

Megapixel Cube Network Camera CB-100A/CB-500A Series User's Manual Quality Service Group

Product name:	Network Camera (CB-100A/CB-500A series)	
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Before You Use This Product

In many countries, there are laws prohibiting or restricting the use of surveillance devices. This Network Camera is a high-performance, web-ready camera which can be part of a flexible surveillance system. It is the user's responsibility to ensure that the operation of this camera is legal before installing this unit for its intended use.

Upon opening the product's package, verify that all the accessories listed on the "Package Contents" are included. Before installing the Network Camera, read the warnings in the "Quick Installation Guide" to avoid misuse. When installing the Network Camera, carefully read and follow the instructions in the "Installation" chapters to avoid damages due to faulty assembly or installation.

FCC Warning

This device complies with Part 15 of FCC rules.

Operation is subject to the following two conditions;

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operations.

Regulatory Information

Federal Communication Commission Interference Statement

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 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.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this 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, and (2) this device must accept any interference received, including interference that may cause undesired operation.

IMPORTANT NOTE:

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

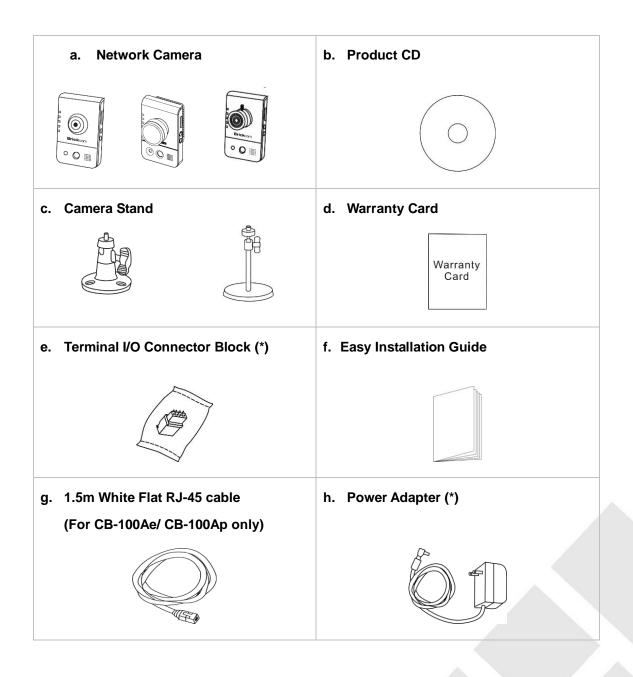
The availability of some specific channels and/or operational frequency bands are country dependent and are firmware programmed at the factory to match the intended destination. The firmware setting is not accessible by the end user.

Product Comparison

Mod	el Name	Lens	Resolution	DI/DO	WiFi	PoE	USB port for 3G/ 4G
	CB-100Ap	Board Lens			-	-	-
CB-100A	WCB-100Ap	Board Lens	1280x800	-	~	-	-
Series	CB-101Ap V2.1	Board Lens		./(1/1)	-	~	\checkmark
	CB-102Ap V2.1	CS Mount		√(1/1)	-	~	\checkmark
	CB-500Ap	Board Lens			-	~	\checkmark
CB-500A	WCB-500Ap	Board Lens	2502 x 1044 pixol	√(1/1)	~	-	-
Series	CB-502Ap	CS Mount	2592 x 1944 pixel	• (1/1)	-	~	\checkmark
	WCB-502Ap	CS Mount			~	-	-
CB-500A -360 Series	CB-500Ap 360p-L	Panomorph Lens	2592 x 1944 pixel	√(1/1)	-	~	*

Package Contents

Please check to make sure the product package contains all the accessories listed below.



INOTE - (*) These are optional features. Please refer to the Product List for the full list of optional features that are available for this product.

Cube Network Camera Overview

The compact Brickcom CB-100A/CB-500A series Cube network series offers a high quality, video surveillance solution for residences and small businesses. Unlike a general webcam, this camera series is a standalone surveillance system that does not need to be connected to a computer. EasyLink[™] is a feature of the CB-100A/CB-500A series camera which allows for users to simply plug in the camera to any home or small business network and play the video.

This camera series offers a user-friendly and unique design which allows anyone without a technical background to use it. It features live video feed and two-way audio which can be used over a local area network (LAN), through any internet browser, or via any 3G mobile device. The wireless capability makes it easy to mount on any surface. The CB-100A/CB-500A series features many cutting edge functions and its fashionable, streamline design make it the perfect additional for any home or office.

Because of its many advanced features, the CB-100A/CB-500A series has many versatile applications. Users can easily monitor the safety of their family members, pets, office, valuables, and property.



Small Office Surveillance –

Security systems for small offices can be expensive and difficult to install and maintain. With the EasyConfig software, the CB-100A/CB-500A series can easily be installed and configured by anyone without extensive technical knowledge. The video can be reviewed remotely so business owners can monitor office safety and employee productivity at all times.



Residence monitor -

Home owners worry about their house and property when they are away. The CB-100A/CB-500A series has a built-in PIR sensor which can detect unauthorized movement in a residence. Once movement is detected, the illumination LED will be triggered and an alert with a snapshot can be emailed or sent through an MMS to the user's portable device.



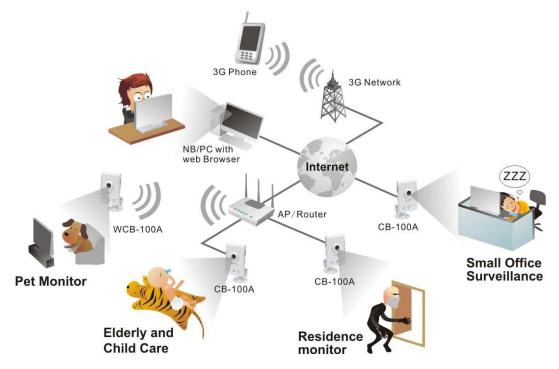
Elderly and Child Care –

A high concern for many people is the safety of elderly relatives and small children. Users can use the CB-100A/CB-500A series camera to ensure the safety of their loved ones by use of the live view and intercom functions.

- 2 -



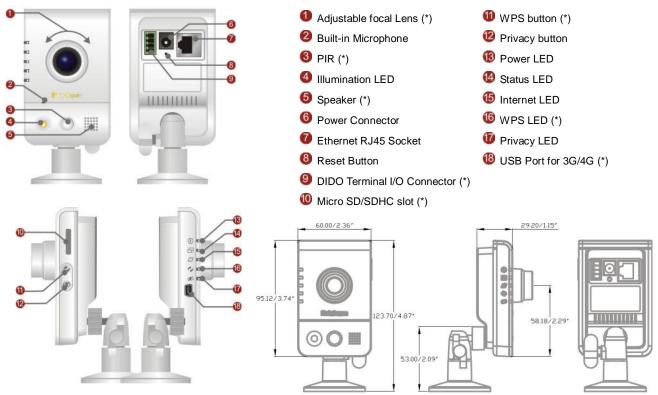
The motion detection feature can be used to create forbidden areas in the home which the pet should not enter when the owner is away. If the camera records the pet entering the region, a recorded message can be programmed to play and the owner will be notified via email or MMS.



- 3 -

Device Appearance Description

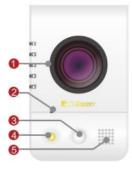
- CB-100A Series/CB-500A Series
- < Front & Rear view >



- 4 -

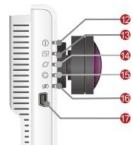
Device Appearance Description

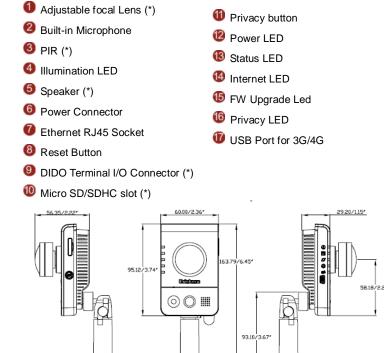
- CB-500Ap-360p-L
- < Front & Rear view >











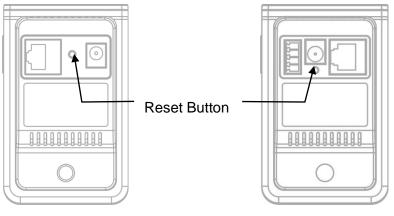
- 1. NOTE The WPS and Privacy buttons must first be enabled through the web GUI in order to work. See page 37 for details on how to enable the Privacy button and see page 50 for details on how to enable the WPS Button.
- 2. (*) These are optional features. Please refer to the Product List for the full list of optional features available for the product.

LED Behavior

Function	LED Behavior	Description	Remark
Power	Continuous Illumination	Normal Operation	Top (Blue)
Power	Unlit	Powered off	Top (Blue)
Status	Continuous Illumination	1. Connected to switch by Ethernet or WiFi.	Second (Blue)
Status	Unlit	 Powered off No connection 	Second (Blue)
Status	Blinking	1. Data Transmission via WiFi or Ethernet	Second (Blue)
Internet	Continuous Illumination	Connected to Internet	Third (Blue)
Internet	Unlit	 Powered off No connection 	Third (Blue)
WPS	Blinking	WPS in progress	WCB-100A/C B-500A SERIES Fourth (Blue)
WPS	Continuous Illumination	WPS success	WCB-100A/C B-500A SERIES Fourth (Blue)
Firmware Upgrade	Blinking	Under FW upgrade Process	WCB-100A/C B-500A SERIES Fourth (Blue)
Firmware Upgrade	Continuous Illumination	Firmware successfully upgraded	CB-100A/CB-5 00A SERIES Fourth (Blue)
Privacy	Continuous Illumination	Privacy mask active	Bottom(Red)
Privacy	Unlit	Privacy mask inactive	Bottom(Red)



Hardware Reset



CB-100A Series

CB-500A Series

The Reset Button can be used to reboot the camera or restore it to factory default settings. If the camera experiences a problem, rebooting the camera may correct the problem. If the problem remains, please restore the camera to factory default settings and reinstall the software.

<u>To Reboot</u> - Press and hold the Reset Button for one second using a paper clip or thin object. Wait for the camera to reboot.

<u>To Restore</u> – Press and hold the Reset Button for ten seconds until the LED light turns off. When successful restored, the LED will be blue during normal operation.

INOTE - By restoring the camera, all settings will be restored to the factory default settings.

Micro-SD/SDHC Card Capacity

The network camera is compatible with Micro-SD/SDHC (Maximum 32GB) cards.

Installation

System Requirements

Operating System:

Microsoft Windows XP Home Edition SP2

Microsoft Windows XP Professional SP2

Computer:

IBM PC/AT Compatible

<u>CPU:</u>

Pentium 3GHz or faster

Memory:

1024 MB or more

Monitor:

1024 x 768 pixels or more, 24-bit True color or better

Network Interface:

10/100Mbps Network interface card must be installed

Web Browser:

Microsoft Internet Explorer 6.0 SP2 or higher

Adobe Reader:

Adobe Reader 8.0 or higher

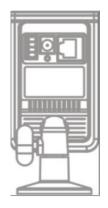
<u>Audio:</u>

The audio function will not work if a sound card is not installed in the PC. Audio may be interrupted depending on network traffic.

