

**S-A H.265  
Corner IP Camera**

**User's Manual**

Ver. 1.1

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# 1. Overview

The S-A H.265 Corner IP Camera is a hybrid surveillance solution featuring zero blind spot field of view and the latest developed HDR engine. The engine delivers an outstanding high dynamic range plus excellent low light performance, ensuring sharp image quality for surveillance through the day. In addition, the corner camera carries a unique, refreshing design to assimilate into the environment or interior decorations of the space. Along with the quick-release camera module, users can easily access from the front of the camera which provides easiness and simplicity for installation, maintenance, repairing, and replacement.

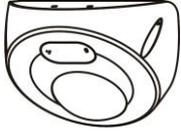
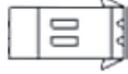
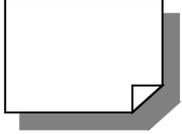
The Corner Camera is the next-generation professional camera which offers a unique solution for critical environments like correctional institution, healthcare facilities, elevator, detention center, etc.

## 1.1 Features

- Multiple Progressive Scan CMOS Sensor support up to 5M Resolution
- Multi Exposure HDR
- Multi Codec Support (H.265 / H.264 / MJPEG)
- Low Latency Streaming
- Quad Streams Support
- True Day/Night Function (ICR)
- IR LED Support (up to 15M)
- 3D Motion Compensated Noise Reduction (MCTF)
- Smart Event Function-  
External Input/ Motion Detection/ Network Failure Detection/ Tampering Alarm/ Periodical Event/ Manual Trigger/ Audio Detection
- Text Overlay and Privacy Masks
- Micro SD/SDHC/SDXC Card Support
- ONVIF Profile S/G/T/M Support
- Smart Low Bitrate Control
- Vandal Proof
- ZDT (Zero Down Time)

## 1.2 Package Contents

Please check the package containing the following items listed below.

 <p>S-A H.265 Corner IP Camera</p>	 <p>2-Pin Power Terminal Block</p>	 <p>Quick Guide</p>
 <p>Plastic Anchor (x8)</p>	 <p>M4x31mm Self-Tapping Screw (x8)</p>	 <p>Security Torx</p>

 **NOTE:** The supplied self-tapping screws are for soft substances / materials such as wood. For other installation environments such as cement wall, users **MUST** pre-drill and use plastic anchors before fastening the supplied self-tapping screws on the wall.

 **NOTE:** Do not replace batteries of the camera. Risk of explosion may occur if the battery is replaced by an incorrect type.

 **NOTE:** Leaving a camera in an extremely high temperature surrounding environment can result in an explosion or the leakage of flammable liquid or gas.

 **NOTE:** Camera subjected to extremely low air pressure may result in an explosion or the leakage of flammable liquid or gas.

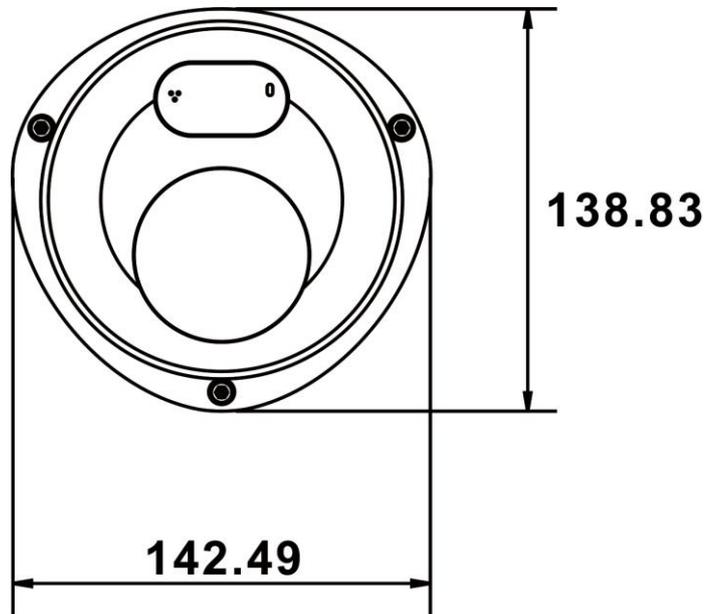
 **NOTE:** The means of power cord of adapter should be connected to a socket-outlet with earthing connection.



