Start the IE or Firefox browser when the network connection is up.
5. Enter 192.168.1.168 in the address bar of the browser.
6. The browser will ask for plug-in or ActiveX if not installed, otherwise it will get to Home page and start to show the video captured by the camera (by default the camera enabled anonymous access)
7. Click “Configuration”, the browser will ask credentials to authorize configuration.
8. Enter the administrator user name and password to access the Web Configuration Interface, the default user name and password are both set to **admin**.
9. In step 6, IE will indicate that “This website wants to install the following add-on: GSViewerX.cab from Grandstream Networks Inc.”, allow the installation.
10. Firefox user need to download and install the plug-in to see the video, the plug-in for Firefox is here:
http://www.grandstream.com/products/tools/surveillance/firefox_plugin.exe

NOTE:

- Please temporarily disable Antivirus or Internet Security Software when download and install the Grandstream Firefox plug-in for video or “GSViewerX.cab” for Microsoft Internet Explorer.

GXV3615 Home Web Page

The Home Page of GXV3615 shown as Figure 1:

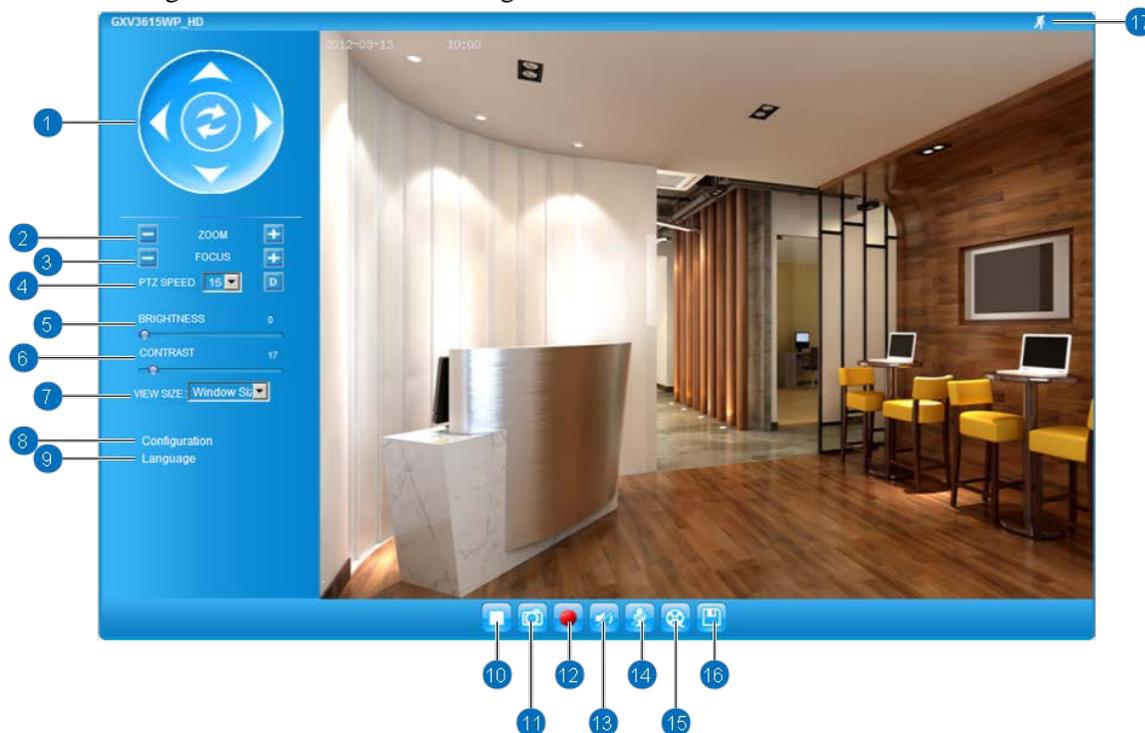


Figure 1: Home Page of GXV3615

- | | |
|---|---|
| <ol style="list-style-type: none"> 1. Control Console: 2. ZOOM: 3. FOCUS: 4. PTZ SPEED/Default Button: 5. BRIGHTNESS: 6. CONTRAST: 7. SATURATION: 8. Configuration: 9. Language: 10. Play/Stop: 11. Snapshot: 12. Record: 13. Sound On/Off: 14. Talk: 15. Replay: 16. Record File Path: 17. Motion Detection Alarm Indicator: | <p>PTZ Console controller for ePTZ function.</p> <p>Zoom in or Zoom out during ePTZ operation.</p> <p>Adjust the focus of image (Not Applicable to GXV3615).</p> <p>Adjust the rotate speed of the control console (Not Applicable);
Default button to reset the video brightness, contrast and saturation to factory default value.</p> <p>Adjust the image brightness.</p> <p>Adjust the image contrast.</p> <p>Adjust the image saturation.</p> <p>Click to enter “Configuration Page” to configure the parameters of GXV3615 (Administration privilege required).</p> <p>Click to switch webpage language.
(Current supported: Chinese, English and Russian)</p> <p>Start/Stop Play the video stream in webpage.</p> <p>Click to capture and save a snapshot of current video displayed.
Default directory: C:\GS_Capture</p> <p>Click to Start/Stop record of current video into a file.
Default directory: C:\GS_Record</p> <p>Toggle to listen/stop the sound from camera microphone</p> <p>Toggle to talk to camera speaker. (PC microphone required)</p> <p>Click to playback the recorded video file.</p> <p>Click to adjust the file path of saved video files.</p> <p>If motion detection alarm triggered, the indicator will flash in red.
Click the indicator icon to turn off the alarm indication.</p> |
|---|---|

GXV3615 Configuration & Language Page

- When click the “Configuration” tab, web page will link to page to configure the related parameters of the GXV3615.
- There are two big categories of settings: Basic Settings and Advanced Settings. Details will be illustrated in the later Chapter.
- When click the “Language” tab, supported languages will be displayed in Figure 2. Click to select the related webpage display language.

Figure 2: Web Language Switch



- Currently firmware only support: English (default), Simplified Chinese and Russian.

BASIC SETTINGS EXPLANATION

System Settings Page

This page allow user to configure the system settings of GXV3615.