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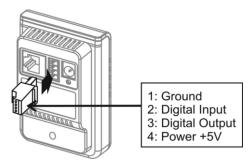
Camera Connection

Warning Hot – Please attach the bracket before using CB-500A Series.



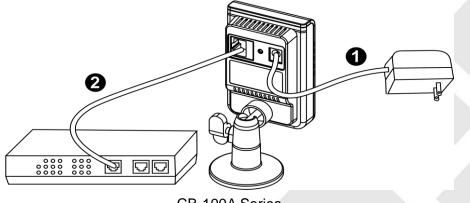
Terminal I/O Connector Block Connection

Attach the supplied connector block to the terminal connector on the camera. Refer to the diagram below to attach external devices to the connector block.

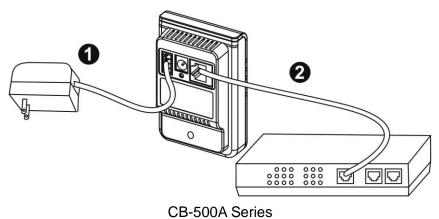


Basic Connection

- 1. Connect the supplied power cable from the camera to a power outlet.
- 2. Connect the camera to a switch using an Ethernet cable.



CB-100A Series



When powering up, the power LED will light up and the camera will boot up. The status LED will turn amber when the camera is obtaining the IP address. After obtaining the IP address, the link LED will flash orange while the network connection is processing.

Software Installation

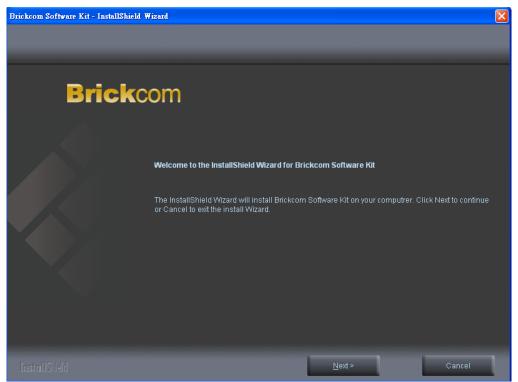
In this manual, "User" refers to whoever has access to the Network Camera, and "Administrator" refers to the person who can configure the camera and grant user access to the camera.

After checking the hardware connection, run the Installation Wizard program included on the product's CDROM to automatically search the intranet for the camera. There may be many cameras on the local network. Differentiate the cameras using the serial number which is printed on the labels on the carton and the bottom of the camera.

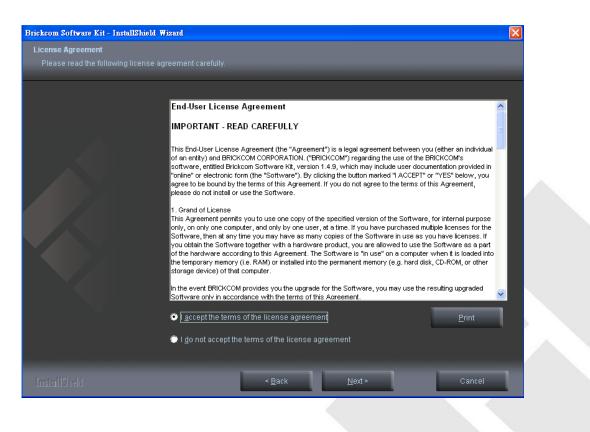
 Insert the Installation CD into the CD-ROM driver. Run Auto-Run Tool directly from the CD-ROM to start the installation. When installing the Brickcom software kit for the first time, select a desired language for the interface. The available languages are listed in the scroll box. Click <Install> and follow the steps to install the EasyConfig wizard on the desired computer.



2. In the Install Shield Wizard dialog box, click <Next> to continue.



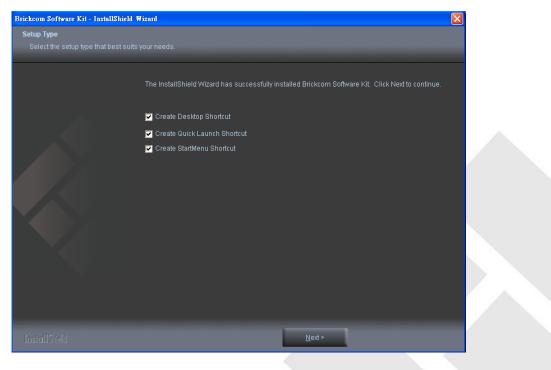
3. Read the End-User License Agreement and check the option "I accept the terms of the license agreement". Click <Next> to continue.



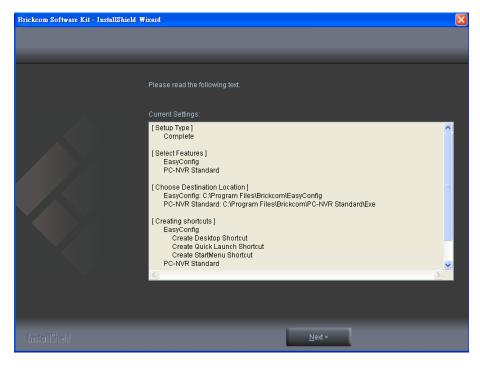
- 4. Select either "Complete" setup or "Custom" setup to install the system.
 - a. If COMPLETE SETUP is selected:
 - i. **All program features** will be installed into the default directory. Check the option "**Complete**" and then click <Next>.

Brickcom Software Kit - InstallShield Wizard		X
Setup Type Select the setup type to install.		
	ct a setup type. All program features will be installed. (Requires the most disk space.) Select which program features you want installed. Recommended for advanced users.	
	< <u>B</u> ack <u>N</u> ext > Cancel	1

ii. Select to create shortcuts. Click <Next> to continue.

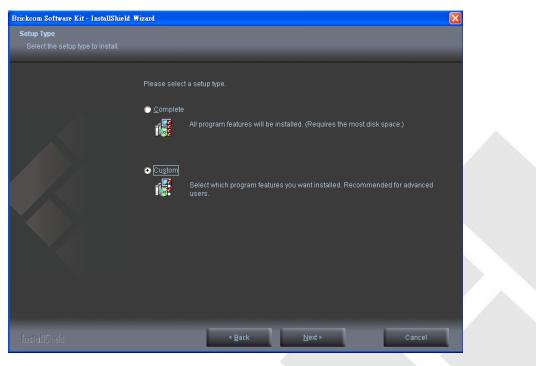


iii. The installation information will be displayed. Click <Next> to continue.



b. If CUSTOM SETUP is selected:

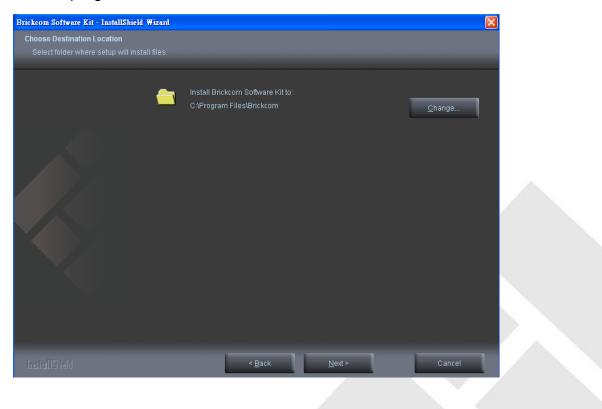
- i. This option is recommended for advanced users. It can be used to install the system to a preferred directory or to select specific program feature(s).
- ii. Check the option "**Custom**", and then click <Next>.



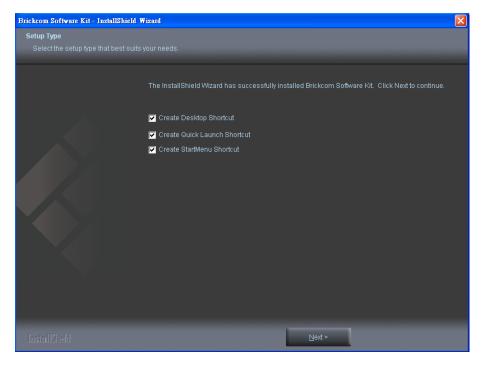
Brickcom Software Kit - InstallShield ¥	lizard				×
Select Features Select the features setup will install.					
	Select the features y EasyConfig PC-NVR Standard Space Required on Space Available on	d C:	1d deselect the feature 8211 K 42322 K 50533 K 25383440 K	es you do not want to install. Description EasyConfig will help user easily configure the Brickcom IP carnera.	
InstallShield	-	< <u>B</u> ack	<u>N</u> ext ≻	Cancel	١

iii. Select the features to install. Click <Next> to continue.

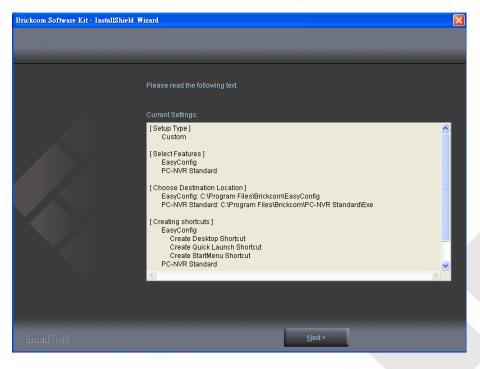
iv. Click <**Change**> to change the appointed folder where installation and program files will be stored. Click <Next> to continue.



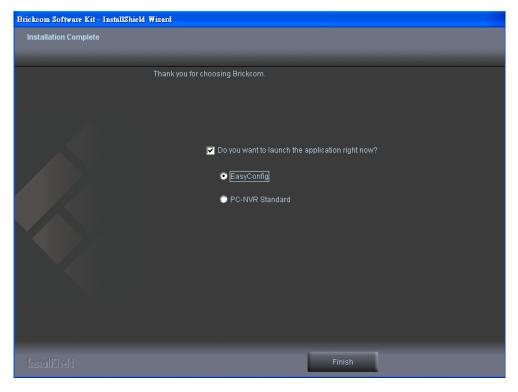
v. Select programs to create shortcuts. Click <Next> to continue.



vi. The installation information will be displayed. Click <Next> to continue.



5. To launch EasyConfig or PC-NVR Standard, select the application and click **<Finish**>. When launching the PC-NVR program, please refer to the PC-NVR user manual.



EasyConfig

To launch EasyConfig, select EasyConfig from the start menu. If Complete Setup type was used in the software installation, an EasyConfig icon was installed on the desktop. Double click to open the icon.

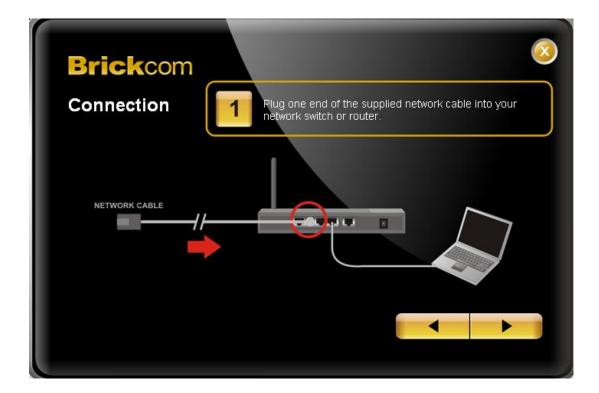


If Custom Setup type was used in the software installation and an EasyConfig icon was not installed on the desktop, the program will be installed under C:\Program Files\Brickcom\EasyConfig unless the program was saved to a preferred directory.

