Grandstream Networks, Inc.

GXV3662_HD/GXV3662_FHD

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GXV3662_HD/FHD User Manual

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WELCOME

Thank you for purchasing Grandstream's GXV3662_HD/FHD vandal proof fixed dome high definition IP Camera, an innovative powerful camera.

GXV3662_HD/FHD is a next generation fixed dome HD network camera of outstanding performance and quality. Its advanced ISP (Image Sensor Processor) powered with state-of-the-art auto-exposure/auto-white-balance algorithm and a high quality lens, ensures high fidelity video quality that matches digital still camera color grade in a wide range of light environments. It features cutting edge H.264 real-time video compression with excellent image clarity, industry leading SIP/VoIP for 2-way audio and video streaming to smartphones and videophones, integrated microphone, speaker, PoE, IR-CUT for day/night mode, edge storage and advanced security protection.

The GXV3662_HD/FHD can be managed with GSurf Pro (Grandstream's intuitive FREE video management software that controls up to 72 cameras simultaneously), or grouped with GVR3550/3552 Grandstream Network Video Recorder (NVR) via plug-n-play, as well as other ONVIF compliant video management systems. It also offers an advanced and flexible HTTP API and an SDK for easy integration with other surveillance systems.

Designed for vandal resistance indoor or outdoor environment with 1/3" CMOS sensor and 3.3~12mm vari-focal lens, DC-Iris, mechanical IR_Cut to automatically switch Color, Black and White mode, PoE, built-in SD card slot, the GXV3662_HD/FHD is ideal for monitoring of wide range of applications environments such as banks, hotels, schools, retail stores and small warehouses, offices or building entrances, and other small to median sized space.

The GXV3662_HD/FHD is a powerful network camera for advanced indoor surveillance applications.

Safety Compliances

These instructions are intended to assist users to safely operate the GXV3662_HD/FHD, avoid dangerous situations or damage the device.

Warning: May cause serious injury or death if any of the warnings below are neglected.	**Caution:** Equipment may be damaged if any of the following caution messages are neglected.

Warning:

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

Caution:

- 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 0 ^{o}C to 45^{o}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 damage the warranty sticker.

A few parts (e.g. electrolytic capacitor) of the equipment shall be replaced regularly according to their average lifetime. The average lifetime 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.

FCC CAUTION

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1) This device may not cause harmful interference.

2) This device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

— Reorient or relocate the receiving antenna.
— Increase the separation between the equipment and receiver.
— Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
— Consult the dealer or an experienced radio/TV technician for help.

RF EXPOSURE INFORMATION (SAR)

This device is designed and manufactured not to be exceeded the emission limits for exposure to radio frequency RF energy set by the Federal Communications Commission of the United States. The exposure standard for wireless devices employing a unit of measurement is known as the Specific Absorption Rate (SAR), and the SAR limit set by FCC is 1.6 W/kg.

This device is complied with SAR for general population/uncontrolled exposure limits in ANSI/IEEE C95.1-1992, and has been tested in accordance with the measurement methods and procedures specified in OET Bulletin 65 Supplement C. This device has been tested, and meets the FCC RF exposure guidelines when tested with the device directly contacted to the body. RF exposure compliance with anybody-worn accessory, which contains metal, was not tested and certified, and uses such body-worn accessory, should be avoided.

Changes or modifications not expressly approved by the party responsible for compliance could void the user’s authority to operate the equipment.

Hereby, Grandstream declares that this device is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

Warranty

If you purchased your GXV3662_HD/FHD 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 GXV3662_HD/FHD 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/sites/default/files/Resources/gxv3662_usermanual_english_0.pdf

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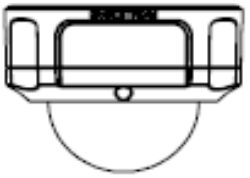
PACKAGE CONTENTS

Equipment Package Contents

The GXV3662_HD/FHD package contains:

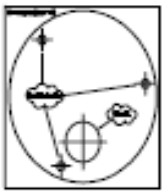
- GXV3662_HD/FHD IP Camera
- 12V DC power Adapter attached to terminal block
- 8-pin terminal block connector – 8-pin connector block for connecting external devices, such as infrared detector, smoke detector, emergency lights, etc., to Alarm IN and Alarm OUT. You can also connect microphones and powered speakers through the audio in and audio out ports.
- Quick installation guide
- Alignment sticker
- Tool set containing a hex key, 3 plastic anchors and 3 screws



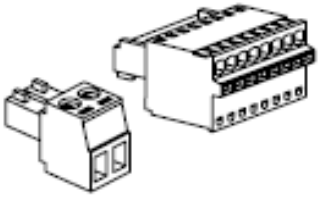
GXV3662

POWER ADAPTER

TOOL SET



ALIGNMENT STICKER



TERMINAL BLOCK

QUICKSTART GUIDE

PRODUCT OVERVIEW

GXV3662_HD/FHD Top View

Figure 1: Top View

GXV3662_HD/FHD Side View

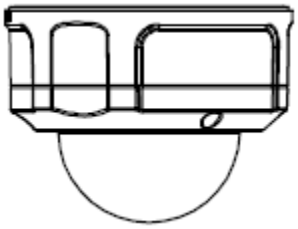


Figure 2: Side View

GXV3662_HD/FHD Bottom View

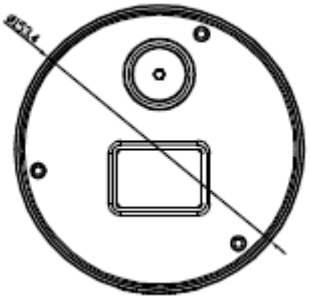
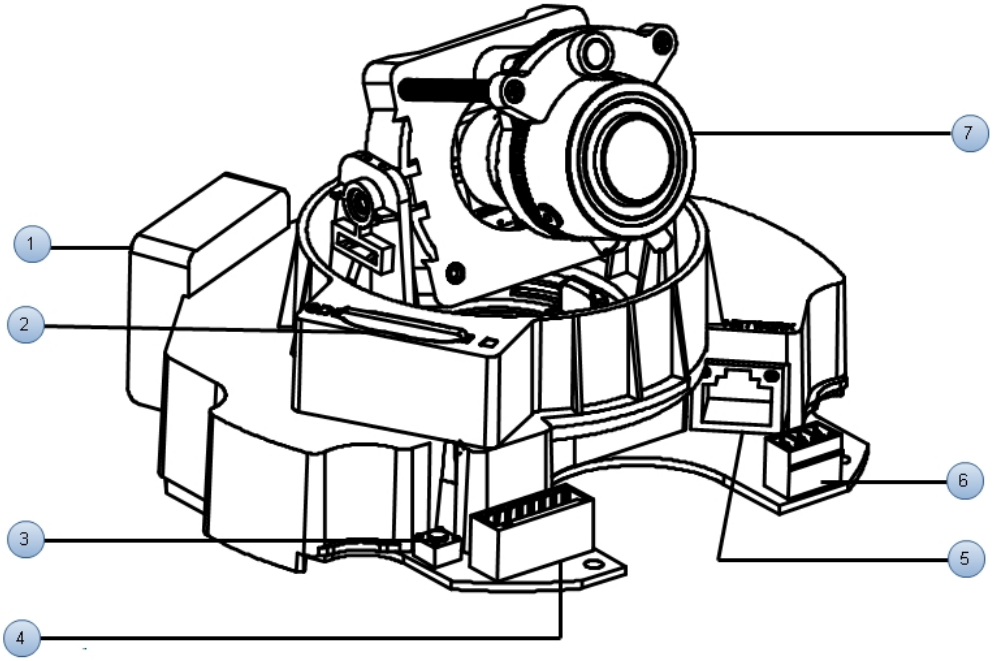
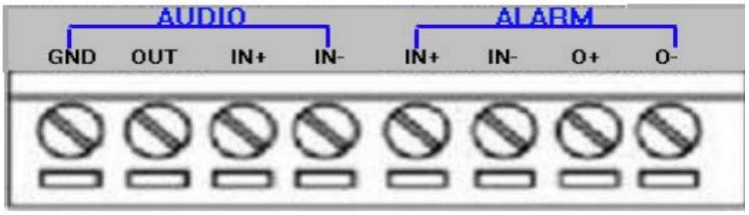


Figure 3: Bottom View

GXV3662_HD/FHD Inside connections



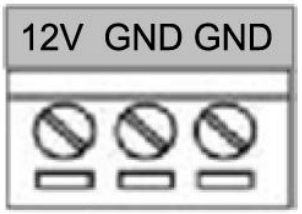
1. ***Internal temperature regulator:*** It adjusts the temperature to ensure the camera works normal under different weather.
2. ***SD card slot:*** SD card slot.
3. ***Reset:*** Press the Reset button for 6 seconds to perform a factory reset
4. ***Alarm/Audio:*** ***Note:*** GXV3662_HD/FHD do not support zoom



Type	Port	Description
AUDIO	GND	Audio Output
	OUT	
	IN+	Audio Input
	IN-	
ALARM	IN+	Alarm Input
	IN-	
	O+	Alarm Output
	O-	

5. ***Network:*** 10/100 Switch LAN port for connecting to Ethernet. The indicator will be steady for connection and flashing for network activity.

6. ***Power:***



Type	Description
12V	12 V DC input
GND	Ground

7. ***Lens:*** For adjusting the lens, unscrew the housing and adjust the lens vertically/horizontally. Screw the housing back when adjustment is done.

NOTE:

- *Loosening the screws on both sides of axle might be necessary for adjusting the lens vertically.*

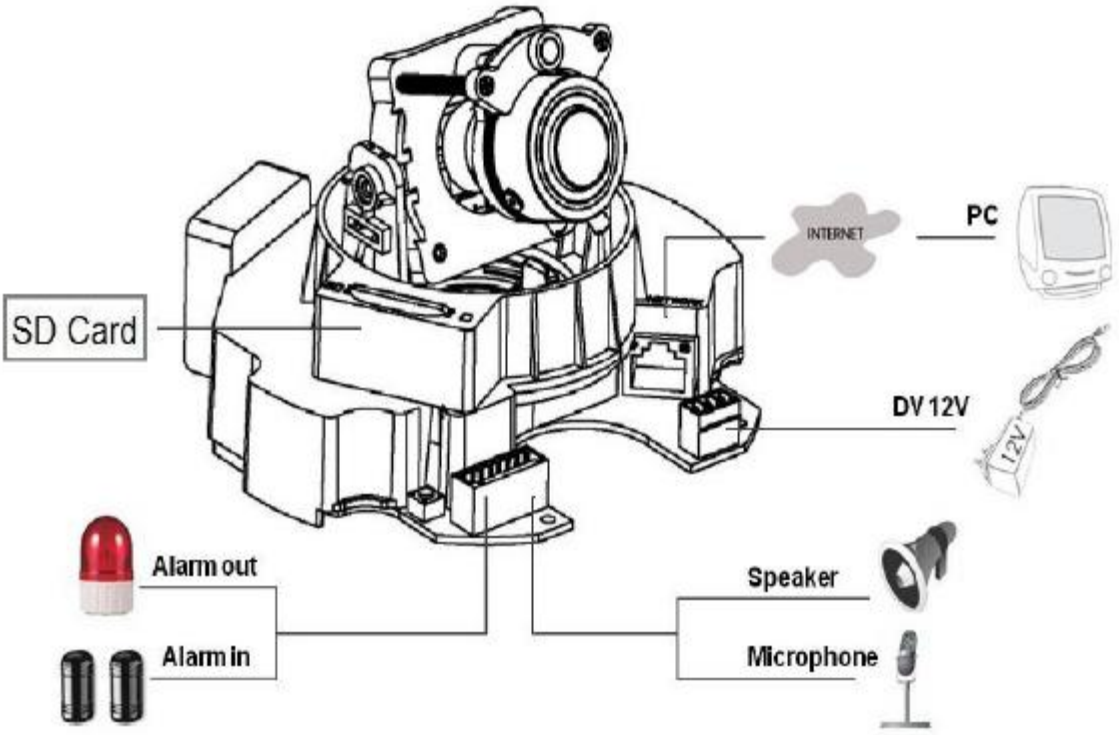


Figure 4: Connection diagram

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GXV3662_HD/FHD Key Features

The table below lists the key features the GXV3662_HD/FHD Supports.

Table 1: GXV3662_HD/FHD Technical Specifications

Model	GXV3662_HD	GXV3662_FHD
Video Compression	H.264, MJPEG	
Image Sensor Resolution	1/3", 1.2 Megapixel CMOS, 1280H x 960V	1/3", 3.1 Megapixel CMOS, 2048H x 1536V
Image Sensor Sensitivity	Day & night mode, exceptionally low noise levels and low-light sensitivity. Shutter: 1/10000 – 1/30 second	
Lens Type	1/3", 3.3-12mm, F1.6-F3.2, DC-Iris, Manual focus: 50cm - ∞	
Operation Mode	Light Sensor, mechanical IR Cut filter, color, black & white mode	
Minimum Illumination	0.05Lux	
Responsivity	5.48V/lux-sec (550nm)	1.9V/lux-sec (550nm)
Supported Maximum Video Resolution and Frame Rate	1280x960 (30fps)	2048x1536 (15fps) 1920x1080 (30fps)
Video Bit Rate	32 Kbps ~ 8 Mbps, multi-rate for preview & recording	
Audio Input & Output	LINE-IN (1.5KΩ Impedance) & LINE-OUT (600Ω, 0.707 Vrms)	
Audio Compression	G.711 U/A (PCMU, PCMA)	
IRIS Control	DC-IRIS	
Alarm Input	V_{in}≤15V, I_{in}≤35mA, Normal open, PINs	
Alarm Output	125VAC/0.5A,30VDC/2A, Normal open, PINs	
Embedded Analytics	Motion detection (up to 16 target areas)	
Pre-/post-alarm Buffer	24MB	
Snapshots	Triggered upon events, send via email/FTP	
Multi-streaming-rate Preview & Recording	Yes	
ePTZ	Yes (at 320x240 resolution)	
Security	Video watermark, HTTPS, admin/anonymous	
Peripheral Ports (SD Card)	Internal SDHC 2.0 socket (maximum capacity 32GB)	
Network Port	10M/100M auto-sensing, RJ45	
Network Protocol	TCP/UDP/IP, RTP, RTSP, DHCP, DDNS, HTTP/HTTPS, SMTP, FTP, NTP	
Power over Ethernet (PoE)	IEEE 802.3af class 0	
SIP/VoIP Support	Yes, Voice & Video-over-IP	
Dimensions (D x H)	153mm x 115m	
Weight	1.19 kg	
Temperature / Humidity	-30C - +50C (-22F- +122F) for DC and PoE, With heater & fan Humidity 10-90% RH(non-condensing)	
Power Adapter	Output: 12VDC/1A; Input: 100–240VAC, 50–60Hz	
Casing	Vandal resistant, weather-proof with IP66 compliance, attachable to mounting kit of 1.875 diameter	
Compliance	FCC, CE, C-tick, IP66	

GXV3662_HD/FHD Lens Specification

Parameters	GXV3662_HD/FHD
Lens Format	1/3”
Image Sensor	1/3” CMOS
Focal Length	3.3mm – 12mm
Aperture Ratio	F1.6 – F3.2
IRIS	DC-Iris
Minimum Object	50 cm
IR CUT Filter	Yes

INSTALLATION GUIDE

Minimum Recommended System Requirement

To install GXV3662_HD/FHD, you have to have a computer, PC recommend. The minimum recommended PC system requirement listed below:

- Windows XP, Windows Vista, Windows 7 and Windows 8
- CPU: Intel Pentium 4 or higher, 2 GHz
- RAM: 2 GB (4 GB recommended for larger systems)
- Support for DirectX 8.0 and above.

Connect your GXV3662_HD/FHD

Using the Power adapter as power supply

- Connect an RJ-45 cable to the NETWORK port of the GXV3662_HD/FHD.
- Connect the other end of the RJ-45 cable to your network or PC.
- Connect the power supply to the DC 12V connector block inside the GXV3662_HD/FHD.
- Connect the other end of the power supply to a wall outlet. The POWER LED will turn solid green.

Using PoE as power supply:

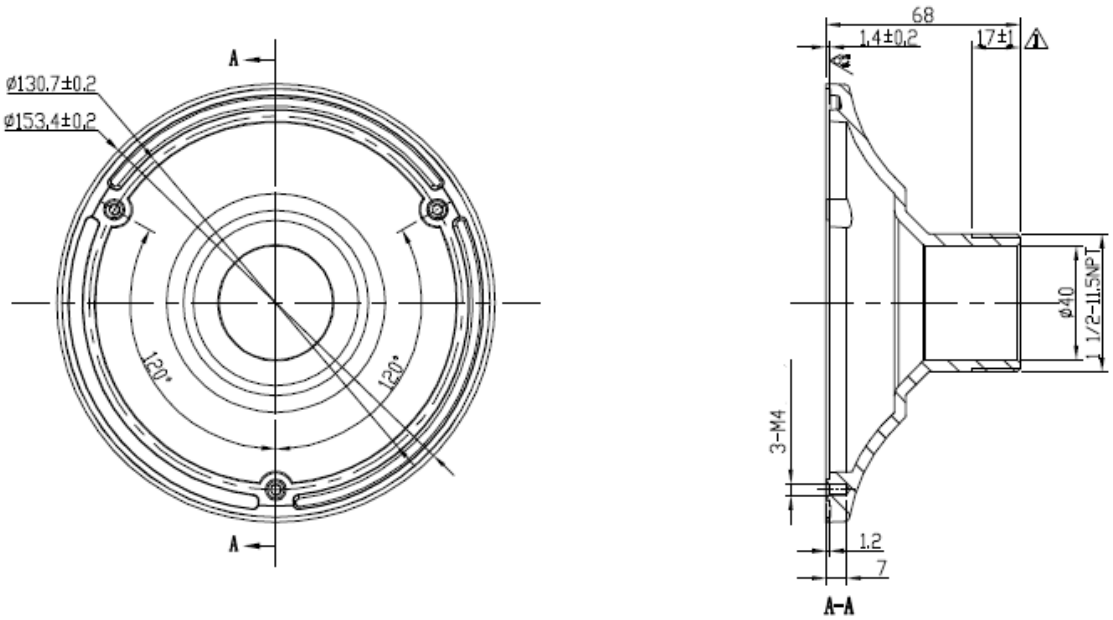
- Connect an RJ-45 to the NETWORK port of the GXV3662_HD/FHD.
- Connect the other end of the RJ-45 cable to a PoE switch. The POWER indicator will turn solid green.

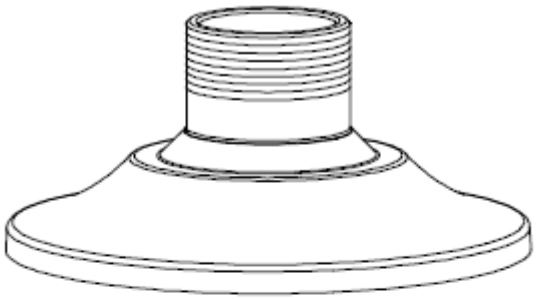
NOTE:

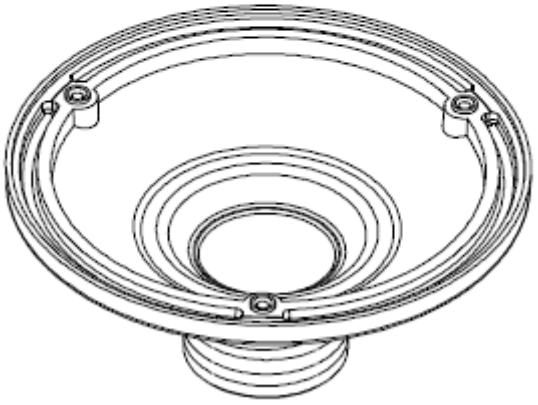
- *If you are going to connect the device to a hub/switch/router, please use a straight-through cable. A crossover cable should be used if you are going to connect the device directly to a PC.*

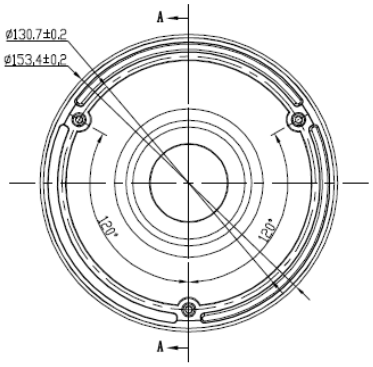
Grandstream provided related installation accessories. User can purchase them from the reseller or distributor.

Also, based on below diagram and parameters, user can purchase from 3rd party the related installation accessories, or even make their own ones, by installing the GXV3662_HD/FHD to the related places.