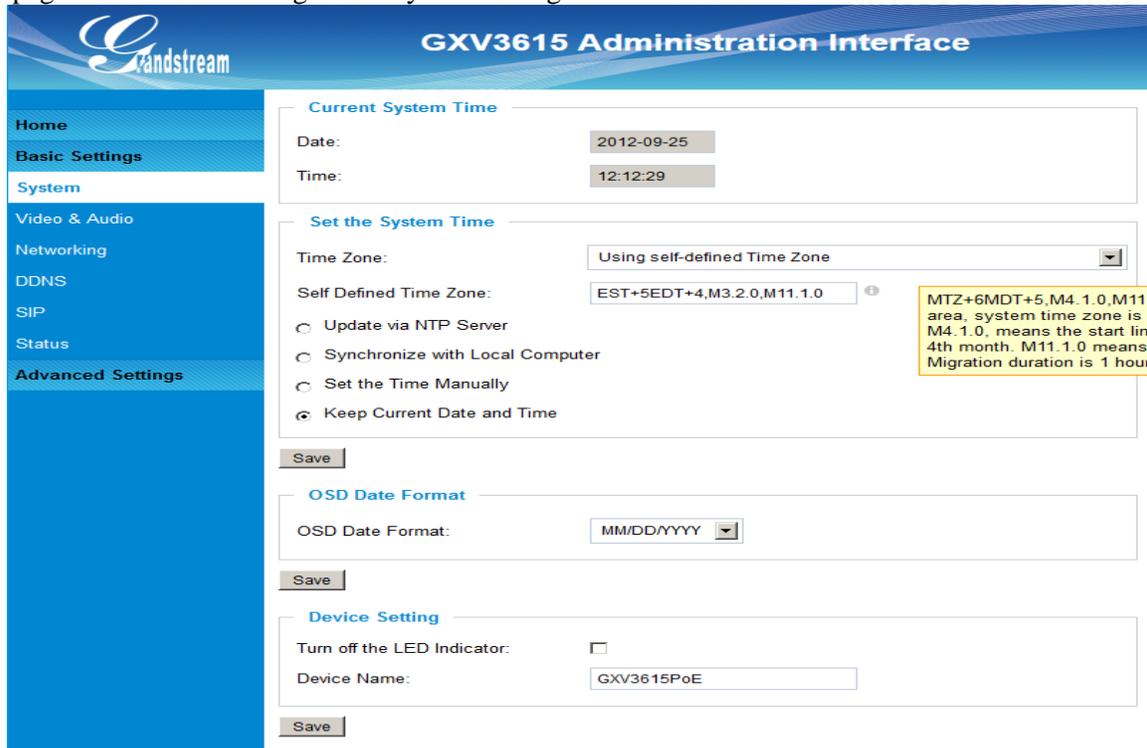


Figure 3: System Settings Page

- **Current System Time:** Display time current system is running at
- **Set the System Time:** Configure the time system is running.
 - Time Zone: Select from pull down menu the time zone unit located
 - Self-Defined Time Zone: Use the self-defined time zone for automatic daylight saving time adjustment. Format please refer to the “help over mouse”
 - Update via NTP Server: Synchronize time using NTP protocol with a Time Server over the Internet cloud (*)
 - Synchronize with Local Computer: Synchronize time with local computer
 - Set the Time Manually: Manually input the time
 - Keep Current D/T: Select to use camera current displayed time
- **OSD Date Format:** Pull down to select date format displayed on video screen.
- **Device Setting:** Setting of Device Operation
 - Turn off the LED Select to turn off the **Green** LED camera operation indication
 - Device Name: The name of device which will be shown in the result of “Search Tool” of GSurf_Pro VMS program.

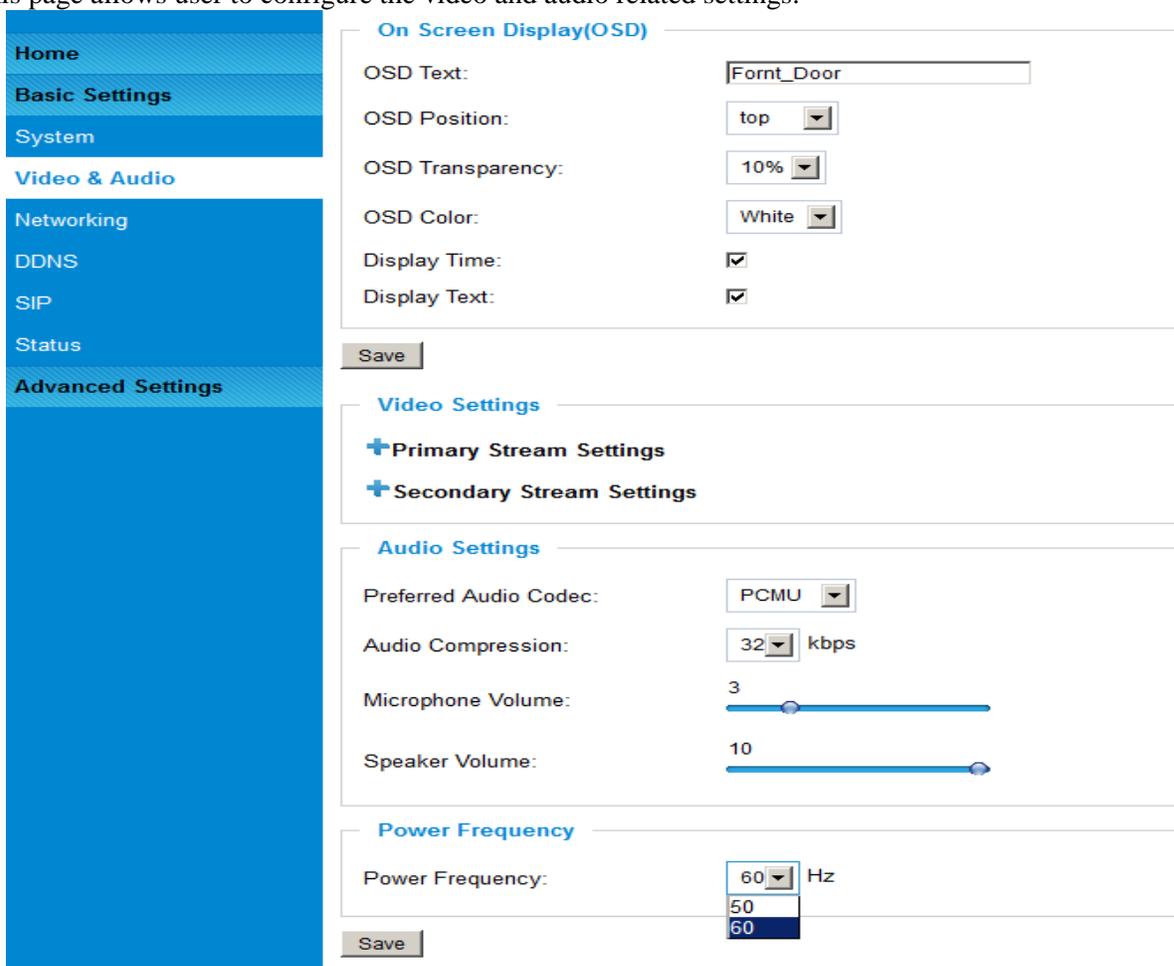
NOTE:

(*) If select this option, a valid DNS server must be configured under **Basic Settings** → **Networking**

➤ **Save** button has to be clicked to save all the changes made to the device.