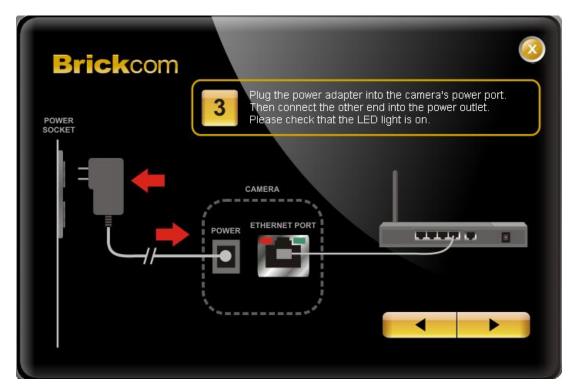
1. Click **<Start>** to continue. The program will automatically search for the camera in the intranet.

NOTE - Check "Skip the hardware installation guide" to skip checking the hardware connection. To check the hardware installation settings, do not check the option box.









 Select either "Simple Mode" or "Professional Mode" to obtain the camera's IP settings. If "Simple Mode" is selected, EasyConfig will set up the connection automatically. If "Professional Mode" is selected, the user will need to configure the IP settings manually.

Brick com		2
automatically. If professional mode	sy configuration program will set up the connection e is selected, the user will need to configure the IP manually. ed. If user wants to set the IP address manually, please refer	
Simple Mode		1. A.
Professional Mode		

3. There may be many cameras in the local network. Differentiate the cameras using their UPnP name. Double click on the camera from the survey list to connect.

	ckcom buble click the camera	you want to connec	t from the list.		
No	UPnP Name	IP Address	MAC Address	Model Name	Firmware
1	FB-100A-dab2	192.168.100.21	00:26:82:1b:da:b2	FB-100Ap	v2.3.7.6
2	FD-100Ap-000d	192.168.100.12	00:26:82:1a:00:0d	FD-100Ap	v2.3.7.6
3	FD-100Ap-ffd9	192.168.100.11	00:26:82:19:ff:d9	FD-100Ap	v2.3.7.6
4	FB-100Ae-dbc7	192.168.100.20	00:26:82:1b:db:c7	FB-100Ae	v2.3.7.6
5	FD-100Ap-3456	192.168.100.10	00:00:00:12:34:56	FD-100Ap	v2.3.7.6
6	FB-100Ap-dad8	192.168.100.22	00:26:82:1b:da:d8	FB-100Ap	v2.3.7.6
7	WFB-100Ae-dc31	192.168.100.24	00:26:82:1b:dc:31	WFB-100Ae	v2.3.7.6
8	FB-100Ap-db54	192.168.100.23	00:26:82:1b:db:54	FB-100Ap	v2.3.7.6
9	WFB-100Ap-0035	10.5.42.201	00:40:25:00:00:35	WFB-100Ap	v3.0.0.7
Searc	h again				

4. Enter the username and password of the camera. For first time use, the default username and password are "**admin/admin**."

Please ente the camera	er the usernam	ne and pa	ssword of	
User Name: Password:	admin			
	OK	Can	cel	

For configuring the IP address settings, select either <Settings remain the same>,
 <Automatically obtain an IP Address (DHCP)> or <Set IP Address configuration manually>. The DHCP setting is recommended.



a. If <Set IP Address configuration manually> is selected, the following pages will be displayed.



Brick Enter the Stat	tic IP Address to configure IP Camera.	3
IP Address	10 . 5 . 42 . 103	
Subnet Mask	255 . 255 . 255 . 0	
Gateway	10 . 5 . 42 . 254	
DNS1	10 . 5 . 1 . 103	
DNS2	10 . 5 . 1 . 101	

6. If the camera supports the EasyLink[™] function, the following page will be displayed. Otherwise, this page will not be shown. *If desired, click <Skip> to skip this setting.

Brickco	m	
EasyLink Se	ettings	
You can use EasyLin	k Settings to connect to the IP camera without kr	nowing the IP address.
EasyLink Name: 002	6821bdbfd	
🖉 Live View - Window	øs Internet Explorer	
🗿 🗢 🛃 http://	/0026821bdbfd.mybrickcom.com	
Brickcom	WFB-100Ap Camera Configuration Utility	Live View I Configuration I Hel
Enter the EasyLink U	RL into a web browser to access the camera's w	eb GUI.

EasyLink[™] is a unique Brickcom function which allows users to assign a unique EasyLink name to their network camera's IP address. There is no need to configure the router to open up ports or remember hard-to-memorize IP addresses. When this feature is enabled, users can log onto [uniqueEasyLinkname].mybrickcom.com to view the camera's web GUI and live view.

- 1. Enter a unique EasyLink name whose length must be between 5-32 characters.
- 2. When finished, click the arrow button to continue.
- 3. **NOTE** See <u>page 42</u> for more details about the EasyLink function.

- 7. When the IP address settings have been configured, the screen will either display a successful or failed connection message. If the connection failed, either try again or quit the installation.
 - a. If "DHCP IP address settings" was selected, the failure page will be displayed as below:



b. If "Static IP address settings" was selected, the failure page will be displayed as below:

8 Brickcom	
Sorry, cannot connect to the IP cameral!	
IP Camera(FD-130Ap) has no response, the following settings are recommended	
IP Address: 192.168.2.199 Subnet Mask: 255.255.0 Gateway: 192.168.2.1 DNS1: 192.168.2.1 DNS2:	
Please try again or click Finish to quit the installation.	
Try again Finish	

c. If the connection was successful, the user will see the message: "Congratulations. The installation of the camera is complete."

When this window is displayed, click **PC-NVR**> to start the PC-NVR program, **Live View**> to view the live video from the connected IP camera, or **X**> in the top right corner of the screen to close the installation window. To run the PC-NVR program, please refer to the PC-NVR user manual for more information.



Once installation is complete, the Administrator should proceed to the next section "Accessing the Network Camera" for necessary changes and configurations.

Accessing the Network Camera

Check Network Settings

The camera can be connected either before or immediately after the software installation. The Administrator should complete the network settings on the configuration page, including entering the correct subnet mask and IP address of gateway and DNS. Ask the network administrator or Internet service provider for the detail information.

Add Password to Prevent Unauthorized Access

The Administrator should immediately implement a new password as a matter of prudent security practice. For first time use, the user name and password for the Administrator are assigned as "admin/admin". After the Administrator changes the Administrator password, the web browser will display an authentication window to confirm the new password. Once the password is set, there is no provision to recover the Administrator's password. If the Administrator's password is lost, the only option is to restore the original factory default settings.

The Administrator can set up a maximum of ten (10) user accounts. Users will be able to access the Network Camera, but will not be allowed to access system configurations.

Authentication

To access the camera's live view, open a web browser and enter the IP address of the camera. A dialog window will pop requesting a username and password. As stated on the previous page, for the default username and password for the Administrator are assigned as "admin/admin". For accounts other than the administrator's account, the user can choose to remember the password for future convenience. It is not recommended to check this box when viewing the camera feed from a public computer.



Installing the Plug-In

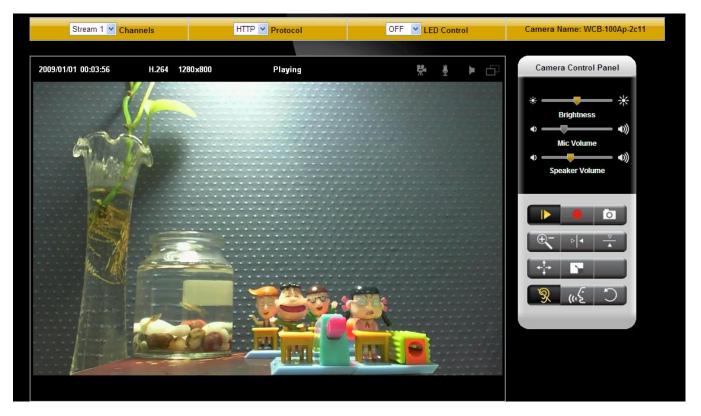
For the initial access to the camera in Windows, the web browser may prompt the administrator for permission to install a new plug-in for on Internet Explorer. Permission request depends on the Internet security settings of the user's PC or notebook. If the highest security level is set, the computer may prohibit any installation and execution attempt. This plug-in has been registered for certificate and is used to display the video in the browser.

Click on <u>Install</u> to proceed. If the web browser does not allow the administrator to continue the installation, check the Internet security option and lower the security levels or contact the networking supervisor or IT for help.

o you want to install this soft	ware?		
Name: Brickcom.cab			
Publisher: BRICKCOM	ORPORATIO	N	
S More options	(Install	Don't Install
🕋 While files from the Intern	et can be usefi	il this file type c	an notentially harm

NOTE – If an error occurred or the plug-in fails to install, it is because the version of the Electronic Signature is newly released and the VeriSign has not been submitted to Microsoft Windows update for validation. Therefore, plug-in will not have its root certificate. If IE discovers that there is no root certificate after the user's PC connects to the camera, it will automatically redirect to VeriSign Web site to download and install the latest root certificate to make the installation successfully. If the user's computer is able to connect to camera but unable to access the internet, then the installation will fail because the computer will not be able to download the latest root certificate. This problem can be resolved if computer can be connect to the internet and the camera at the same time and will not recur when Windows update patches become available.

Live View



NOTE - (*) These are optional features. Please refer to the Product List for the full list of

optional features available for the product.

Live View is the default page that opens when accessing the camera. Live video is displayed directly in the browser window.

• Stream1/Stream2 Channels

The network camera offers simultaneous dual stream for optimized quality and bandwidth. Go to Configuration \rightarrow Camera/Video/Audio \rightarrow Video to configure the codec compression and video resolution or refer to the Video configuration page.

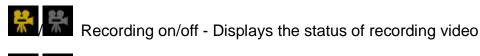
HTTP/TCP/UDP protocol

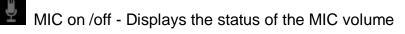
HTTP – This unicast method can be used to traverse firewalls. Firewalls are commonly configured to allow the HTTP protocol, thus allowing RTP to be tunneled.

TCP - This protocol guarantees the complete delivery of streaming data and provides better video quality. The downside of using this protocol is that the quality of its real-time effect is less than that of the UDP protocol.

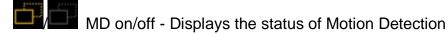
UDP - This protocol allows for more real-time audio and video streams. However, network packets may be lost due to network burst traffic and images may be broken. Activate UDP connection time-sensitive responses are more important than video quality.

LED Control – Use the drop-down menu to adjust the brightness of the camera's LED.





Speaker on/off - Displays the status of the Speaker



- Brightness Drag the slider bar to adjust the image brightness level.
- **Mic volume** Drag the slider bar to adjust the microphone volume.
- Speaker volume The built-in speaker will play sound from an audio clip from the computer microphone when it is enabled.

For more Audio settings, please refer to the Audio configuration page.



Playor Stop - Play or stop the video.



Recording - Record video to a computer.



Snapshot - Capture and save still images.