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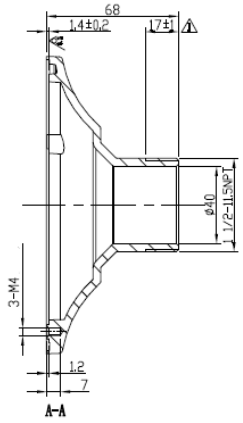
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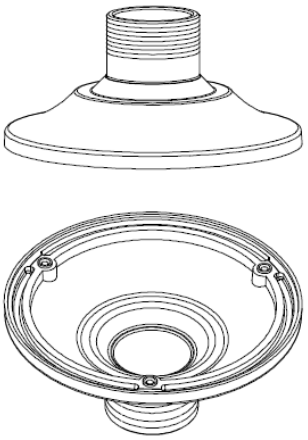

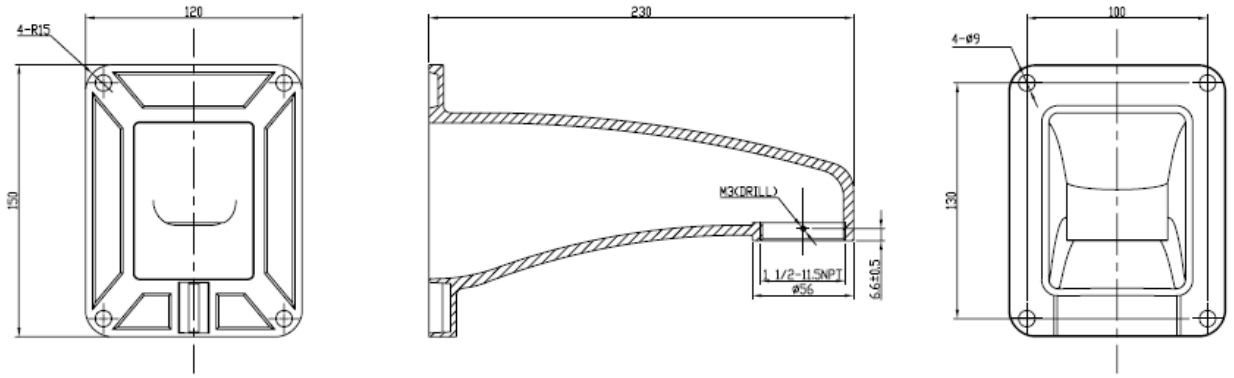
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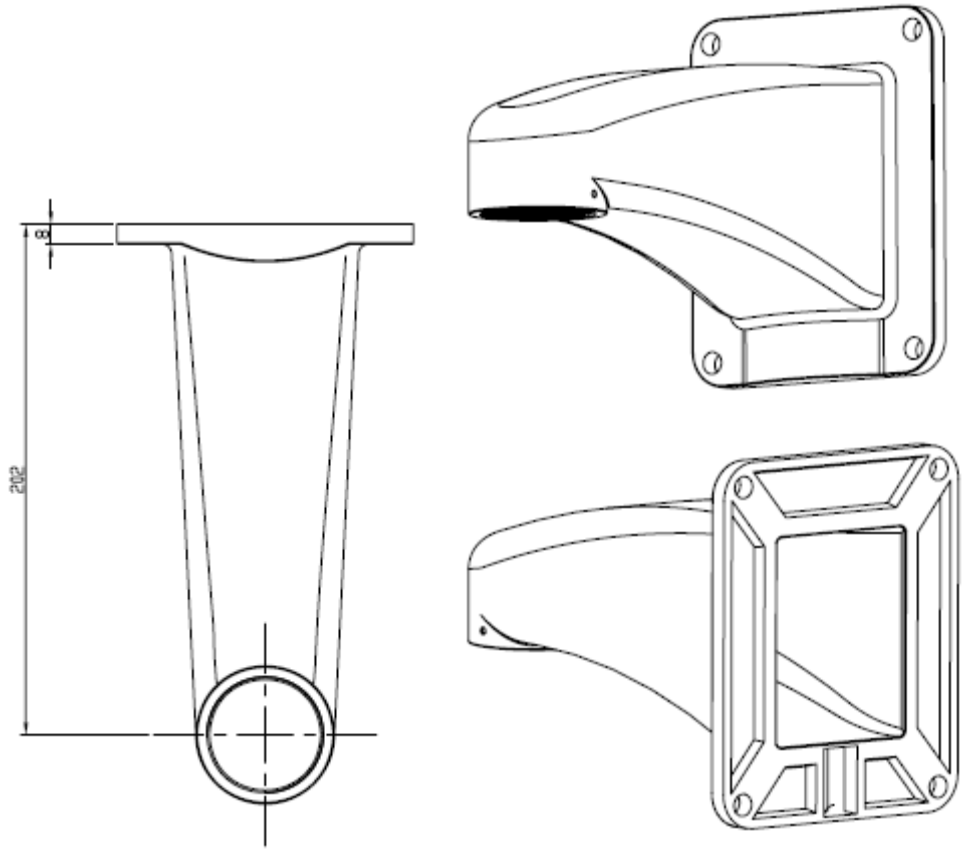
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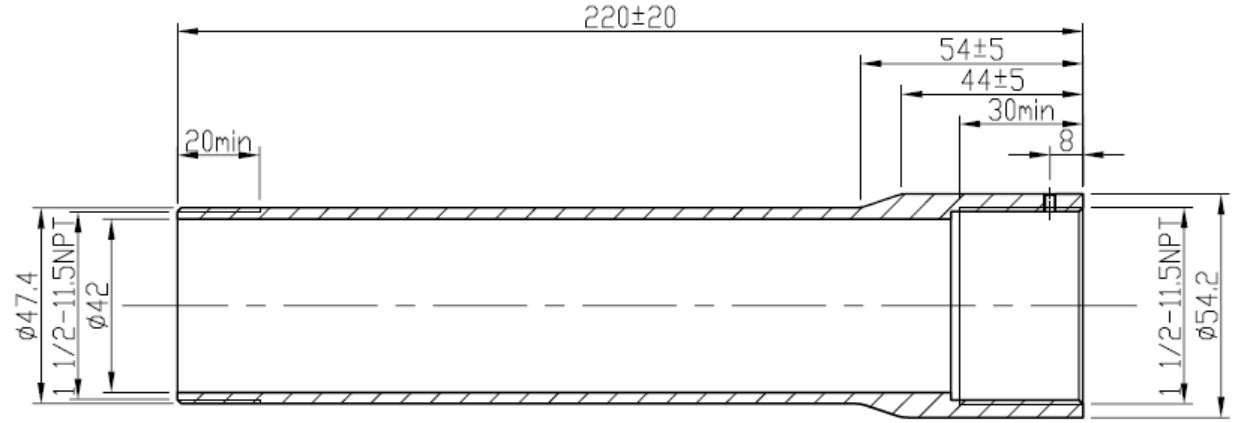
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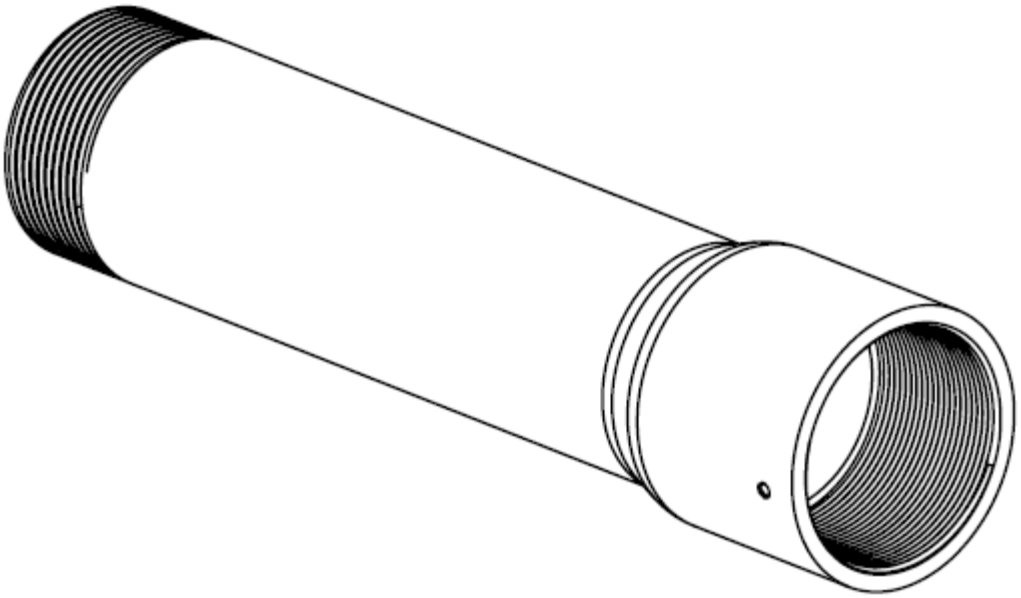

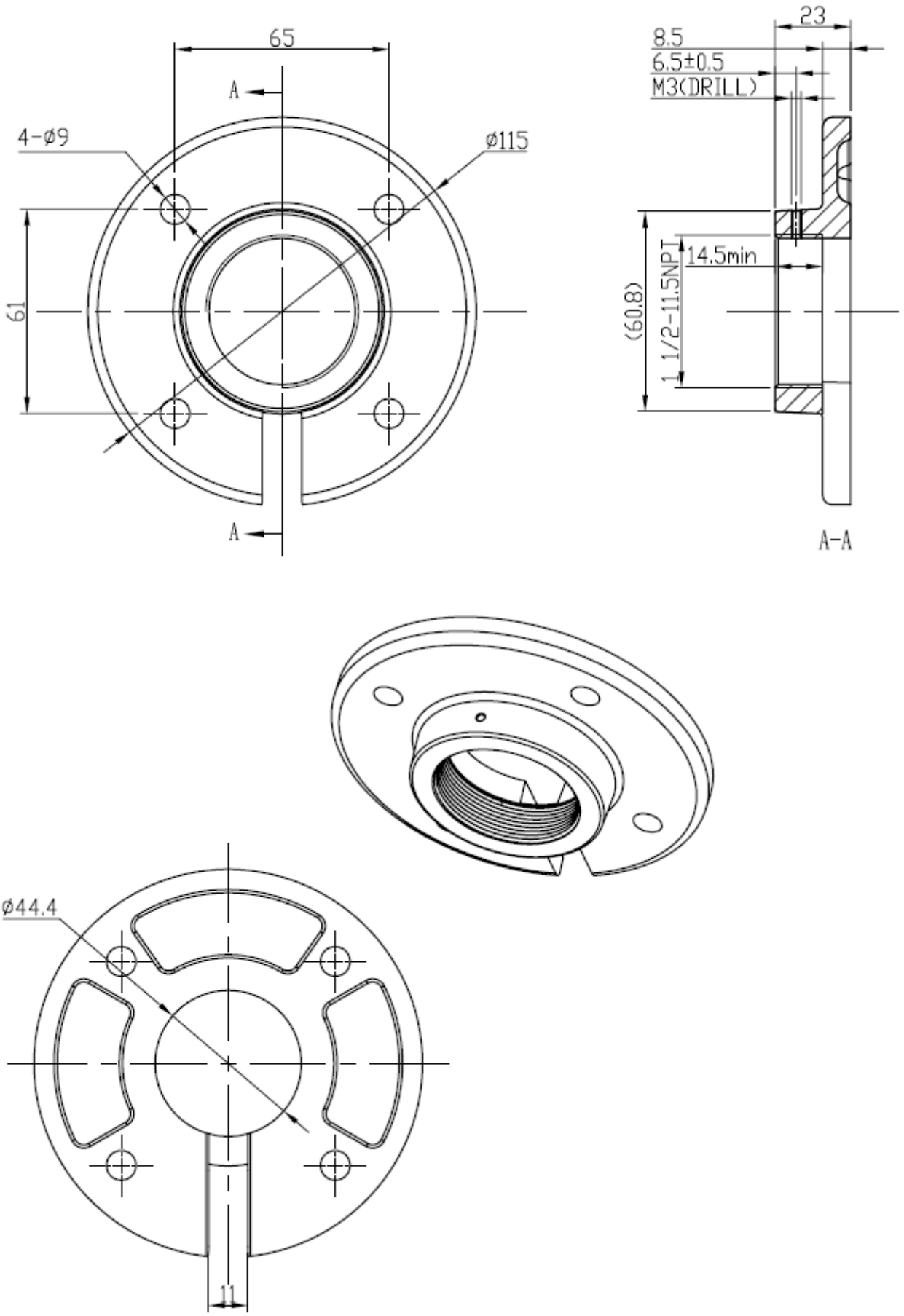
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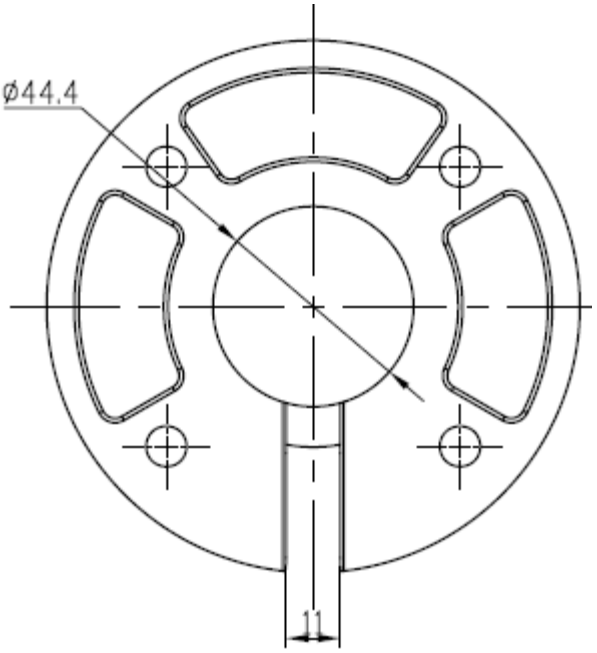
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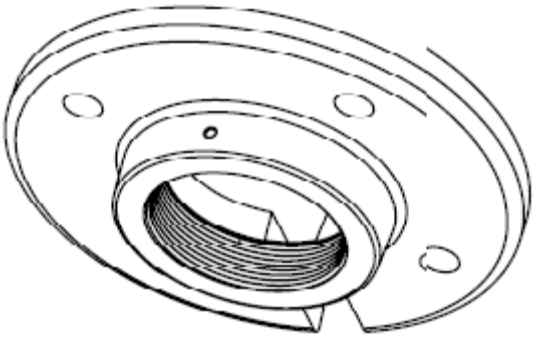

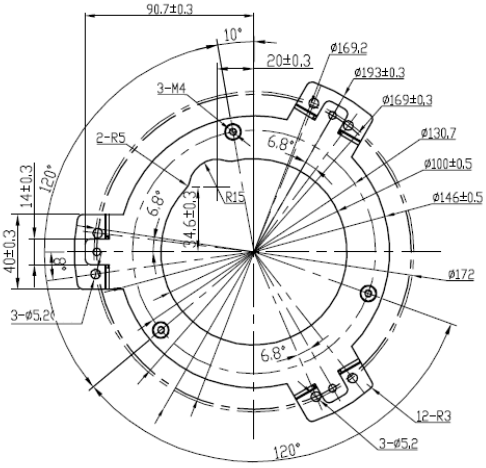
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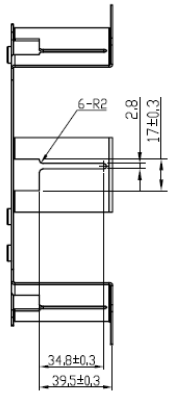
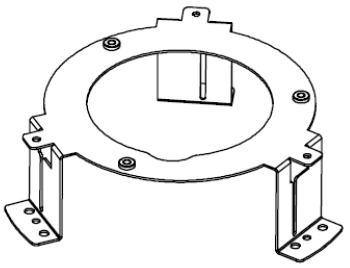
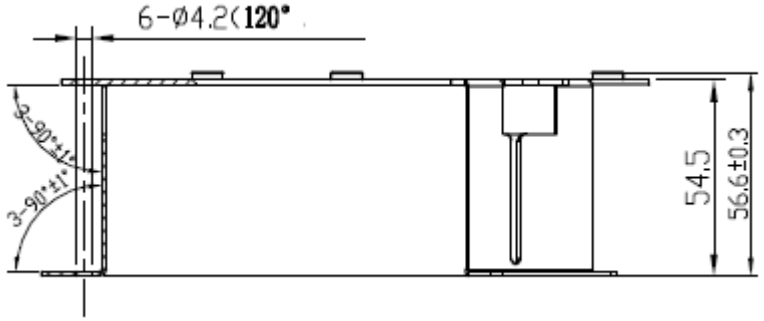
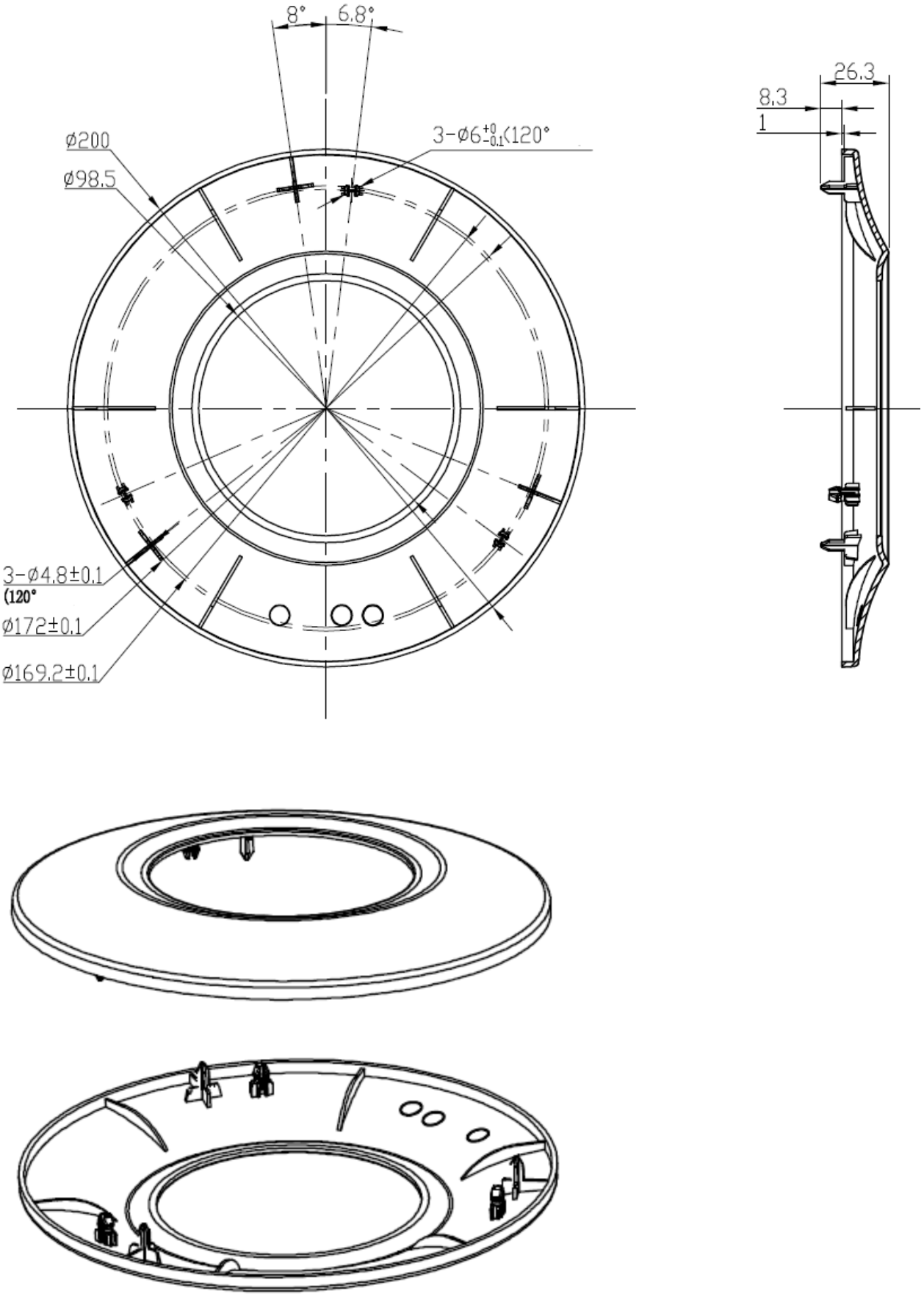
Ø100±0.5
Ø146±0.5
R15
34.6±0.3
6.8°
120°
14±0.3
40±0.3
8
Ø172
3-Ø5.2
6.8°
12-R3
3-Ø5.2
120°


6-R2
2.8
17±0.3
34.8±0.3
39.5±0.3




6-Ø4.2(120°
3-90°±1°
3-90°±1°
54.5
56.6±0.3


8°
6.8°
ø200
ø98.5
3-ø6+0 -0.1(120°
3-ø4.8±0.1
(120°
ø172±0.1
ø169.2±0.1
26.3
8.3
1

Configuring the GXV3662_HD/FHD via Web Browser

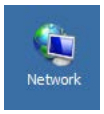
The GXV3662HD/FHD by default enabled as DHCP client, it will automatically get IP address from the network with DHCP server running.