Video & Audio Setting Page

This page allows user to configure the video and audio related settings.



On Screen Display(OSD)

OSD Text:

OSD Position:

OSD Transparency:

OSD Color:

Display Time:

Display Text:

Video Settings

+ Primary Stream Settings

+ Secondary Stream Settings

Audio Settings

Preferred Audio Codec:

Audio Compression: kbps

Microphone Volume:

Speaker Volume:

Power Frequency

Power Frequency: Hz

Figure 4-1: Video & Audio Settings Page

- **On Screen Display (OSD):** Display time stamp and text on the video screen.
 - OSD Text: Inputted text (to identify the camera) shown on the screen.
 - OSD Position: Show the OSD in either top or bottom position on screen.
 - OSD Transparency: Adjust the opaque of the OSD
 - OSD Color: Pull down to select the color of the text showed in OSD
 - Display Time: When checked, time stamp will display on video screen
 - Display Text: When checked, inputted text will display on video screen.
- **Audio Settings:** Pull down to disable or select different audio codec used in microphone. Three codec supported: G.711u, G.711a and G.726.
 - Audio Compression: Audio compression rate used in audio codec
 - Microphone Volume: Slide to adjust microphone gain.
 - Speaker Volume: Slide to adjust the built-in speaker volume.
- **Power Frequency:** Select correct local power frequency to avoid video flicking effect under fluorescence light condition. US is 60Hz. China is 50Hz.

Video Settings

Primary Stream Settings

Preferred Video Codec: H264

Resolution: NTSC D1 720*480

Bit Rate: 1024 kbps

Maximum Frame Rate: 15 fps

Bit Rate Control: CBR VBR

I-frame Interval: 30 Frame(1-100)

Secondary Stream Settings

Preferred Video Codec: MJPEG

Resolution: NTSC CIF 352*240

Bit Rate: 1024 kbps

Maximum Frame Rate: 5 fps

Bit Rate Control: CBR VBR

I-frame Interval: 30 Frame(1-100)

Figure 4-2: Video & Audio Settings Page

- **Primary Stream Settings:**
 - Preferred Video Codec: MJPEG and H.264 supported, H.264 recommended.
 - Resolution: The video resolution in pixel, Max. is D1 resolution
 - Bit Rate: video bit rate used in video
 - Max. Frame Rate: The max. frame rate used
 - I-frame Interval: I-frame interval
- **Secondary Stream Settings:** Pull down to select, same as Primary steam..

NOTE:

- *H.264 suggested if camera needs to be viewed via Internet.*
- *If MJPEG selected, reduce fps to minimum to save bandwidth and get better image*
- Grandstream IP Camera provides two video streams, user can use them with flexibility. For example, the high-resolution stream for local recording; another low or high resolution for remote monitoring or Smartphone applications, or vice versa depending application scenarios.
- *Use below link to calculate bandwidth and storage before installation*
<http://www.grandstream.com/support/tools/bandwidth-storage-calc>

Networking Setting Page

This page allows user to configure network related parameters:



Figure 5: Networking Setting Page

- **IP Address Configuration:** Camera IP address configuration
 - Dynamically Associated via DHCP: Default setting, DHCP server assign IP to camera.
 - Statically Configured as: Static IP address configuration
- **DNS Configuration:** DNS server IP, must be configured correctly **if using static IP.**
- **HTTP:** Web access TCP port, default 80.
- **PPPoE** PPPoE account credential setting information.

NOTE:

- If camera behind SOHO router with port forwarding configuration for remote access, static IP or static DHCP has to be used to avoid IP address change after router reboot.
- TCP port above 5000 suggested if port forwarding HTTP remote access, due to some ISP would block port 80 inbound traffic. For example, change the default HTTP port from 80 to 8088, to make sure the port forwarding not likely be blocked.
- In addition to HTTP port, RTSP port also required to be configured for port forwarding, in order for remote party viewing the H.264 video.
- If change the default port from TCP 80 to port "A", then RTSP port should be "2000+A". Both TCP port "A" and "2000+A" should be configured for port forwarding in the router. For example, the HTTP port changed to 8088, the RTSP port should be 10088, both 8088 and 10088 should be configured for port forwarding in order for remote camera video access.

Wi-Fi Settings Page

This page allows user to configure Wi-Fi network related parameters:

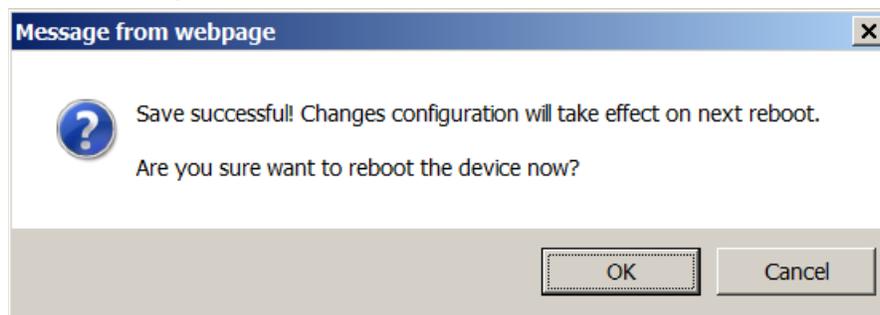


Figure 6-1: Wi-Fi Networking Setting Page

- Enable Wi-Fi:** If checked and click “Save”, a reboot is required before Wi-Fi start to work. A pop up window will show as Figure 7-1.