Digital Zoom - Enable the digital zoom operation.



Mirror - Horizontally reflect the display of the live video.



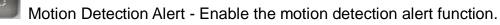
Flip - Vertically reflect the display of the live video.

Real Size - View the object in real size. Press it again to switch back to normal

mode.



mode.





Mute – Turn off the sound.



Talk(*) - To communicate through the camera using the computer MIC.

Full Screen - Switch to full screen mode. Press the "Esc" key to return to normal





1. The <Camera Control Panel> functions have no effect on the recorded video. Whatever changes are made to the <Camera Control Panel> will not be applied to the recorded video. 2. The LED is not for continuous use and has an estimated life span of 30,000 hours.

3. The LED cannot be replaced.

Brickcom Configuration

Click <**Configuration**> on the main page to change the camera settings pages.

NOTE - Only Administrators can access the Configuration page.

Camera/Video/Audio

Camera

Camera	Profile Management	
Profile : Day 🔻		Name Day
Prome. Buy		Brightness 🔹 🛶 🗸
K		Contrast o ①
		Sharpness 🔳 🛶 🛶 📳
5		Saturation
		Flicker © 50Hz Free @ 60Hz
		Exposure Auto
		Option BE EE EE
		De-Noise Level Auto
	1	Mirror and Image: Flip Flip
and the second second		Color Color Effect Black & White
		 Auto
		White O 3000k Balance O 5000k
		© 7000k
		Test in Full Screen
		Apply Cancel

Profile – Up to five profiles can be created for different lighting environments. Day and night are default profiles and users can create up to three additional profiles. Select a profile from the drop-down menu or select different icons to change profile settings.

Name – Profile Name

Brightness - Drag the bar to adjust the image brightness level from -5 to +5.

Contrast - Drag the bar to adjust the image contrast level from -5 to +5.

Sharpness - Drag the bar to adjust the image sharpness level from -5 to +5.

Saturation - Drag the bar to adjust the image saturation level from -5 to +5.

Flicker-Free – Eliminates the problem of flicker.

Exposure Control

Auto: The camera will automatically control exposure.

Manual: Select this option to define the exposure manually

Mirror and Flip

Mirror - Enable to horizontally reflect the display of the live video.

Flip - Enable to vertically reflect the display of the live video.

De-Noise

Auto - The camera will automatically filter the frame-to-frame defects to reduce the visual impact of blur.

The De-noise can be set between 1 to 3, with 3 giving the best video resolution.

Color Effect - Select to display color or black and white video streams.

White Balance: White balance is a camera setting that adjusts for lighting in order to make white.

Profile Management: Profiles can be scheduled to change at scheduled times or under different lightening changes.

Camera	Profile Management	
Always	Schedule	
Always use:	ay 🔻	
	Apply Cancel	

Always- Select Always to use a single profile. Select the profile from the drop down menu.

Camera	Profile Management
O Always O	Day&Night O Schedule O Digital Input
Day Profile	Day 💌
Night Profile	Night -
Switch to Day	y profile if the detected value is higher than 40 for 5 Second
Switch to Nig	ht profile if the detected value is lower than 10 for 5 Second
	*
Current value	e detected: 155
	Apply Cancel

Day & Night (Only available with models with a light sensor)- Select Day & Night to schedule two profiles for day and night. Select profiles from the drop down menu for the Day and Night Profiles.

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Always Sch	edule					
		0:00	6:00	12:00	18:00	24:00
	_	Sun				
	Day 💿	Mon				
	Night 🔘	Tue				
	Sunset 🔘	Wed				
	User1 🔘	Thu				
	-	Fri				
	User2 🔘	Sat				

Schedule – Select Schedule to schedule specific time periods for different profiles.

Camera	Profile Management
O Always O	Day&Night 🔘 Schedule 🔘 Digital Input
High profile:	Day this profile will trigger the actions when the DI status is high.
Low profile:	Night this profile will trigger the actions when the DI status is low.
Current status:	High
	Apply Cancel

Digital Inputs (Only available with models with a DI terminal)- Select Digital Input to have the profile management controlled by an external sensor. Select profiles from the drop down menu. Profiles will change according to different trigger voltage levels.

Click Apply to apply settings or Cancel to cancel changes.

Video

The Network Camera offers two separate streams for different viewing options.

	Aspect Ratio
Mode	© 4:3 © 16:9 ● 16:10
	Stream 1
Video Codec	H.264 •
Video Resolution	1280×800 -
Frame Rate	25 •
QualityBitrate	4000 Kbps. (64~12000)
GOP	0 • (0~30,0:auto)
_	Stream 2
Enable	
Video Codec	MJPEG -
Video Resolution	1280×800 -
Frame Rate	25 •
Quality	3 •
Transport	 RTP RTP with Quantization Table Header HTTP Transport
Note:For stream recordin than 1280x1024.	g,stream 1 must be set to H.264 or MPEG4 with a bitrate lower than 1.5Mbps or the quality below 3 and the resoltion lowe

Stream 1 & Stream 2

Aspect Ratio – Select the width to height image aspect ratio.

Video Codec - The Network Camera offers three choices of video codec standards for real-time viewing: H.264, MPEG-4 and MJPEG.

Video Resolution - Select from the drop-down menu to choose the best resolution recording settings.

Frame Rate - Select the frame rate from drop-down menu. When H.264 or MJPEG is selected, the frame rate ranges from 1 to 30 fps. When MPEG-4 is selected, the frame rate ranges from 1 to 15 fps. Set a higher frame rate for smoother video quality.

Video quality and bit rate - Choose either "quality" or "bitrate" to control the video quality with video codec at H.264 or MPEG4. Only "quality" can be chosen when video codec at MJPEG is selected. Set the bitrate higher for a better video quality.

Transport-

RTP: The Real-time Transport Protocol (RTP) defines a standardized packet format for delivering audio and video over IP networks.

RTP with Quantization Table Header : Choose this option to explicitly include JPEG quantization table in the RTP stream [RFC 2435, section 3.1.8].

HTTP Transport: If MJPEG is used for Video Codec, HTTP Transport protocol must be enabled to remotely access the video stream.

NOTE - a higher bitrate will use higher network bandwidth. The video quality can be

set between Level 1 to Level 6, with Level 6 producing the best image quality.

HTTP Transport – If MJPEG is used for Video Codec, users can enable HTTP Transport protocol for video communication.

NOTE – HTTP Transport is for non-IE browser used only.

Click Apply to apply settings or Cancel to cancel changes.

Video Overlay

Sti	ream Vic	leo Overlay	RTSP Server	Save File Folder	Advanced Settings	
		_		Timestamp		
	Enable					
	Position	Left-Top 🔻				
				Text		
	Enable					
	Position	Left-Top 🔻				
	Text					
	The video overlay will or	nly take effect in stre	eam 1			
			Apply	Can	cel	

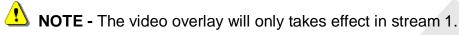
Timestamp

To display the date and time on the screen during live view, check "Enable" to enable the timestamp function and select the display position from the drop-down menu.

Text

To make a note about the camera, check "Enable" and select the display position from the drop-down menu. Enter a video description in the text box.

Click **Apply** to apply settings or **Cancel** to cancel changes.



RTSP Server

Str	Stream Video Ove		verlay	RTSP Server	Save File Folder	Advanced Settings	
					RTSP Server		
	P	ort	554				_
	Authen	ntication	NONE	•			
		_	_	_	RTP/RTCP	_	_
	RTCP	Mode	Without S	R ▼			
				Apply		Cancel	

To utilize RTSP authentication, the user must first set a password for the camera. RTSP (Real-Time Streaming Protocol) controls the delivery of streaming media. By default the port number is set to 554.

Authentication - Depending on the network security requirements, the camera provides two types of security settings for streaming via RTSP protocol: NONE and DIGEST.

If DIGEST authentication is selected, user credentials are encrypted using MD5 algorithm, thus providing better protection against unauthorized access.

RTP/RTCP-

RTCP without SR - RTCP without SR (Sender Report) is the default option. Under this option, audio and video received from the IP camera are played immediately and independent of each other.

RTCP with SR - RTCP with SR option allows synchronization between video and audio on live viewing. Choose this option if audio and video become unsynchronized.

Click Apply to apply settings or Cancel to cancel changes.

Stream	Video Overlay	RTSP Server	Save File Folder	Advanced Settings	
		Reco	rding Folder Path		
Path	C:\Users\Mars\Document	s\Brickcom		Browse	
		Snap	shot Folder Path		
Path	C:\Users\Mars\Document	s\Brickcom		Browse	
Туре	JPEG -				
These est					
These set	ings are used for Recording a	nd Snapsnot functions in the	e Live view page.		
		Apply	Car	ncel	
		- 38	-		

Save File Folder

Recording folder path - The destination for saving the recording video files. Click Browse to specify the saving path.

Snapshot folder path - The destination for saving the snapshot files. Click Browse to specify the saving path and select the format from the drop-down menu.

Advanced Settings

Video usability information (VUI)- Enable this feature to insert extra information into the bit stream to enhance the use of the video for a wide variety of purposes.

Sequence Parameter Set (SPS) & Picture Parameter Set (PPS)-

Enable or disable SPS and PPS in the H.264 packet, Sequence parameter sets (SPS), which apply to a series of consecutive coded video pictures called a coded video sequence, and Picture parameter sets (PPS), which apply to the decoding of one or more individual pictures within a coded video sequence.

Click **Apply** to apply settings or **Cancel** to cancel changes.

Audio

The administrator can set up two separate streams for the camera for different viewing devices. The administrator can enable or disable the audio function on either stream. If audio enable is selected, select the Audio codec from the drop-down menu.

St	tream Adva	anced Settings
		Stream 1
	Enabled	
	Audio Codec	G.711 💌
		Stream 2
	Enabled	
	Audio Codec	G.711 💌
		Apply Cancel

Advanced Settings

Sti	ream	Advanced	Settings				
				Camera S	peaker		
	Enal	bled	✓				
	Volu	ime	50% 💌				
				Echo Canc	ellation		
	Enal	bled					
			Ap	pply	Cancel		

Camera Speaker – If the speaker is enabled, select the volume from the drop-down menu. **Echo Cancellation Enabled** - Enable to avoid an echo.

Click **Apply** to apply settings or **Cancel** to cancel changes.

Multicast

Multio	cast			
		St	ream 1	
	Enabled			
	Multicast Address	234 .1 .2 .3	Port 10000	
		St	ream 2	
	Enabled			
	Multicast Address	234 .1 .2 .3	Port 20000	
		Apply	Cancel	

Multicast sends a video stream to the multicast group address and allows multiple clients to acquire the stream at the same time by requesting a copy from the multicast group address. Therefore, multicast can effectively save Internet bandwidth. The RTSP (Real-Time Streaming

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Protocol) controls the delivery of streaming media.

Click "Enable" to enable Multicast stream 1 or Multicast stream 2. The default value for multicast address and port are 234.1.2.3 and 10000. Use different port number for different streams. It is recommended to use the default values.



NOTE - Using the IP address of the Network Camera enables access to the video.

Example: rtsp://192.168.1.1/channel1

Click **Apply** to apply settings or **Cancel** to cancel changes.