Windows Platform:

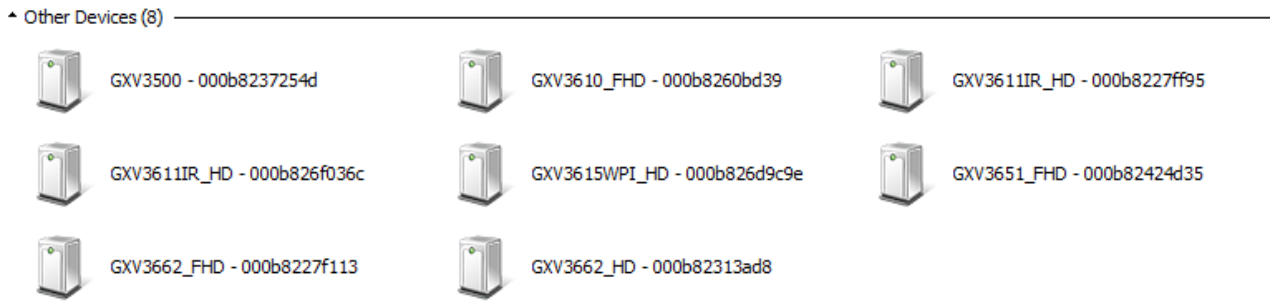
There are two ways for Windows user to get access to the IP Camera easily:

A. UPnP

By default, the GXV3662_HD/FHD has the UPnP feature turned ON. For customers using Window network with UPnP turned on (most SOHO router support UPnP), it is very easy to access the IP camera:

- Find the "Network" icon 

at Windows Desktop.
- Click the icon to get into the "Network" and the IP cameras will list as "Other Devices" shown like below. Refresh the pages if nothing displayed. Otherwise, the UPnP may not active in the network.



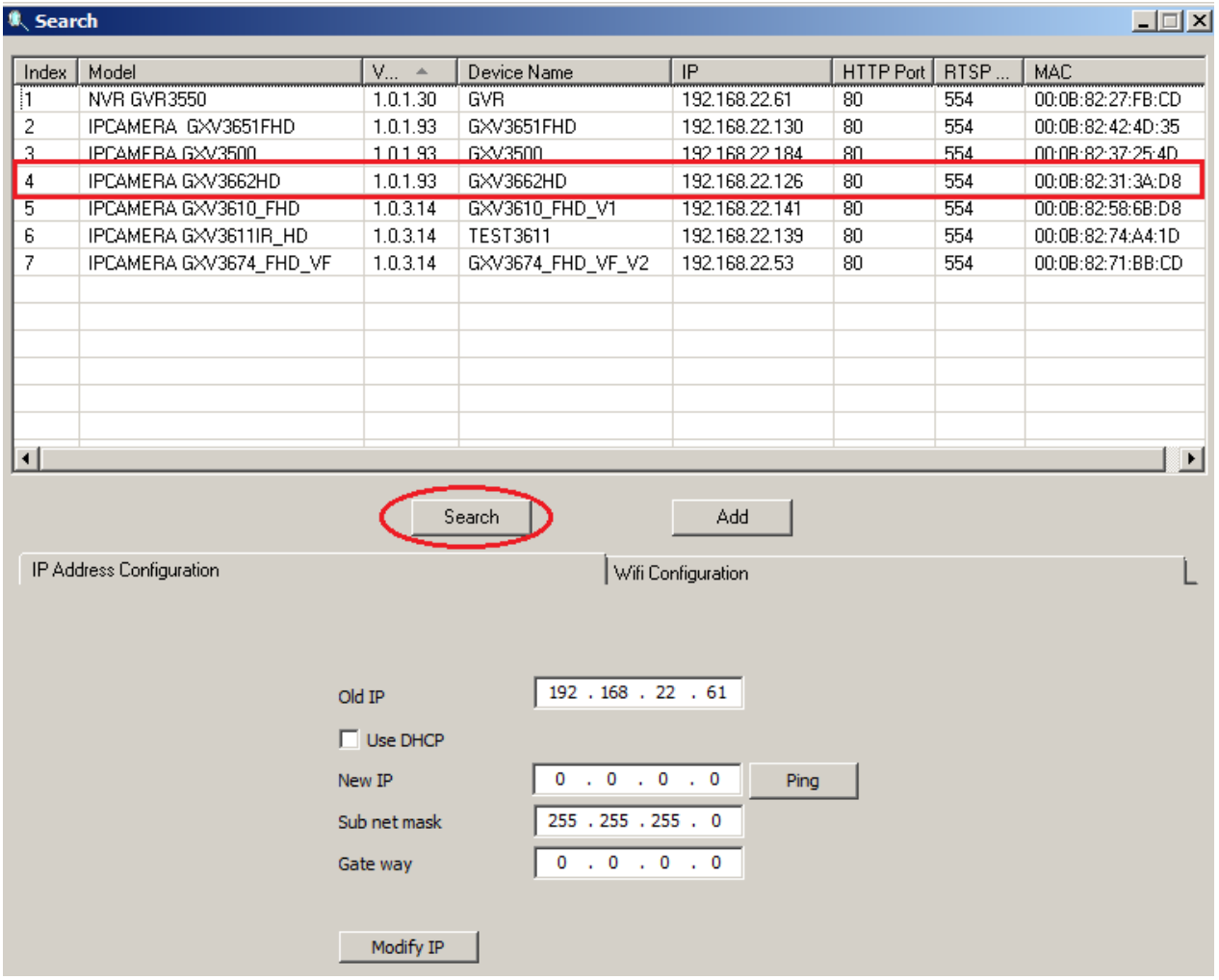
- Click the displayed icon of related IP camera, the default browser (e.g.: Firefox or Chrome) will open and connect directly to the camera's webpage, prompt message will display asking for plug-in installation.
- Disable security or antivirus software, download the plug-in, close browser and install the plug-in, open the browser again, the embedded video will be displayed if clicking the icon of the related IP Camera.

B. "GS_Search" Utility Tool

User can know the IP address assigned to the camera from DHCP server log or using the Grandstream GS_Search tool. Following is the instruction for using "GS_Search" utility tool:

1. Download the GS_Search tool from Grandstream website, or download and install GSurf_Pro V2:
   http://www.grandstream.com/products/tools/surveillance/GS_Search.zip
   http://www.grandstream.com/products/tools/surveillance/gsurf_pro.zip
2. Run the Grandstream GS_Search tool by double click the unzipped "GS_Search.exe", or "Search Tool" in the pull down Menu of "Manage Tool" tag of GSurf_Pro V2.
3. Click on the

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, browser will indicate that "This website wants to install the following add-on: GSViewerX.cab from Grandstream Networks Inc." Please allow the installation.
10. The plug-in can be download here:

    http://www.grandstream.com/products/tools/surveillance/webcontrl_plugin.zip

NOTE:

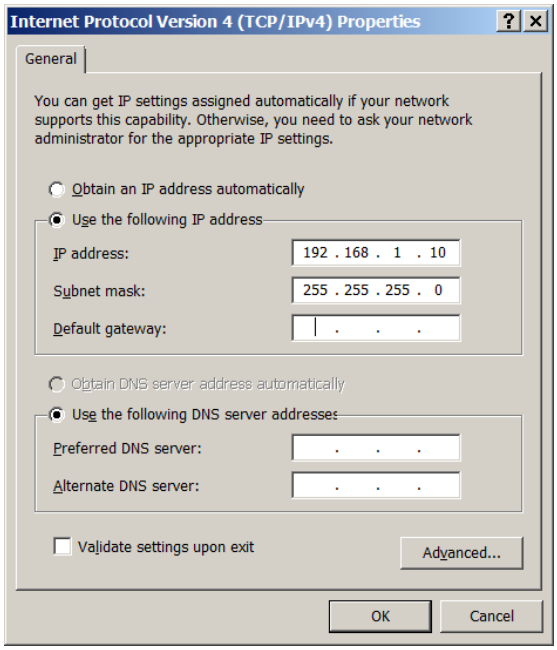
- *Please temporarily disable Antivirus or Internet Security Software when download and install the Grandstream Firefox plug-in for video or "GSViewerX.cab" for Microsoft Internet Explorer.*
- *Please trust and install the file downloaded if prompted by the Antivirus or Security software.*

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 GXV3662_HD/FHD
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 GXV3662_HD/FHD.
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, browser will indicate that "This website wants to install the following add-on: GSViewerX.cab from Grandstream Networks Inc." Please allow the installation.
10. The plug-in can be download here:

    http://www.grandstream.com/products/tools/surveillance/webcontrl_plugin.zip

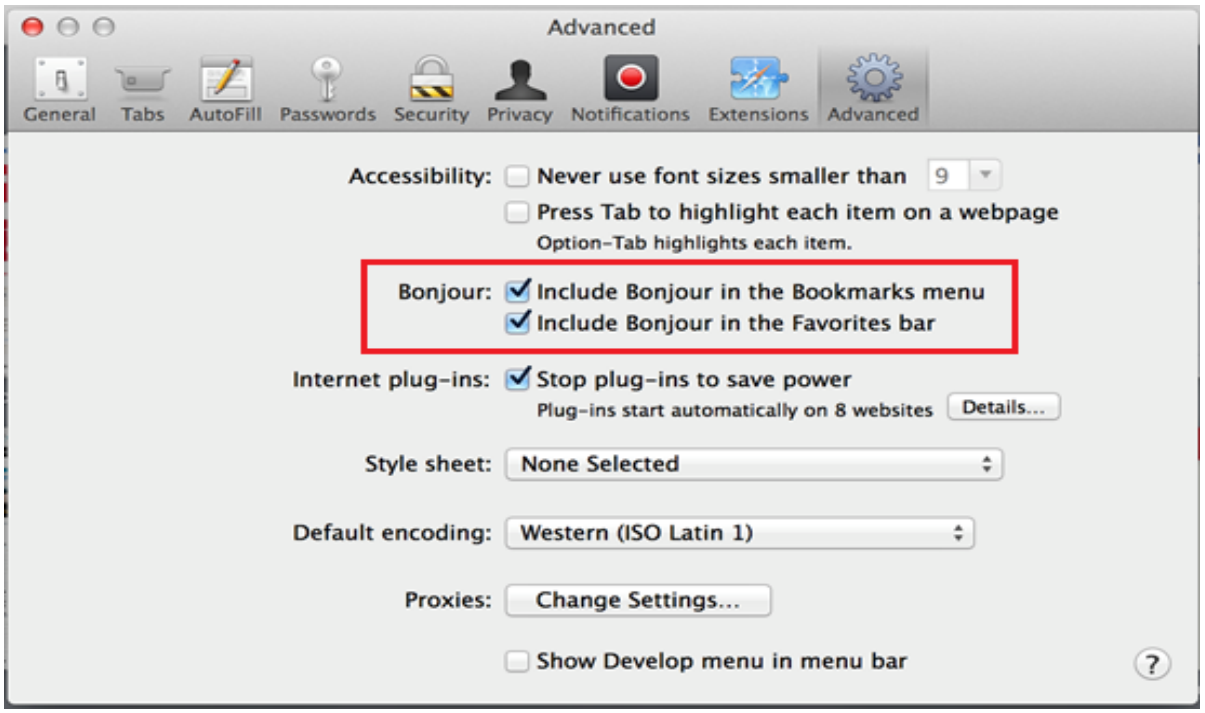
NOTE:

- *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.*
- *Please trust and install the file downloaded if prompted by the Antivirus or Security software*

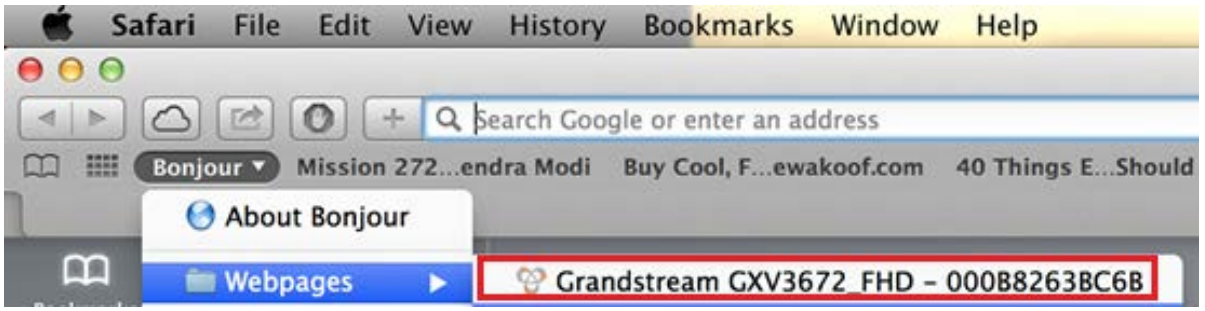
Apple Platform:

For Apple users, please turn on Bonjour of Safari to find and access the GXV3662_HD/FHD.

1) Open Safari, select "Advanced" to open the Advanced Setting.
2) Click "Include Bonjour in the Bookmarks menu" and "Include Bonjour in the Favorites bar" then close the setting page and back to Safari.



3) Bonjour will now display embedded at Safari. Select "Bonjour" pull-down menu and select "Webpages", the related IP Camera like GXV3662_HD/FHD will be there.



4) Click the displayed camera to access to the configuration page of the camera.

5) To see the video, user has to change the video codec from default H.264 to MJPEG, and type in following to URL:

http://IP_Address_Camera:Port/mjpeg/mjpegX.html

(X: 0, 4 represent 1st , 2nd stream, Default Port: 80)

NOTE:

- *The instruction given here based on Safari/OS-X, other Apple platform like iOS (iPhone/iPad) can use similar method.*

- *iPhone/iPad (iOS) users are recommended to use Applications in Apple Store.*
- *Free or Paid applications from Apple Store like "IP Cam Viewer" are suggested and verified working with Grandstream IP Cameras like GXV3662_HD/FHD.*

http://hit-mob.com/

- *Apple Store applications like "IP Cam Viewer" will support H.264 video codec.*

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GXV3662_HD/FHD Application Peripheral Connection

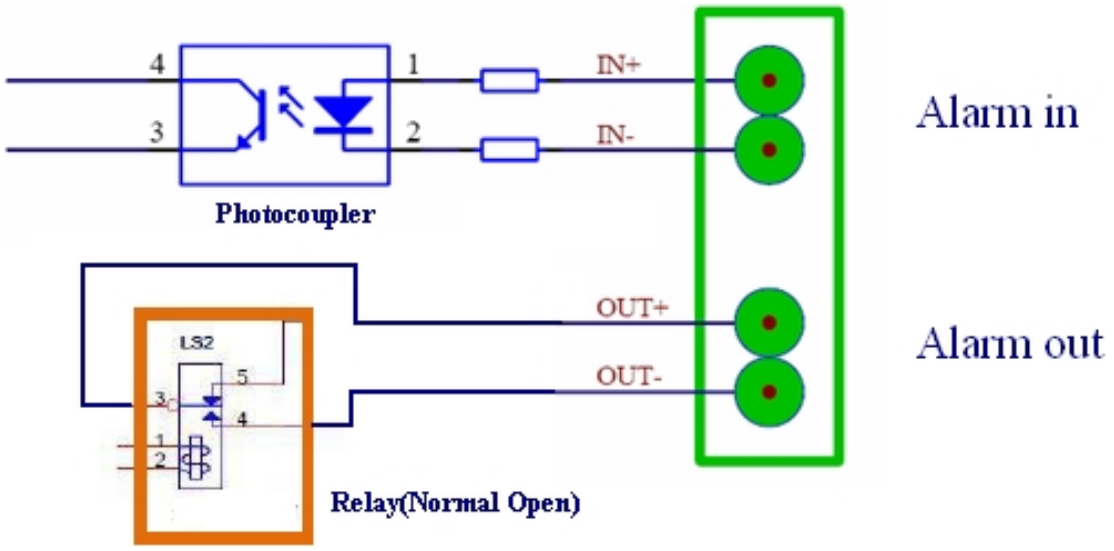
Below is the illustration of GXV3662_HD/FHD peripheral connections for related application.

NOTE:

- *32GB SD card can hold about 5 day 7x24 video recording using 720p 10fps 2M video bit rate. For more days of storage, either using Motion Detection Event Video Recording, or using Grandstream NVR GVR3550/3552, or GSurf_Pro V2 VMS.*
- *Alarm_In could use any 3rd party Sensors (like IR Motion Sensor) or Intercom Push Button, etc.*
- *Alarm_Out device could use 3rd party Siren and Strobe Light, or Electric Door Striker, etc.*
- *Audio Input (Microphone) and Audio Output (Amplified Speaker) using interface matching below impedance parameter:*

Audio Input	Line-In (1.5KΩ)
Audio Output	Line-Out (600Ω, 0.707 Vrms)

- *Grandstream Video Phone can work with GXV3662_HD/FHD via either Peer IP (LAN) or SIP extension (WAN).*
  - *Peer to Peer (or Direct IP) works only at LAN using static IP;*
  - *SIP extension requires related SIP server/proxy provided and configured.*



NOTE:

- *The Alarm_In and Alarm_Out circuit connection has to be similar to above circuit diagram and meet following requirement:*

Alarm Input	Vin<15V, PINs (1.02KΩ)
Alarm Output	125VAC/0.5A, 30VDC/2A, Normal Open, PINs

- *The Alarm_In circuit (like above photo coupler), if there is any voltage change smaller than 15V, as specification listed), the GXV3662_HD/FHD Alarm_In port will detect it and trigger the action and event.*

- *Higher voltage and wrong polarity connection are prohibited because this will damage the devices.*

GXV3662_HD/FHD Home Web Page

The Home Page of GXV3662_HD/FHD shown as Figure 5:

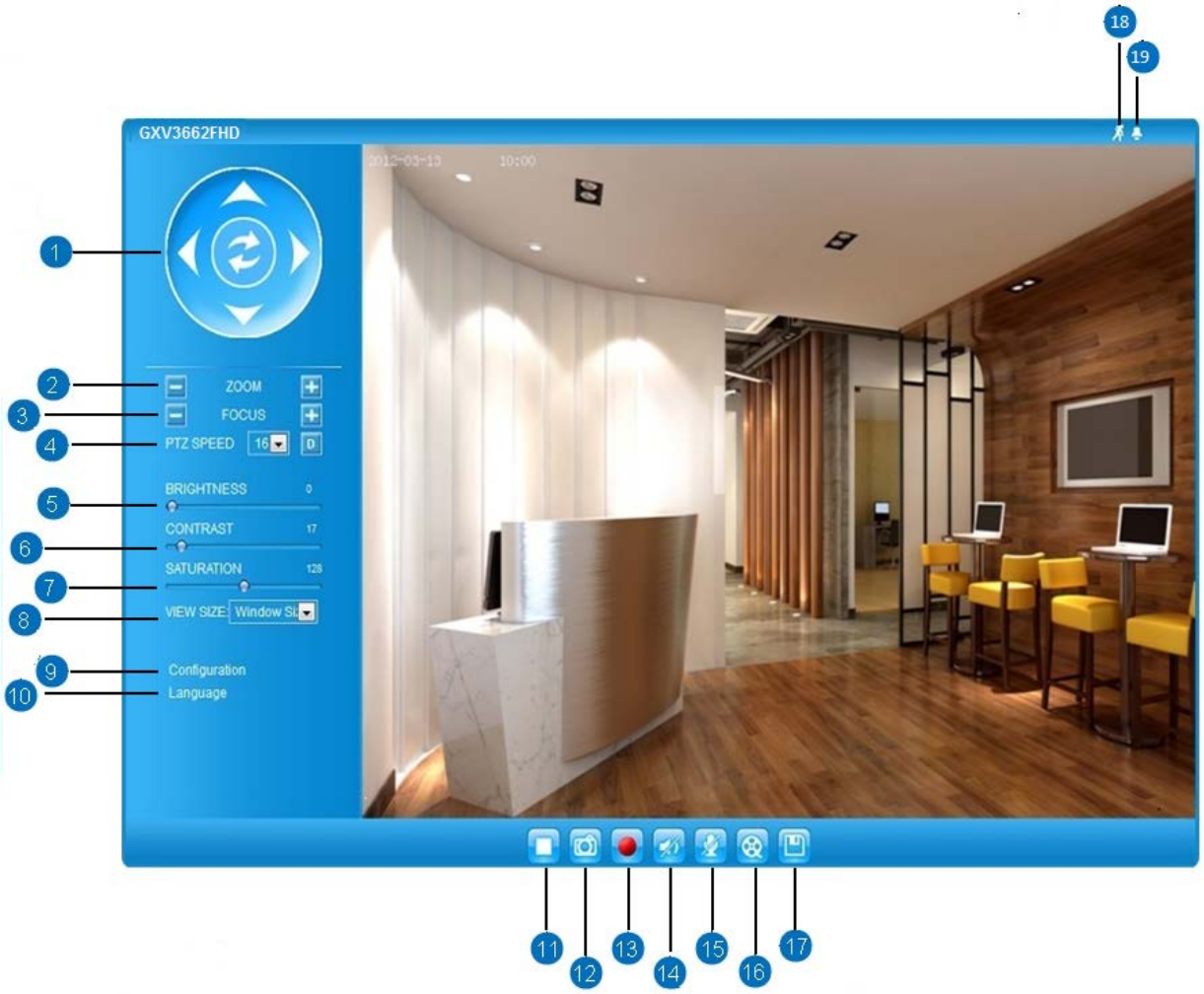


Figure 5: Home Page of GXV3662_HD/FHD

1. ***Control Console:*** PTZ Console controller for ePTZ function.
2. ***ZOOM:*** Zoom in or Zoom out during ePTZ operation(The GXV3662HD/FHD does not support zoom).
3. ***FOCUS:*** Adjust the focus of image (if equipped with the proper lens).
4. ***PTZ SPEED/Default Button:*** Adjust the rotate speed of the control console(PTZ is not supported in the GXV3662_HD/FHD);
   Default button to reset the video brightness, contrast and saturation to factory default value.
5. ***BRIGHTNESS:*** Adjust the image brightness.
6. ***CONTRAST:*** Adjust the image contrast.
7. ***SATURATION:*** Adjust the image saturation
8. ***View Size:*** Adjust the image display size.
9. ***Configuration:*** Click to enter "Configuration Page" to configure the parameters of GXV3662_HD/FHD (Administration privilege required).
10. ***Language:*** Click to switch webpage language.
    (Current supported: Chinese, English and Russian)
11. ***Play/Stop:*** Start/Stop Play the video stream in webpage.
12. ***Snapshot:*** Click to capture and save a snapshot of current video displayed.
    Default directory: C:\GS_Capture

13. ***Record:*** Click to Start/Stop record of current video into a file.
    Default directory: C:\GS_Record
14. ***Sound On/Off:*** Toggle to listen/stop the sound from camera
15. ***Talk:*** Toggle to talk to camera speaker. (PC microphone required)
16. ***Replay:*** Click to playback the recorded video file.
17. ***Record File Path:*** Click to adjust the file path of saved video files.
18. ***Motion Detection Alarm Indicator:*** If motion detection alarm triggered, the indicator will flash in ***red***.
    Click the indicator icon to turn off the alarm indication.
19. ***DI Alarm:*** If alarm in triggered, the indicator will flash in ***red***.
    Click the indicator icon to turn off the alarm indication.

