IP WEB
User Manual
V2.0

Please read carefully before installing or contacting your supplier.
The information contained at the time of printing is correct, but is subject to change without notice. This guide is based on Firmware Version 216.
Every effort has been made for accuracy, product improvements may change the features or functions.

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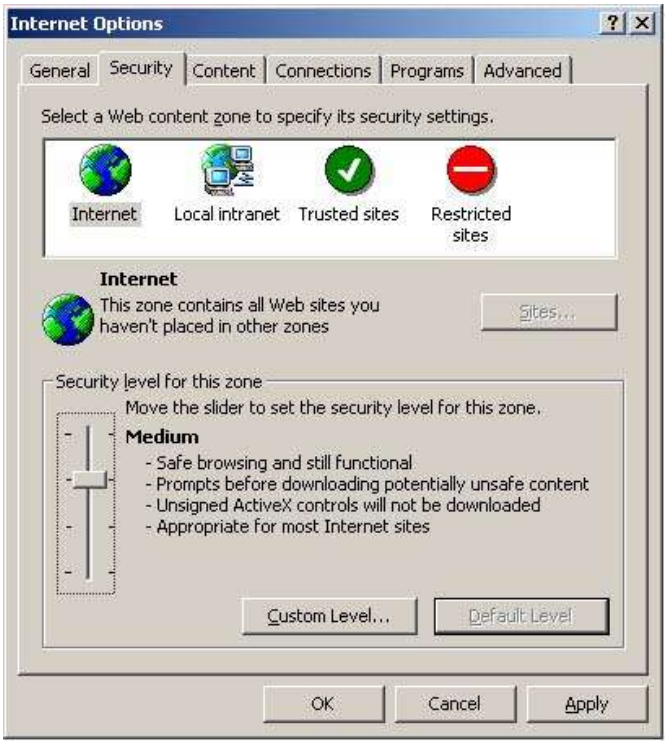
CONTENTS

Chapter ONE - WEB LOGIN

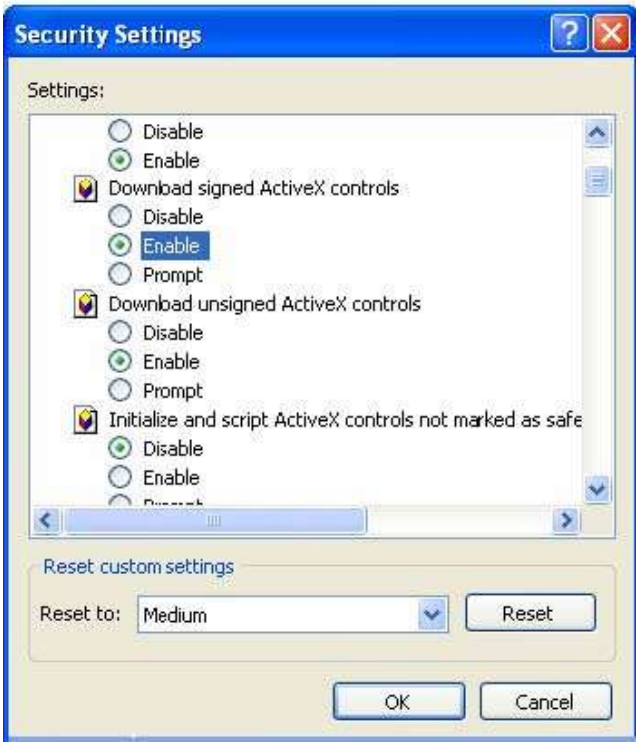
1.1 ActiveX control setting

Before navigating to the camera WEB page, we need to set IE ActiveX controls first. Select Internet Options from the Tools Tab in internet Explorer. Select the Security Tab from the system pop up dialog as follows:

Select “security” “Custom level” Button, in system pop up dialog as follows：



Scroll to "Download unsigned ActiveX controls”, change to Enable.
It is not recommended to set the Internet safety level to minimum.



1.2 WEB login

After the ActiveX option is set, open IE browser address bar, currently Internet Explorer is the only supported browser. Enter the IP address of the camera in the IE browser address bar. Press the Return Key (ENTER). The WEB page of the camera will appear and prompt you to enter your user name and password for access.

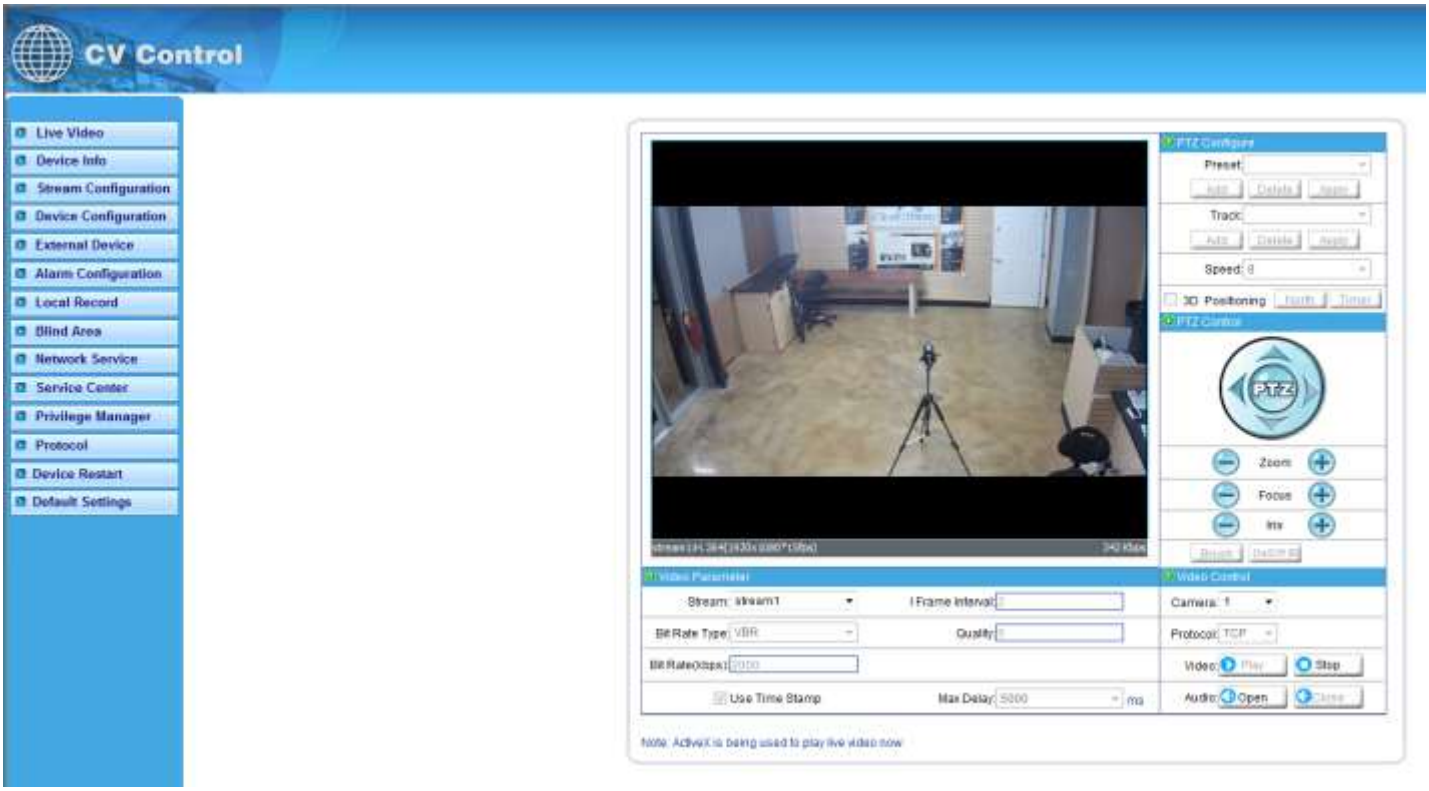
The default IP address is: 192.168.0.120 - The default User Name and Password is: admin

Chapter TWO - Device Configuration

2.1 live video

After you have logged in correctly, the webpage will display as below. Move the mouse over the video window and double click the left mouse button, this will change the page into full screen mode for the video stream. Other camera settings are located in the panel on the left side as labeled.

Clicking the right mouse button on the video window will open the Sensor configuration menu.



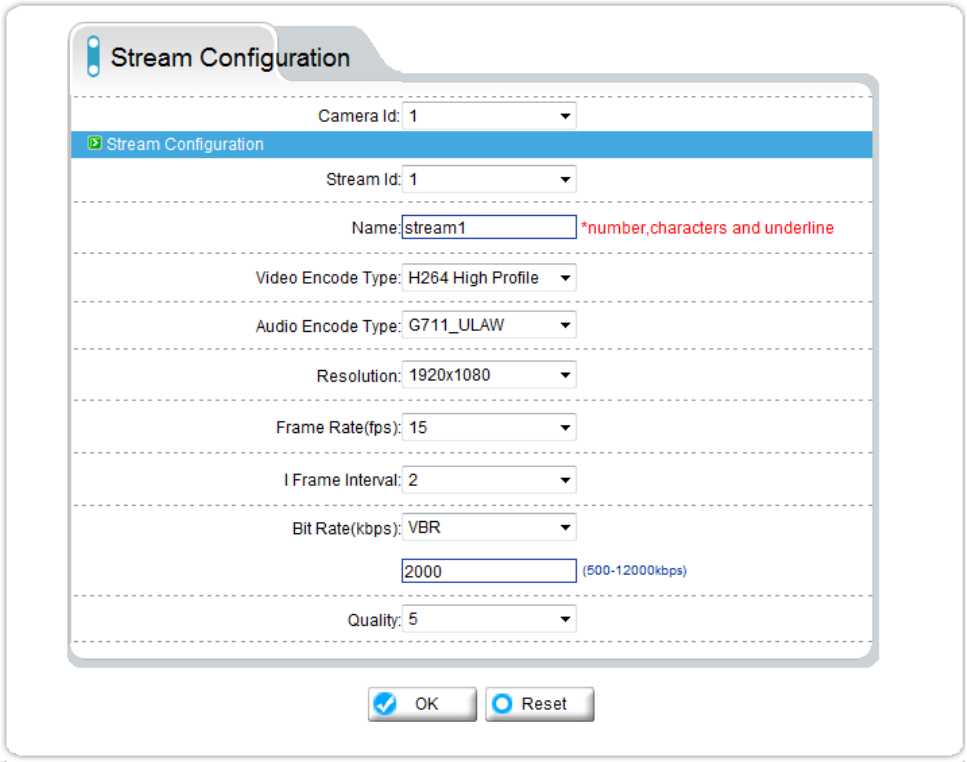
2.2 Device Information

To the left side of the main video window is the “Configuration Panel”, most settings are located there. IP Address configuration, Audio Settings, Network Ports, User Name, Passwords, are some examples.