Privacy Mask Control

The Cube camera is equipped with a privacy feature which allows users to mask the camera's live view. A black screen will be displayed in place of the live view window. This application is particularly useful when the camera is being used for home surveillance. With the privacy button, the user can have privacy while they are going about their daily life.

Privacy M	Privacy Mask Control					
		Privacy Mask Control				
	Enabled					
		Hardware Privacy Mask Button				
	Enabled					
		Apply Cancel				

Privacy Mask Control – Enable the Privacy Mask control to remotely mask the camera's live view.

Hardware Privacy Mask Button – Click to enable the privacy mask button on the camera. If this feature is not enabled, the user will not be able to use the privacy mask button. Click **Apply** to apply settings or **Cancel** to cancel changes.

Enabling De-Warp Function For Camera

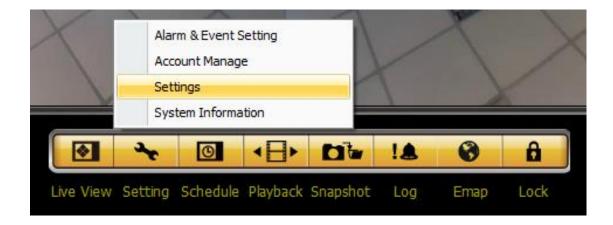
From the camera search list, select the camera you wish to add. Enter the username and password for the camera (the default username is **admin** and the default password is **admin**), then click **Add**.

Do	ublo	oliak tha mayaa an	o notwork como	ra ta add it ta tha	PDCCA			
DU	uoie-	click the mouse on	a network came	ra to add it to the	DRU04			
	No.	UPnP Name	IP Address	MAC Address	Model Na	Firmware	Status	
	1	FB-300Ap-447a	192.168.10.128	ac:81:12:01:44:7a	FB-300Ap	v3.1.0.7	Already in Site L	
•	2	MD-500Ap-360-02	192.168.10.65	00:22:f4:82:02:30	Brickcom-5	v3.2.2.6		=
	3	FB-100Ap-7ba5	192.168.10.123	00:26:82:74:7b:a5	FB-100Ap	v3.1.0.7		
	4	PZ-040D-3cd9	192.168.10.39	00:26:82:b6:3c:d9	PZ-040D	v3.1.0.4	Already in Site L	
	5	IPCam-TEST	192.168.10.24	00:22:f4:81:c3:45	Brickcom-3	v3.2.2.3		
	6	カメラ画像	192.168.10.44	00:26:11:22:88:11	Brickcom-3	v3.2.1.3		
	7	TEST (C1100-6	192.168.10.3	00:11:6b:a0:61:74	C1100	v1.1.8.3		
	8	Lab_Cam2	192.168.10.130	00:26:82:74:7b:11	FB-100Ap	v3.1.0.7		
	9	FB-100Ap-db03	192.168.10.60	00:26:82:1b:db:03	FB-100Ap	v3.1.0.7		
	10	FB-130Ap-b365	192.168.10.51	00:26:82:d1:b3:65	FB-130Ap	v3.1.0.1		
	11	OB-100Ae-4864	192.168.10.124	ac:81:12:34:48:64	OB-100Ae	v3.1.0.7		•

Drag the camera from the camera tree list to the live view window. The live view window will show the camera's image as below.



Click and choose **Settings** in the menu.



In Panorama Settings, click Enable and select the lens type of the selected camera.

ameras	ce 県 Storage	Video Wall NVS Settings A System 2.	Joystick
Site Name MD-500Ap-360-0230	Camera Na MD-500Ap-		Click here to preview
		Username: admin Password: Model: Auto switch	VO Settings LED Control OSD Settings
	•	Record Stream Type Liveview Stream Type Stream Type: Stream 1 Camera Name: MD-500Ap-360-023C Video Codec: H.264 Video Resolution: 2032X1536 Audio Codec: G.711	Ste Name Date/Time Panorama Settings Carbon Content of the set of the se

• Immervision A8TRT:

For the 360P cameras (ex: MD-300Np-360P), please select Immervision A8TRT.

🖉 Settings		x
	🖷 Video Wall 🔋 NVS Settings 🕌 System 🗘 J	loystick
Cameras Site Name Camera Na 1 MD-500Ap-360-0230 MD-500Ap-	Connect to Camera Site Name: MD-500Ap-360-0230 V Auto V Auto	Click here to preview
	Password: ***** Model: Brickcom IP Camera *	VO Settings LED Control
	Auto switch Record Stream Type Liveview Stream Type Stream Type: Stream 1	OSD Settings
Export Import	Camera Name: MD-500Ap-360-023C Video Codec: H.264 Video Resolution: 2032X1536 Audio Codec: G.711	Panorama Settings

In the preview window, you can see an oval image with the black background. If you do not get the oval image, the de-warp function will not work properly.

Click **OK** to save and apply the panorama settings.

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• FishEye:

The BRC64 supports the fisheye lens for the Brickcom camera used along with the 3rd-party fisheye lens (ex. The 3rd-party fisheye lens attached to the FB series camera). In this case, please select **FishEye**.

🖉 Settings		x
Camera Sequence Storage Cameras	🖷 Video Wall 🔋 NVS Settings 🚢 System 🔔 Jo	pystick
Site Name Camera Na 1 FB-130Np-fb2a FB-130Np-f 2 OB-100Ap-b030 OB-100Ap-0 3 PZ-040D-3cd9 PZ-040D-3cd 4 FB-300Ap-447a FB-300Ap- 5 GMD-100Ap-0333 GMD-100Aq 6 WFB-300Ap-4351 WFB-300Ap- 7 MD-500Ap-0320 MD-500Ap-	Site Name: MD-500Ap-360-0230 Image: Auto Image: I	Click here to preview
	Username: admin Password: Password: Model: Brickcom IP Camera Auto switch Record Stream Type Liveview Stream Type Stream Type: Stream1	VO Settings LED Control OSD Settings Site Name Date/Time
Export Import	Camera Name: MD-500Ap-360-023C Video Codec: H.264 Video Resolution: 2032X1536 Audio Codec: G.711 OK CANCEL	Panorama Settings Panorama Settings Enable Lens Type: FishEye

In the preview window, you can see a circular image with the black background. If you do not get the circular image, the de-warp function will not work properly.

Click **OK** to save and apply the panorama settings.

• Immervision A0**V:

If you have a CS-mount ImmerVision Panomorph lens and want to use it with the camera (ex: CB-502Ap), please select **Immervision A0**V**.

am		\$	Connect to Camer Site Name:	MD-500Ap-360-0230	
	Site Name FB-130Np-fb2a OB-100Ap-b030	Camera Na FB-130Np-1 OB-100Ap-	IP 🔘 Doi	nain Name 💿 Easy Link 💿 Generic RTSP	
-	PZ-040D-3cd9	PZ-040D-30	IP Address:	192 . 168 . 10 . 65	Click here to preview
5	FB-300Ap-447a GMD-100Ap-3933 WFB-300Ap-435f	FB-300Ap-4 GMD-100Aj WFB-300Aj	Http Port:	80	
7	MD-500Ap-360-0230	MD-500Ap-	Username:	admin	
			Password:	****	∼VO Settings
			Model:	Brickcom IP Camera	LED Control
			Auto switch		OSD Settings
			Record Stream 1	ype Liveview Stream Type	V Site Name
			Stream Type:	Stream1	☑ Date/Time
			Camera Name: Video Codec:	11.254	Panorama Settings
4 [Video Resolutio	n: 2032X1536	C Enable
			Audio Codec:	G.711	Lens Type: Immervision A0**V 🔹

In the preview window, you can see an oval image with the black background. If you do not get the oval image, the de-warp function will not work properly.

Click **OK** to save and apply the panorama settings.



On the BRC64 PC-NVR, you can use the mouse or the software control panel to perform the PTZ (pan, tilt, zoom) operations. For the mouse-based PTZ control, the drag operation of the mouse changes the viewing direction, and the mouse wheel does the zoom-in and zoom-out of the image.

The result of the PTZ operation depends on where the camera is installed (on the ceiling, on the ground, or on the wall). For the BRC64 PC-NVR to know the actual position of the camera, please right click on the FishEye / Immervision A0**V / Immervision A8TRT camera image for the menu to pop up. Then select **Image Effect** \rightarrow **Panorama** \rightarrow **Camera Position**. Under **Camera Position**, 3 options are available: **Ceiling**, **Ground**, **Wall**.

Ceiling	Select this option if the camera is installed on the ceiling
	facing the ground.
Ground	Select this option if the camera is installed on the ground
	facing the ceiling.
Wall	Select this option if the camera is installed on the wall
	facing forward.



The BRC64 PC-NVR offers a few display modes for the FishEye / Immervision A0**V / Immervision A8TRT cameras, such as the normal PTZ-capable display, simultaneous quadruple PTZ-capable display, and the 180° perimeter display. To select the display mode, please right click on the FishEye / Immervision A0**V / Immervision A8TRT camera image for the menu to pop up. Then select **Image Effect** \rightarrow **Panorama** \rightarrow **Display Mode**. Under **Display Mode**, 3 options are available: **PTZ**, **Quad**, **Perimeter**.

PTZ	Select this option for the single display. The PTZ commands are applicable.
Quad	Select this option for the 2x2 quadruple display. The PTZ commands are applicable to each of the displays, just like controlling 4 different cameras.
Perimeter	Select this option for the 180° horizontal panoramic image.

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PTZ Control Panel:

Click the **PTZ Setting** button (marked by **1** on the picture) on the control panel to show the PTZ control section (marked by **2** on the picture). The PTZ control section consists of 8 directions and the Home button at the center.

1. Click the direction buttons to change the viewing direction on the image.

2. Click the Home button at the center of the PTZ control section to revert to the default viewing direction and zoom level.



After clicking the **Setting** button, the **Zoom in** and **Zoom out** buttons will show up.



On the PTZ control section, click the arrow (marked by **3** on the picture) for the **Preset Point and Patrol** section to come up.



To set up the pre-set point(s):

1. Determine the desired viewing direction and zoom level using the PTZ commands.

2. Enter the name into the Current Position field (ex. Pre-set 1),

then click 💽 to create a new pre-set point. Click 🖃 to

delete an existing pre-set point.

3. On the drop-down list below the **Current Position** field, the user can view all the configured pre-set points. When the user selects a pre-set on the drop-down list and clicks **•**, the image corresponding to the preset will be Immediately displayed.

To set up the patrol rule(s):

1. Enter the name into the **Description** field, then click **f** to create a new patrol rule. Click **f** to delete an existing rule.

2. On the drop-down list below the **Description** field, the user can view all the configured patrol rules. When the user selects a patrol rule on the drop-down list and clicks . the BRC64 PC-NVR will run this rule endlessly. Click I to stop the rule.

3. When a patrol rule is selected, in the **Edit Patrol** section the user can see which pre-set points are included and put in order for the patrol rule. The user can select the desired pre-set

point(s) on the drop-down list in the Edit Patrol section, then click 🖭 to add a pre-set point

to the patrol rule, or click **E** to delete a pre-set point from the patrol rule. The user can double-click the **Duration** field of each pre-set point to set the period of stay for the pre-set point.