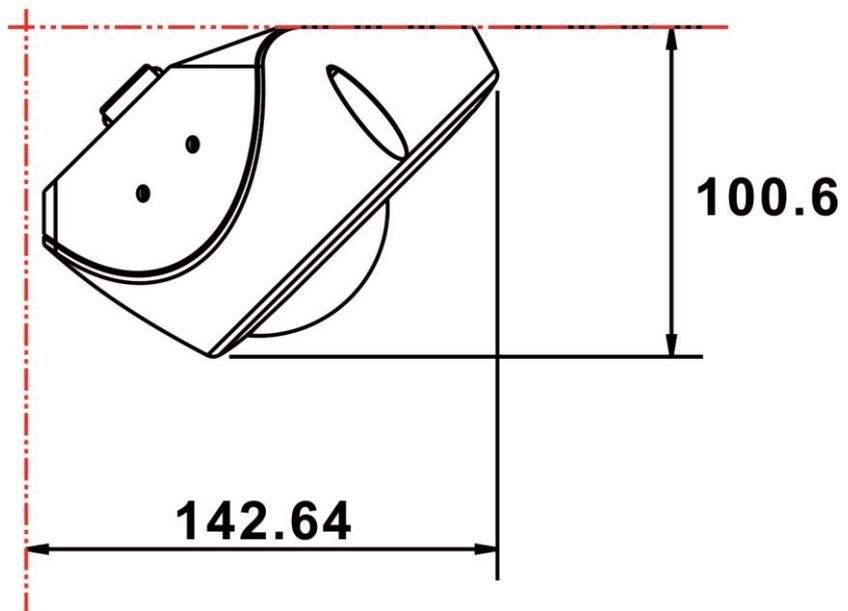
**NOTE:** The product is intended to be supplied by a UL Listed Power Unit marked "L.P.S." (or "Limited Power Source") and is rated 1) 12Vdc, 0.53 A min. (supplied by power adaptor), 2) 24Vac, 50/60Hz or 50/60Hz, 0.48 A min. (supplied by power adaptor), or 3) 48Vdc, 0.13 A min. (supplied by PoE), Tma = 55 degree C. If further assistance with purchasing the power source is needed, please contact DynaColor, Inc.

### 1.3 Dimensions

The dimensions of the camera are shown below.



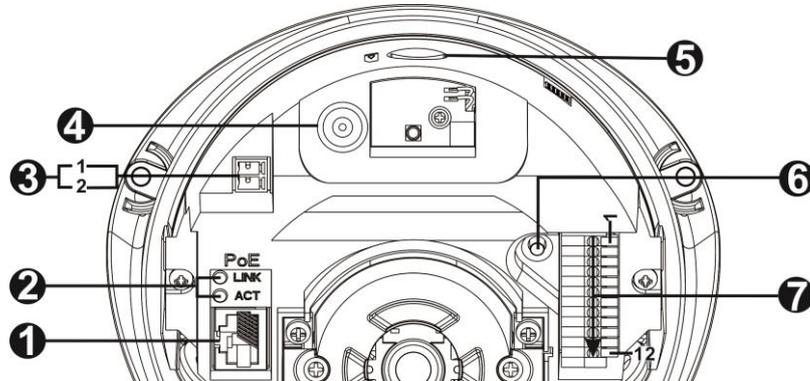
**Unit: mm**



**Unit: mm**

## 1.4 Connectors

The diagram below shows the default button, microSD card slot and various connectors of the camera. Definition of each connector is given as follows.



No.	Connector	Pin	Definition	Remarks	
1	RJ-45	-	For network and PoE connections		
2	Network LEDs	-	For network connection and activity indication		
3	Power (DC 12V / AC 24V )	1	DC 12V +	AC 24V 1	Power connection
		2	DC 12V -	AC 24V 2	
4	Built-in Microphone	-	Audio In		
5	microSD Card Slot	-	Insert the microSD card into the card slot to store videos and snapshots. Do not remove the microSD card when the camera is powered on.		
6	Default Button	-	Press the button with a proper tool for at least 20 seconds to restore the system.		
7	Alarm & Audio I/O	1	GND	Ground connection	
		2	BNC	For analog video output	
		3	GND	Ground connection	
		4	Audio Out R	Audio Out (Line Out)	
		5	Audio Out L		
		6	Audio In R	Audio In (Line In)	
		7	Audio In L		
		8	Alarm In 2 +	Alarm connection  #Do <b>NOT</b> connect external power supply to the alarm I/O connector of the camera.	
		9	Alarm In -		
		10	Alarm In 1 +		
11	Alarm Out -				
12	Alarm Out 1 +				



**NOTE:** To avoid audio quality degradation, do **NOT** connect built-in microphone and external audio-input device (via Line-in) at the same time. So does the audio-output connection.