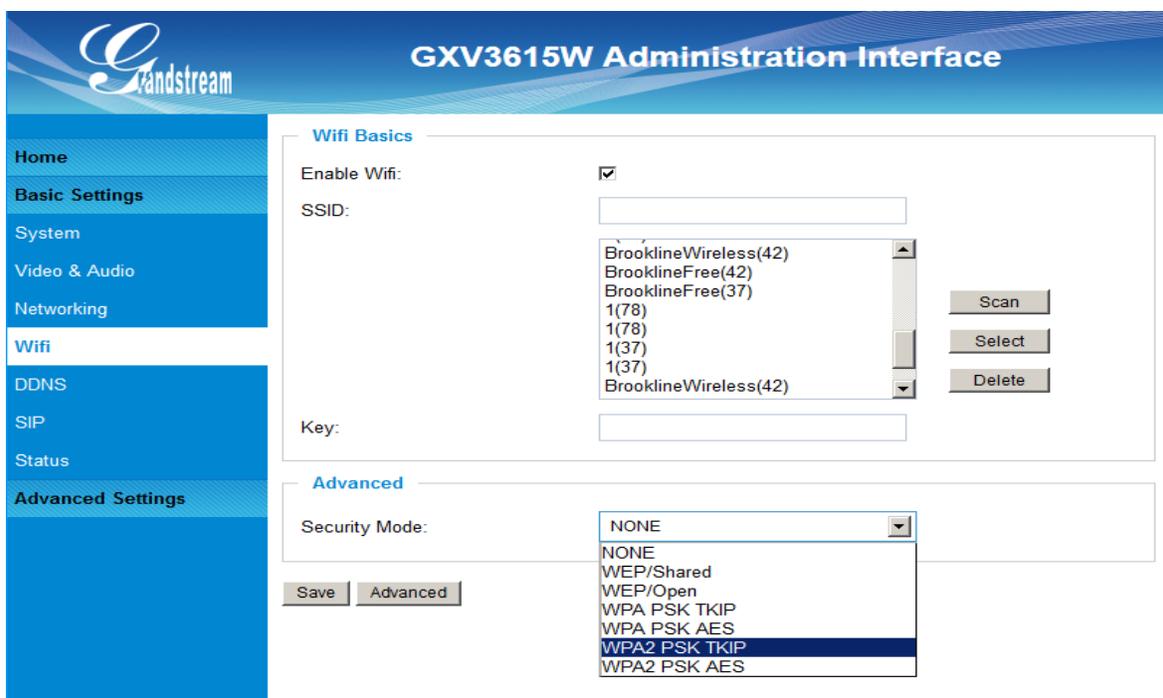


Figure 6-2: Wi-Fi Networking Setting Page

- SSID:** Wi-Fi network SSID. When Wi-Fi enabled, click “Scan” the camera will scan the Wi-Fi access point nearby.
- Key:** Key for security enhanced Wi-Fi network the camera try joining.
- Security Mode:** The security mode Wi-Fi access point or router used.

DDNS Settings Page

This page allows user to configure dynamic DNS related parameters:



The screenshot shows the 'GXV3615 Administration Interface' with a navigation menu on the left. The 'Dynamic DNS Settings' section is active, containing the following fields:

- DDNS Active:** A checkbox that is currently unchecked.
- DDNS ISP Type:** A dropdown menu with 'dyndns.org' selected.
- Self-Define DDNS Address:** An input field with a yellow callout box next to it containing the text 'Optional self-designated DDNS address'.
- Site Name:** An input field.
- DDNS Account:** An input field.
- DDNS Password:** A password input field with masked characters and an information icon.
- STUN Server:** An input field.

A 'Save' button is located at the bottom left of the settings area.

Figure 7: DDNS Setting Page

- **DDNS Active:** Enable DDNS by check this field.
- **DDNS ISP Type:** Select the DDNS service provider from the pull-down menu list
- **Self-Define DDNS Address:** Input the self-defined DDNS address
- **Site Name:** DDNS site name
- **DDNS Account:** DDNS account name
- **DDNS Password:** DDNS password
- **STUN Server:** Stun server FQDN or IP. If device behind a non-symmetric router, STUN server can help to penetrate & resolve NAT issue.

SIP Setting Page

This page allows user to configure SIP related parameters.

GXV3615 can be configured as SIP endpoint to call out when alarm triggered; or allow permitted number to call in to check the video if Grandstream video IP phone is used.



Figure 8-1: SIP Setting Page

- **Registered:** SIP registration status. Display “Online” in Green, “Offline” in Red.
- **Unregistered on Reboot:** If checked and server support, reboot camera will unbind all registration in same SIP account.
- **Account Name:** SIP account name
- **SIP Server:** FQDN or IP, SIP server from VoIP service provider or peering device

- **Outbound Proxy:** IP or FQDN of Outbound proxy server, helps penetrate NAT/Firewall
- **SIP User ID:** SIP username, or telephone number from ITSP
- **Authenticate ID:** Authenticate ID used by SIP proxy
- **Authenticate Password:** Authenticate password used by SIP proxy
- **STUN Server:** STUN server used to resolve NAT if have
- **Stream:** Stream used for SIP call, default 2nd stream for bandwidth safety
- **Preferred Vocoder:** Audio codec used for SIP call
- **Registration Expiration:** Registration expiration time, default 3600 seconds
- **Local SIP Port:** Local SIP port, default 5060
- **Local RTP Port:** Local RTP port for media, default 5004
- **Auto on hook Timer:** Auto On Hook timer, default 300 seconds
- **Disable Audio in SIP Call:** Checked to disable audio for SIP call
- **Enable Keep Alive:** Checked to enable, help NAT resolution
- **Accept Direct IP Call:** Check to accept peer to peer SIP call from peering IP device

Figure 8-2: SIP Setting Page

- **Enable White List Number Filter:** Check to allow only white list number to call in, for security
- **Enable Dual-way Audio Warning:** Check to enable two-way audio warning.
- **Phone List/Phone Number:** Callee or call receiver number when alarm call triggered.
- **White List/Phone Number:** Phone numbers allowed to call into the camera.

Status Page

This page shows the GXV3615 operation status:



The screenshot shows the 'GXV3615W Administration Interface' with a sidebar menu on the left and three main content panels on the right. The sidebar menu includes: Home, Basic Settings, System, Video & Audio, Networking, Wifi, DDNS, SIP, Status, and Advanced Settings. The 'Status' menu item is highlighted. The main content area is divided into three sections: System Statistics, Network Status, and Camera Type.

System Statistics	
Product Model:	GXV3615W
Hardware Version:	V0.2A
Part Number:	9670001902A
Bootloader Version:	1.0.0.0
Core Version:	1.0.4.2
Base Version:	1.0.4.37
Firmware Version:	1.0.4.37
System Up Time Since:	13 days 18 hours 16 minutes

Network Status	
MAC Address:	00:0B:82:2E:FA:AB
LAN IP Address:	66.228.93.55
LAN Subnet Mask:	255.255.255.128
LAN Default Gateway:	66.228.93.1
PPPoE IP Address:	0.0.0.0
PPPoE Status:	Disconnected
DDNS Status:	Disabled
Wifi Status:	Disconnected
SIP Registered:	Offline

Camera Type	
Camera Type:	Aptina, MT9V136 Pixels 680*512

Figure 9: Status Page

NOTE:

- When SIP account registered, the status will display “Online” in Green.
- When SIP account unregistered, the status will display “Offline” in Red.

ADVANCED SETTINGS EXPLANATION

The supports all the traditional and advanced telephony features.

User Management Page

This page allows user to do user management:



Figure 10: User Management Page

- **Existing User Name:** Allow revise existing user or add new user
- **User Name:** The name of user need to be revised
- **User Password:** New password if revise password
- **Confirm User Password:** Re-enter the new password for verification
- **Privilege:** Choose user privilege
- **Allow Anonymous Viewing:** When checked, no security enhanced. Any person can view the camera if knowing the IP or FQDN of the camera, but can NOT change anything, just view ONLY.