GXV3662_HD/FHD Configuration & Language Page

- When click the "Configuration" tab, web page will link to page to configure the related parameters of the GXV3662_HD/FHD.

- 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 as shown below. Click to select the related webpage display language.

- 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 GXV3662_HD/FHD.

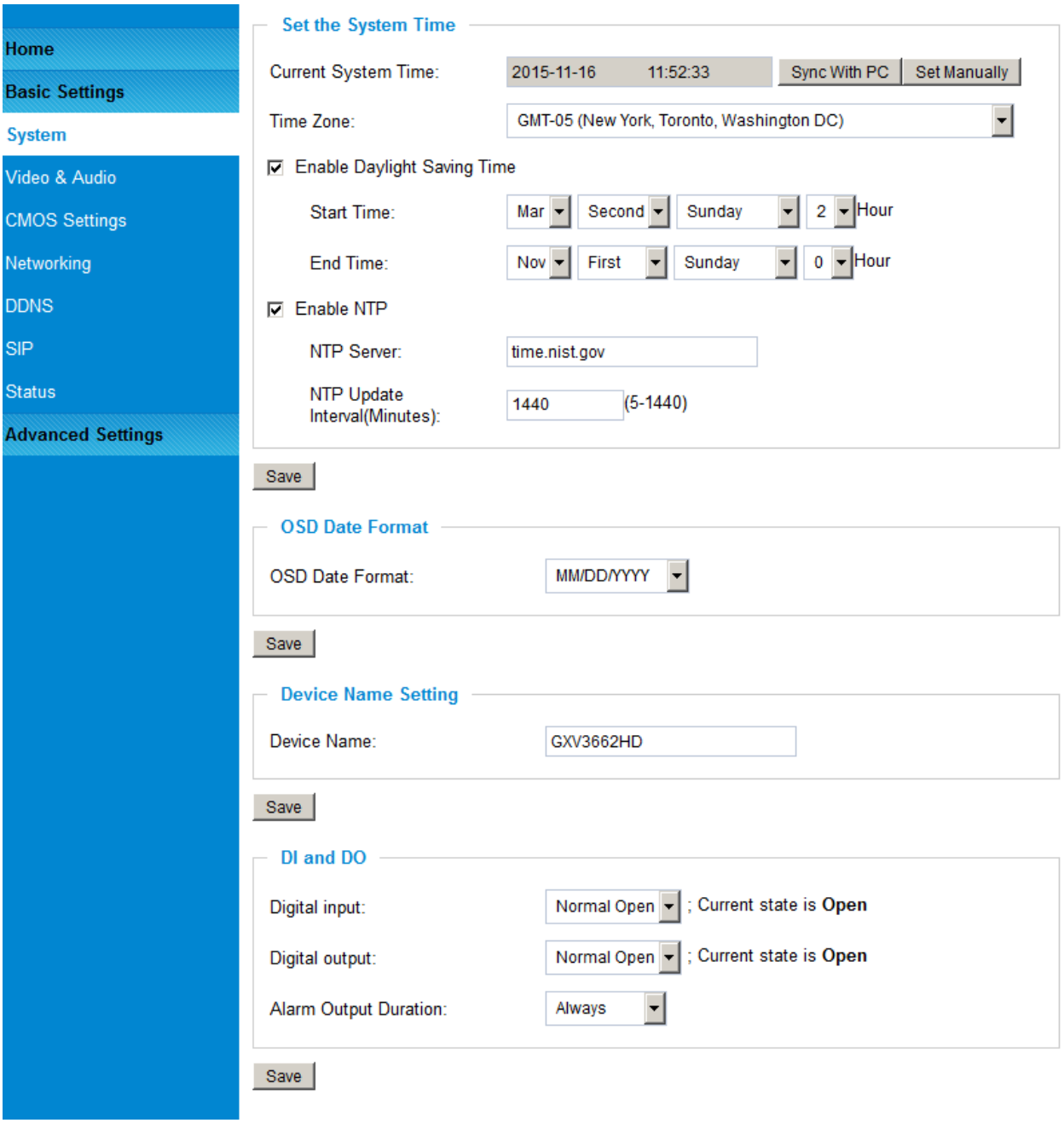


Figure 6: System Settings Page

- ***Current System Time:*** Display time current system is running at
  - ***Sync with PC:*** Click to synchronize current time with computer.
  - ***Set Manually:*** Click to manually set the current time and date.
- ***Time Zone:*** Select from pull down menu the time zone unit located
  - Enable DST: Configure Day Light Saving Time
  - NTP: Enable and configure NTP server and update interval.

- ***OSD Date Format:*** Pull down to select date format displayed on video screen.
- ***Device Name Setting:*** Set the name of the camera which will be shown in the result of "Search Tool" of GSurf_Pro VMS program.
- ***DI and DO:*** Setting the state of the Alarm IN / Alarm out Settings and Alarm output action duration before restore to previous state.

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.

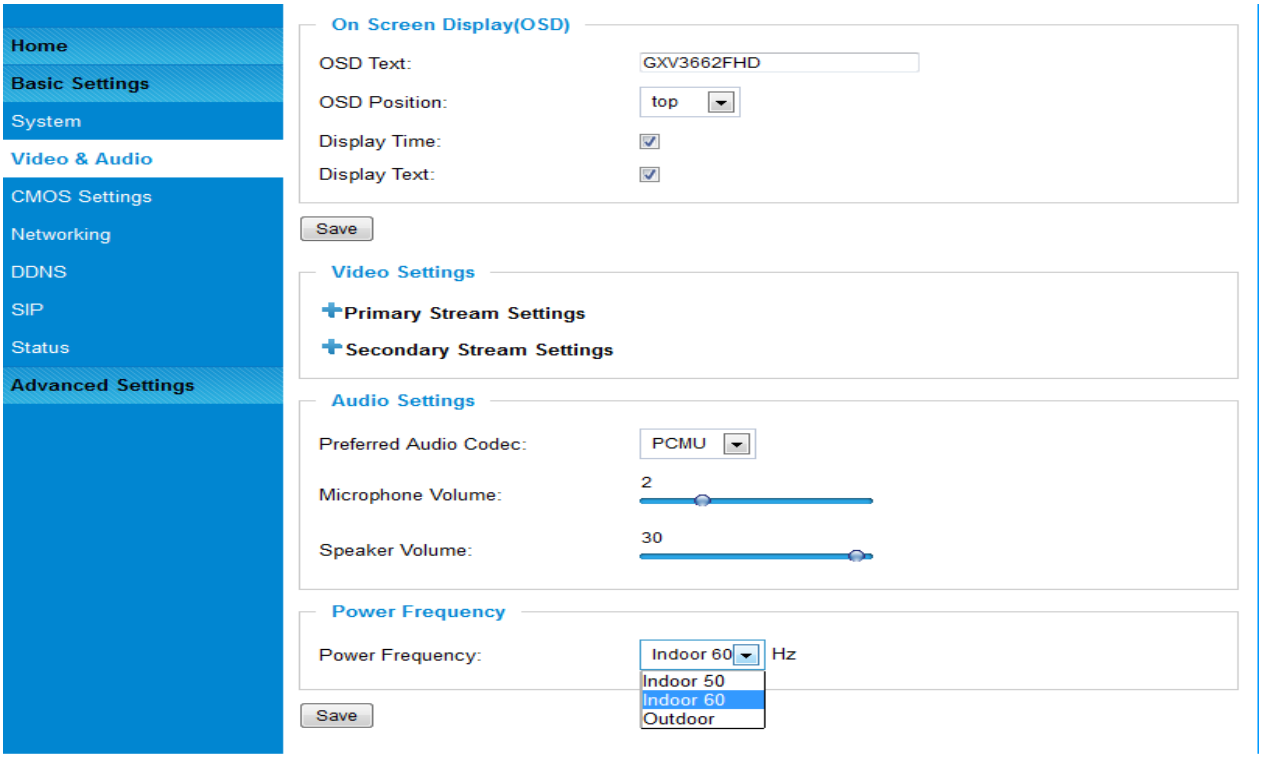


Figure 7: Video & Audio Settings Page

- ***On Screen Display (OSD):*** Display time stamp and text on the video screen.
  - o OSD Text: Inputted text (to identify the camera) shown on the screen.
  - o OSD Position: Show the OSD in either top or bottom position on screen.
  - o Display Time: When checked, time stamp will display on video screen
  - o 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.
  - o Microphone Volume: Slide to adjust microphone gain.

- Speaker Volume: Slide to adjust the speaker volume.

- ***Power Frequency:*** Select correct local power frequency to avoid video flicking effect under fluorescence light condition.

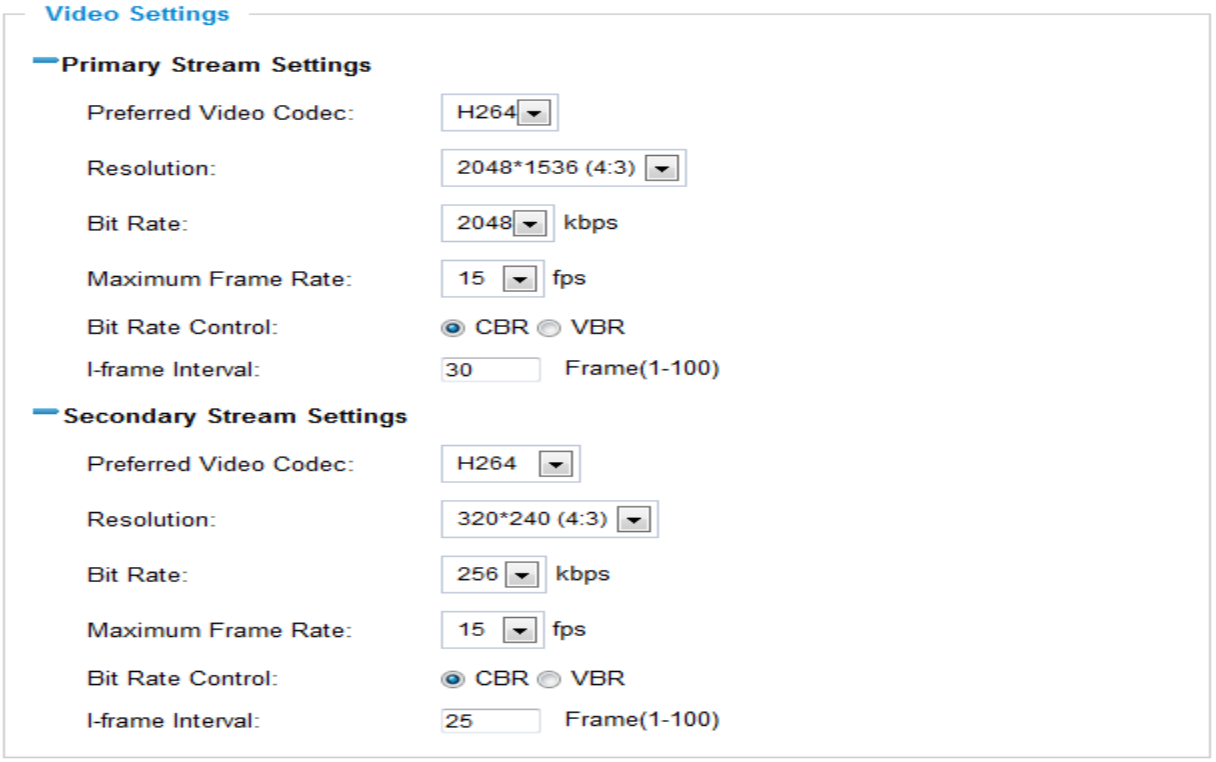


Figure 8: Video & Audio Settings Page

- ***Primary Stream Settings:***

  - Preferred Video Codec: MJPEG and H.264 supported, H.264 recommended.
  - Resolution: The video resolution in pixel used in camera video, the higher the resolution is, the better the video quality is, and higher bandwidth is required.
  - Bit Rate: The number of bits that are conveyed or processed per unit of time.
  - Max Frame Rate: The video frame rate is adjustable based on network conditions. Increasing the frame rate will increase the amount of data significantly therefore consuming more bandwidth. Video will be impaired due to packet loss when there is insufficient bandwidth.
  - Bit Rate Control: Variable Bit rate (VBR) and Constant Bit Rate (CBR). Variable Bit Rate - If VBR is selected, the codec varies the amount of output data per time segment. VBR produces a better quality-to-space ratio. The bits available are used to enable more flexibly and encode sound or video data more accurately, with fewer bits used in less demanding passages and more bits used in difficult-to-encode passages. Constant Bit Rate - If CBR is selected, the codec‘s output data is constant regardless of the input data. The output bit rate is defined in ―Bit rate‖. CBR is useful for streaming multimedia content on limited capacity channels. It is easier to calculate required bandwidth as well as the required storage space using CBR.

- I-frame Interval: While streaming video over a network, compression technologies are used to show the incremental difference between each frame. I-frames are used to help keep the video looking normal. When intervals are shorter, the video quality is higher but uses more bandwidth. Recommend at least 1 I-frame interval at every 1~3 seconds. (e.g.: max. 30FPS with I-frame Interval 30~90)

- ***Secondary Stream Settings:*** Pull down to select, same as Primary steam.

NOTE:

- *H.264 suggested if camera needs to be viewed via Internet.*
- *The definition of Baseline, Main Profile and High profile of H.264 please refer to:* http://en.wikipedia.org/wiki/H.264/MPEG-4_AVC
- *If MJPEG selected, reduce max. frame rate to min. value 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 vice versa depending application scenarios.*
- ***Use below link to calculate bandwidth and storage before installation***
  http://www.grandstream.com/support/tools/bandwidth-storage-calc

CMOS Settings Page

This page allows user to adjust the CMOS parameters:

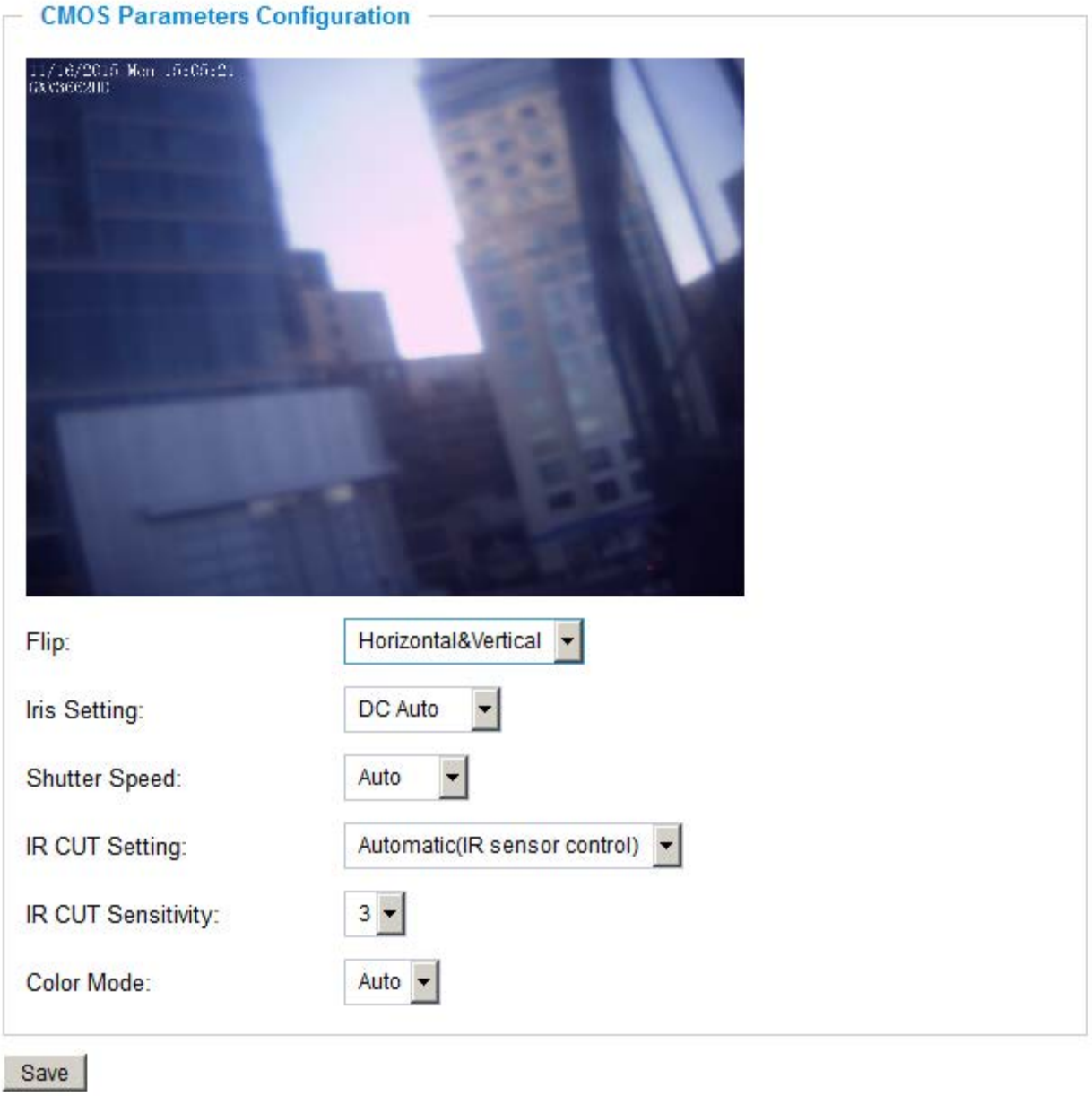


Figure 9: CMOS Settings Page

- ***Flip:*** Pull down to choose the angle of video flip axis.
- ***Iris Setting:*** Select from either automatic, where the iris would open or close depending on the environment conditions, or set it to manual where the user can select from having it open100/80/60/40/20 percent.
- ***Shutter Speed:*** Select from either automatic shutter speed depending on the environment conditions, or select one of the available shutter speeds from 1/30 to 1/1000 of a second.

- ***IRCUT Setting:*** Select from either manual or automatic. If the user selects manual then select from either daytime mode or night mode. If the user selects automatic, then select a sensitivity value from 1 to 5 that adjusts the best to the environment conditions.
- ***IRCUT Sensitivity:*** Select from pull down menu the sensitivity of the IRCut Sensitivity
- ***Color Mode:*** Camera Color Mode. There are three options: Color; Black/White; Auto.