**NOTE:** It is not recommended to record with the microSD card for 24/7 continuously, as it may not be able to support long term continuous data read/write. Please contact the manufacturer of the microSD card for information regarding the reliability and the life expectancy.

## 2. Camera Cabling

Please follow the instructions below to complete the cable connections.



**NOTE:** This camera must be installed by qualified personnel and the installation should conform to all local codes.

### 2.1 Power Connection

For power connection, please refer to section [Connectors](#). Alternatively, users can power the camera by PoE if a Power Sourcing Equipment (PSE) switch is available. Please refer to the section below for Ethernet cable connection.



**NOTE:** If the device is powered over Ethernet, make sure the PSE is connected to the network.

### 2.2 Ethernet Cable Connection

To have best transmission quality, cable length shall not exceed 100 meters. Connect one end of the Ethernet cable to the RJ-45 connector of the camera, and plug the other end of the cable to the network switch or PC.



**NOTE:** In some cases, Ethernet crossover cable might be needed when connecting the camera directly to the PC.

Check the status of the link indicator and the activity indicator LEDs. If the LEDs are unlit, please check the LAN connection.



Green Power LED lights up when the camera is powered up.

Orange Network LED (1) flashes when data is being transmitted over network, (2) lights up for good network connection.

### 2.3 Connect Alarm I/O

The camera supports one alarm input and one relay output for alarm application. Refer to section [Connectors](#) for pin definitions.



**NOTE:** Do **NOT** connect external power supply to the alarm I/O connector of the IP camera.

## 2.4 Camera Installation

The following description demonstrates how to directly install the camera to the corner.

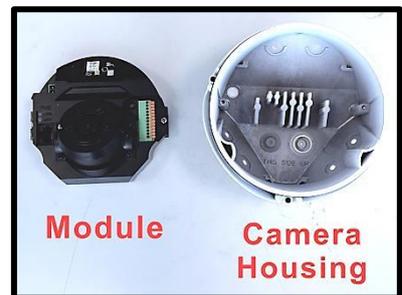
### Step 1:

Loosen the three security screws on the camera with the supplied security torx and open the dome cover.



### Step 2:

Loosen the two screws of the camera module and remove the camera module from the camera housing.



### Step 3:

There are two cable entry holes of the camera housing (with waterproof cable grommets). Choose the desired cable entry hole and drill a hole in the cable grommet.



The recommended cable diameters are as below:

#### Ethernet (RJ45) Cable

- Diameter: 4~7 mm

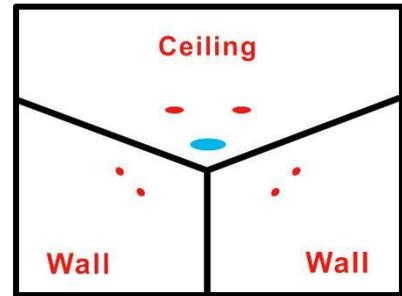
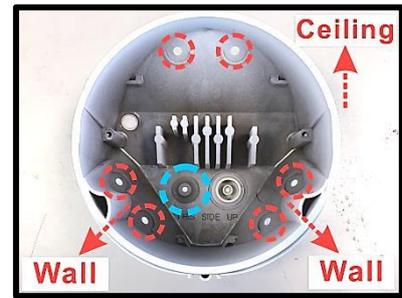
#### Power & Alarm/Audio Cable

- Diameter: 5~10 mm



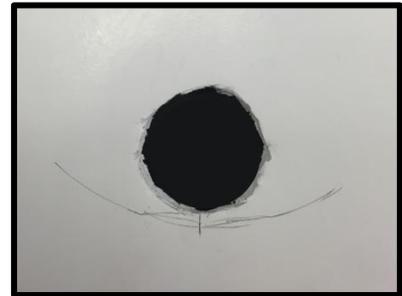
**Step 4:**

Place the camera housing at the installation location. Mark the position of the six screw holes and the cable entry hole indicated in the right figure on the ceiling/wall.