Maintenance Page

This page allows user to maintain the camera:



Figure 11: Maintenance Page

- **Restart:** When clicked, the camera will reboot or restart
- **Restore:** When clicked, the camera will be reset to factory default, wiping out all the configurations (except IP address)

Firmware Upgrade and Provisioning:

- **Upgrade via:** Upgrade firmware via TFTP, HTTP or HTTPS
- **Firmware Server Path:** Server path holding the firmware
- **Config Server Path:** Server path holding the configuration file (auto provisioning)
- **XML ConfigFile Password:** Password for encrypt the XML based configuration file
- **Automatic Upgrade Interval (Minutes):** Time interval for automatic upgrade, default 10080
- **Automatic Upgrade:** Checked to enable automatic firmware upgrade and provisioning.

NOTE:

- Only XML based provisioning is supported by GXV3615 and GS surveillance products.

SMTP Setting Page (Email Alarm)

This page allows user to configure email client to send out email when alarm triggered:

SMTP Server Settings

Enable SMTP:

SMTP Server:

SMTP Server Port:

From E-Mail address:

To E-Mail address 1:

To E-Mail address 2:

To E-Mail address 3:

User Name:

Password:

SSL:

1 Required Fields.
2 Valid DNS server is required for hostname.

Figure 12: SMTP Setting Page

- **Enable SMTP:** When checked, email client is enabled.
- **SMTP Server:** SMTP Email Server IP or Domain Name
- **SMTP Server Port:** Port number used by server to send email
- **From Email address:** The email address of alarm email sending from, usually client email ID
- **To E-Mail address:** The email address to receive the alarmed email, total 3 included.
- **User Name:** Email client User ID
- **Password:** Email client password
- **SSL:** Check if the SMTP email server requires SSL

NOTE:

- Click “Save” to save the email configuration information.
- Click “Test” after configuration, if setting is correct, a test email will send out and “Test successful!” yellow bar will display like below



Figure 13: SMTP Testing Page

FTP Settings Page (Upload Alarm)

This page allows user to configure FTP parameters to upload the alarm or video recording::

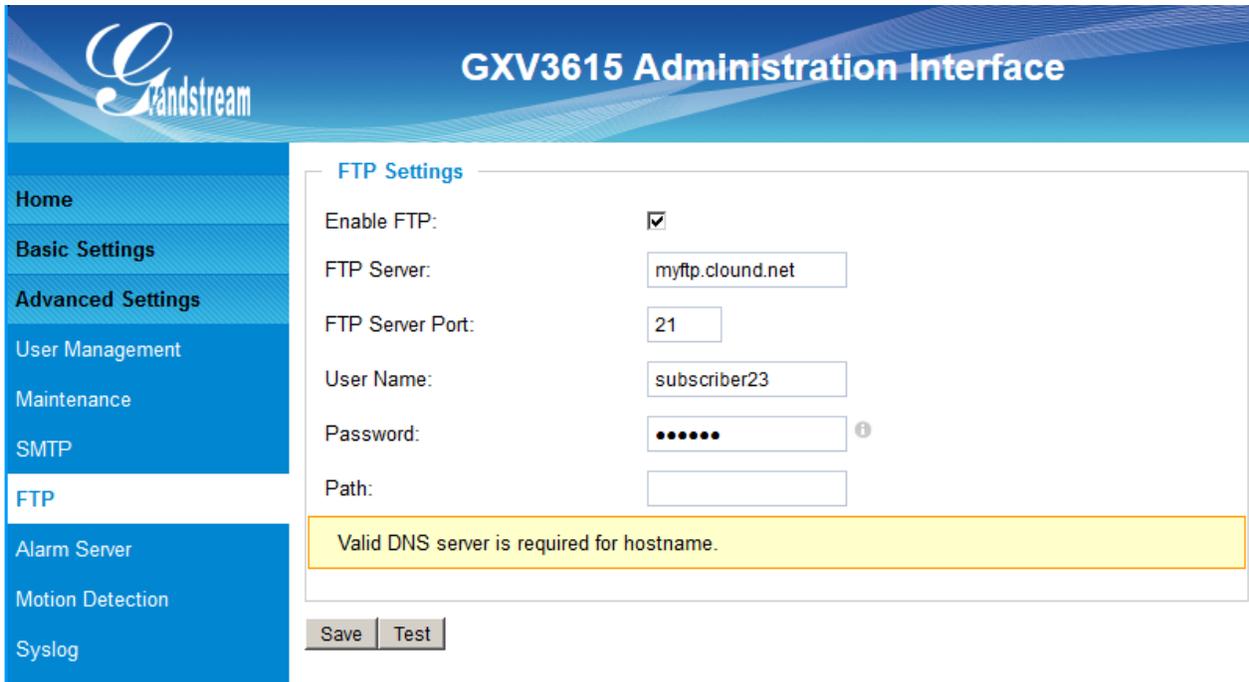


Figure 14: FTP Setting Page

- **Enable FTP:** When checked, built-in FTP client is enabled.
- **FTP Server:** IP or Domain name of FTP site or server
- **FTP Server Port:** TCP port for FTP server, default port number 21
- **User Name:** FTP server User ID
- **Password:** FTP server user password
- **Path:** Path in FTP server where upload files stored, blank means default folder.

NOTE:

- Click “Save” to save the FTP configuration information.
- Click “Test” after configuration, if setting is correct, a test FTP operation will be performed and “Test successful!” yellow bar will display if the operation is successful.

Alarm Server Settings Page (Upload Alarm to supported VMS or HTTP Server)

This page allows user to configure alarm HTTP server to upload alarms:

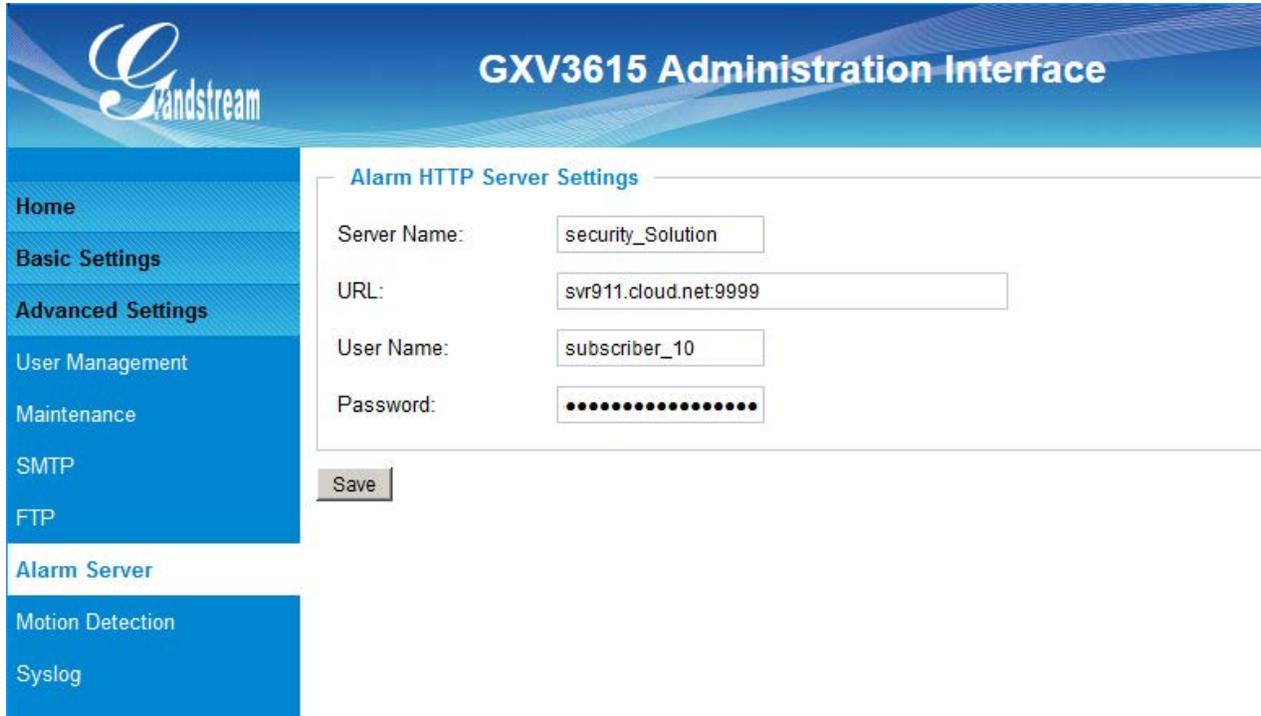


Figure 15: Alarm HTTP Server Setting Page

- **Server Name:** The name of HTTP server or VMS system
- **URL:** URL of the Server
- **User Name:** User ID from that Server
- **Password:** Password for that User ID

NOTE:

- Grandstream provide HTTP API to help 3rd party company by using HTTP server or VMS to develop further solutions for its customers.
- Grandstream IP Camera and DVS (include GXV3615) are ONVIF certified.

Motion Detection Configuration Page (Set Alarm)

This page allows user to configure motion detection to trigger alarms:

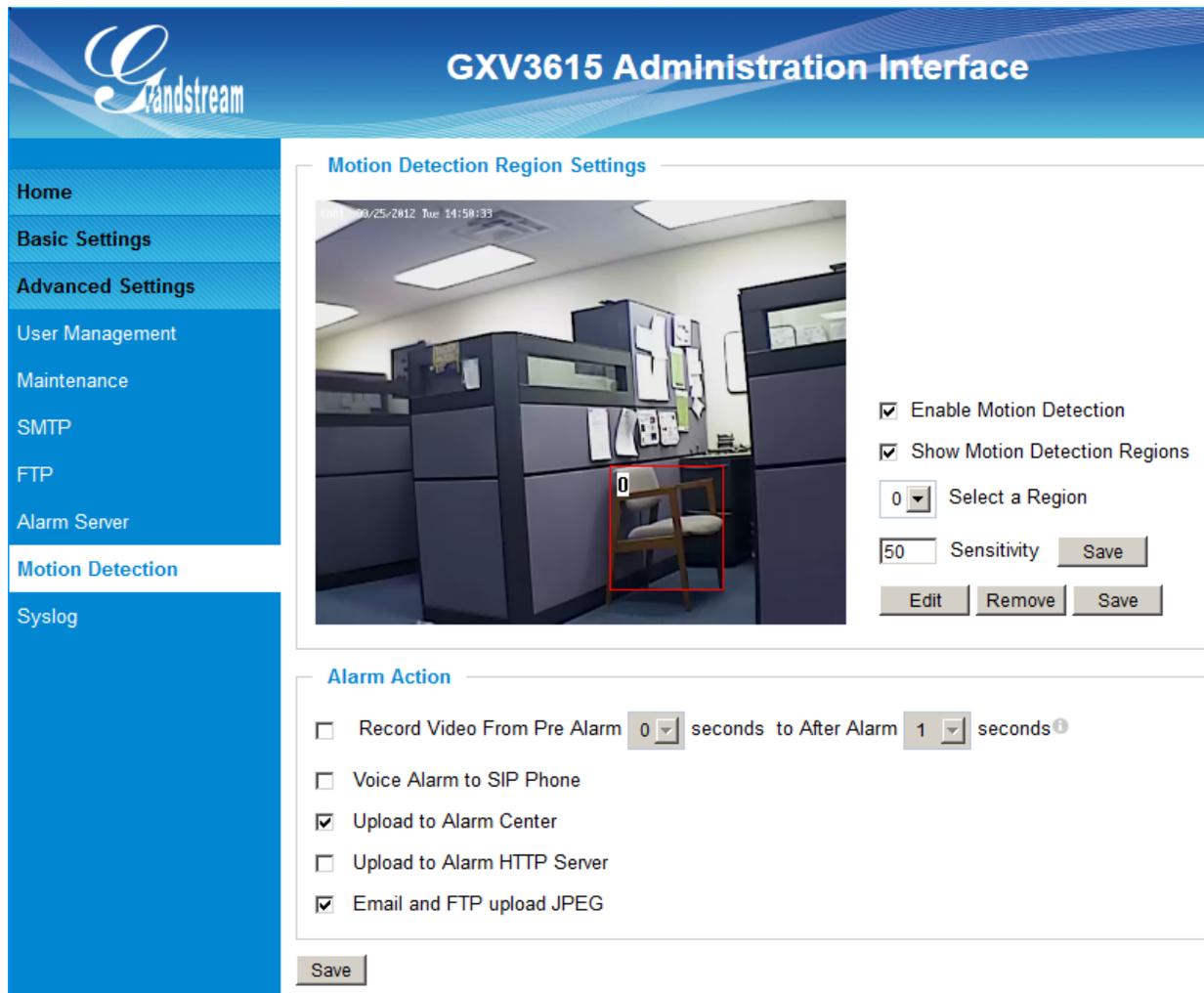


Figure 16-1: Motion Detection Configuration Page

- **Enable Motion Detection:** When checked, Motion Detection enabled.
- **Show Motion Detection Regions:** When checked, Motion Detection region with number will be displayed in White Rectangle in the screen; when “Edit” clicked, the Rectangle will become Red, as shown in Figure 16-1.
- **Select a Region:** Pull down to select and configure alarm region, altogether 16 alarm region available, from 0 to 15.
- **Sensitivity:** Select configured alarm region number, input number for sensitivity to trigger alarm, 100 is the maximum sensible value.