NOTE:

- *Flip option recommended if camera requires ceilling installation*
- *Auto option recommended for both Shutter Speed and Color Mode.*

Networking Setting Page

This page allows user to configure network related parameters:

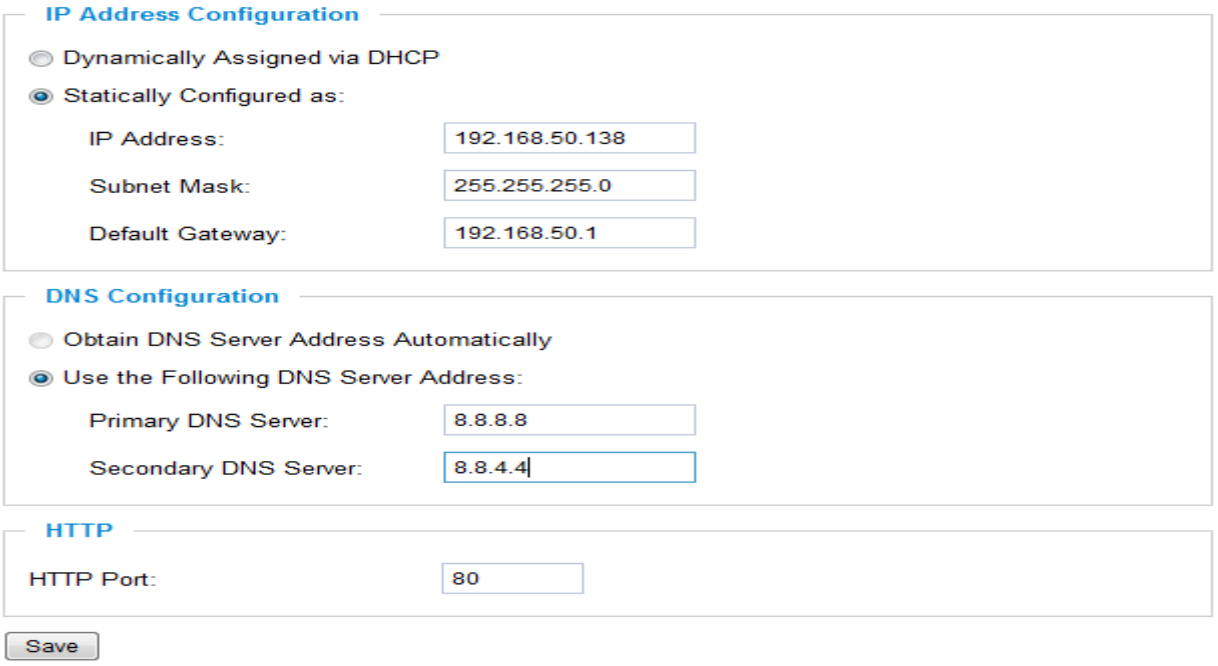


Figure 10: Network Setting Page

- ***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.

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.*

DDNS Settings Page

This page allows user to configure dynamic DNS related parameters:

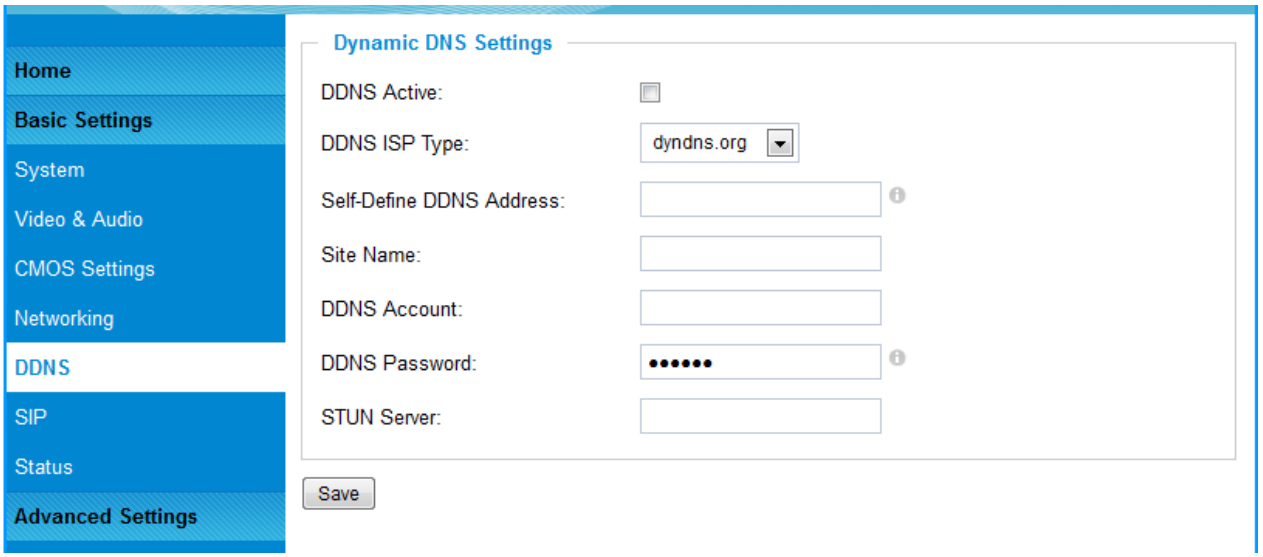


Figure 11: DDNS Setting Page

- ***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 non-symmetric router STUN server can help to penetrate & resolve NAT issue.

SIP Setting Page

This page allows user to configure SIP related parameters.

GXV3662_HD/FHD can be configured as SIP endpoint to call out when alarm trigged; or allow permitted number to call in to check the video if Grandstream video IP phone is used.

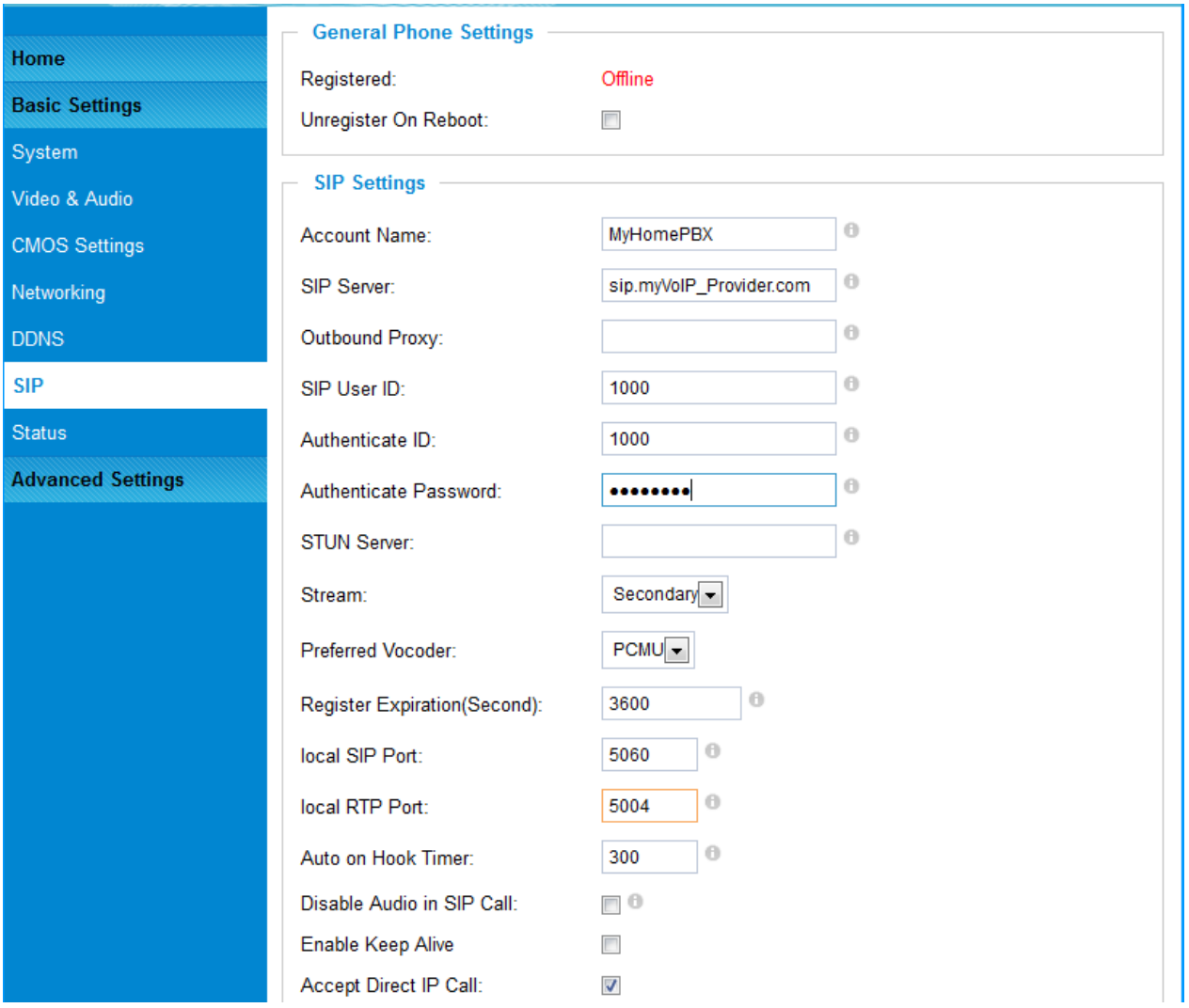
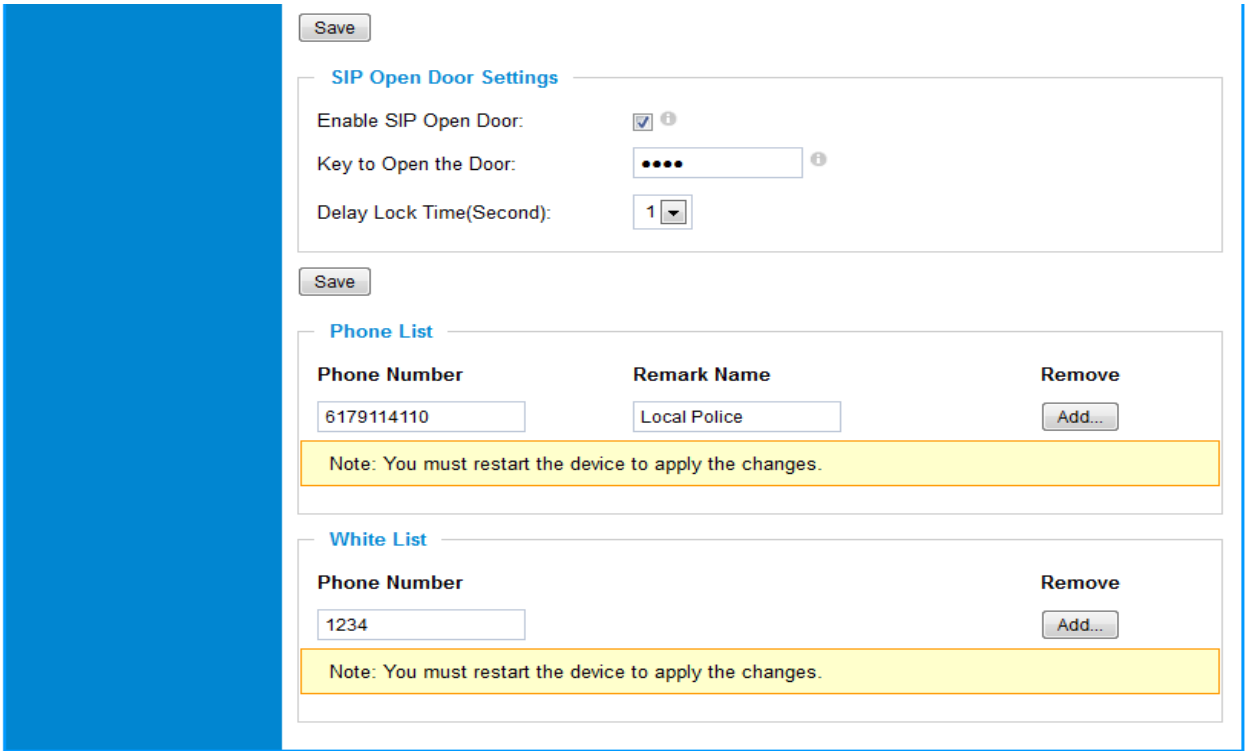


Figure 12: SIP Setting Page

- ***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 of SIP server from VoIP service provider
- ***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
- ***Steam:*** Which stream used for SIP call.
- ***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 IP call.
- ***Enable White List Number Filter:*** Check to allow only white list number to call in, for security.
- ***Enable two-way Audio Warning:*** Check to enable two-way audio when call established (Default)
- ***Self-define Warning Audio:*** Upload self-defined alarm warning message audio. (Format: G.711 .WAV format, File Size <= 300KB, Linear PCMU or PCMA, 8KHz Sampling Rate, 16bit, Single Channel)



- ***Enable SIP Open Door:*** This will close the DO connections in the back to close the circuit that connected to it.
  - ***Key to Open the Door:*** DTMF key (Currently only SIP INFO DTMF is supported) or password has to be matched to operate the control circuit. Digits 0-9 only.
    During operation, inputted password has to end with "#" key.
- ***Delay Lock Time(Second):*** This is the time in seconds that the circuit will remain closed when this function is triggered
- ***Phone List/Phone Number***: Callee or call receiver number when alarm call trigged.
- ***White List/Phone Number:*** Phone numbers allowed to call into the camera.

NOTE:

- *When selected, this feature will override any existing Alarm Out (like Alarm In triggered Alarm Out, or Motion Detection triggered Alarm Out). The Alarm Out Port has to connect to Electric Door Strike or Relay to control door open/close.*
- *Remote SIP phone needs key in password (digits 0-9 only, ended with # key) matching the configuration here to open the door. (via DTMF)*

Status Page

This page shows the GXV3662_HD/FHD operation status:

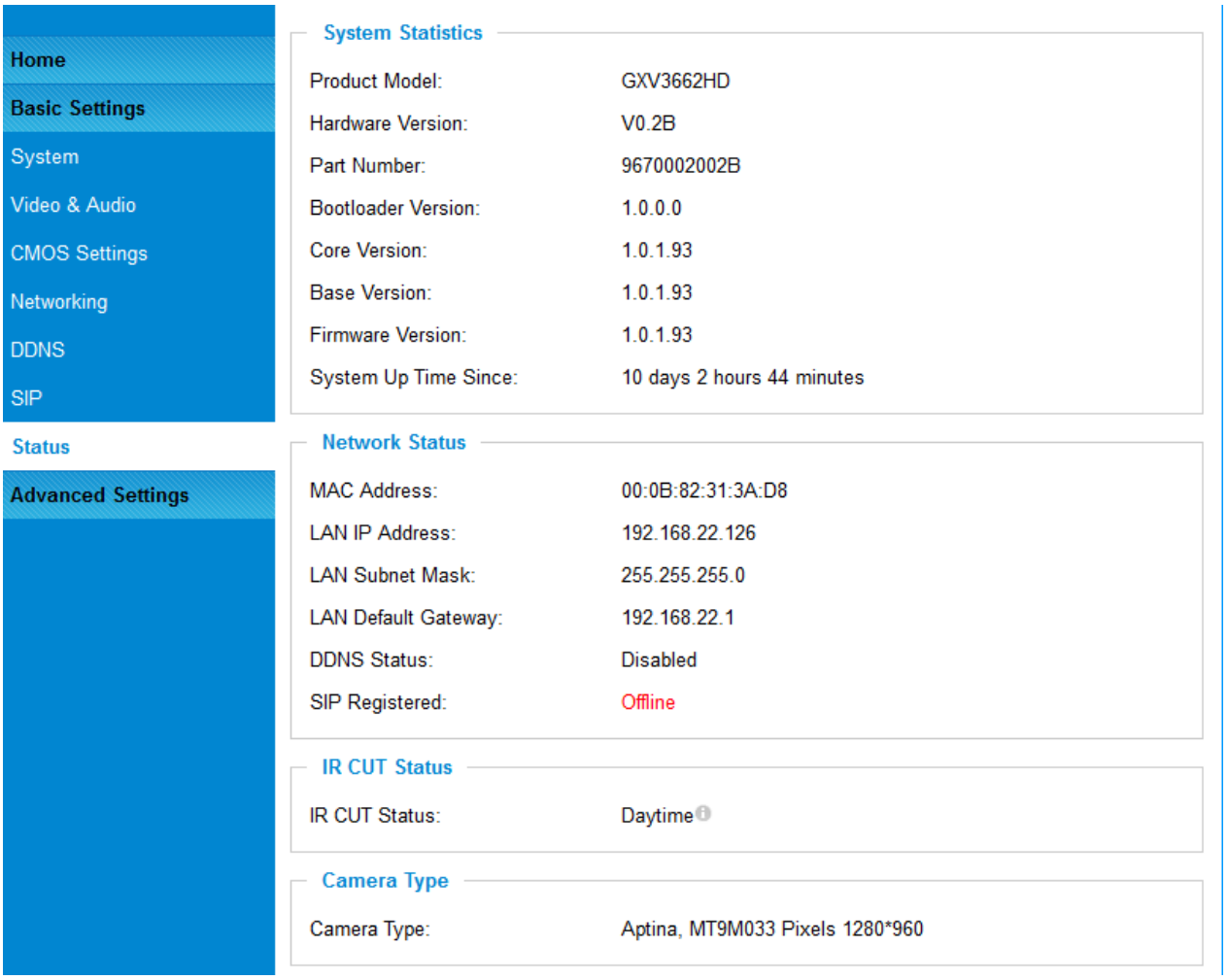


Figure 13: Status Page

NOTE:

- *When SIP account registered, the status will display "Online" in Green.*
- *When SIP account unregistered, the status will display "Offline" in Red, as below.*

SIP Registered: Offline

This page intentionally left blank

ADVANCED SETTINGS EXPLANATION

This part explains all the features available under the advanced settings tab.

User Management Page

This page allows user to do user management:

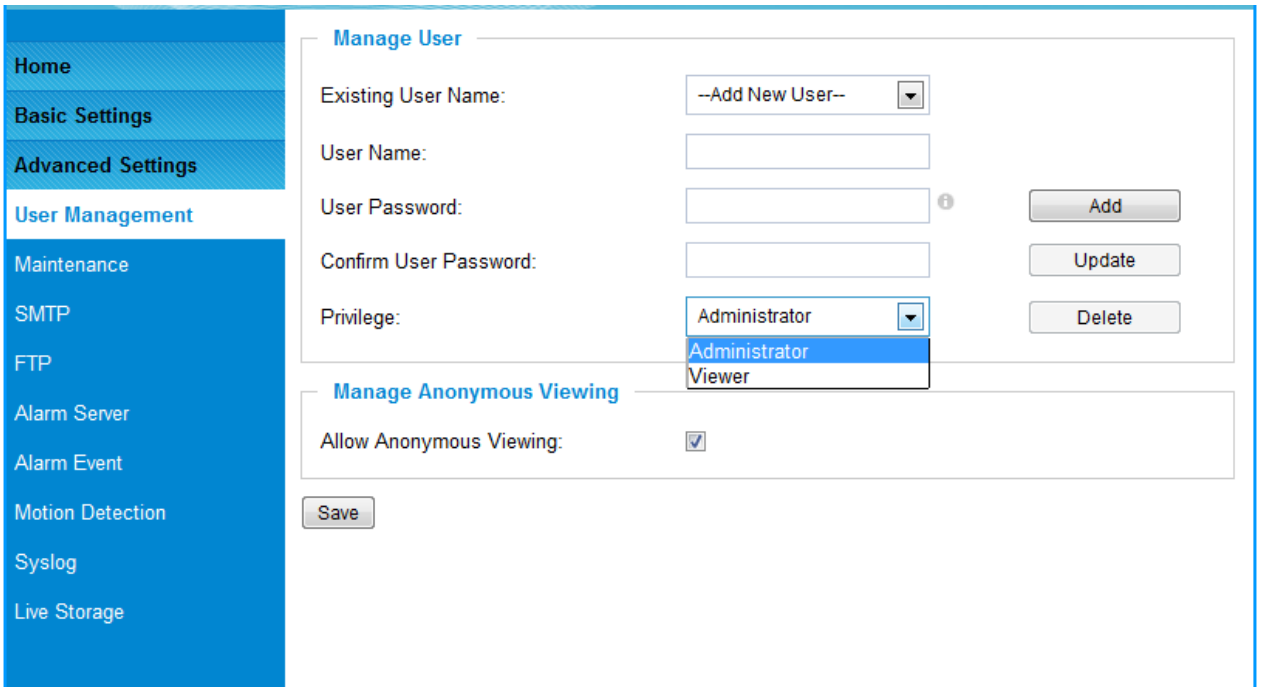


Figure 14: User Management Page

- ***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.
  Two levers: Administrator, Viewer.
  Viewer cannot change any settings.