Network

IP Settings

This section explains how to configure a wired network connection for the camera. There are several ways to setup the camera over the Internet: (1) obtain an available dynamic IP address assigned by a DHCP server, (2) use a static IP, or use PPPoE (Point-to-point over Ethernet). Select the desire setup mode from the IP settings drop-down menu.

IP Se	ttings			
,				
	Mode	DHCP 🗸		
,				
		Apply	Cancel	

1. **DHCP** –If this option is selected, the camera will automatically obtain an available dynamic IP address from the DHCP server each time it connects to the LAN.

Mode	Static IP 🗸
IP Address	169 . 254 . 209 . 208
Subnet Mask	255 . 255 . 0 . 0
Default Gateway	169 . 254 . 209 . 198
Primary DNS	
Secondary DNS	0.0.0.0

2. **Static IP -** Select this option to manually assign a static IP address to the camera. Enter the static IP address, Subnet mask, Default Gateway, Primary and Secondary DNS provided by the ISP.

IP Settings		
	Mode	
	Username	
	Password	

3. PPPoE (Point-to-point over Ethernet): Use this mode if connecting to the Internet

through a DSL Line. 4 NOTE - To utilize this feature, it requires an account provided

by an Internet Service Provider. Enter the user name and password provided by the ISP. Click **Apply** to apply settings or **Cancel** to cancel changes.

4. 3G(*) – Use this option if using a 3G SIM card to transmit video/audio surveillance over a 3G network

Mode	3G 💌
APN	internet
Dial Number	*99#
PIN Code	0000
Username	
Password	

NOTE - This function is only available for GOB models.

a. Enter the APN (Access Point Number), Dial Number, PIN Code, User Name and Password provided by the ISP.

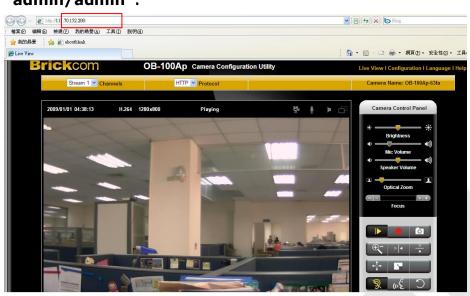
b. Click **Apply** to apply the settings. The message below will be displayed if the 3G settings were successfully applied.



c. Before disconnected the wired connection with the network camera, obtain the IP Address by opening EasyConfig. The 3G connection IP Address will be displayed in the IP Address column.

	ckcom double click the camera y	you want to connec	t from the list.		(
No	UPnP Name	IP Address	MAC Address	Model Name	Firmware
1	GOB-100Ap-dab2	111.70.152.208	00:26:82:1b:da:b2	GOB-100Ap	v2.3.7.6
Sea	rch again				

d. The network camera can now be accessed over a 3G network. To access the video feed through the internet, open a web browser and enter the network camera's IP address. A dialog window will pop up requesting a username and password. As stated on the previous page, the default username and password for the Administrator account are **"admin/admin".**



UPnP

Universal Plug and Play (UPnP) simplifies the process of adding a camera to a local area network. Once connected to a LAN, the camera will automatically appear on the intranet. Click "Enable" to enable this function and enter an UPnP name which the camera will appear under on the intranet.

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U	PnP	
	Enabled	
	UPnP Name	WCB-100Ap-2c11
		Apply Cancel

Click **Apply** to apply settings or **Cancel** to cancel changes. **DDNS** (dynamic domain name service)

DDNS links a domain name to an IP address, allowing users to easily access their camera even with a changing IP address. Brickcom network cameras are compatible with three DDNS

		_		_				- <u>/•</u>	\			
service pro	oviders (1)	DynDNS,	(2)	TZO,	and	(3)	No-IP.	_ <u></u>		- Before	utilizing	this

function; please apply for a dynamic domain account from a DDNS provider.

DynDNS	TZO	NO-IP	
		1	
	Enable		
	Username		
	Password		
	Hostname		
		Apply	Cancel

DynDNS – Enable the DynDNS to allow the camera to have a fixed host and domain name. Refer to the DynDNS website (www.dyndns.com) to apply for a dynamic domain account. When an account has been created, enter the username, password and hostname. Click **Apply** to apply settings or **Cancel** to cancel changes.

TZO

DynDNS	TZO	NO-IP
	Enable	
	Email Address	
	TZO Password	
	Domain Name	
		Apply Cancel

TZO is a DDNS provider which allows users to create a dynamic DNS. Refer to the TZO website (http://www.tzo.com/) to apply for a dynamic domain account. When an account has been created, enter the e-mail address, password and domain name.

Click Apply to apply settings or Cancel to cancel changes.

No-IP

DynDNS	TZO	NO-IP	
	Enable		
	Email Address		
	Password		
	Hostname		
		Apply	/ Cancel

No-IP is a DDNS provider which offers DNS services, email, network monitoring and SSL certificates. Email services include POP3 email, outbound SMTP email, backup mail services and mail reflection and filtering. Refer to the No-IP website (www.no-ip.com) to apply for a dynamic domain account. When an account has been created, enter the e-mail address, password and domain name.

Click **Apply** to apply settings or **Cancel** to cancel changes.

EasyLink™

EasyLink[™] is a unique Brickcom function which allows users to assign a unique EasyLink name to their network camera's IP address. There is no need to configure the router to open up ports or remember hard-to-memorize IP addresses. When this function is enabled, users can log onto [uniqueEasyLinkname].mybrickcom.com to view the camera's web GUI and live view.

- 1. Check the box to enable EasyLinkTM.
- 2. If Auto mode is selected, the following page will be displayed. **NOTE** This mode is recommended.
- 3. Enter a unique EasyLink name whose length must be between 5-32 characters. Verify that the EasyLink name is available.

E	asyLink	
	Enable	
	Mode	💿 Auto 🔘 Manual
	EasyLink Name	00402512aabb .mybrickcom.com Verify
	EasyLink Status	The EasyLink function cannot work because the IP camera is behind a Double NAT network.
		Apply Cancel

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- 4. If Manual mode is selected, the following page will be displayed.
 - a. Manually enter the Public IP Address, HTTP port and RTSP port or leave the default values.

Eas	syLink	
_		
	Enable	
	Mode	🔘 Auto 💿 Manual
	EasyLink Name	00402512aabb .mybrickcom.com Verify
	Public IP Address	0.0.0.0
	Public HTTP port	80
	Public RTSP port	554
	EasyLink Status	The EasyLink function cannot work because the IP camera is behind a Double NAT network.
		Apply Cancel

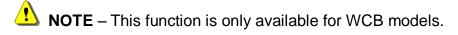
Click **Apply** to apply settings or **Cancel** to cancel changes.

NOTE - The EasyLink function will not work if the following conditions occur:

- 1. The camera cannot be located behind a double NAT network.
- 2. The camera's IP address cannot be assigned to specific port numbers using the router's port forwarding.
- 3. EasyLink uses UPnP to exchange port information with the router. The camera must connect to the internet through a router which supports UPnP.

Wireless

These settings control how a Network Camera interacts with a wireless network. Users can identify the wireless network and enable wireless encryption.



Basic Settings

Basic Settings	Adva	nced Settings	Wi-Fi Protected Setup	
Network Nam	ne (SSID)	Brickcom		Site survey
Securit	ty	Disabled	1	
		Disabled WEP WPA-Personal WPA2-Personal	Apply	Cancel
			Site	e Survey List
			Click the Site Surve	ey Button to update the list.

Network Name (SSID) - The Service Set Identifier (SSID) is the network name used to identify the wireless signal emitted from a wireless camera. It is case-sensitive and can be up to 32 characters long.

Wireless devices have a default SSID set by the factory. Brickcom wireless products use **Brickcom** as the default name. It is recommended for users to rename their SSID to something unique in order to distinguish their wireless device from surrounding wireless networks.

NOTE - Be careful when including personal information when naming the SSID as it is viewable by anyone browsing for wireless networks.

Security - Encryption protects data transmitted over a wireless network. Wi-Fi Protected Access (WPA-Personal/WPA2-personal) and Wired Equivalent Privacy (WEP) offer different levels of security for wireless communication. А network encrypted with WPA-Personal/WPA2-personal is more secure than a network encrypted with WEP because WPA-Personal/WPA2-personal uses dynamic key encryption. To protect the information as it passes through the airwaves, it is recommended to enable the highest level of encryption supported by the network equipment.

Site Survey – Survey the local area for available wireless networks. The user should select their Local Area Network (LAN) from the Site Survey List.

Network Name (SSID)	Brickcom	S	te survey			
Security	Disabled 💌					
		Apply		Cancel		
		Site Surv	vey List			
S SID	Mode	Security	Channel	Signal	Туре	Select
test_gary_Brickcom_1	11b/g/n	NONE	1	78%	Infrastructure	Select
SmartHub-AWRT600N	11b/g/n	NONE	1	73%	Infrastructure	Select
Test-FAE	11b/g/n	NONE	1	100%	Infrastructure	Select
bricom_3	11b/g/n	NONE	1	89%	Infrastructure	Select
Test_Cavin	11b/g	NONE	1	57%	Infrastructure	Select
	11b/a/p	NONE	2	6004	Infractructure	Soloct

WEP- Wired Equivalent Privacy (WEP) is a basic encryption method which transmits network broadcast messages using radio signals. It is not as secure as WPA.

Basic Settings	Advan	ced Settings	Wi-Fi Protected Setup					
Network Name	(SSID)	Brickcom		Site survey				
Security	<i>ı</i> –	WEP 🜱						
TX Key		1 🕶						
WEP Encryp	otion	40/64 bits (10 hex o	digits) 💌					
Key 1								
Key 2								
Key 3								
Key 4								
Authenticat	tion	Open System 🔽						
			Apply	(Cancel			
				Survey List				
SSID		Mode	Security	Channel	Signal	Туре	Select	
test_gary_Brid	kcom_1	11b/g/n	NONE	1	78%	Infrastructure	Select	
SmartHub-AW	RT600N	11b/g/n	NONE	1	73%	Infrastructure	Select	
Test-FA	Æ	11b/g/n	NONE	1	100%	Infrastructure	Select	
bricom	_3	11b/g/n	NONE	1	89%	Infrastructure	Select	
Test_Ca	vin	11b/g	NONE	1	57%	Infrastructure	Select	
	сот	11b/a/a	NONE	2	R00/	Infractructure	Soloct	

Tx Key - Select a key from the drop-down menu.

WEP Encryption - Select a level of WEP encryption: 64 bits 10 hex digits or 128 bits 26 hex digits. The default is 64 bits 10 hex digits.

Key 1-4 - Enter the WEP key(s) manually.

Authentication - The default is set to Open System, which allows either Shared Key or Auto authentication to be used. With Shared Key authentication, the sender and recipient use a WEP key for authentication. With Auto authentication, the sender and the recipient do not use a WEP key for authentication.

Click **Apply** to apply settings or **Cancel** to cancel changes.