2.2.1 Device Info: The Device ID & Name is set in this tab, the Hardware & Software Versions are viewable.

2.3 Stream Configuration

The Submenu listed on the left side labeled "Stream Configuration", enables you to configure the video stream settings for the camera. The screen below is an example seen when selecting this function:

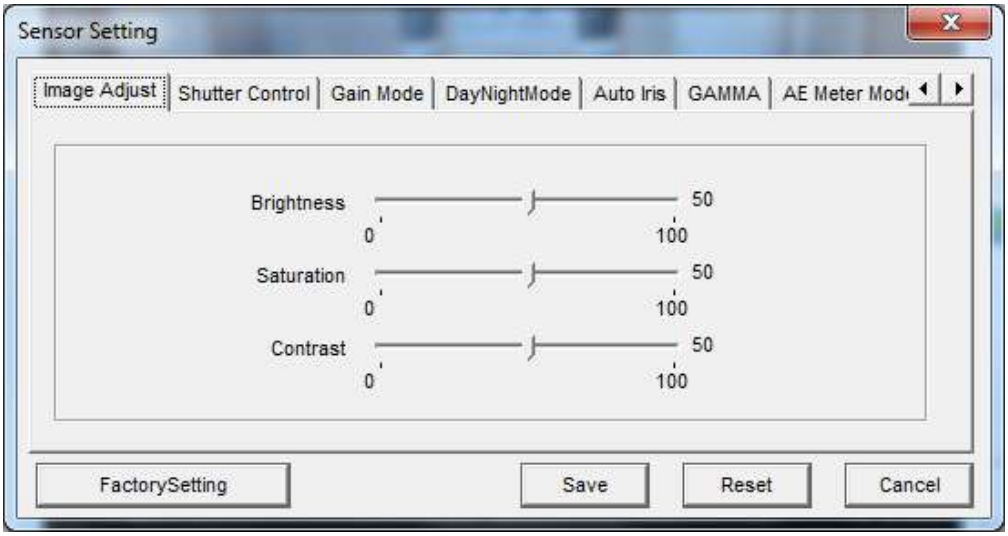


Each camera or video server can be configured for different video streams; each device has up to three different video streams. This let you set a high quality recording stream and a low bitrate stream for remote monitoring. Stream 1 & 2 are H.264, Stream 3 is MJPEG.

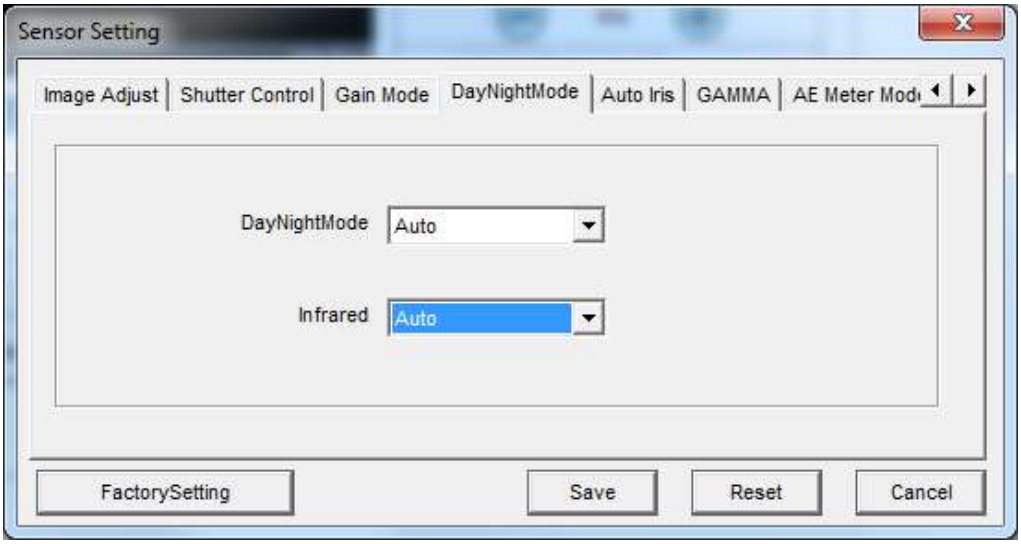
Resolution is based on camera specifications such as 1, 2 or 5 MegaPixel, sub resolution levels can be selected, streams can be divided into:1920x1080/1280x960/1280x720/1600x1200/D1/CIF/QCIF, etc.

Frame rate: PAL can be up to 25fps and NTSC up to 30fps
I Frame interval: time interval between I frames divided into 1/2/3/ seconds. The default value 2 should be used.
Bit Rate: CBR or **VBR**. CBR is constant bit rate, where the data is streamed at a constant value.
VBR is a variable bit rate, where compression of the video data can change relative to the percent of motion in the video image of the scene. The stream size is relative to the quality setting below.
Quality: Value 1-9 choose within quality. Higher quality values produce clearer images and larger data streams.

2.3.1 Sensor Settings (Config): These tabs control how the camera reacts to the install environment.



2.3.2 IR LED Control



The IR LED's can be manually controlled through the Day/Night tab, the Operation modes are: Auto, Off & On.

2.3.3 Bandwidth Optimization: Best configuration settings for IP Cameras: Open Sensor Config Menu:

1) Under Sensor Config menu, select the Bandwidth Optimization tab.
   Set Manual mode, Temporal = 40 and Spatial = 10
2) Gain Mode set to Auto, Max Gain (db) = 30db,
3) Shutter Control set to: Auto Shutter, MaxShutter = 1/15
4) Under Stream Configuration menu, select Stream 1, set VBR, High Profile
5) Set Quality 5 or 6 (5 is about 30-40% less bandwidth than 6)

These settings will decrease bandwidth by more than half AND provide better quality video

2.5.1 Local Network

Camera network IP address and related settings are controlled through this menu. Edit or Change the appropriate fields to match the network parameters the device is being connected to. You must click Apply and OK after making changes, in most cases the device will reboot with the new settings.

2.5.2 Device port

Control port: The default value is 30001, it communicates camera control functions including RS-485 & PTZ control through the network.

TCP audio and video port: The default value is 30002, TCP protocol uses this port for audio & video transmission.

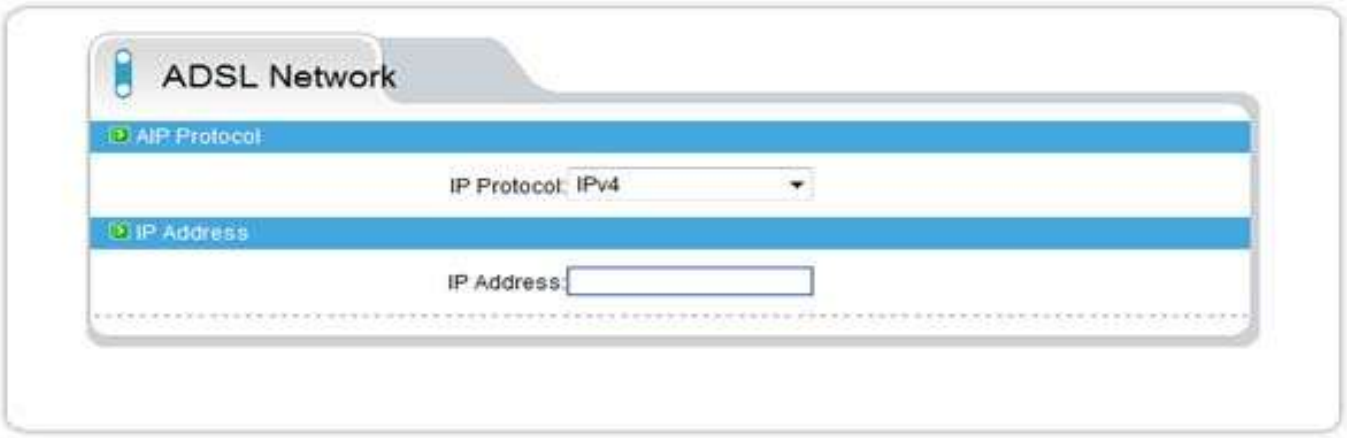
HTTP Port: Default value is 80, for Web page access. If the value is changed, the new value must be used when accessing the device in a browser. As an example, if the port is changed to 8080 and the address is 192.168.0.120, you would use the following URL structure: http://192.168.0.120:8080 in the browser address bar.

RTSP Port: Default value is 554, the video stream is delivered through this port. It can be used in media players capable of playing streaming video. VLC player & Windows Media player along with other devices can display a video stream from a camera or video encoder.

RTMP Port: Default value is 8080, Flash audio & video data is delivered through this port.

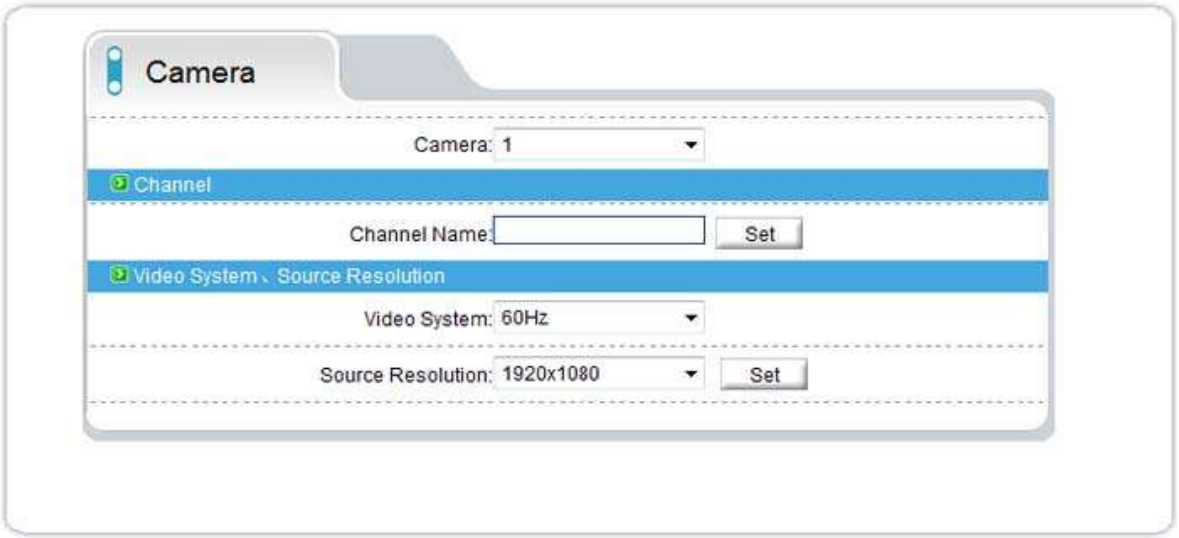
2.5.3 ADSL Network

PPPoE parameters are set under the Network Service tab. After valid data is entered and PPPoE is enabled, a successful dial-up connection to the internet will display the WAN IP Address obtained.