**Step 5:**

On the ceiling/wall, drill a cable entry hole. Then, thread the cable through the hole.

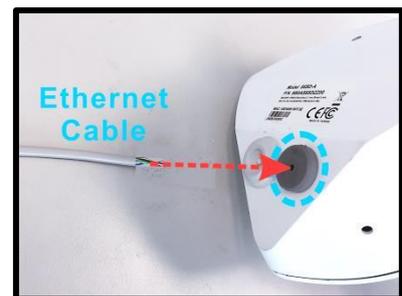


**Step 6:**

Drill a hole slightly smaller than the supplied plastic screw anchor on each marked screw hole. Then insert the plastic screw anchors into the drilled holes

**Step 7:**

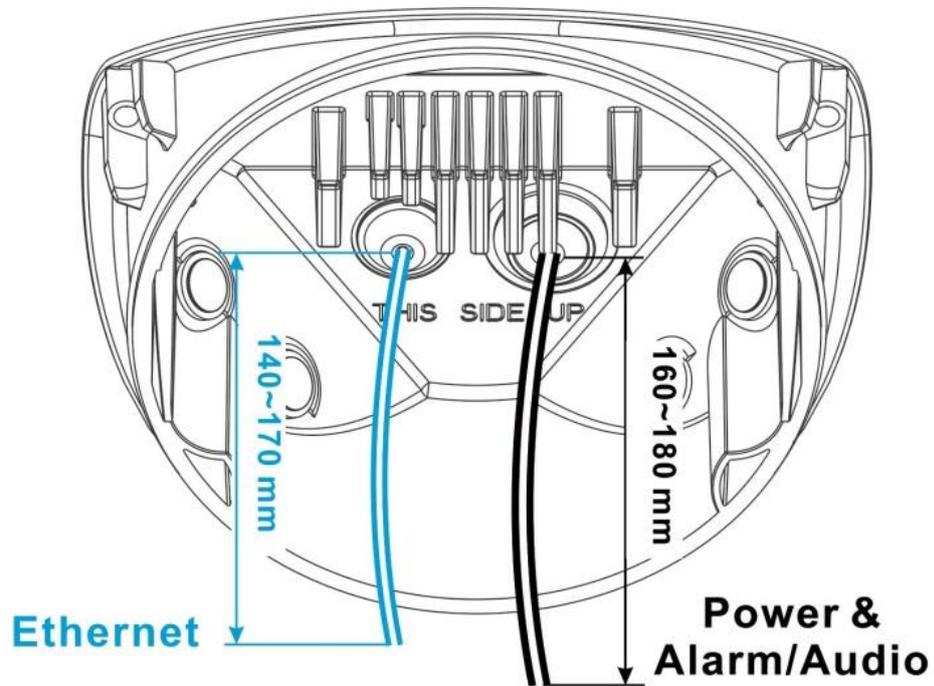
Pass the cable through the grommet hole.



**Step 8:**

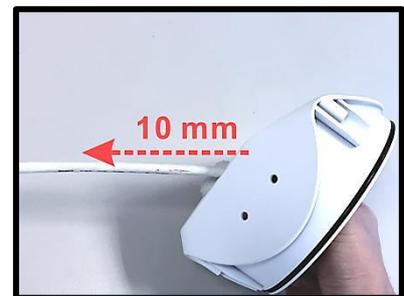
Pull out the cable from the cable entry hole of the housing.

The recommended cable lengths extended beyond the cable entry holes are shown as below.



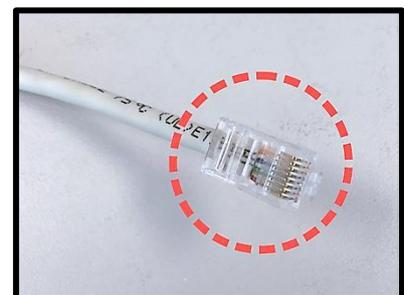
**Step 9:**

Pull the cable back **10 mm** from the bottom of camera housing. Make sure the waterproof cable grommet is locked in position.