- ***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:

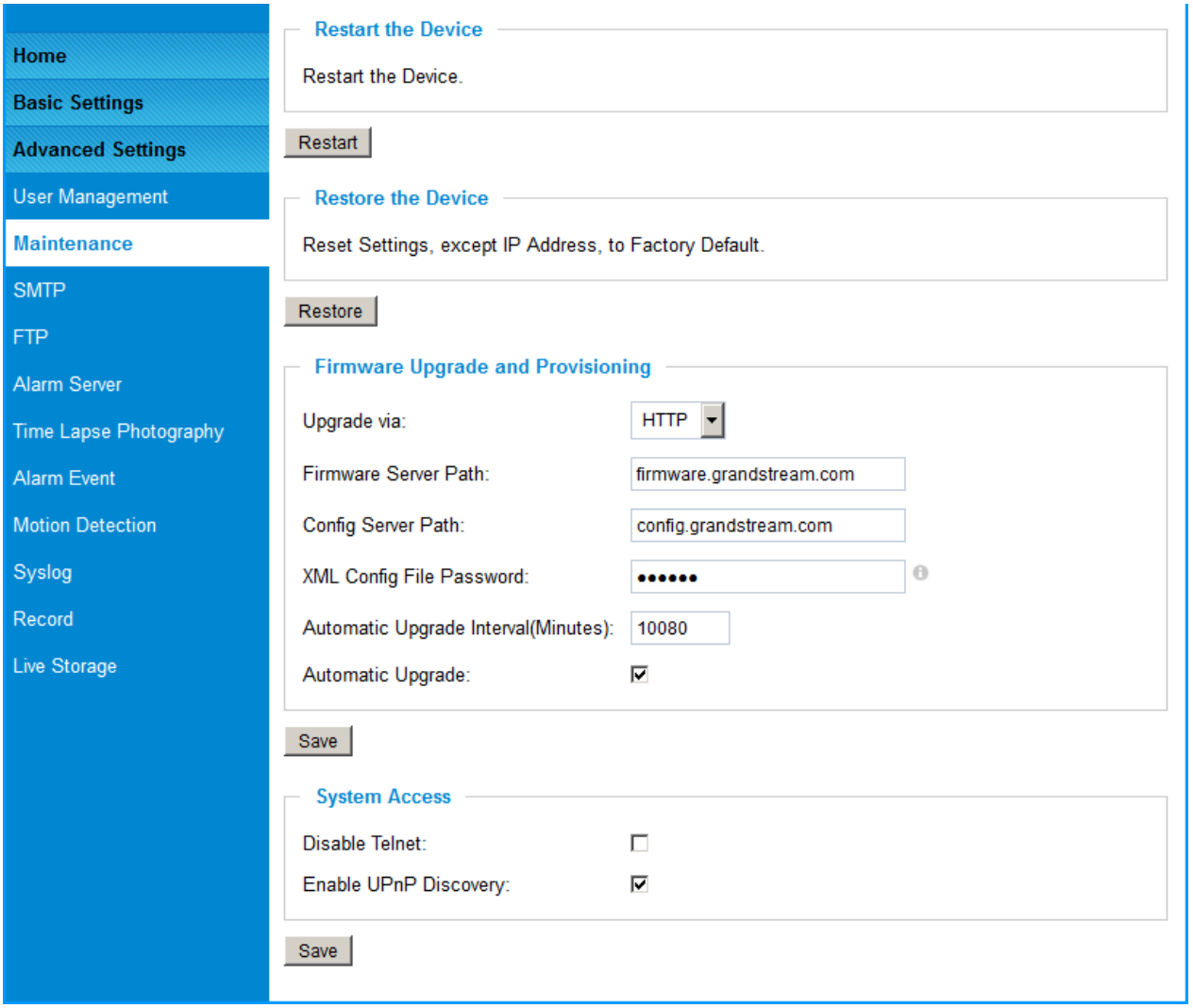


Figure 15: Maintenance Page

- ***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 automatic provisioning is supported by GXV3662_HD/FHD.*

System Access:

- ***Disable Telnet:*** Turn Off Telnet access. Default checked to disable Telnet for security.
- ***Enable UPnP Discovery:*** Default checked for UPnP discovery at LAN.

SMTP Setting Page (Email Alarm)

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

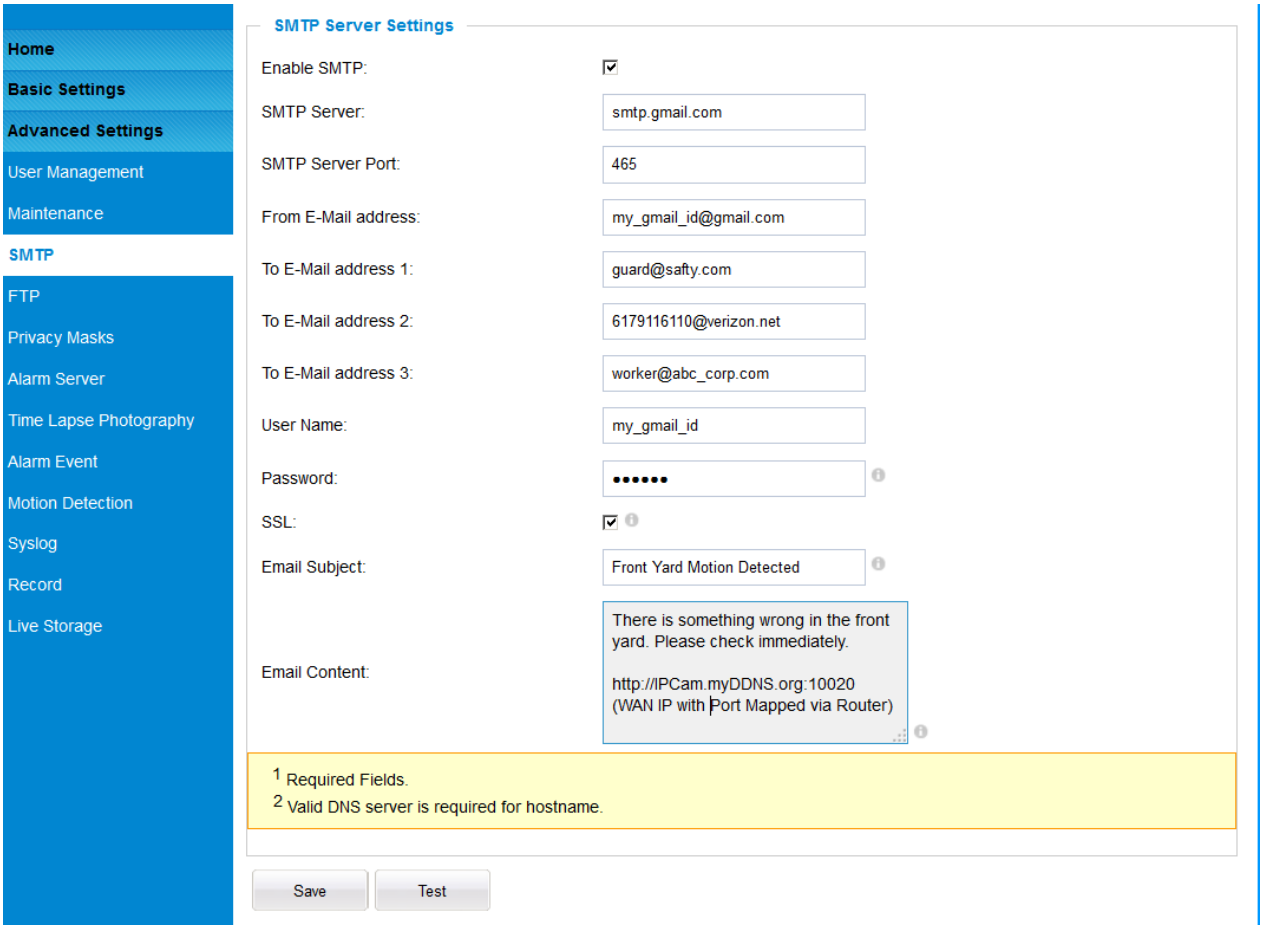


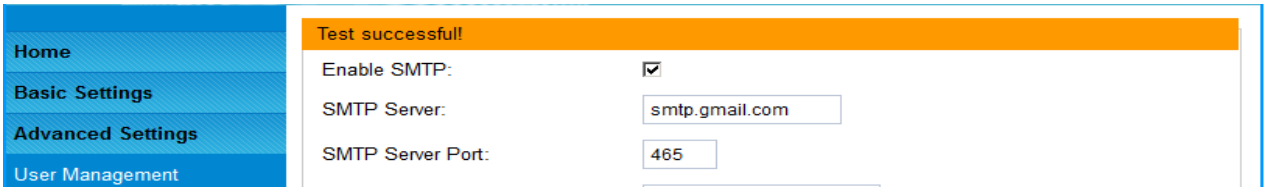
Figure 16: SMTP Setting Page

- ***Enable SMTP:*** When checked will enable email client.
- ***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
- ***Email Subject:*** Customizable email subject for user's convenience
- ***Email Content:*** Customizable email content for user's purpose.

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!" orange bar will display like below*



FTP Settings Page (Upload Alarm)

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

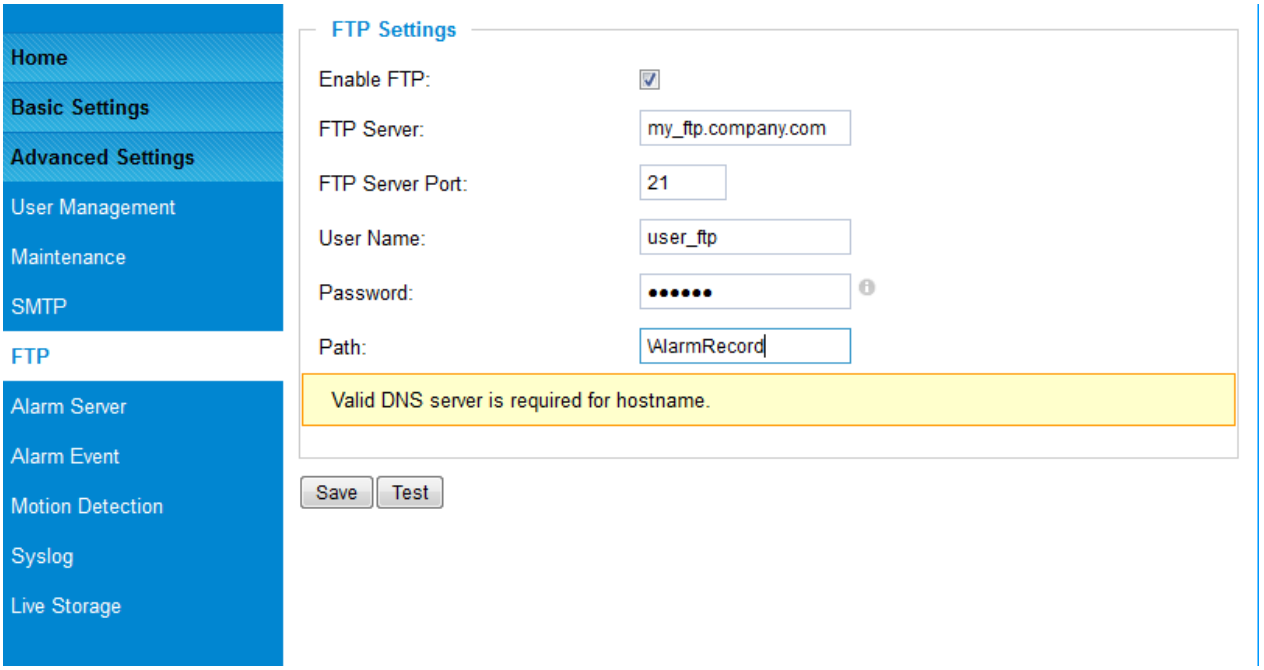


Figure 17: FTP Setting Page

- ***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 the server where upload files are stored.

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

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

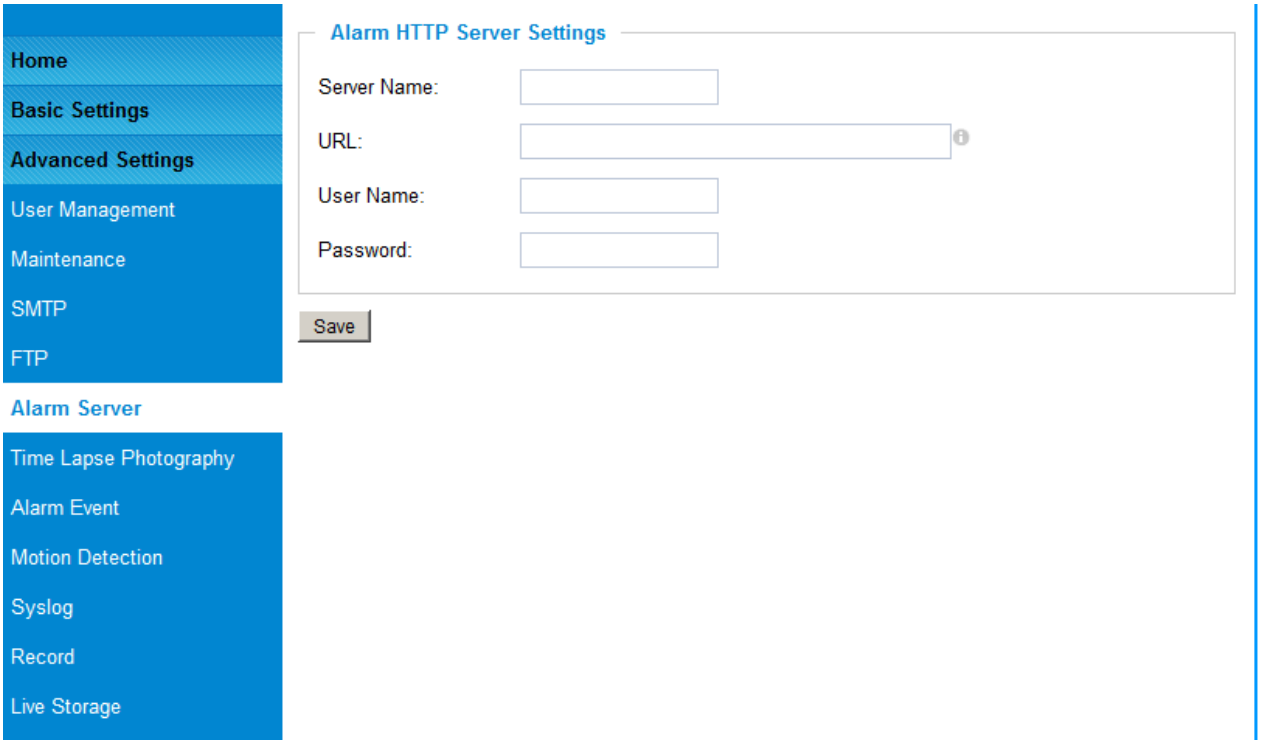


Figure 18: Alarm HTTP Server Setting Page

- ***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

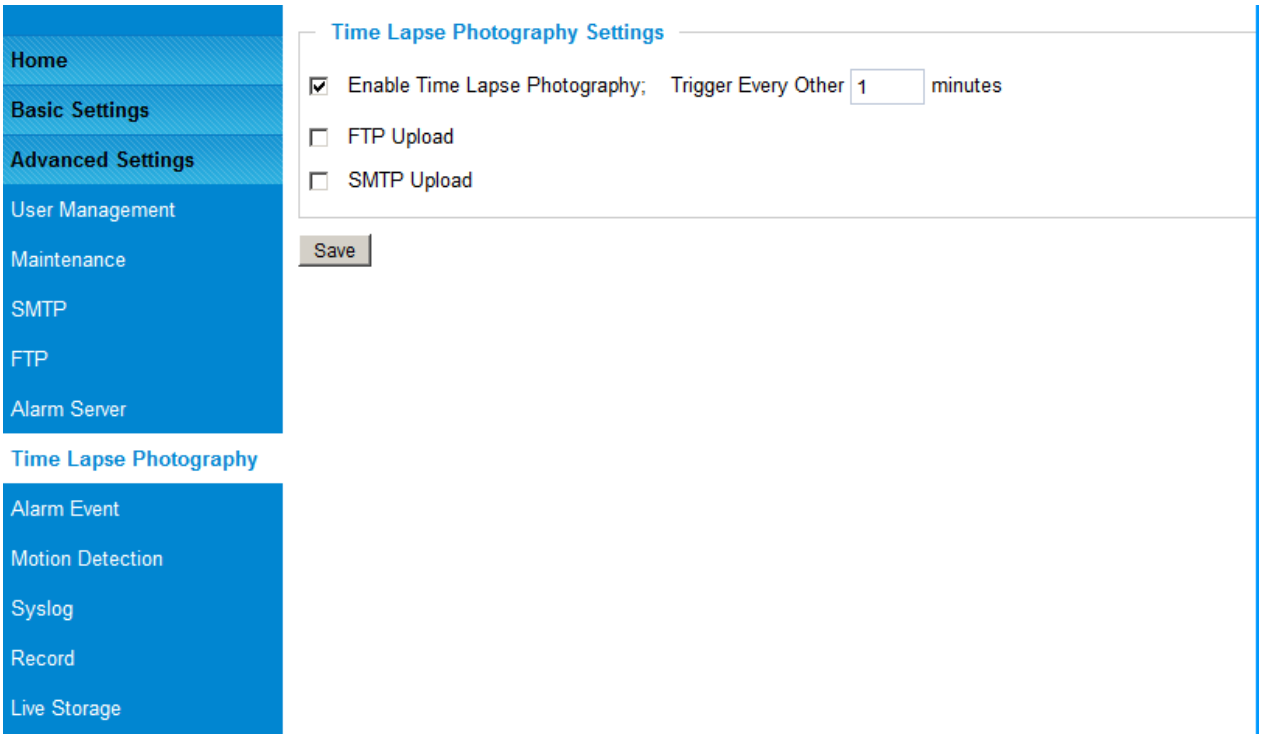
NOTE:

- *Grandstream provide HTTP API to help third party companies by using HTTP server or VMS to develop further solutions for their customers.*
  http://www.grandstream.com/products/surveillance/general/documents/grandstream_http_api.pdf

- *Grandstream IP Camera and Encoder (include GXV3662_HD/FHD) are ONVIF certified.*

Time Lapse Photography

This page allows user to configure time lapse photography or period snapshot setting:



- ***Enable Time Lapse Photography:*** Check to enable this feature. User can configure the timer or duration of the triggering moment, minimum value is 1 minute.
- ***FTP Upload:*** Enabled will allow device to upload the snapshots to FTP server. The FTP server is configured at "FTP" server page illustrate before.
- ***SMTP Upload:*** Enabled will allow device to email the snapshots via email server. The email server is configured at "SMTP" configuration page.

Click "Save" button to save the changes made and the feature will take effect immediately.

Alarm Event Page

The GXV3662_HD/FHD supports alarm inputs, for example, infrared detector, smoke detector and so on. Follow the steps to make Alarm Input work:

1. Connect the alarm input equipment to the GXV3662_HD/FHD.
2. Set up the alarm event time schedule.
3. Configure the alarm actions which you would like the GXV3662_HD/FHD to take when the alarm is triggered.