2.5.5 Camera

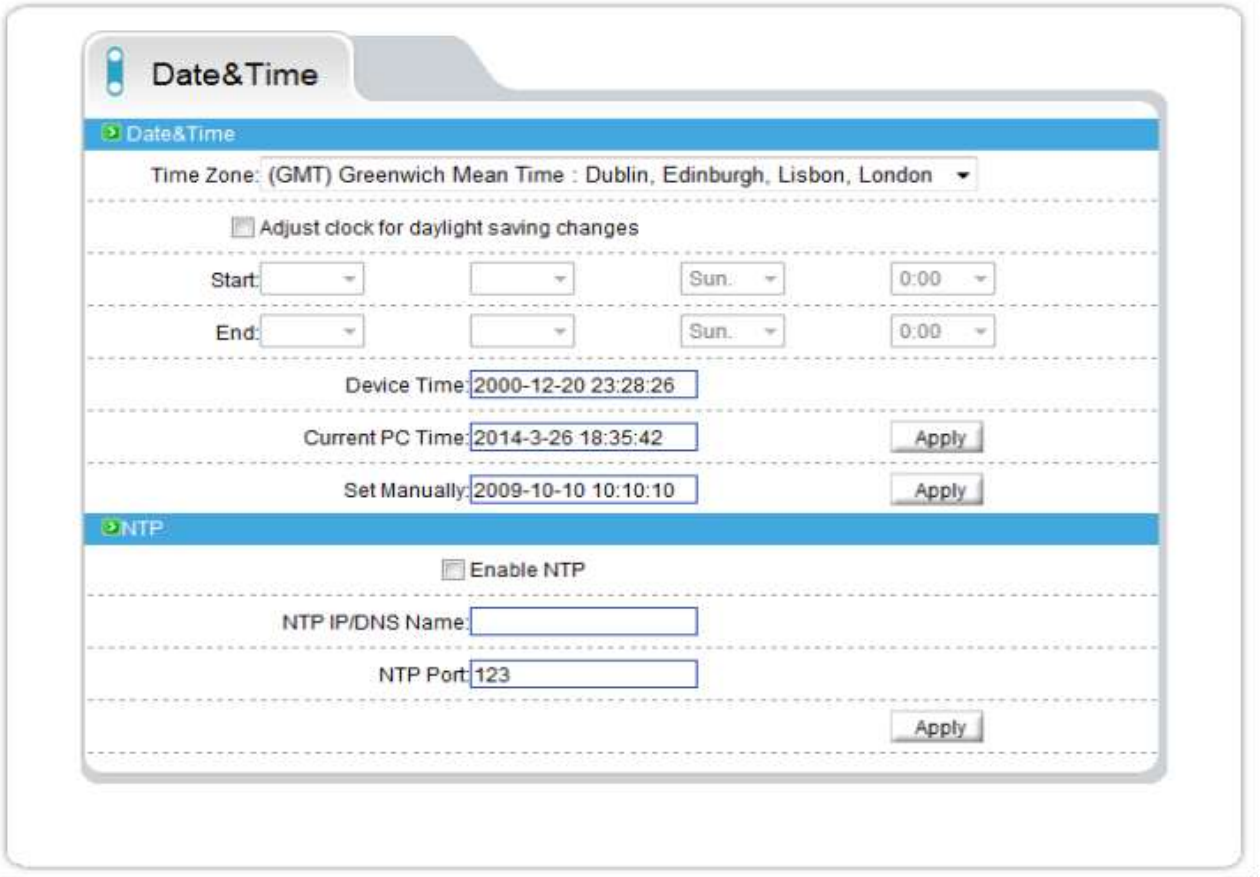
Camera Name: Channel Name option can be set, more options are available in the OSD menu.
The name of the camera will be displayed in the real-time Monitoring-Device list.
Video System: sets the PAL/NTSC, 50/60 Hz frequency output mode, based on model specifications.
Source Resolution: Sets video source output resolution, this is based on camera resolution and type.



2.5.6 Date & Time

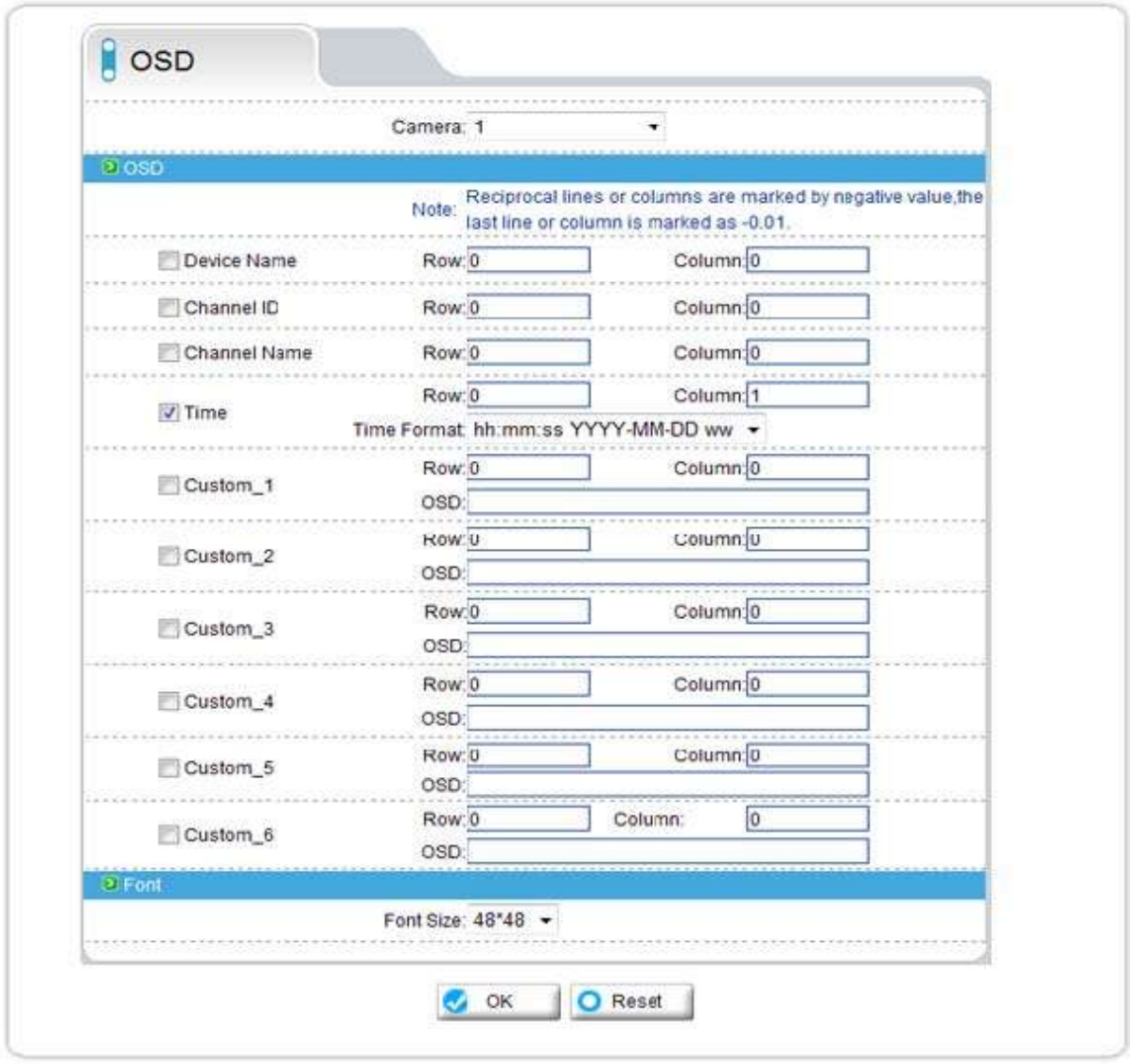
Camera date & time parameters are set through this tab. Manual entry, Time Zone, P.C. time sync and NTP server connection, are available options for setting the camera time.

NTP**:** Network Time Protocol: The camera can be configured to connect to a NTP source for automatic time sync. This ensures the correct time will be available for display and scheduled camera functions.

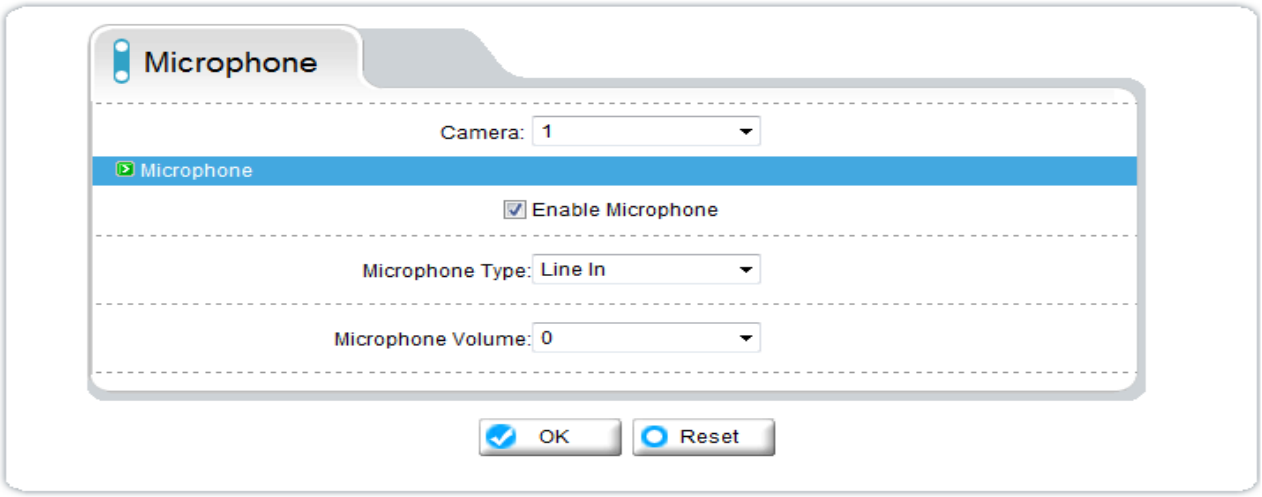


2.5.7 OSD settings

This tab allows customization of the information displayed as OSD Video Overlay. A check placed in the box to the left of the listed label will enable it to display on the video stream.