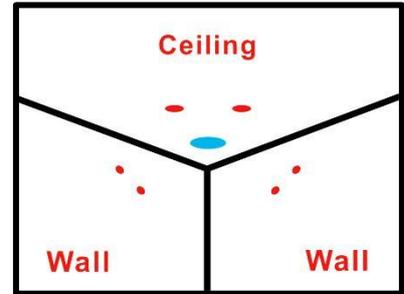
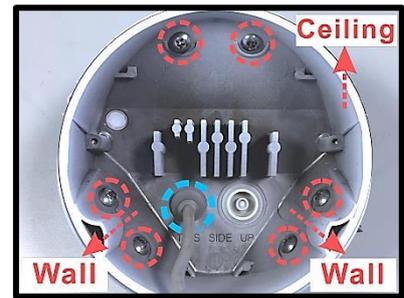
**Step 10:**

Use a cable crimping tool to attach the cable wires to a connector.



**Step 11:**

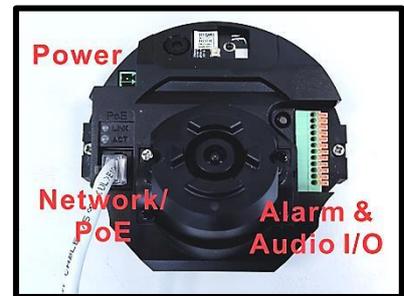
Match the six screw holes on the camera housing with the plastic screw anchors at the installation location. Fasten the camera housing with the supplied M4x31 mm self-tapping screws.



**Step 12:**

Connect the Ethernet cable to the camera.

For the power and the alarm & audio I/O connectors, please refer to section Connectors.



**Step 13:**

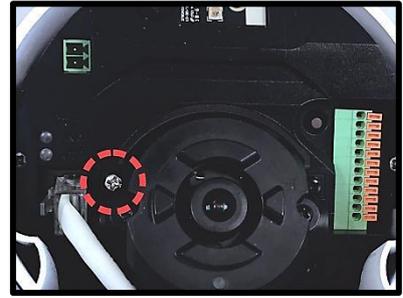
Place the camera module back to the camera housing. Align the two screw holes of the camera and fasten the two screws.



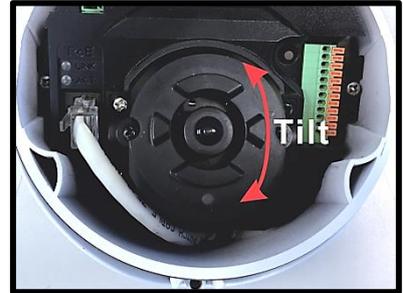
**Step 14:**

Loosen the tilt screw. Adjust the tilt holder of the camera to point the lens at a suitable position for the desired camera view.

Users can see the camera view by accessing the Camera Browser-viewer.



**NOTE:** Tilt adjustment angle is between  $-15^{\circ}$  ~  $15^{\circ}$ .



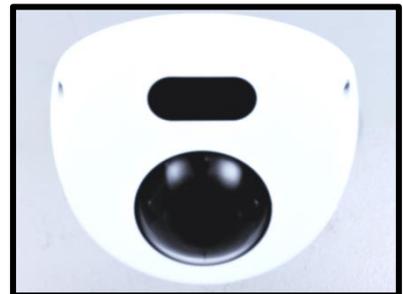
**Step 15:**

Fasten the tilt screw to fix the tilt angle of the camera.

**Step 16:**

Attach the dome cover to the camera and fasten the three security screws.

Installation completed.



### 3. System Requirements

To perform the IP camera via web browser, please ensure the PC is in good network connection, and meet system requirements as described below.

Items	System Requirement
<b>Personal Computer</b>	<b>Minimum :</b> 1. Intel® Core™ i5-2430M @ 2.4 GHz 2. 4 GB RAM
	<b>Recommended:</b> 1. Intel® Core™ i7-3770 CPU@3.4GHz 2. 8 GB RAM
<b>Operating System</b>	Windows 7 or later operating system
<b>Web Browser</b>	Microsoft Internet Explorer 11.0 (recommended) Chrome Firefox Safari
<b>Network Card</b>	10Base-T (10 Mbps) or 100Base-TX (100 Mbps) operation
<b>Viewer</b>	ActiveX control plug-in for Microsoft IE



**NOTE:** The ITE is to be connected only to PoE networks without routing to the outside plant or equivalent description.