Alarm Action:

- **Record Video From.....** Allow user to select how long pre/after Alarm trigger moment, the video be captured.
- **Voice Alarm to SIP Phone:** When checked, a SIP alarm phone call will be made to pre-configured number.
- **Upload to Alarm Center:** When checked, the alarm video will be transferred to Alarm Center, like Grandstream free GSurf_Pro VMS software.

NOTE:

- *Grandstream free GSurf_Pro VMS software can be downloaded here:*
http://www.grandstream.com/products/tools/surveillance/gsurf_pro.zip
- **Upload to Alarm HTTP Server:**
 When checked, alarm will be transferred to the HTTP server via HTTP API.
- **Email and FTP upload JPEG:**
 When checked, a snapshot of trigger moment will be generated and email to pre-configured email account, or FTP to related Server.

This page allows user to configure Motion Detection Operation Schedule:

Motion Detection Time Schedule

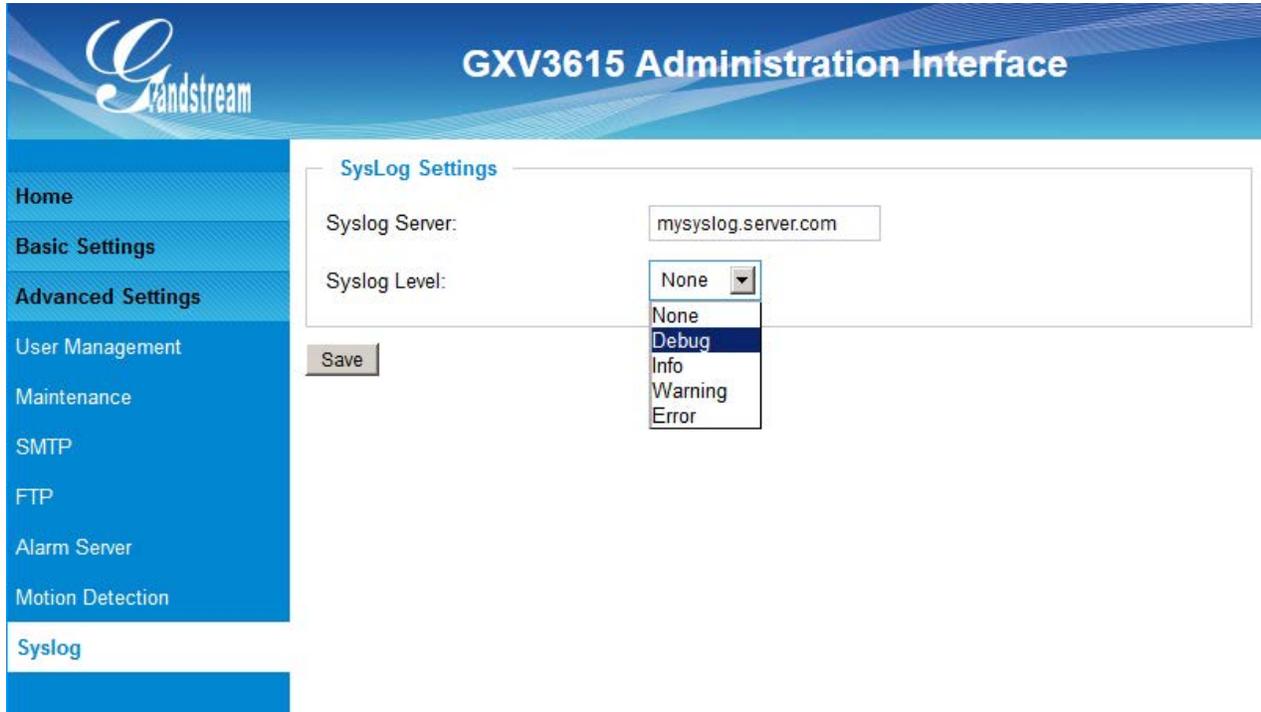
Region ID	Date	Start Time	End Time	
0	Everyday	00:00	08:00	<input type="button" value="Add"/>
0	Everyday	20:00	23:59	<input checked="" type="checkbox"/>
0	Everyday	00:00	08:00	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> Un-Check All				<input type="button" value="Delete"/>

Figure 16-2: Motion Detection Schedule Configuration Page

- *As shown in Figure 16-2, user can configure the Motion Detection Region with related Start Time and End Time to control the motion detection operation.*

Syslog Settings Page (Troubleshooting)

This page allows user to enable the Syslog to help troubleshooting problems:



The screenshot shows the 'SysLog Settings' page in the GXV3615 Administration Interface. The page features a blue header with the Grandstream logo and the title 'GXV3615 Administration Interface'. On the left, there is a vertical navigation menu with the following items: Home, Basic Settings, Advanced Settings, User Management, Maintenance, SMTP, FTP, Alarm Server, Motion Detection, and Syslog. The main content area is titled 'SysLog Settings' and contains the following fields:

- Syslog Server:** A text input field containing the value 'mysyslog.server.com'.
- Syslog Level:** A dropdown menu with the following options: None, Debug, Info, Warning, and Error. The 'Debug' option is currently selected.
- Save:** A button to save the settings.

Figure 17: Alarm Server Setting Page

- **Syslog Server:** Syslog server IP or Domain Name
- **Syslog Lever:** Lever of syslog message sent to the syslog server:
None, Debug, Info, Warning, Error.

SOFTWARE UPGRADE

Software upgrade can be done via either TFTP, HTTP or HTTPS. The corresponding configuration settings are in the ADVANCED SETTINGS configuration page.

Software Upgrade via TFTP, HTTP or HTTPS

This page allows user to configure firmware upgrade:



Restart the device

Restart the device.

Restart

Restore the device

Reset settings, except IP address, to factory default.

Restore

Firmware Upgrade and Provisioning

Upgrade via: HTTP

Firmware Server Path: firmware.grandstream.com

Config Server Path: fm.grandstream.com/gs

XML Config File Password:

Automatic Upgrade Interval(Minutes): 10080

Automatic Upgrade:

Save

Figure 18: Firmware Upgrade and Provisioning

NOTE:

- Grandstream recommends end-user use the Grandstream HTTP server. Its address can be found at <http://www.grandstream.com/support/firmware>.
- Current HTTP firmware server: **firmware.grandstream.com**
- For large companies, we recommend to maintain their own TFTP/ HTTP/HTTPS server for upgrade and provisioning procedures.

Instructions for local firmware upgrade using TFTP server:

1. Unzip the file and put all of them under the root directory of the TFTP server.
2. Put the PC running the TFTP server and the device in the same LAN segment.
3. Please go to File -> Configure -> Security to change the TFTP server's default setting from "Receive Only" to "Transmit Only" for the firmware upgrade.
4. Start the TFTP server, in the phone's web configuration page
5. Configure the Firmware Server Path with the IP address of the PC
6. Update the change and reboot the unit

End users can also choose to download the free HTTP server from <http://httpd.apache.org/> or use Microsoft IIS web server.