2.5.8 Microphone setting



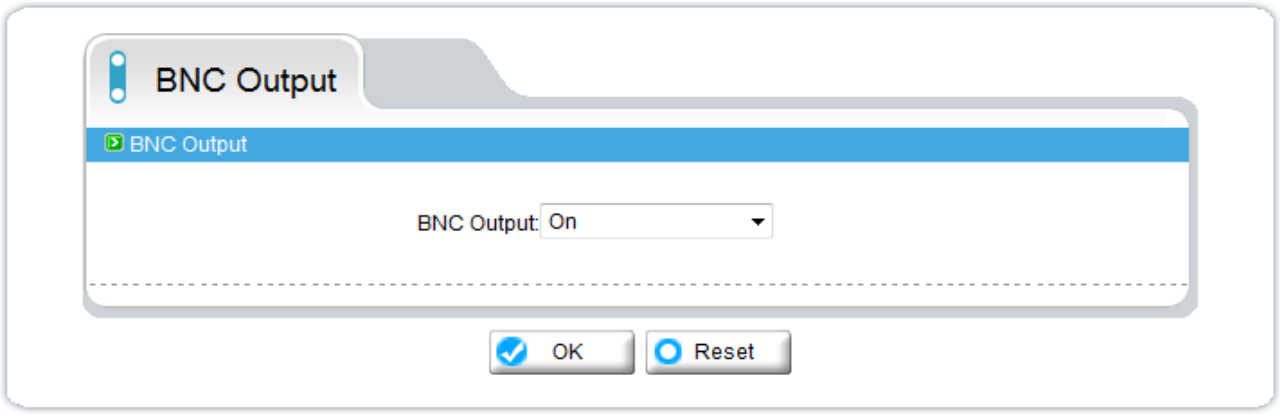
Microphone Type: Internal: built-in microphone. (if fitted)
External: Where supported will select the Audio Input as audio source for Line in:
Audio is encoded inside the data stream, audio format is set under the Streaming Settings. A check placed in the box on the left side of the Enable Microphone label, enables Mic or Line input.
Microphone Volume controls the signal level.

2.5.9 Dome PTZ

IP PTZ address for RS-485 is set though this function

2.5.10 BNC Output

This setting enables the composite output for Technician use during install, it also will display the Current IP Address of the camera at the bottom of the screen. This allows the installer to know the IP Address of the camera, without using a computer.



2.5.11 system service

For factory use & tech support, leave as set.

2.5.12 System Language Configuration

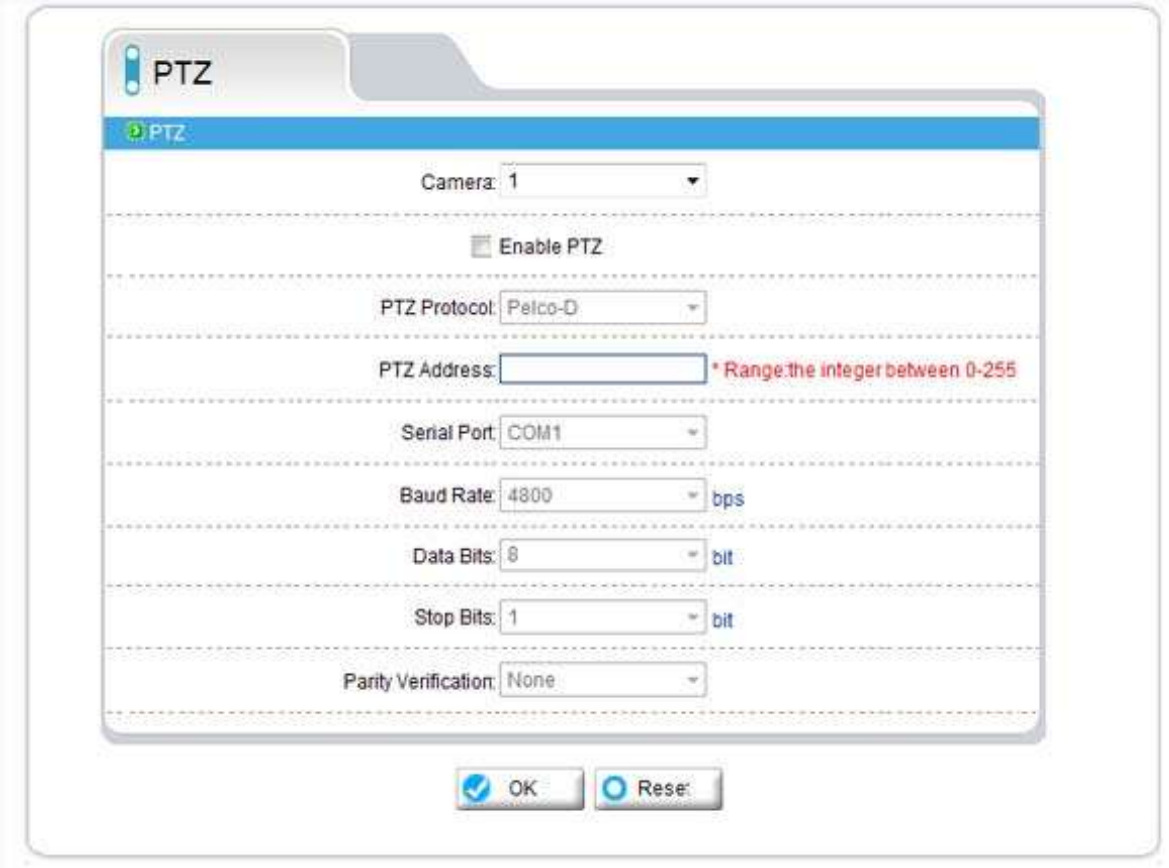
Selects the language of the control menu for the IP Camera.

2.6 External Device

The IP Camera can connect to external equipment using RS-485 communications.

2.6.1 PTZ

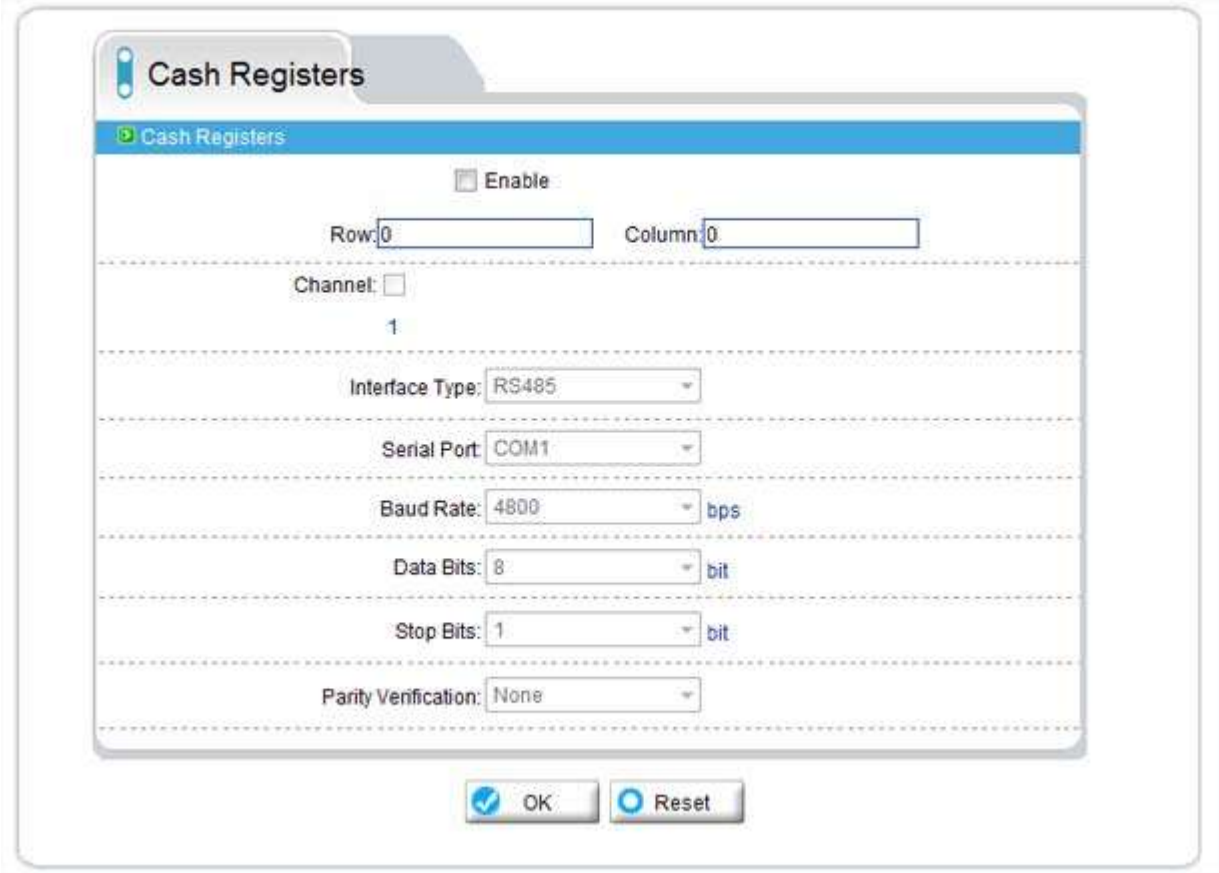
The communications protocol, address and baudrate parameters are set in this tab.



2.6.2 PTZ Keyboard

PTZ keyboard communication parameters are set in this tab. Data entered needs to match the equipment the camera is being connected to.