## 4. Access Camera

For initial access to the IP camera, users can search the camera through the installer program: DeviceSearch.exe.

### **Accessing the Camera by Device Search Software**

- Step 1:** Double click on the program Device Search.exe.
- Step 2:** After its window appears, click on the <Device Search> button on the top. All the finding IP devices will be listed in the page.
- Step 3:** Find the camera in the list by its IP address and click on it. The default IP address of the camera is: **192.168.0.250**.
- Step 4:** The default IP address of the camera may not be in the same LAN as the IP address of the PC. If so, the IP address of the camera needs to be changed. Right click on the camera and click <Network Setup>. Meanwhile, record the MAC address of the camera, for future identification.
- Step 5:** The <Network Setup> page will come out. Select <DHCP> and click <Apply> down the page. The camera will be assigned with a new IP address.
- Step 6:** Click <OK> on the Note of setting change. Wait for one minute to re-search the camera.
- Step 7:** Click on the <Device Search> button to re-search all the devices. Find the camera in the list by its MAC address. Then double click or right click and select <Browse> to access the camera directly via a web browser.

**Step 8:** A prompt window requesting for default username and password will appear. Enter the default username and password shown below to login to the camera.

Login ID	Password
Admin	1234



**NOTE:** ID and password are case sensitive.



**NOTE:** It is strongly advised that administrator's password be altered for the security concerns. Refer to the [S Series H.265 HDR IP Camera Menu Tree](#) for further details.

### **Installing DCViewer Software Online**

For initial access to the camera, a client program, DCViewer, will be automatically installed to the PC when connecting to the camera.

If the web browser doesn't allow DCViewer installation, please check the Internet security settings or ActiveX controls and plug-ins settings (refer to section [Setup Internet Security](#)) to continue the process.

The Information Bar (just below the URL bar) may come out and ask for permission to install the ActiveX Control for displaying video in browser. Right click on the Information Bar and select <Install ActiveX Control...> to allow the installation.

The download procedure of DCViewer software is specified as follows.

**Step 1:** In the DCViewer installation window, click on <Next> to start installation.

**Step 2:** The status bar will show the installation progress. After the installation is completed, click on <Finish> to exit the installation process.

**Step 3:** Click on <Finish> to close the DCViewer installation page.

Once the Viewer is successfully installed, the Home page of the IP camera will be shown as the figure below.

### Fixed Lens Models

The screenshot shows the 'Network Camera' Home page. At the top, there is a navigation bar with 'Home', 'System', 'Streaming', 'Camera', and 'Logout' tabs. A 'Language Selection' dropdown is set to 'English'. Below the navigation bar, there is a 'Stream 1' dropdown, 'Video Format Selection', 'Live Video Pane', and a 'Time Display' showing '2016/09/04 00:27'. The main area displays a live video feed of a train station. At the bottom, there is a control bar with several icons and a 'Video Compression Info' table.

Stream 1 : H264 bitrate	6144 kbps	low compression, high quality
Stream 2 : H264 bitrate	4096 kbps	
Stream 3 : H264 bitrate	2048 kbps	middle compression, middle quality
Stream 4 : H264 bitrate	2048 kbps	middle compression, middle quality

Control buttons below the table include: Video Quality Info Button, Full Screen Button, Talk Button, Listen Button, Snapshot Button, Live View Pause Button, Video Record Button, and Manual Trigger Button.



**NOTE:** For more details about the function buttons on the Home page, please refer to the [S Series H.265 HDR IP Camera Menu Tree](#).

## 5. Setup Video Resolution

Users can setup video resolution on Video Configuration page of the user-friendly browser-based configuration interface.

Video Format can be found under: **Streaming> Video Configuration**.

The screenshot shows the 'Network Camera' configuration interface. The top navigation bar includes 'Home', 'System', 'Streaming' (highlighted in red), 'Camera', and 'Logout'. A language dropdown is set to 'English'. The left sidebar contains a menu with 'Video Configuration' (highlighted in red), 'Video Rotation', 'Video Text Overlay', 'Video ROI', 'Video ROI Encoding', 'Video OCX Protocol', 'Video Mask', and 'Audio'. The main content area is titled 'Video Configuration' and displays settings for four video streams. Stream 1 and Stream 2 are active, with Stream 1 resolution set to 2048 x 1536 and Stream 2 resolution set to 800 x 600. Stream 3 and Stream 4 are disabled. The BNC support is also shown as 'No'. 'Save' and 'Reset' buttons are at the bottom right.