WPA-Personal - WiFi Protected Access (WPA)-Personal

Network Name (SSID)	Brickcom	Si	ite survey			
Security WPA-Personal V						
Encryption TKIP V						
Shared Key	Shared Key (8 to 63 characters)					
		Apply Site Surv	vey List	Cancel		
SSID	Mode	Security	Channel	Signal	Туре	Select
test_gary_Brickcom_1	11b/g/n	NONE	1	78%	Infrastructure	Select
SmartHub-AWRT600N	11b/g/n	NONE	1	73%	Infrastructure	Select
Test-FAE	11b/g/n	NONE	1	100%	Infrastructure	Select
bricom_3	11b/g/n	NONE	1	89%	Infrastructure	Select
Test_Cavin	11b/g	NONE	1	57%	Infrastructure	Select
DO NIVE TEST	11b/a/a	NONE	2	6004	Infractructure	Soloct

Encryption - Supports two encryption methods with dynamic encryption keys: Temporal Key Integrity Protocol (TKIP) and Advanced Encryption Standard (AES). Select the algorithm type from the drop down menu: TKIP or AES. The default is TKIP.

Shared Key - Enter the key shared between the Router and the server keys. Enter a password of 8-63 characters.

Click **Apply** to apply settings or **Cancel** to cancel changes.

WPA2-Persona I - WiFi Protected Access (WPA2-Personal)

Network Name (SSID)	Brickcom	Si	te survey			
Security	WPA2-Personal V					
Encryption						
Shared Key						
Site Survey List						
SSID	Mode	Security	Channel	Signal	Туре	Select
test_gary_Brickcom_1	11b/g/n	NONE	1	78%	Infrastructure	Select
SmartHub-AWRT600N	l 11b/g/n	NONE	1	73%	Infrastructure	Select
Test-FAE	11b/g/n	NONE	1	100%	Infrastructure	Select
bricom_3	11b/g/n	NONE	1	89%	Infrastructure	Select
Test_Cavin	11b/g	NONE	1	57%	Infrastructure	Select
				6004	Infractructure	Soloct

Encryption - WPA2 supports AES encryption method with dynamic encryption keys. **Shared Key** - Enter the key shared between the Router and the server keys. Enter a password of 8-63 characters.

NOTE - If using WPA or WPA2, each device in the wireless network must use the same WPA or WPA2 method and shared key or else the network will not function properly.

Advanced Settings

Basic S	Settings Ac	Ivanced Settings	Wi-Fi Protected Setup		
Г					
	Network Mod	le BGN-Mix	ed 💌		
	Radio Band	Auto-20/4	.0MHz Channel 🛛 👻		
	WMM (802.1e Q	Disabled	*		
			Apply	Cancel	

Network Mode - From the drop-down menu, select the wireless standards running on the network.

- •If there are Wireless-B, Wireless-G and Wireless-N (2.4GHz) devices on the network, use the default setting, **BGN-Mixed**.
- •If there are Wireless-B and Wireless-G devices on the network, select **BG-Mixed**.
- •If there are only Wireless-B devices on the network, select Wireless-B Only.
- •If there are only Wireless-G devices on the network, select Wireless-G Only.
- •If there are only Wireless-N (2.4GHz) devices on the network, select Wireless-N Only.
- •(*)If there are Wireless-A and Wireless-N devices on the network, select **AN-Mixed**.
- •(*)If there are Wireless-A, Wireless-B, Wireless-G and Wireless-N (2.4GHz) devices on the network, use the default setting, **ABGN-Mixed**.
- •(*)If there are only Wireless-A devices on the network, select Wireless-A Only.

Radio Band - The settings are available for the Auto-20/40MHz channel and Standard-20 MHz channel.

Enable WMM (802.1e QoS) - WMM is a wireless Quality of Service feature that improves quality for audio, video, and voice applications by prioritizing wireless traffic. To use this feature, the wireless client devices on the network must support Wireless WMM. The default setting is **Enabled.** To disable this feature, select **Disable**.

Click **Apply** to apply settings or **Cancel** to cancel changes

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Wi-Fi Protected Setup

Basic	Settings	Advanced	Settings Wi-Fi Prote	ected Setup				
				Wi-Fi Prot	ected Setup			
	PIN Mode Enter PIN number 38989827 in the AP device Enter the AP's SSID Brickcom Click the Register button on the right to start WPS. Register							
	Wi-Fi Prote Sta	•	Not Configured					
				Hardware	WPS Button			
	Enal	bled						
			Apply		C	Cancel		

Use this method if the client device has a Wi-Fi Protected Setup PIN number.

- 1. Enter the network name from the device in the field.
- 2. Click <Register> to start WPS.
- 3. Click "Enable" to enable the WPS Button. If this feature is not enabled, the user will not be able to use the WPS button

Click **Apply** to apply settings or **Cancel** to cancel changes.

HTTP/HTTPS

HTTP	/HTTPS	
		HTTP
	Enabled	
	Port	80
		HTTPS
	Enabled	
	Port	443
		Apply Cancel

HTTP – (HyperText Transfer Protocol) - This protocol allows for TCP protocol quality without having to open specific ports for streaming. Users inside a firewall can utilize this protocol to allow streaming data through.

HTTPS - (Hypertext Transfer Protocol over SSL) - This protocol allows authentication and encrypted communication over SSL (Secure Socket Layer). It helps protect streaming data transmission over the Internet on a higher security level than HTTP.

Click "Enable" to enable and Apply to apply settings or Cancel to cancel changes.

To enable HTTPS, users have to create and install a certificate.

1. Click "Continue to this website" to install.

There is a probl	em with this website's security certificate.
The security certifica	ate presented by this website was issued for a different website's address.
Security certificate p send to the server.	problems may indicate an attempt to fool you or intercept any data you
We recommend th	at you close this webpage and do not continue to this website.
Click here to close	e this webpage.
Continue to this	website (not recommended).
More informat	ion

2. Enter the User name and Password of the camera.

Connect to 192.1	58.1.1 ? 🔀
	GP
username and passwo Warning: This server i	is requesting that your username and In insecure manner (basic authentication
User name:	🖸 admin 🛛 👻
Password:	••••
	Remember my password
	OK Cancel

3. Click "Certificate Error" on the top right corner of the window to view the certificate.

🚱 🕞 🔻 🙋 https://192.168.1.103/		👻 😵 Certificate Error	
File Edit View Favorites Tools Help		X Mismatched Address The security certificate presented by this website was issued for a different website's address.	<u>ن</u>
Brick com	WCB-100Ap Camera Configur	This problem may indicate an attempt to fool you or intercept any data you send to the server.	e View I (
Stream 1 👻 Channels	TCP Y Protocol	We recommend that you close this webpage. About certificate errors	Name: W
2009/01/01 00:06:44 H.264	1280x800 Playing	View certificates	era Contro

4. Click "Install Certificate" and follow the steps to finish the installation.

Certificate	? 🗙
General Details Certification Path	
Certificate Information	_
This certificate is intended for the following purpose(s): •Ensures the identity of a remote computer	
Issued to: Brickcom	-
Issued by: Brickcom	
Valid from 7/8/2009 to 7/3/2029	
Install Certificate	nt
0	

Event

Event Settings

When an event (such as unauthorized movement) occurs, the camera can be scheduled to perform certain actions. An Event Type is a set of parameters that defines these actions. This section describes how to configure the camera to perform certain actions when events occur.

Event	Settings				
				Event List	
	Enable	Name	Event Type	Action	
	Note:For stream reation than 1280x1024.	cording,stream 1 mu		PEG4 with a bitrate lower than 1.5Mbps or the quality below 3 and the resoltion lower	
			Add E	Event Delete Event	

Click <Add Event> on the Event Settings page. The Event Setup page will appear.

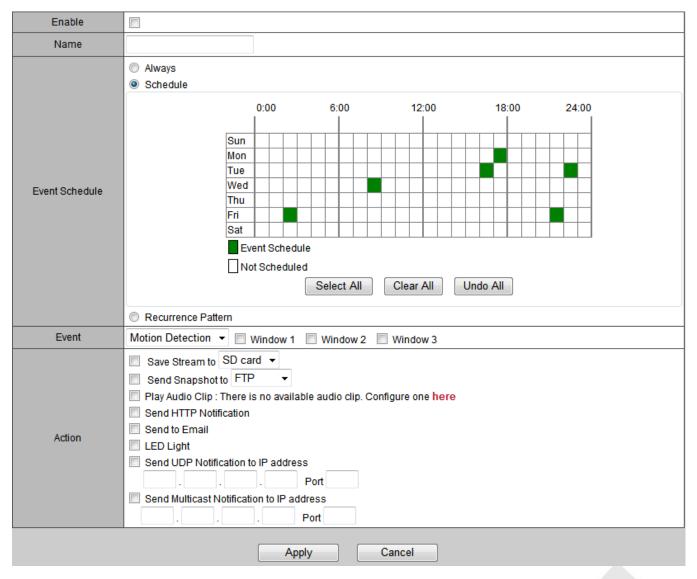
		Ev	ent List	
Enable	Name Event T	уре	Act	ion
Note:For stream rec han 1280x1024.	ording,stream 1 must be set to H	.264 or MPEG4 wit	a bitrate lower than 1.5Mbps or th Delete Event	e quality below 3 and the resoltion lo
Enable				
Name				
Event Schedule	 Always Schedule Recurrence Pattern 			
Event	Motion Detection 👻 📃	Window 1 📃 Wir	dow 2 🔲 Window 3	
Action	Save Stream to FTP Send Snapshot to FTF Play Audio Clip : There is Send HTTP Notification Send to Email LED Light Send UDP Notification to Send Multicast Notificati	s no available aud o IP address . Port	o clip. Configure one <mark>here</mark>	

How to Set Up an Event Schedule

Event Schedule describes how and when the camera performs certain actions.

1. Check "Enable" and enter a descriptive name for the event schedule.

- 2. Set Event Schedule to define when the event is activated by selecting from Always (24 hours), Schedule or Recurrence pattern.
 - a. If Schedule is selected from the Event Schedule, the following page will be displayed:



- A Scheduled Event can be programmed for certain times and day. Click individual boxes to schedule specific times for the camera to detect events.
 - b. If Recurrence Pattern is selected, the following page will be displayed.