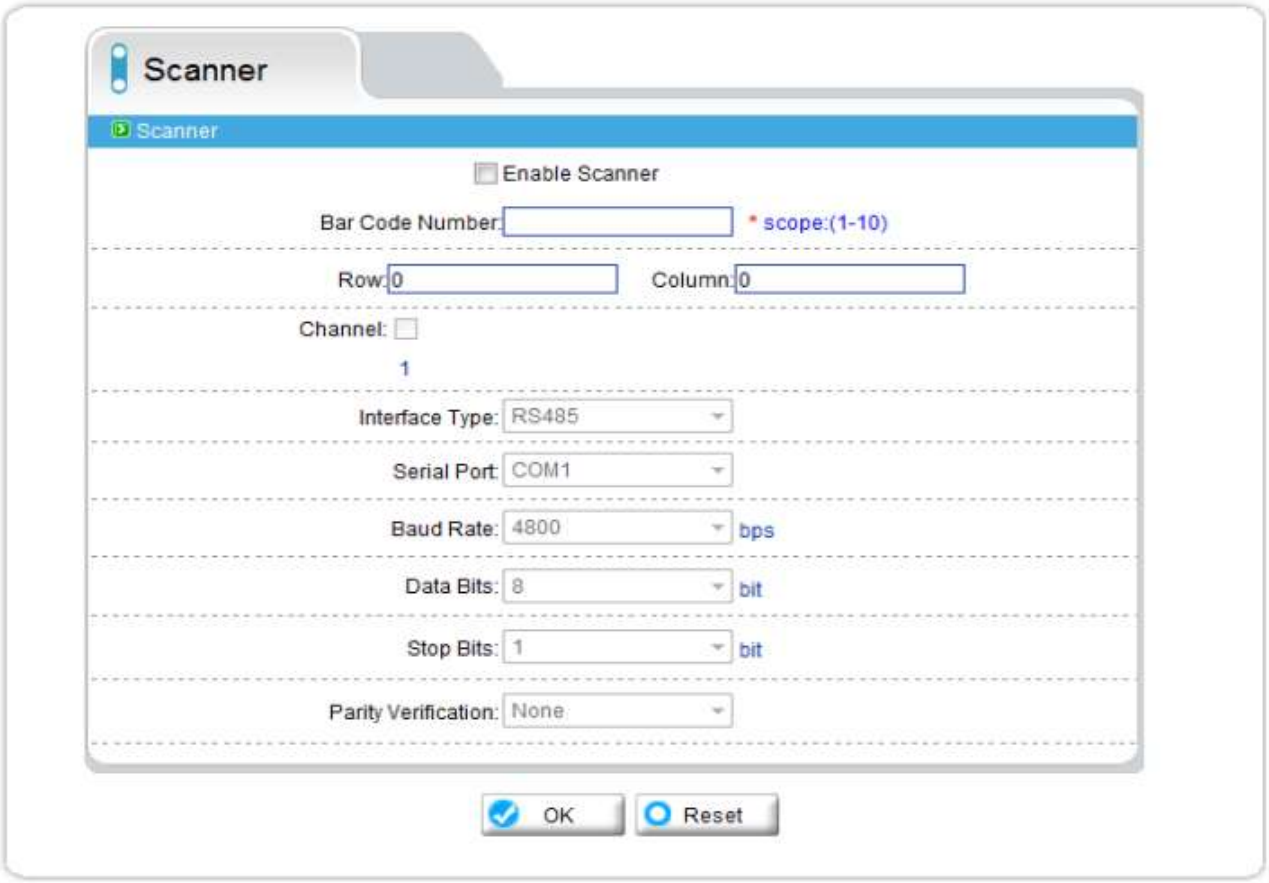
2.6.3 Cash Registers



External RS-485 protocol & communications parameters are set through this tab. This provides an interface for cash registers to display the output data of the receipt printer as OSD information.

Note: Special external equipment is required to support this option.

2.6.4 Scanner



A scanner can be interfaced to the camera, the resulting data scans can be displayed as an OSD overlay.

2.7 alarm configuration

Alarm configuration, including alarm I/O port configuration, Disk warning, I/O alarm linkage, and motion detection alarm settings are located under this tab.

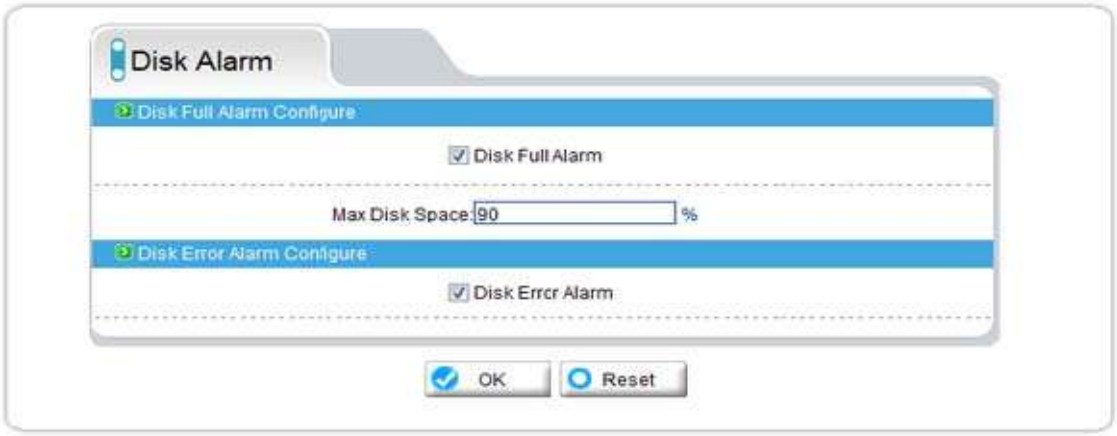
2.7.1 Alarm I/O Parameter Configuration

Alarm Input: Select the alarm input configuration ID, Trigger can be set for High or Low level transition.
Alarm Output: Select the alarm output configuration ID, The dry contact output can be set as N/C or N/O. There is an option for Switch Mode & Pulse Mode, Pulse Mode causes the contacts to oscillate at the specified frequency. A pulse can also be output, its duration is set in the Alarm Time box. Note: the unit of Alarm Time is millisecond

The input and output of the camera is low voltage & low current.

NEVER CONNECT 110 VAC to the camera input or output.

2.7.2 Disk Alarm Configuration

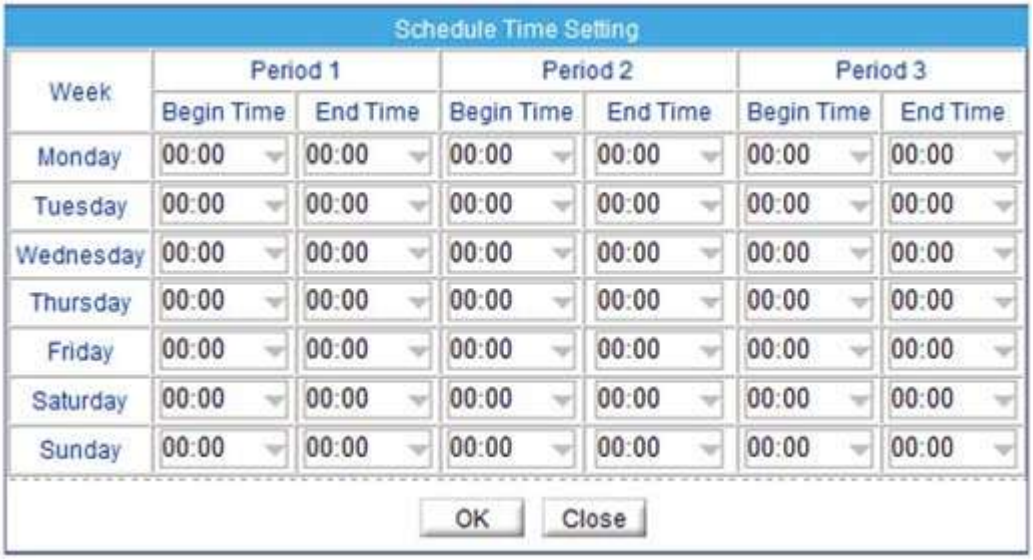


Disk Alert configuration including: disk error alarm and disk full alarm. Disk alarm events will be recorded in the alarm log.

2.7.3 I/O Alarm Linkage Configuration

Note: Before Recording, “Local Record” & “Record Policy” parameters must be configured.

First select the Enable check box, then set the recording schedule. Output response to alarm conditions can include PTZ activation to a preset or other motion commands (Tour, Track, Scan).

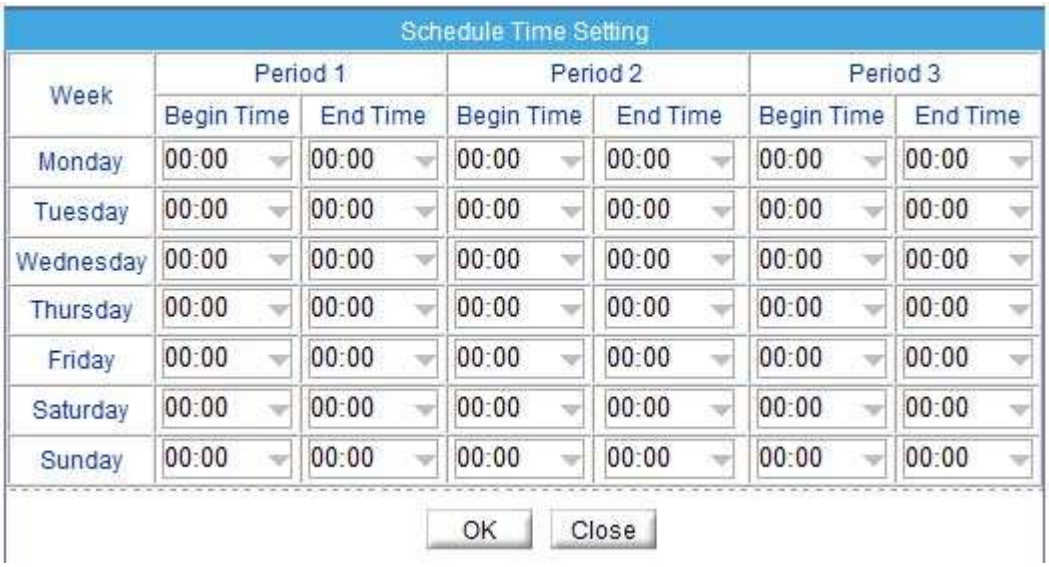


2.7.4 Motion Alarm Configuration

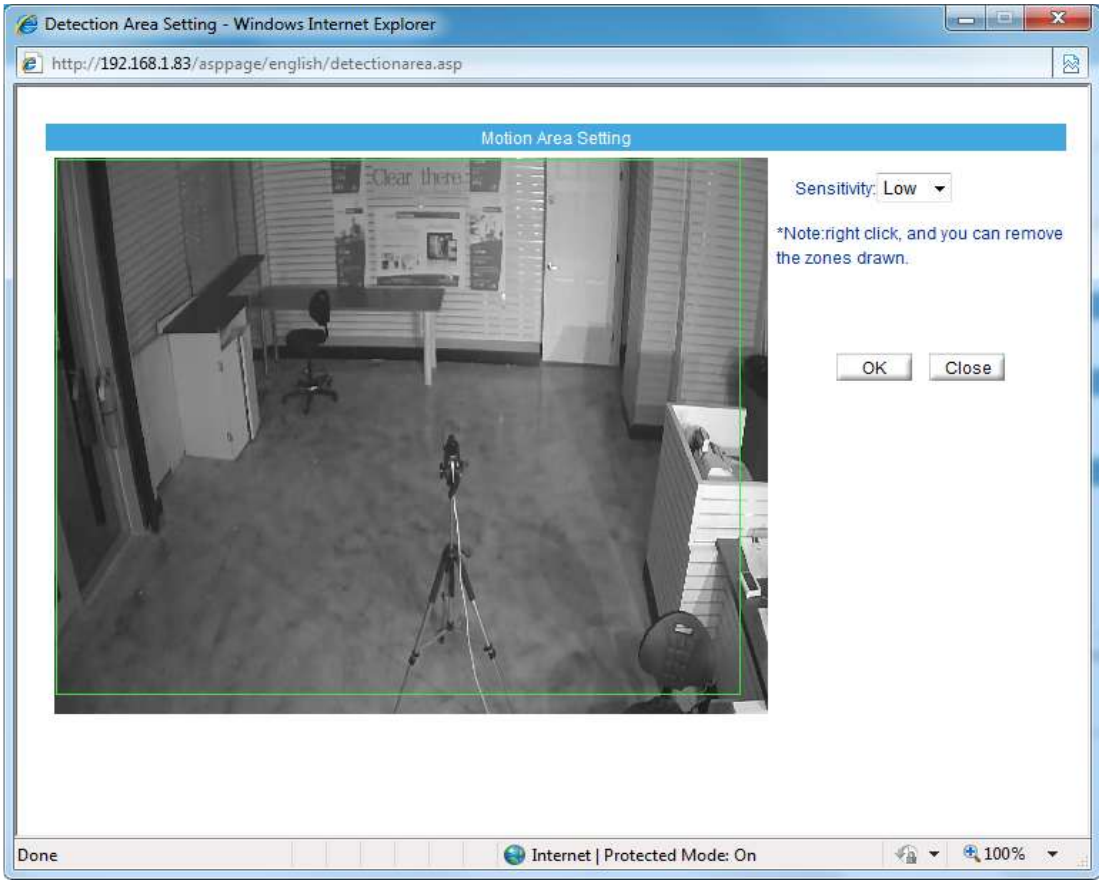
Note: Before Recording, “Local Record” & “Record Policy” parameters must be configured.