Configuration File Download

Grandstream SIP Device can be configured via Web Interface as well as via Configuration File through TFTP or HTTP/HTTPS. "Config Server Path" is the TFTP or HTTP/HTTPS server path for configuration file. It needs to be set to a valid URL, either in FQDN or IP address format. The "Config Server Path" can be same or different from the "Firmware Server Path".

A configuration parameter is associated with each particular field in the web configuration page. A parameter consists of a Capital letter P and 1 to 3 (Could be extended to 4 in the future) digit numeric numbers. i.e., P2 is associated with "Admin Password" in the ADVANCED SETTINGS page. For a detailed parameter list, please refer to the corresponding firmware release configuration template.

When Grandstream Device boots up or reboots, it will issue request for configuration file named "cfgxxxxxxxxxxx", where "xxxxxxxxxxx" is the MAC address of the device, i.e., "cfg000b820102ab". The configuration file name should be in lower cases.

Currently GXV3615 only support XML configuration.

RESTORE FACTORY DEFAULT SETTING

WARNING!

Restoring the Factory Default Setting will DELETE all configuration information of the camera. Please BACKUP or PRINT out all the settings before approach to following steps. Grandstream will not take any responsibility if you lose all the parameters of setting or cannot connect to your VoIP service provider.

FACTORY RESET

There are two (2) methods to reset your unit:

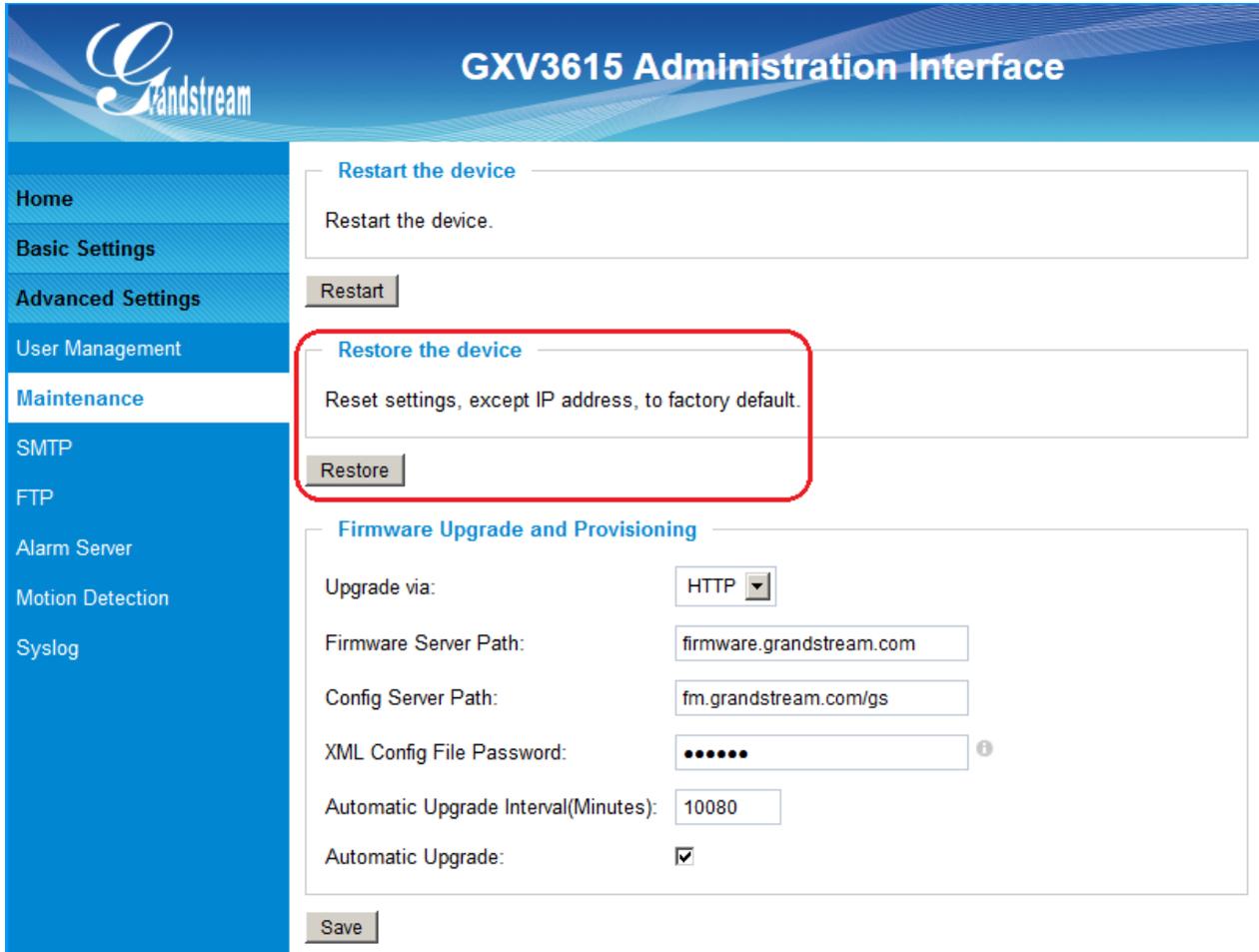
Reset Button

Reset default factory settings following these four (4) steps:

1. Unplug the Ethernet cable.
2. Locate a needle-sized RESET hole on the back panel of the camera above the power jack.
3. Insert a pin in this hole, press and hold for about 30 seconds till reboot
4. Take out the pin. All settings are now restored back to factory default settings.

Reset from Web Interface

This page allows user to configure dynamic network related parameters:



The screenshot displays the GXV3615 Administration Interface. On the left is a navigation menu with the following items: Home, Basic Settings, Advanced Settings, User Management, Maintenance, SMTP, FTP, Alarm Server, Motion Detection, and Syslog. The main content area is titled "GXV3615 Administration Interface" and contains three sections:

- Restart the device**: A text box containing "Restart the device." and a "Restart" button.
- Restore the device**: A text box containing "Reset settings, except IP address, to factory default." and a "Restore" button. This section is highlighted with a red rectangular box.
- Firmware Upgrade and Provisioning**: A section with several input fields and a checkbox:
 - Upgrade via: HTTP (dropdown menu)
 - Firmware Server Path: firmware.grandstream.com
 - Config Server Path: fm.grandstream.com/gs
 - XML Config File Password: [masked with dots]
 - Automatic Upgrade Interval(Minutes): 10080
 - Automatic Upgrade:A "Save" button is located at the bottom of this section.

Figure 19: Factory Reset from Web Interface