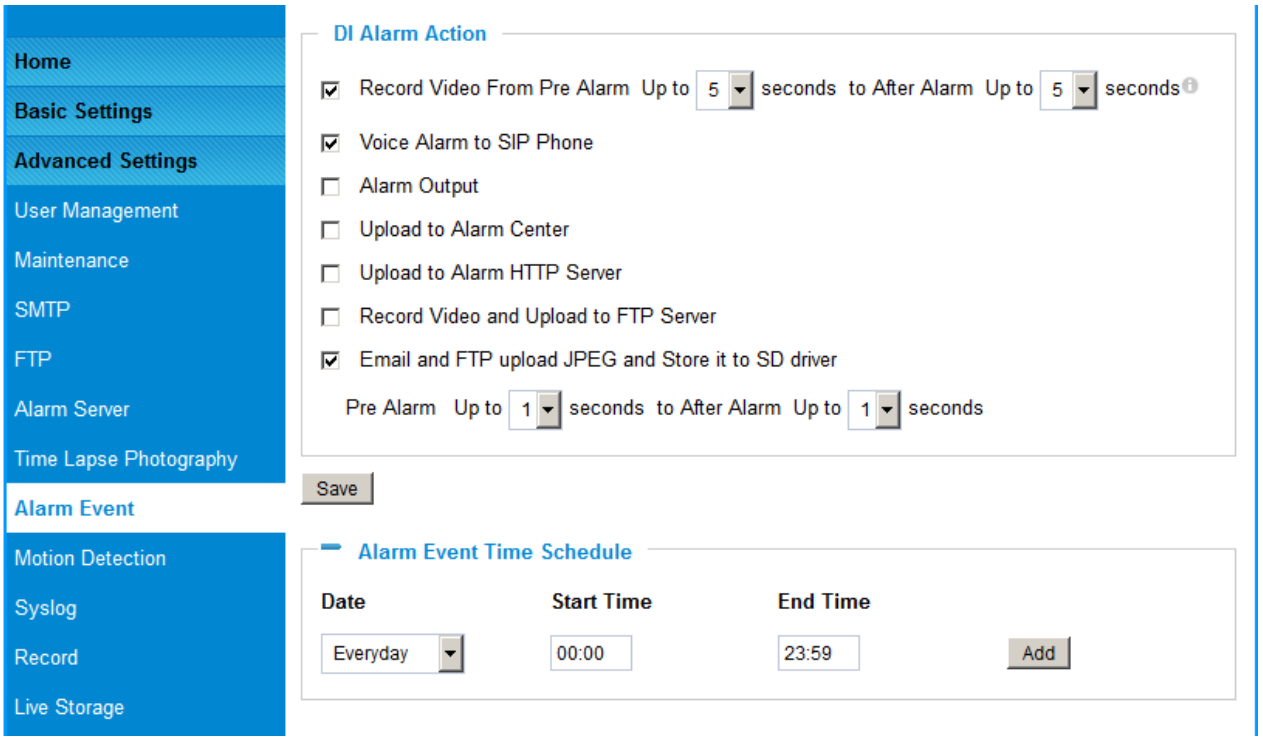


Figure 19: Alarm Event Setting Page

DI Alarm Action Setting:

- ***Pre/Post Alarm Recording (Record Video From Pre Alarm Up to XXX to After Up to XXX):***
  Depending on 1st stream resolution, this allows internal buffer to store the pre/post alarm video for applications to utilize.
  MJPEG is NOT supported for this feature.
- ***Voice Alarm to SIP Phone:***
  Enabled will allow device to make SIP call after receiving Alarm_In.
  See below NOTE for example.
- ***Alarm Output:*** Enabled will allow Alarm Output after receiving Alarm_In signal.
- ***Upload to Alarm Center:*** Upload to alarm center like 3rd party VMS system.
- ***Upload to Alarm HTTP Server:***
  Upload to 3rd party HTTP server or application using HTTP API.
- ***Record Video and Upload to FTP Server:***
  Upload video recording to pre-configured FTP server.
- ***Email and FTP upload JPEG and Store it to SD drive:***
  Email, FTP and Store to the SD card the configurable trigger moment JPEG snapshots.

Click "Save" to save the settings. Following bar will display if operation successful.

NOTE:

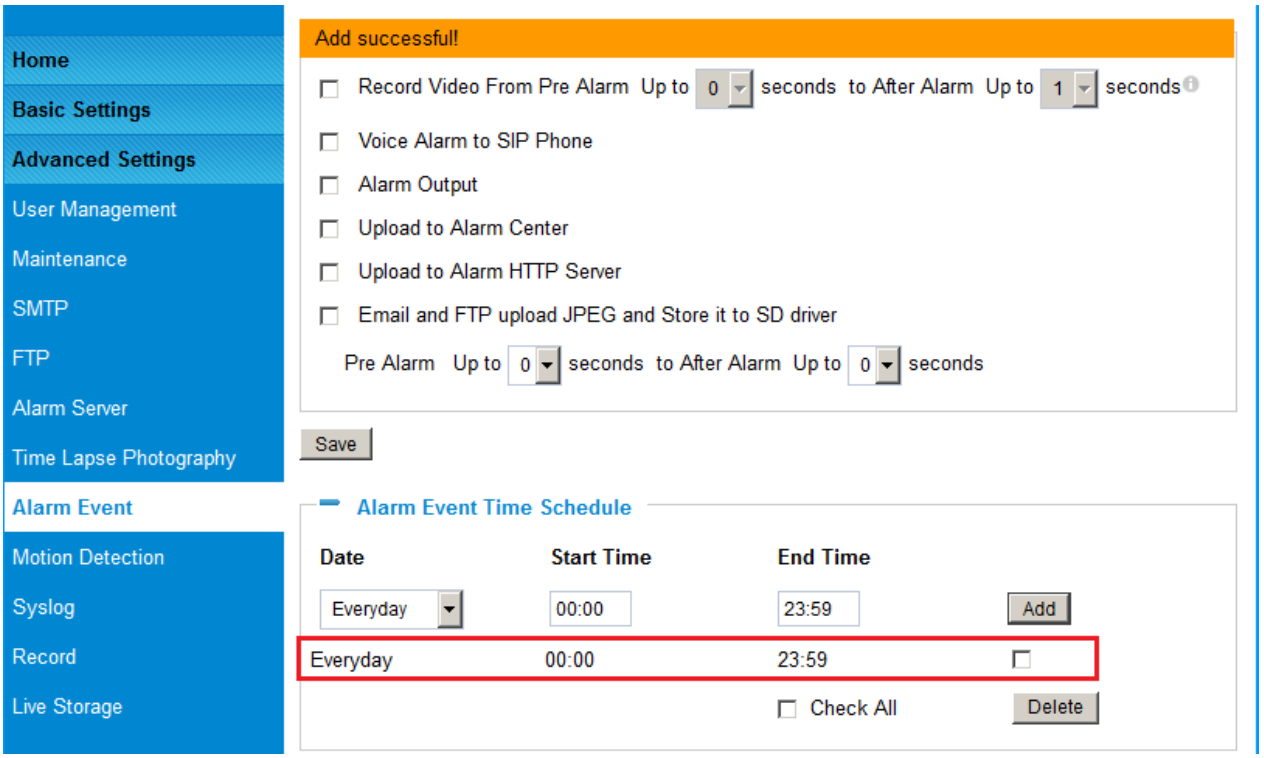
- *Voice Alarm to SIP Phone:* Application example: Intercom System, press button as Alarm_In, the pre-programmed SIP number or peer IP device will be called. If the receiver is Grandstream Video phone, the callee can use DTMF PIN code to operate and Open Door.

- *Please do not connect a device that has a signal voltage that is higher than 15V, this will damage the IP camera.*

Internally, the Alarm-out uses relays as a switch (30VAC/2A); users can connect devices such as an alarm siren, alert lights or electric strike to this port. Under normal circumstances, the circuit is open. When there is an alarm event, the GXV3662_HD/FHD will close the circuit to trigger the alarm.

Alarm Event Time Schedule:

This section allows user to configure the time during which the GXV3662_HD/FHD will monitor the Alarm Input. The GXV3662_HD/FHD not only can monitor the settings but also can take actions when the alarm is triggered.

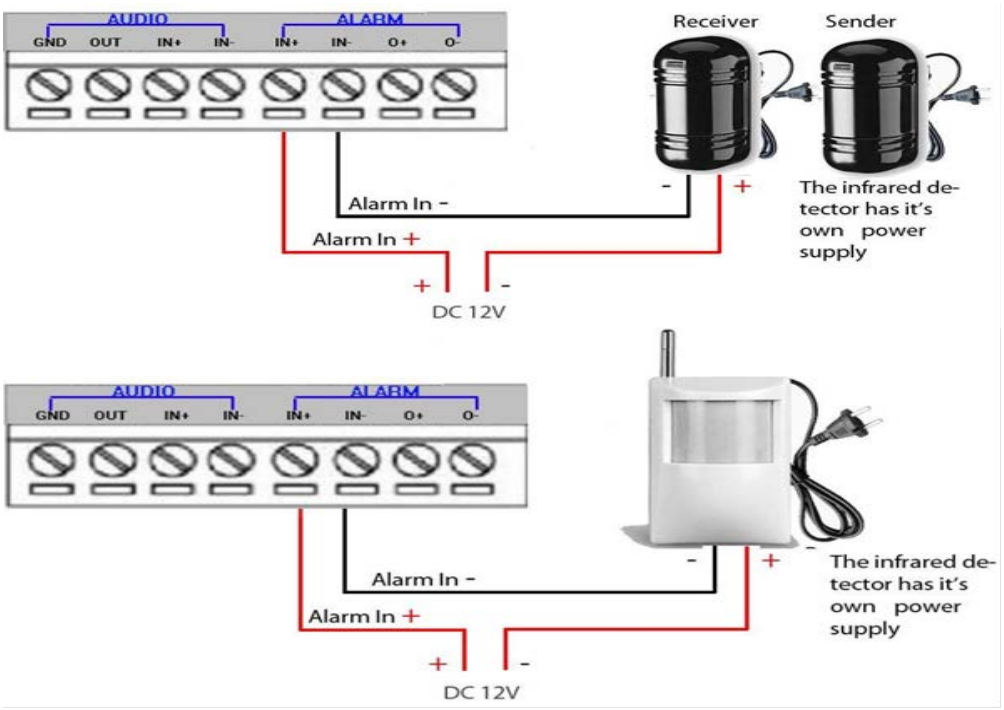


NOTE:

- User has to configure the "Time Schedule"; otherwise the Alarm_In will not work because no schedule configured.

Connect Alarm Input Equipment to the GXV3662_HD/FHD

Here are two sample connection diagrams. Connect the alarm equipment to the GXV3662_HD/FHD by following the diagram below:



How to connect an Alarm Output Equipment to GXV3662_HD/FHD

Here is a sample connection diagram. Connect the alarm output equipment to the GXV3662_HD/FHD by following the diagram below.

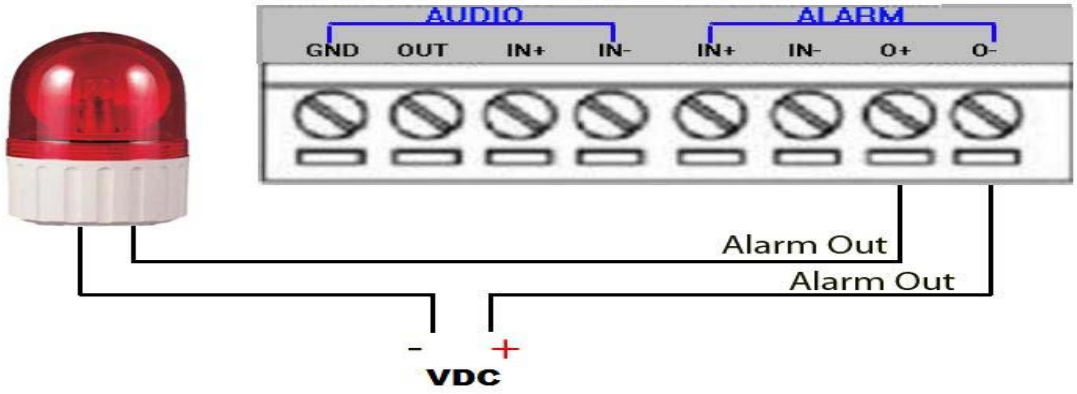


Figure 20: Alarm Output connection

Motion Detection Settings Page

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

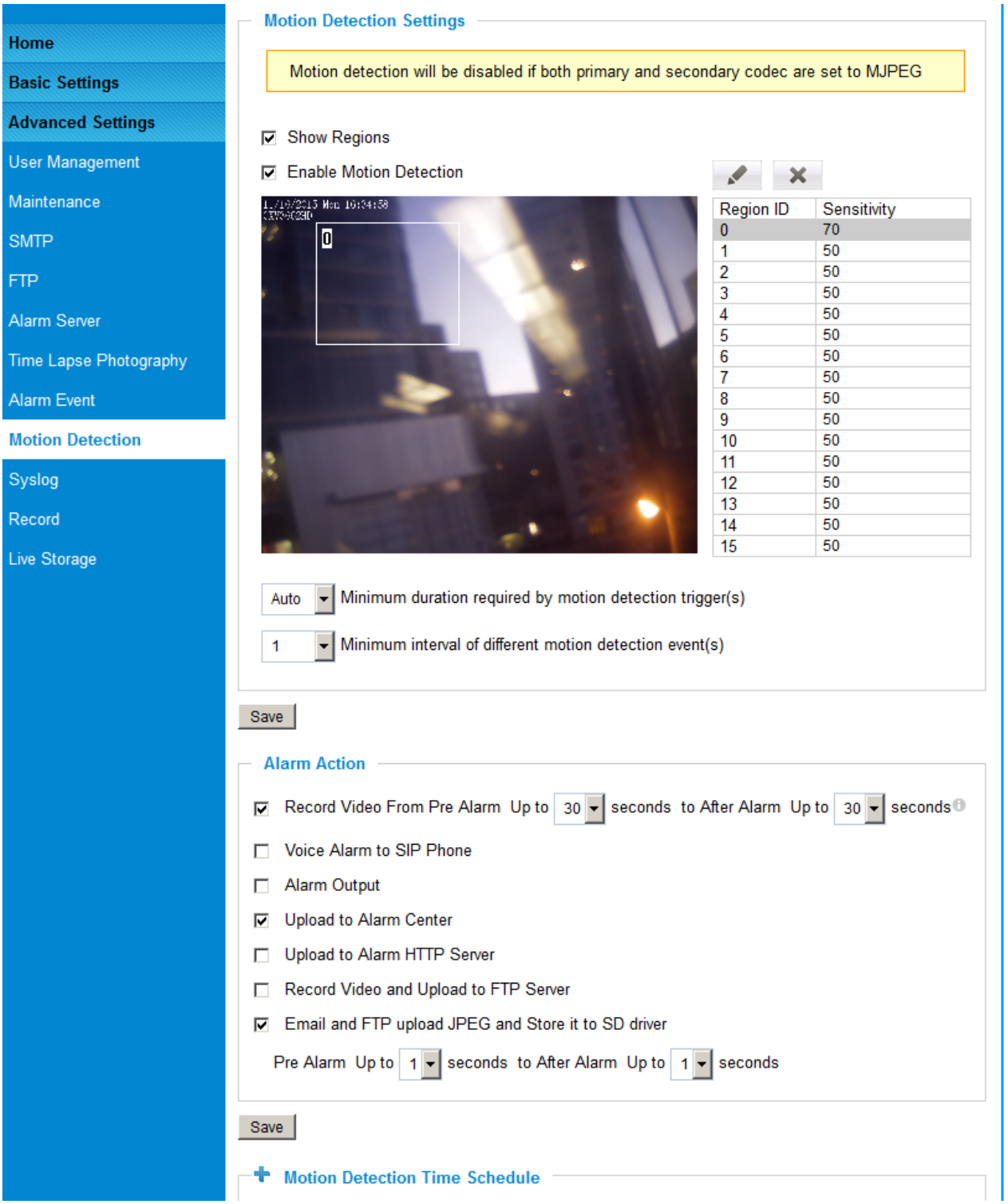


Figure 21: Motion Detection Configuration Page

- ***Show Regions:*** When checked, Motion Detection region with number will be displayed as a white rectangle in the screen. When "Edit" clicked, the Rectangle will become Red, as shown in Figure 16-1.
- ***Enable Motion Detection:*** When checked, Motion Detection is enabled.

There are total 16 regions be available for MD configuration, from region 0 to 15.
Select and highlight the number of region to configure the MD and the sensitivity.

- ***Minimum duration required by motion detection trigger(s):***
  Min. period (in second) to identify as a valid MD event. Default is Auto, max. value is 5 second. The setting helps to reduce false alarm based on user's scenarios.
- ***Minimum interval of different motion detection event(s):***
  Min. time frame (in second) to identify as different MD events if there are constant motions. Max. value is 60 seconds or 1 minute. This setting helps accuracy of MD triggered recording.

Alarm Action:

- ***Record Video From Pre Alarm Up to XXX seconds to After Alarm Up to XXX seconds:***
  This setting to allow configure pre/post alarm video for applications to utilize. MJPEG is NOT supported for this feature.
- ***Voice Alarm to SIP Phone:*** If SIP server or peer IP device configured, check this will allow MD event to trigger alarm SIP call to pre-configured number.
- ***Alarm Output:*** Select will allow MD to send alarm to Alarm Output interface.
- ***Upload to Alarm Center:*** When checked, the alarm video will be transferred to Alarm Center, like Grandstream free GSurf _Pro VMS software, or 3rd party Alarm Center.
- ***Upload to Alarm HTTP Server:*** When checked MD alarm will be send to 3rd party HTTP server Via Grandstream HTTP API.
- ***Record Video and Upload to FTP Server:***
  When checked and FTP server configured, the recorded video will be send to the configured FTP server.
- ***Email and FTP upload JPEG and Store it to SD driver:***
  When checked, snapshots of trigger moment will be emailed to pre-configured email account and also uploaded to FTP server if configured; will also be stored to the SD card inserted (maximum 32GB). The pre/post alarm snapshot numbers can be configured based on time (in second) to meet user's requirement.

NOTE:

- *Grandstream free GSurf_Pro VMS software can be downloaded here:*
  http://www.grandstream.com/sites/default/files/Resources/GSurf_Pro_V2_1.0.3.13.zip
- *Email/Snapshot storage is mutual exclusive with SD card DVS recording in next section.*

This page allows user to configure Motion Detection Operation Schedule:

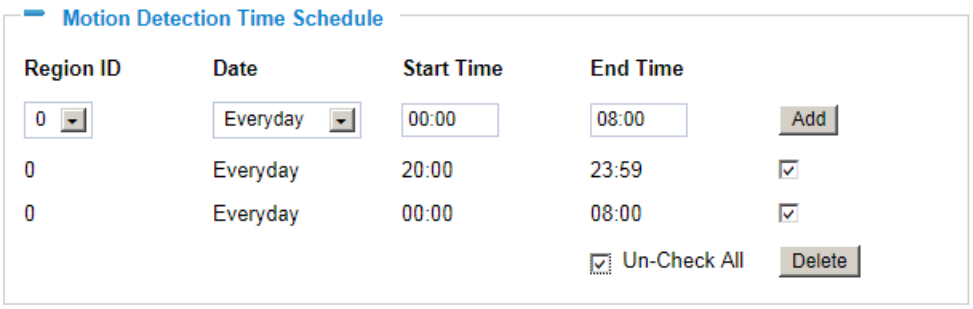


Figure 22: Motion Detection Schedule Configuration page

- *As shown in Figure 22, user can configure the Motion Detection Region with related Start and Stop time to control the motion detection operation.*

Syslog Settings Page (Troubleshooting)

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

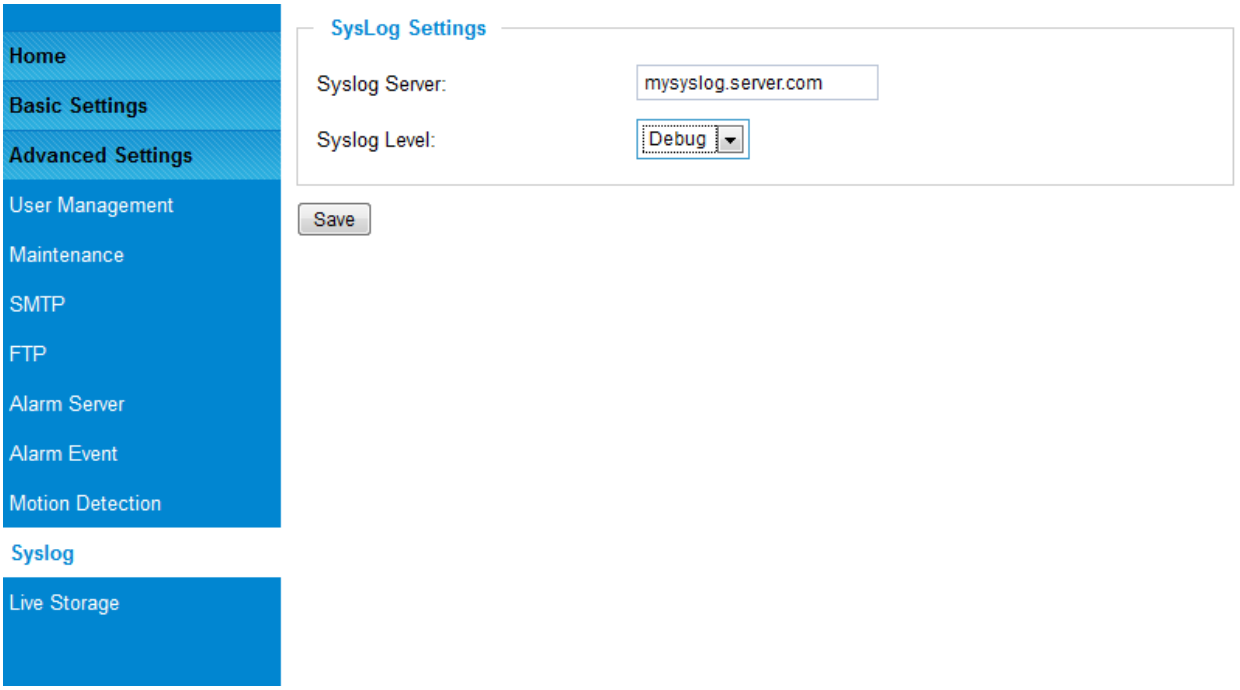
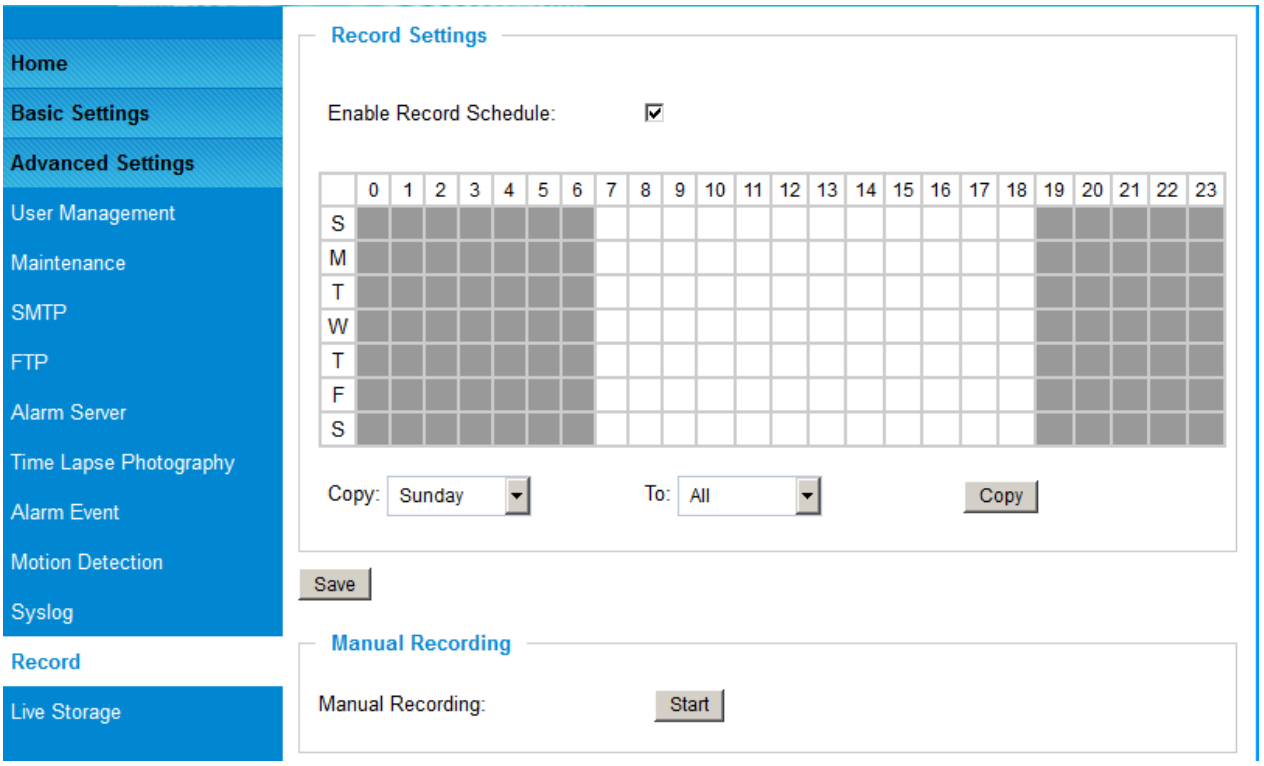


Figure 23: Syslog Configuration Page

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

Record Settings Page (Local Video Storage)

This page allows user to configure local video recording storage if SD card inserted.