First enable Motion Parameter check box & set schedule. Configure PTZ movement response to motion detect trigger.

Set the schedule for detecting motion & click OK. Select Motion Area and outline the area of the video scene shown in the Pop-Up window, that you want to use as a trigger.



2.7.5 Motion Area Setting

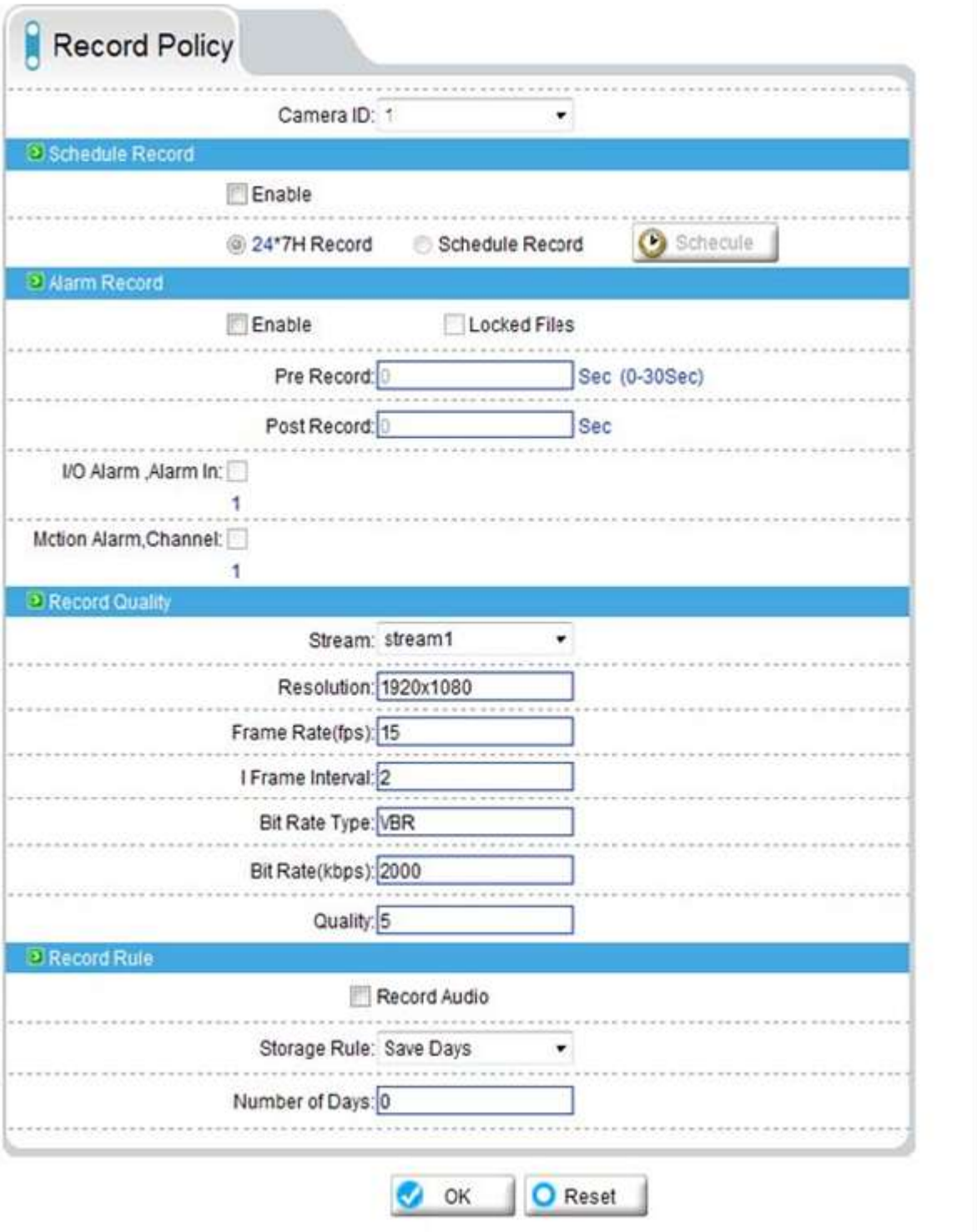


Motion Area: Press & hold the left mouse button on the video image displayed in the Pop-up, drag boxes to cover the area you want to detect. Up to 8 zones can be added. Use the right mouse button to delete zones.

2.8 local Record

Settings for selecting media source and parameters, SD Card, NAS & FTP.

2.8.1 Record Policy



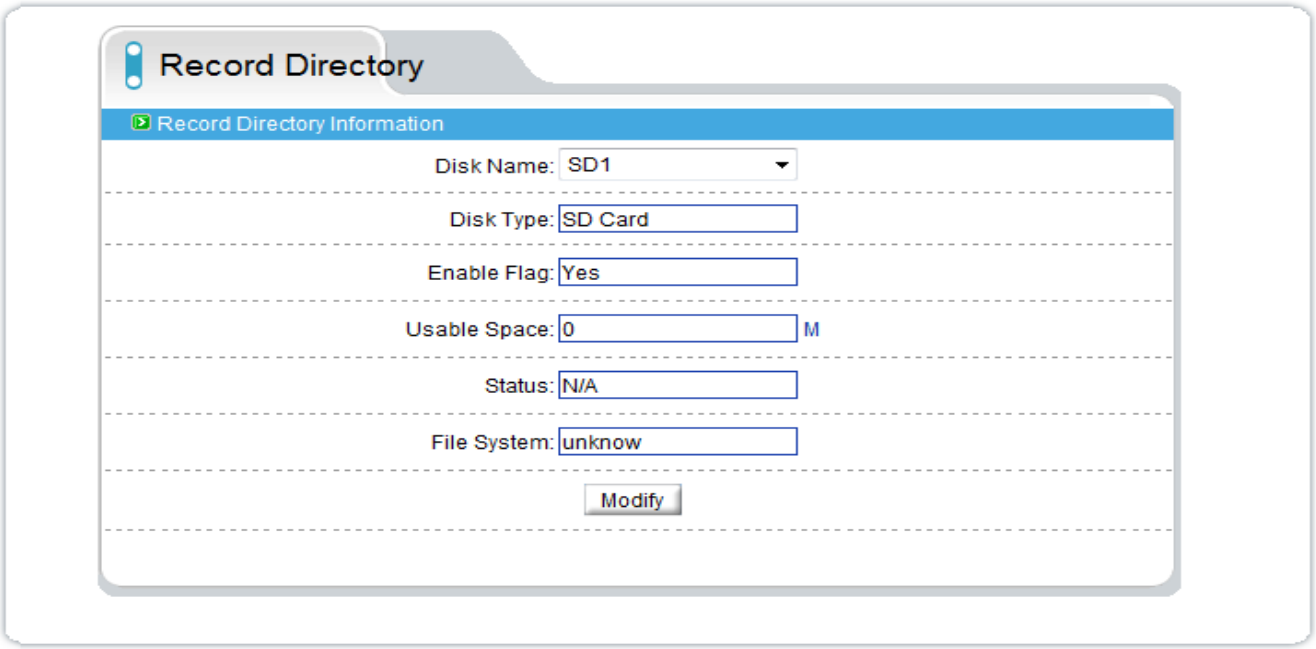
Select the camera ID, Stream #, Recording Quality and Alarm Record parameters.
Alarm record: Pre and post record length time options are set here.
Days to keep video: Largest number of days is: 9999 days.
Stream: Record selected video stream ID #.

Note: Triggered Recording Time; the total length of time=Length of pre-recorded+ Event time length + Length recording continued.

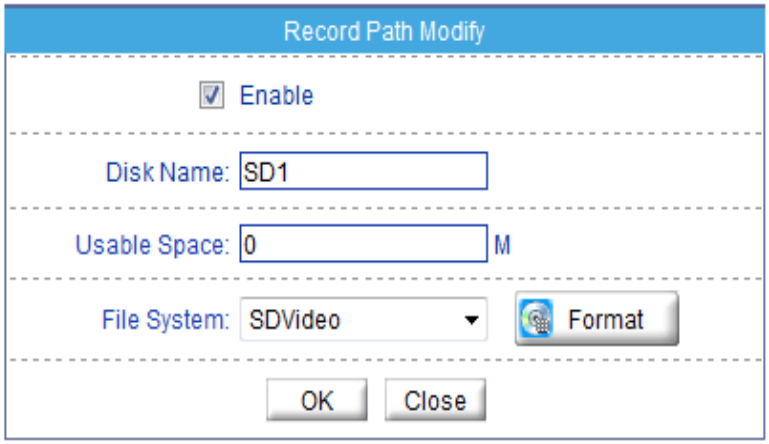
Example: Set pre-recorded length to10 seconds, Length of continued recording to 10 seconds, Trigger motion detection for the duration of 5 seconds.
The recording time total length =10+5+10=25 seconds.

2.8.2 Record Directory

Three media location types are available for storing recorded video: SD card, NAS and FTP.