Stream	Encoding	Encode Type	Resolution	Rate Control	Profile	Framerate	Bitrate	GOV Length
stream 1	Yes	H.264	2048 x 1536	VBR	Main profile	30	4096	60
stream 2	Yes	H.264	800 x 600	VBR	Main profile	30	4096	60
stream 3	No							
stream 4	No							

BNC Support: No

The default value of video resolution is as below.

<b>3M</b>	H.265/H.264- 2048 × 1536 (30/25 fps) + H.265/H.264- 800 × 600 (30/25 fps)
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## 6. Configuration Files Export / Import

To export / import configuration files, users can access the Maintenance page on the user-friendly browser-based configuration interface.

The Maintenance setting can be found under this path: **System> Maintenance**.

Users can export configuration files to a specified location and retrieve data by uploading an existing configuration file to the camera.

### **Export**

Users can save the system settings by exporting the configuration file (.bin) to a specified location for future use. Click on the <Export> button, and the popup File Download window will come out. Click on <Save> and specify a desired location for saving the configuration file.

### **Upload**

To upload a configuration file to the camera, click on <Browse> to select the configuration file, and then click on the <Upload> button for uploading.

## 7. Tech Support Information

This chapter will introduce how to delete previously-installed Viewer in the PC and how to setup the Internet security.

### 7.1 Delete the Existing DCViewer

For users who have installed the DCViewer in the PC previously, please remove the existing DCViewer from the PC before accessing to the IP camera.

#### **Deleting the DCViewer**

In the Windows <Start Menu>, activate <Control Panel>, and then double click on <Add or Remove Programs>. In the <Currently installed programs> list, select <DCViewer> and click on the button <Remove> to uninstall the existing DCViewer.

#### **Deleting Temporary Internet Files**

To improve browser performance, it is suggested to clean up all the files in the <Temporary Internet Files>. The procedure is as follows.

**Step 1:** In the web browser, clicks on the <Tools> tab on the menu bar and select <Internet Options>.

**Step 2:** Click on the <Delete> button under <Browsing History> section. In the appeared window, tick the box beside the <Temporary Internet files>.

**Step 3:** Click on <Delete> to start deleting the files.

## 7.2 Setup Internet Security

If ActiveX control installation is blocked, please either set Internet security level to default or change ActiveX controls and plug-ins settings.

### **Internet Security Level: Default**

**Step 1:** Start the Internet Explorer (IE).

**Step 2:** Click on the <Tools> tab on the menu bar and select <Internet Options>.

**Step 3:** Click on the <Security> tab, and select <Internet> zone.

**Step 4:** Down the page, click on the <Default Level> button and click on <OK> to confirm the setting. Close the browser window, and restart a new one later to access the camera.

### **ActiveX Controls and Plug-ins Settings**

**Step 1:** Repeat **Step 1 to Step 3** of the previous section above.

**Step 2:** Down the page, click on the <Custom Level> button to change ActiveX controls and plug-ins settings. The Security Settings window will pop up.

**Step 3:** Under <ActiveX controls and plug-ins>, set **ALL** items (as listed below) to <Enable> or <Prompt>. Please note that the items vary by IE version.

#### **ActiveX controls and plug-ins settings:**

1. Binary and script behaviors.
2. Download signed ActiveX controls.
3. Download unsigned ActiveX controls.
4. Allow previously unused ActiveX controls to run without prompt.
5. Allow Scriptlets.
6. Automatic prompting for ActiveX controls.
7. Initialize and script ActiveX controls not marked as safe for scripting.
8. Run ActiveX controls and plug-ins.
9. Only allow approved domains to use ActiveX without prompt.
10. Script ActiveX controls marked safe for scripting\*.
11. Display video and animation on a webpage that does not use external media player.

**Step 4:** Click on <OK> to accept the settings. A prompt window will appear for confirming the setting changes, click <Yes(Y)> to close the Security Setting window.

**Step 5:** Click on <OK> to close the Internet Options screen.

**Step 6:** Close the browser window, and restart a new one later to access the camera.