When enabled and SD card inserted, the GXV3662_HD/FHD can record video locally at the SD card. This is especially good for backup and also for environment where 7x24 recording is not required.

In order to record more before recycle or overwrite, recommend user to use Motion Detection so the GXV3662_HD/FHD only record video where motion detected.

Live Storage Setting Page (SD card File Management)

This page allows user to manage the recorded files in SD card:

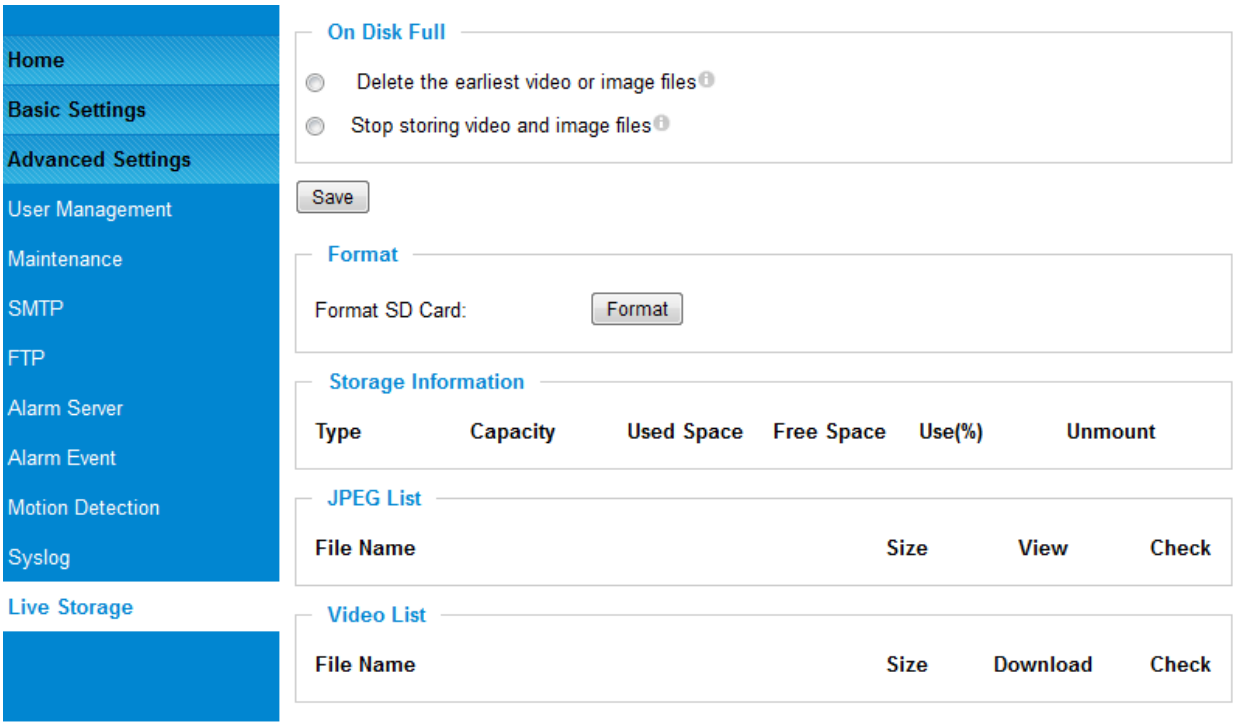


Figure 24: Live Storage Management Page

- ***On Disk Full:***
  Select below two different operations when SD card is full
  - Delete the earliest video or image files
  - Stop storing video and image files

- ***Storage Information:***
  The SD card information will be displayed in this column.

- ***JPEG List:***
  Motion trigged Snapshot JPEG file will be listed here.

- ***Video List:***
  Motion trigged video recording clip will be listed here.

NOTE:

- *Grandstream free VMS software GSurf_Pro V2 can be downloaded here:*
  http://www.grandstream.com/sites/default/files/Resources/GSurf_Pro_V2_1.0.3.13.zip

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SOFTWARE UPGRADE

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

Software Upgrade via TTFP, HTTP or HTTPS

This page allows user to configure firmware upgrade:

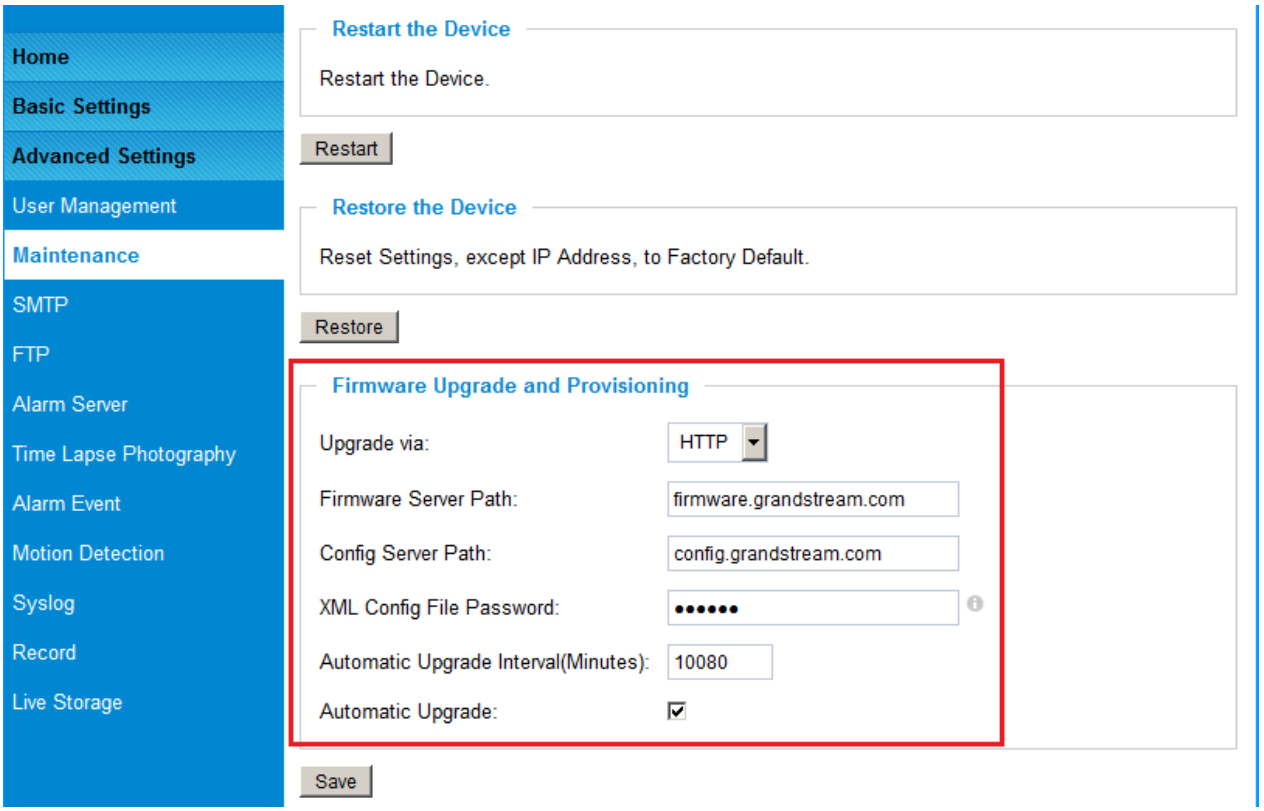

Figure 25: Firmware Upgrade and Provisioning

NOTES:

- *Grandstream recommends end-user use the Grandstream HTTP server. Its address can be found at http://www.grandstream.com/support/firmware .*
- *Currently the HTTP firmware server FQDN is* **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 "cfgxxxxxxxxxxxx", where "xxxxxxxxxxxx" is the MAC address of the device, i.e., "cfg000b820102ab". The configuration file name should be in lower cases.

Currently GXV3662_HD/FHD 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 three (3) methods for resetting your unit:

Reset Button

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

1. Unplug the Ethernet cable.
2. Locate a needle-sized hole on the back panel of the camera above the power jack.
3. Insert a pin in this hole, and press and hold for about 15 seconds till reboot
4. Take out the pin. All unit settings are restored to factory settings.

Reset from Web Interface

This page allows user to configure dynamic network related parameters:

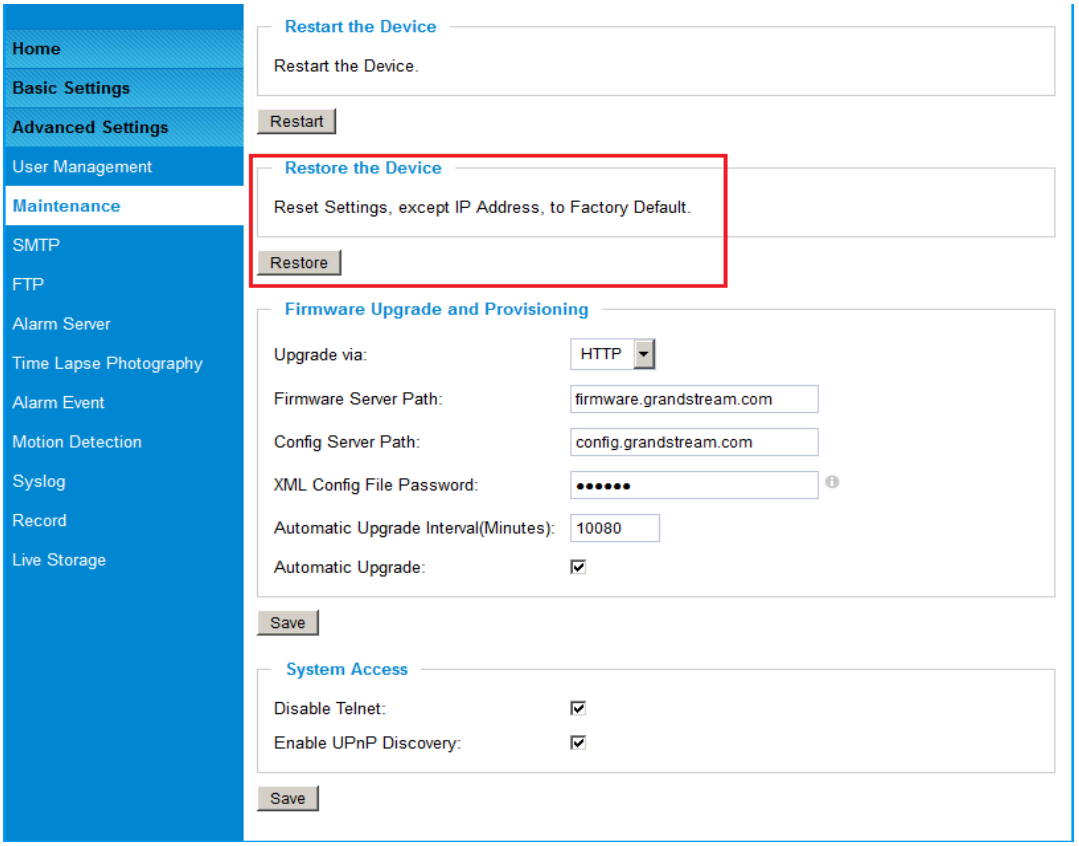

Figure 26: Factory Reset from Web Interface

IP VIDEO SURVEILLANCE FAQ

1. What is the default IP address of the GXV-3662_HD/FHD?
The default IP configuration is DHCP.

2. Why can I not view the live video stream in Microsoft Internet Explorer?
Please check whether the IE add-on is installed correctly.
Once you log into the GXV 3662_HD/FHD web interface, Internet Explorer will indicate that -This website wants to install to following add-on: ¸GSViewer. cab' from Grandstream Networks, Inc. Please install this add-on when prompted by IE.

3. How do you manually uninstall the Grandstream video viewer add-on for IE?
Please follow these steps to uninstall the add-on:
1. Delete the *GSViewerX Control* from *C:\WINDOWS\Downloaded Program Files* directory
2. Delete *GSNetClient.dll, GS_Replay.exe, GSViewerX.ocx, hi_h264dec_w.dll, lik_VoiceEngine_dll.dll* and *GSViewerX.inf* from *C:\WINDOWS\system32*

4. Why can't I access the GXV-3662_FHD web configuration interface?
Q 1: Is your internet service down?
A 1: Connect a PC to the internet to test the connection.

Q 2: Are the PC and the device in different subnets?
A 2: Check the subnet mask and default gateway of the device and PC.

Q 3: Is there a conflict with another IP address?
A 3: Try to change the IP address of the device.

Q 4: Has the HTTP port been changed?
A 4: Contact the administrator of the device for more information.

5. The GXV-3662_FHD web configuration page is not displayed correctly in Internet Explorer 8?
In IE8, Compatibility View might need to be enabled for the GXV-3662_FHD web configuration page to load properly. To enable compatibility view, open IE8, click *Tools*, *Compatibility View Setting,* and add the GXV-3662 web configuration pages to the Compatibility View.

6. Why does IE indicate to install Grandstream Video Viewer add-on after a firmware upgrade? The add-on was properly installed before the firmware upgrade process.
New firmware will often upgrade the add-on as well. To watch the live video stream, you must install the newest version of the add-on.

7. How do you watch secondary video stream?
Login to the home page of the GXV-3662_FHD web GUI, click Play to watch the video stream. To watch a secondary video stream, right click on the video, and select *Secondary Stream* on the pop-up menu. Try reinstalling the Grandstream Viewer add-on for IE if you cannot see the video stream.

8. Why is audio missing from the recorded video when an alarm is triggered?

Please double check whether the device has an audio input connected. GXV3662_HD/FHD has a MIC IN port for an audio input.

9. What is DDNS? Is it important for IP surveillance product to have DDNS support?

DDNS is an acronym for Dynamic Domain Name Service. It is important to choose an IP network camera that has DDNS support for dynamic IP addresses.

Chances are that the network has a dynamic IP address (which changes with every log on). A DDNS service makes sure that the camera's IP address always matches up to the current server address. DDNS also allows for a website to be linked to the IP camera that is constantly updated with the correct information and has a reliable feed.

10. Why is Windows Media Player unable to play the recorded videos files?

The GXV-3662_FHD uses the H.264 video codec. Windows Media Player may lack the proper H.264 decoder to play the recorded video. Please download the Microsoft FFDShow H.264 decoder from http://sourceforge.net/projects/ffdshow-tryout/ and install it.

11. Alarm Triggered Events do not work in GSurf_Pro.

Please double check the Alarm Action on your GXV-3662_HD/FHD. Login to the web GUI of the GXV3662_HD/FHD, go to the Motion Detection or Alarm Events page, and make sure option Upload to Alarm Center is checked.

12. How can I use a cell phone to watch the GXV3662_HD/FHD video stream?

You must set the video resolution to QCIF to watch the GXV3662_HD/FHD video stream from a cell phone. Make sure to set the bit rate to 64kbps to ensure the best video quality.

13. What Smartphone application should I use to view the video?

There are free applications and paid version application for this, you can find them in Google Play for Android phone and Apple Store for iPhone, like: IP Cam Viewer:

http://hit-mob.com/

14. Why doesn't the IP address of the device reset when I click the "Restore" button on the Maintenance page?

The GXV3662_HD/FHD could be installed in areas that are not easy to access. For example, it could be installed on the roof of a building or the ceiling of an office. This makes it difficult to reinstall the device, therefore the -Restore function will not clear the IP address. Press the RESET button on the device for at least 6 seconds until you hear a beep to perform a factory reset of all parameters (including the IP address).

15. Why can't the live video stream be viewed using a mobile phone or GSurf_Pro after changing the HTTP Port of the device?

Make sure that the RTSP port of the device is set to 2000 plus the HTTP Port number. For example, if the HTTP port is 88, then the RTSP port of the device that you configured on GSurf_Pro / mobile phone should be 2088.

16. Some notes on using SD cards

1. The GXV3662 only supports FAT32 formatted SD cards
2. The GXV3662 supports SD and SDHC
3. It takes 10-15 seconds to read SDHC cards with large memory capacities. Please wait 15 seconds to unplug the SD card after you plug them into the device.
4. If there are many files (ie. 1800 or more image batch files) on the SD card, it can take up to 5 minutes to read them. Please do not refresh the web interface at this time as the GXV3662 will restart reading the SD card. Grandstream is currently working on a fix for this issue.

17. Port forwarding

Two ports must be forwarded on your router to watch video from a GXV3662_HD/FHD that is located on a private network from a PC in a public network. The web port (HTTP) and the RTSP port. Please make note that the RTSP port number changes according to the web port. If the web port is 80, then the RTSP port is 554. If the web port is not 80, then the RTSP port equals the web port +2000. For example, if the web port is 88, then the RTSP port will be 2088.

18. Tested PC display adapters.

Display Adapter	***Test Result***
SiS 650/651/740/661 FX/741/760 Series	Works normally
Intel(R) 82945R Express Chipset Family	Works normally
VIA/S3G UniChrome Pro IGP	Works normally
NIVDIA Geforce 7300GS	Works normally
SiS 661FX	Works normally
SiS Mirage Graphics	Works normally
SiS 661 Series	Works normally
Intel(R) G33/G31 Express	Works normally
SiS Mirage3 Graphics	Works normally
SiS 661FX/GX Mirage Graphics	Works normally
S3 Graphics ProSavageDDR(Microsoft Corporation)	Works normally
XGI Velari Z7/Z9/Z9S V1.08.12	There is some delay when playing videos.
Intel 965 Express Chipset Family	Works normally
ATI Mobility Radeon X1300	Works normally
Intel(R) G45/G43 Express Chipset	Works normally
Mobile Intel 965 Express Chipset Family	Works normally
Mobile Intel(R) 4 Series Express Chipset Family	Works normally
Mobile Intel® 945GM Express Chipset Family	Works normally
Mobile intel® 915GM/GMS, 910GML Express Chipset Family	Works normally
Intel® G45/G43 Express Chipset	Works normally
ATI Technologies, RAGE XL PCI	This display adapter cannot display videos.