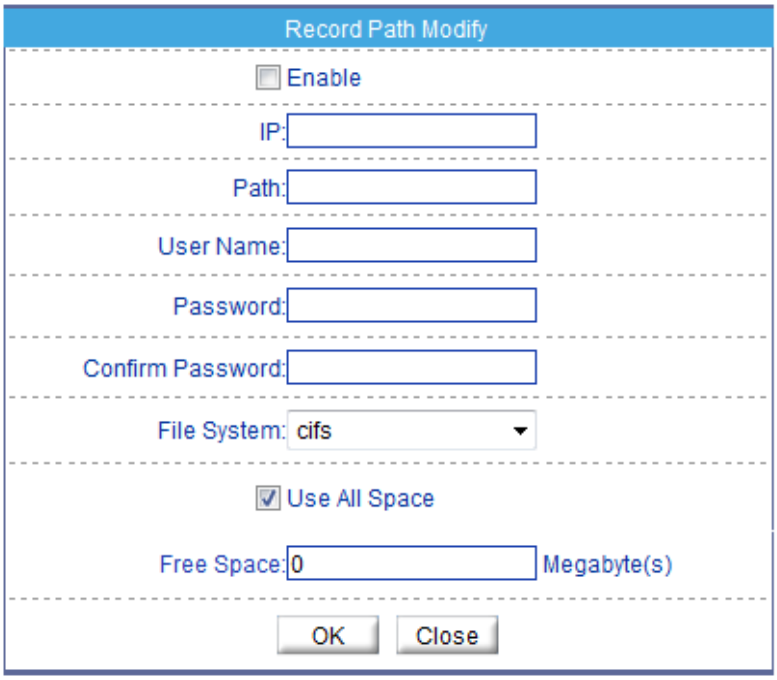


1. SD Card: Select SD Card as disk type, click the Modify button, SD Card format menu is displayed below:



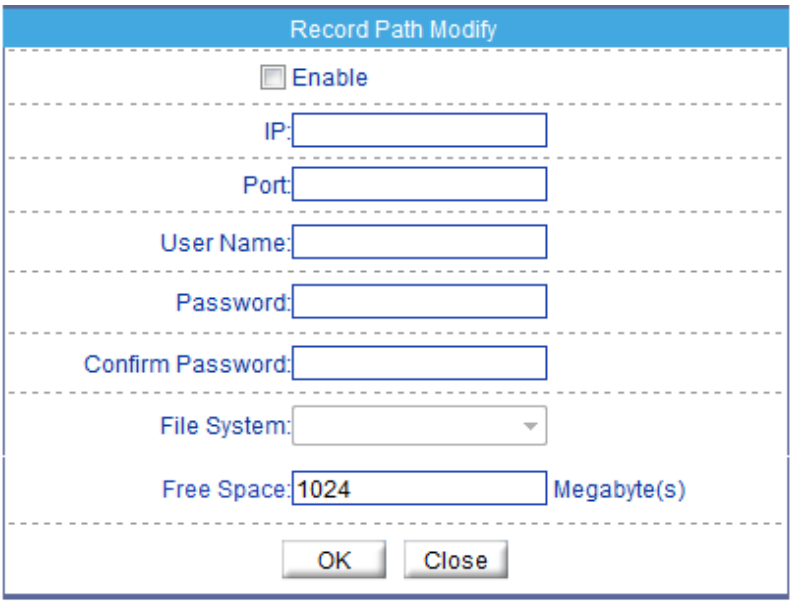
Disk Name: can be set to directory name .
Usable Space: the directory size can be limited by entering a value or unrestricted by entering 0.
File System: divided into SD Video and ext3.

2. NAS: Select NAS from the Disk Type and click Modify, the following menu will display:



Configure NAS IP Address, Path, Username and associated parameters to record directly to NAS. Click Check Box to enable NAS function

3. FTP: Select FTP as Disk Type and click the Modify Button, the following menu will display:



Enter FTP IP Address, Port, Username & password info to configure direct recording to FTP location. Select the Enable Check Box to use FTP storage function for video.

2.9 privacy Masking setting

A privacy mask can be created to prevent viewing & recording of an area,
only 8% of the image area can be masked . Simply drag a box over the area you wish to block.
The area can be cleared using the right mouse button.

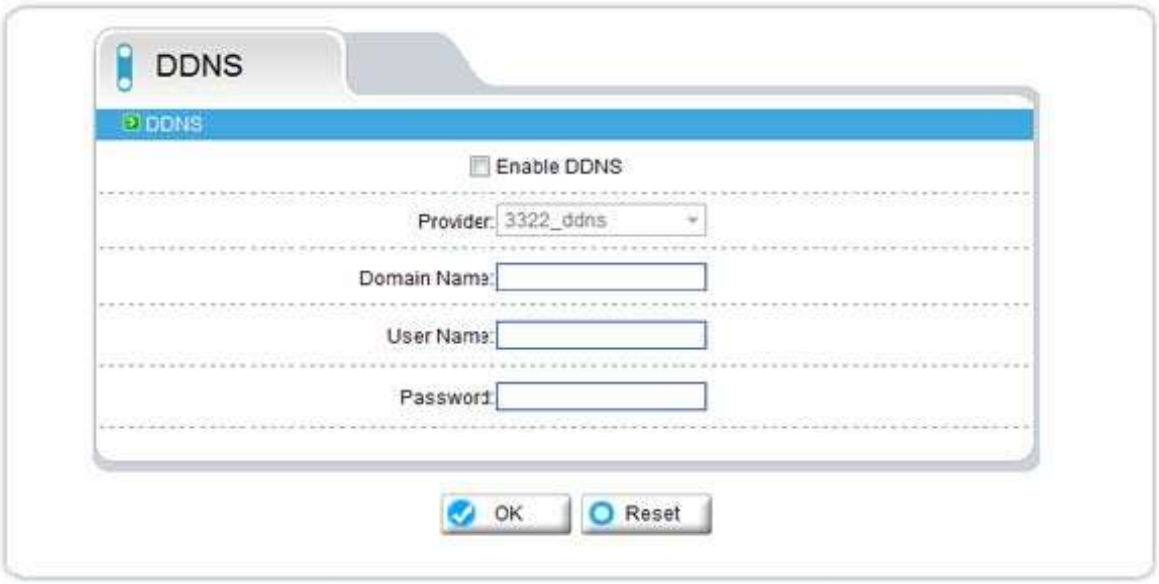
2.10 Network Service

2.10.2 PPPoE

PPPoE: The camera supports connections to equipment requiring PPPoE for WAN access.
After the camera client is configured with valid login credentials, the camera will attempt to connect and obtain a WAN IP Address. Upon successful connection, the WAN IP Address is displayed in the ADSL Network Tab.

Note: For first time setup, configure all user information & restart equipment to obtain IP.

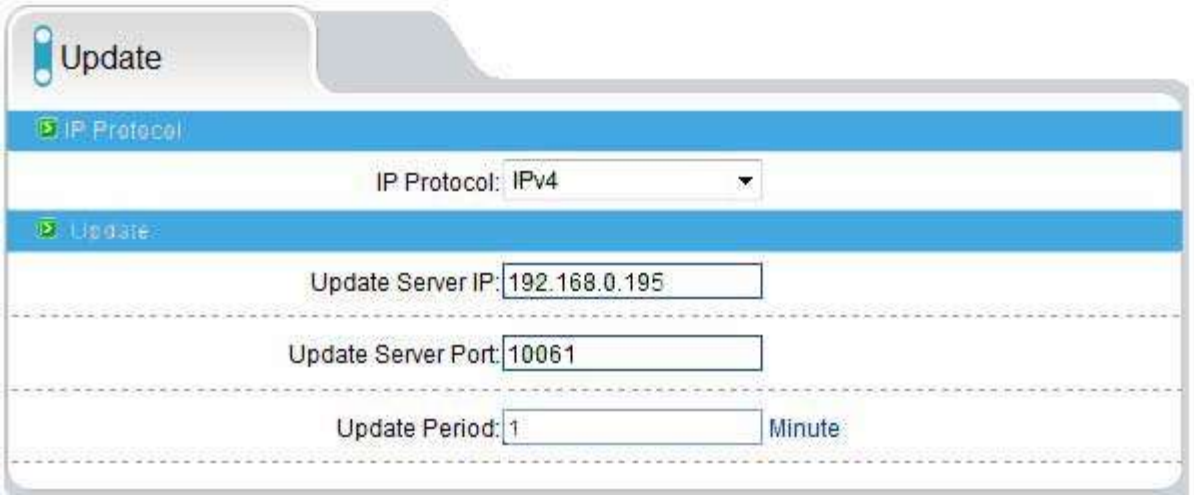
2.10.3 DDNS



DDNS: Dynamic Domain Name Service; If the WAN that the camera is connected to does not have a static IP Address, such as a PPPoE connection, DDNS can be used to easily locate the camera from the internet.
The camera DDNS supports DynDns.com service.

2.10.4 Update

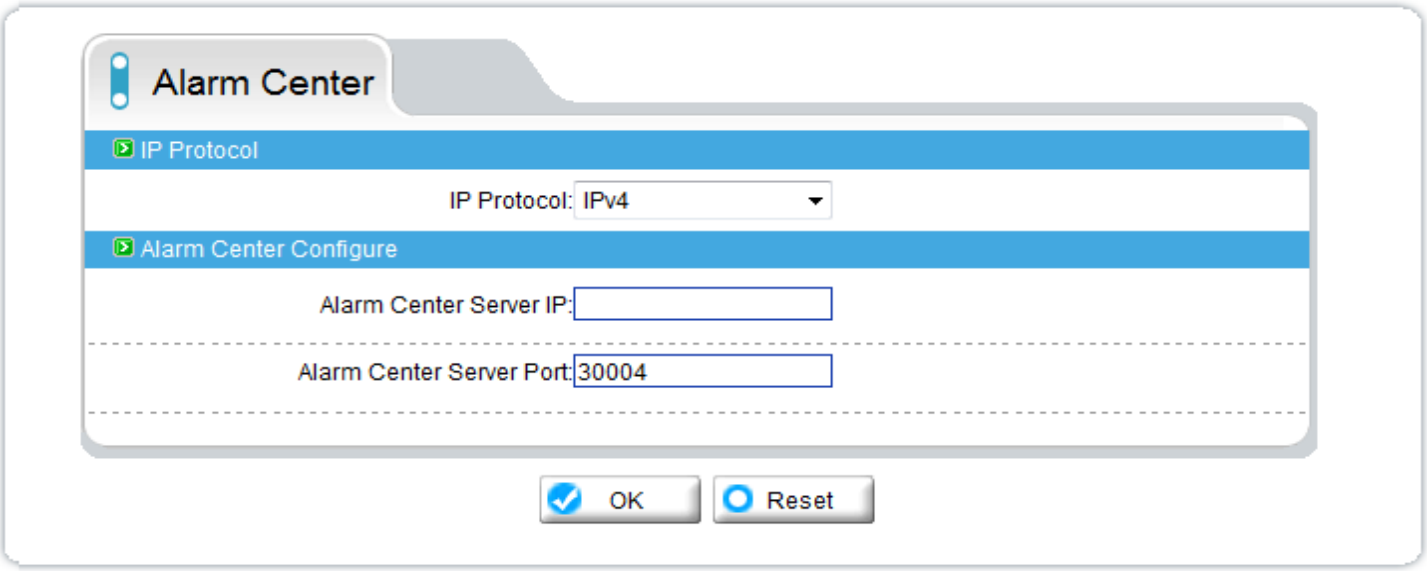
Optional upgrade configuration menu. This method of upgrade is not currently used, if an update is required, Tech Support will provide the correct version of firmware and an automatic install tool with detailed instructions.



2.11 Service Center

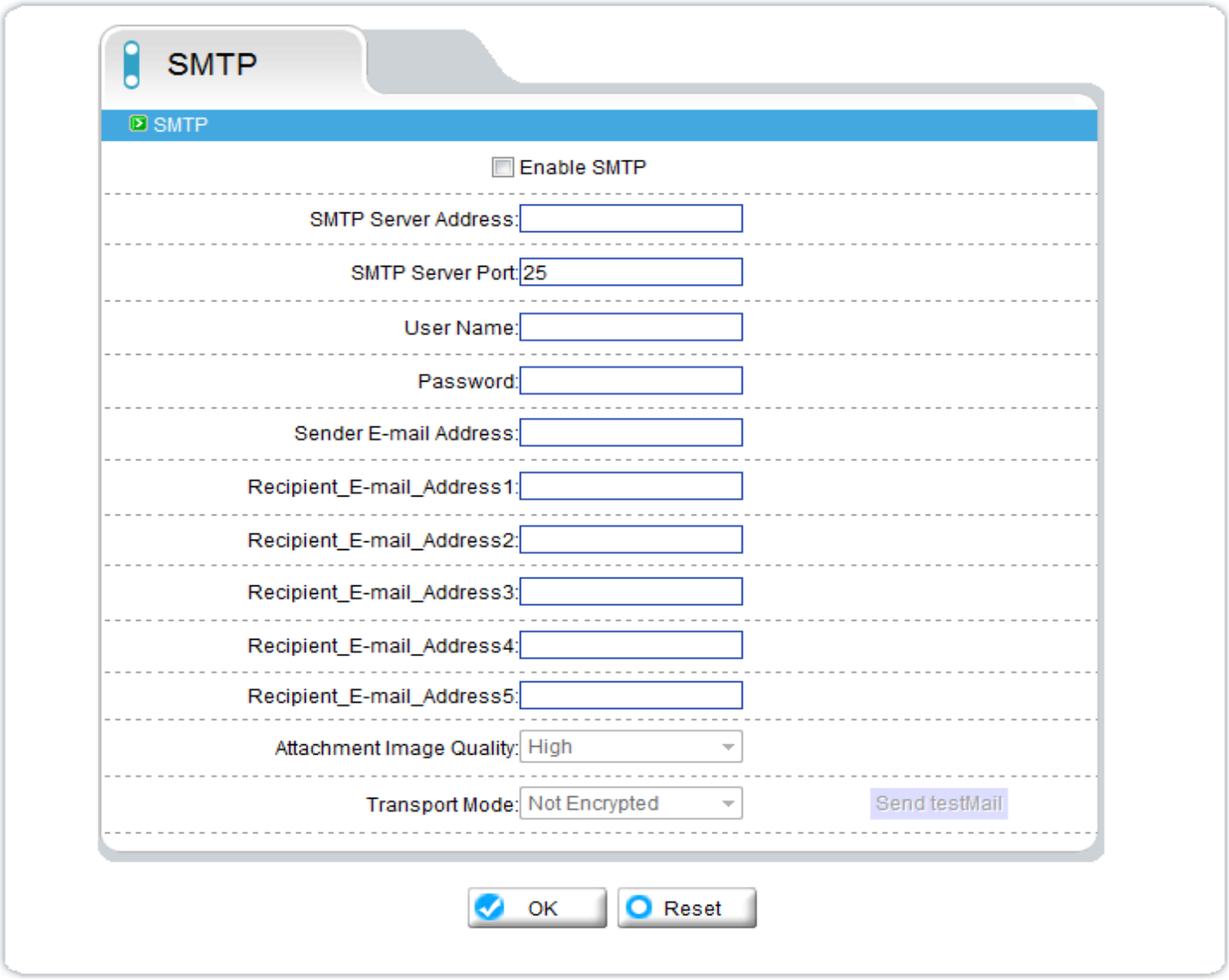
2.11.1 Alarm center

Alarm Center: Configures the IP Address and Port of the Alarm Center Server.



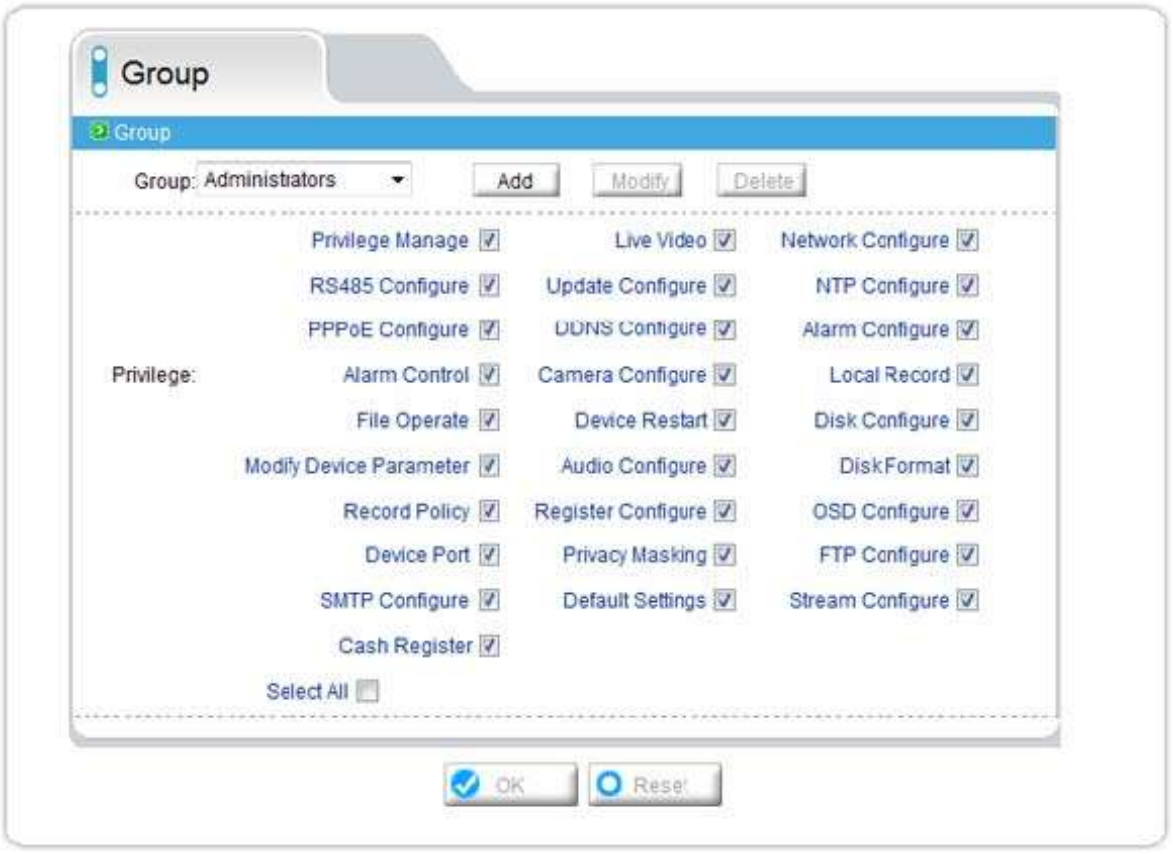
2.11.2 SMTP

SMTP: Enter the SMTP Mail Server info from your ISP or Service Provider. This enables the sending of images & messages to the listed Mail recipients when the Alarm Trigger conditions are reached for I/O or Motion.



2.12 Privilege Manager

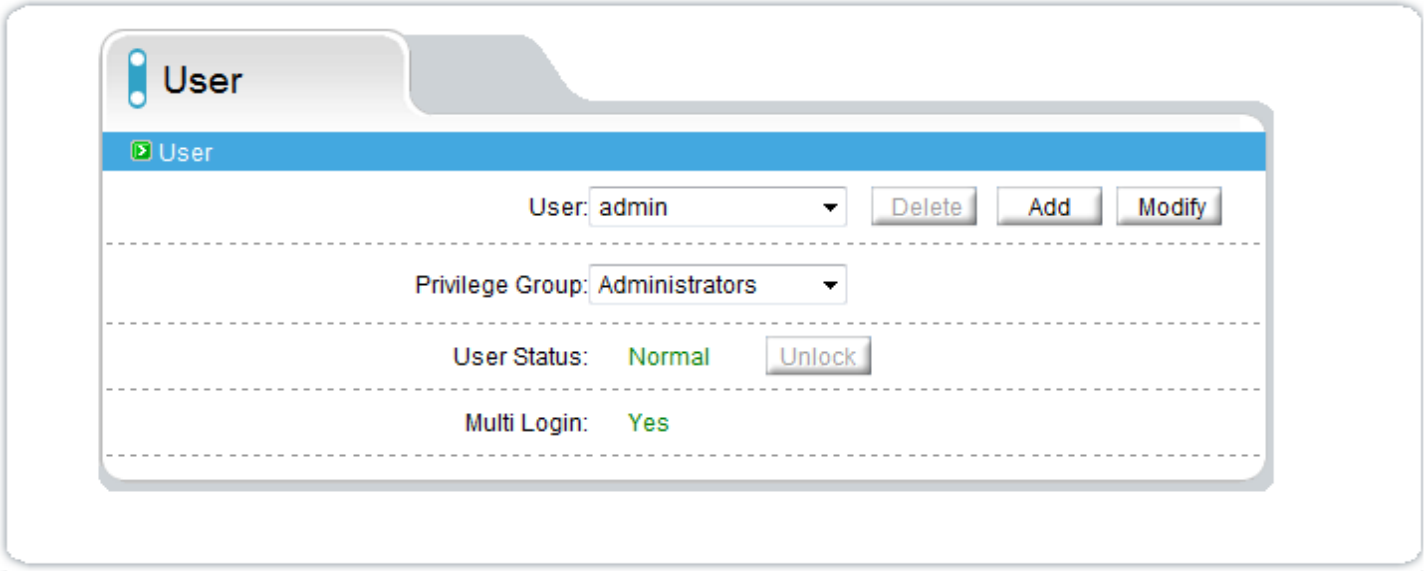
2.12.1 Group Authority Setting



Groups with different privilege levels can be created to protect the camera from access and unauthorized setting changes, while allowing controlled access to the camera for viewing. Groups can be added or removed, the Administrators Group basic permissions cannot be deleted.

2.12.2 User setting

Users can be added, removed or modified and be attached to any group for permissions.
User passwords can also be created and changed. The default user admin, cannot be deleted. Options for Multi Login can be set to allow or secure multiple logins by the same account at the same time.



2.13 protocol

2.13.1 Protocol information

This is a view only menu to check the protocol version, Name & Build.

2.13.2 Security

When the ONVIF protocol is in use, this selects the option to use security credentials

2.14 Device Restart

Select the Restart button to reboot the camera.

2.15 Default settings

The parameters of the IP equipment will restored to the factory value. This will remove any User ID's , Passwords and IP Addresses that were added. The camera will be restored to the default IP Address 192.168.0.120 and User / Password: admin.