			Event List
Enabled	Name	Event Type	Action
	12345	Motion Detection	Send to Email
	abcde	PIR	Take Snapshot
	asdf	Audio	LED Light
	-	Ad	d Event Delete Event
Enabled			
Name	asdf		
Always Schedule Schedule Ore Recurrence Pattern Sun ♥ Mon □ Tue ♥ Wed ♥ Thu □ Fri □ Sat □ Start 00 ♥ : 07 ♥ Duration 10 Minutes			
Event	Audio Detect	tion 💌	
Event Audio Detection Save Stream to SD card Send Snapshot to FTP Play Audio Clip : There is no available audio clip. Configure one here Send HTTP Notification Send to Email LED Light Send UDP Notification to IP address Send Multicast Notification to IP address . . Port			

- i. An event schedule can be programmed to recur at different times according to the user's needs. Select the days for the event schedule to occur. Select a start time and specify the duration.
- 3. Define what will trigger an event to occur by selecting an option from the Event drop-down list.
- 4. Select the Actions that will occur when the event is triggered.

a. When <Send to Email> is selected, the following page will be shown:

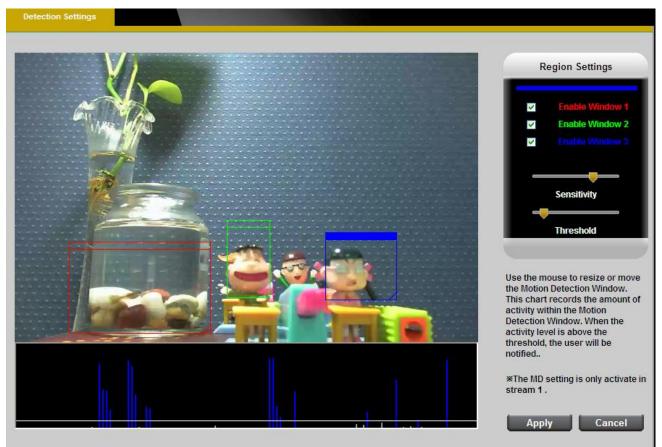
Enable	
Name	
Event Schedule	 Always Schedule Recurrence Pattern
Event	Motion Detection 👻 🔲 Window 1 💭 Window 2 💭 Window 3
Action	 Save Stream to FTP Send Snapshot to FTP Play Audio Clip : There is no available audio clip. Configure one here Send HTTP Notification Send to Email LED Light Send UDP Notification to IP address
Email	Sender TO CC Sender's Name Subject

- i. Sender Enter the email address of the sender.
- ii. Recipient Enter the email address of the recipient. To enter multiple recipients, separate each using a comma.
- iii. Sender's Name Enter the sender's name that will appear in the recipient's inbox.
- iv. Subject Enter the title of the email.
- 5. When complete, click **Apply** to save new event or **Cancel** to delete the event. The new event will appear on the event list.
- To edit an event setting; select the event from the list. To remove an event setting from the list, select an event name from the list and then click <Delete Event>. Click <Add Event> to add more events.

INOTE - Refer to the Audio Clip section for more details about the "Play Audio Clip" action.

Motion Detection

Motion can be detected by measuring changes in the speed or vector of an object or objects in the monitored area. This section explains how to configure the Network Camera to enable motion detection.



Detection Setting – Use this setting to enable and define the motion detection windows. The user can defined up to three areas on the live view window for motion detection.

- 1. Select <Window1>, <Window2>, or <Window3> to adjust the motion detection window.
- 2. Check the box to enable the window.
- 3. Use the mouse to resize or move the motion detection window.
- 4. Adjust the "Sensitivity" level. Lower sensitivity levels will result in more activity needed to trigger an event.
- 5. Adjust the "Threshold" to change the threshold level. The higher the threshold, the larger objects need to be to trigger an event.
- 6. The chart below the Live View window indicates the activity level of the Motion Detection window. When motion is detected by the camera and exceeds the defined threshold, a red bar will appear. Users can use this feature as a trigger source to send photos or videos to a remote server via email or FTP.

PIR(*)

PIR		
Sensit	vity 50 🗸 %	
	Apply Cancel	

The PIR (Passive InfraRed) sensor measures infrared light radiating from objects in its field of view. This can be used to detect a moving object, such as a person, in dimly lit areas.

Sensitivity – Adjust the sensitivity of the PIR Sensor from the drop down menu. The sensitivity can be set from 10 - 100%; with the default sensitivity set at 50%. Higher sensitivity levels will increase the range of the PIR Sensor. When the sensitivity level is set to 100%, the PIR sensor will be able to detect moving objects within six meters.

Audio Detection

Audio De	etection	
	Sensitivity	50 • %
		Apply Cancel

Users can schedule an event to be triggered if there is a change in the sound level of a monitored area. Audio detection can be used to measure change in the ambient voice. Select the sensitivity from the drop-down menu.

Sensitivity - is used to adjust the sensitivity of the sound level from 10 - 100%. The default sensitivity is 50%.

^{60 %} Display the current sound level.

Notifications

Use the tools in this section to specify what type of notification will be sent when an event occurs. The camera can send buffered images to an FTP server, Samba, Email, or HTTP.

FTP Settings

File Transfer Protocol (FTP) is used as an application component to automatically transfer files for program internal functions. Select "Primary FTP Server" from the Server Selection drop down menu to send media files to a FTP server when an event is triggered. Enter the FTP IP address or hostname. By default, the FTP port server is set to 21. Enter the account name, password and FTP Path to configure the settings.

FTP Settings		
Serv	er Selection	Primary FTP Server
FT	P Address	IP Address • 0 .0 .0 .0
F	TP Port	21
Acc	ount Name	
Accou	int Password	
F	TP Path	
		Apply Test Cancel

E-mail Settings

Select "Primary Email Server" option from the Server Selection drop down menu to send media files to an email server when an event is triggered.

SMTP Server - Enter the server host name of the email server.

SMTP Port - Enter the port number of the email server; by default, the SMTP port is set to 25.

Authentication - Select the authentication type from the drop-down menu.

Email Account - Enter the user name of the email account if necessary.

Email Password - Enter the password of the email account if necessary.

Server Selection	Primary Email Server
SMTP Server	
SMTP Port	25
Authentication	LOGIN
Email Account	
Email Password	

Click **Apply** to apply settings or **Cancel** to cancel changes.

Samba Settings

Select this option to send the media files via a network neighborhood when an event is triggered.

Server Address - Enter the IP address of the Samba server.

User Name - Enter the user name of the Samba server.

Password - Enter the password of the Samba server.

Work Group - Enter the workgroup of the Samba server.

Shared Folder - Enter the share folder of the Samba server.

Samba Settings	
Server	Address P Address 0 .0 .0 .0
User	name
Pass	sword
Work	Group
Shared	1 Folder
	Apply Test Cancel

HTTP Settings

Select this option to send the media files via an HTTP notification when an event is triggered.

HTTP Se	ettings	
Г		
	URL	
	Message	
	Username	
	Password	
		Apply Cancel

URL –Specify the URL to send HTTP requests. The URL is normally written as: http://ip_address/ notification.cgi?parameter

ip_address – type the IP address or host name of the HTTP host.

Parameter – type the notification parameter if necessary.

Example

URL - http://192.168.1.1/xxxx.cgi

Message - name1=value1&name2=vlaue2

Result - http://192.168.1.1/xxxx.cgi? name1=value1&name2=vlaue2

Ex:

https://192.168.1.1/notification.cgi?event=MD&camera=FB-100A

Message - Enter the message notification that will be sent when an event is triggered.

Enter the user name and password if necessary.

Video Clip

Video Clip	
Pre-Alarm Buffer	5 Seconds (0-10)
Post-Alarm Buffer	5 Seconds (0-30)
Maximum Buffer Size	1024 Kbytes (128-1500)
	Apply Cancel

This function is used to determine when video clips will be recorded and stored after an event is triggered.

Pre-alarm buffer - Images can be stored internally on the server from the time immediately preceding the trigger. Enter the desired length of time.

Post-alarm buffer - Images can be stored internally on the server from the time immediately following the trigger. Enter the desired length of time.

Maximum buffer size – Specify the maximum file size allowed.

Audio Clip(*)

Audio Recording – Audio clips can be recording and played when an event occurs.

Audi	o Recording					
		Audio Clip List				
	Index	File Name				
	1	11111.wav				
		Play Stop Delete Export				
	Import					
	Please select a file to import Browse Import					
		Audio Recording Settings				
	File Na	ime				
	Durat	ion 5 🔽 Second				
		Record				

Click Browse to import a file from a local hard drive or network disk. Select the file and click

Import. NOTE – The camera can only play audio clips which are saved as .wav files with G.711 u-law encoding in 8000 Hz sampling rate.

To record a new clip using the camera's microphone:

- 1. File Name-Enter a file name.
- 2. Duration Enter the number of seconds to record.
- 3. Click **Record** to record the new audio clip.
- 4. The new audio clip will appear on the audio clip list.
- 5. Select an audio clip file from the Audio Clip List.
 - a. Play- Select to hear the audio clip
 - b. Stop- Select to stop playing the audio clip.
 - c. Delete- Select to delete an audio clip.
 - d. Export- Select to export the audio clip to a local hard drive or network disk.

LED Light(*)

LED Light	
	LED Light
Mode	 Keep active during event Keep active for 1 Sec (1~10)
LED Control	Activate On Inactivate Off
	Apply Cancel

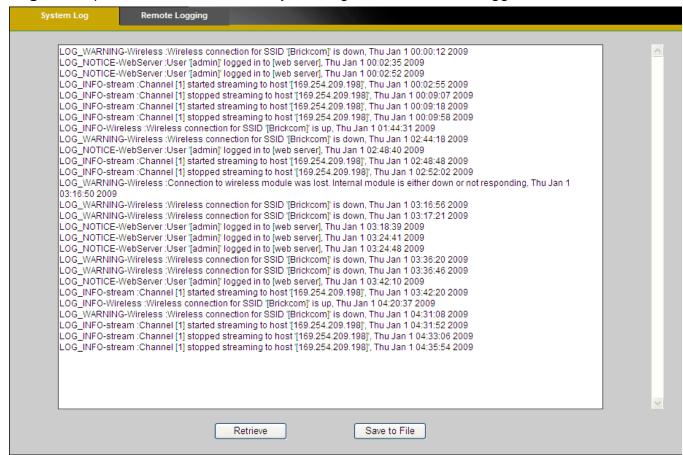
Mode – Select "Keep active during event" or "Keep active for" a specific amount of time when an event is triggered.

LED Control - The LED on the front of the camera can be set to flash at a configurable interval when an event is triggered. From the Activate drop down menu, select a percentage which the LED will brighten to. When the LED reaches the selected percentage, it can be configure to fade to off or turn off. Select the option from the Inactive menu.

System

System Log

Log – Set up the camera to record a system log when an event is triggered.



This page displays the system's log in chronological order. The system log is stored in the camera's buffer area and will be overwritten when the buffer area is full.

Click **Retrieve** to retrieve the log or click **Save to file** to save the system log.

Remote Logging

System Log	Remote Log	ng
Ena	bled	
IP Ad	dress) .0 .0 Port 514
		Apply Cancel

The user can configure the camera to send the system log file to a remote server as a log backup.

Click to enable remote log and enter the IP address of the remote server.

Enter the port number of the remote server.

Click **Apply** to apply settings or **Cancel** to cancel changes.

Date and Time

Manual – Manually enter the date and time.

Clone from PC – The camera will sync with the time, date and time zone of the computer used to modify the camera settings. Check "Clone" to utilize this option. The read-only date and time of the PC will be displayed.

NTP – (Network Time Protocol) - NTP is a protocol for synchronizing the clocks of a computer system. Select to update the time with a NTP server on an hourly, daily, weekly, or monthly basis.

Time Zone – Select the local time zone from drop-down menu.

NTP Server 1 and Server 2 - Enter the address of the NTP server

Daylight Saving - Enable this option to automatically update for Daylight Savings Time.

	Manual	Year 2009 Month	1 Day 1 Hour 0 Minute 0 Second 0
•	Clone from PC	Year 2010 Month	8 Day 3 Hour 17 Minute 27 Second 33
		Clone	
		TimeZone	(GMT+8)HONG KONG
	NTD	TimeZone NTP Server 1	(GMT+8)HONG KONG tick.stdtime.gov.tw
	NTP		

Click Apply to apply settings or Cancel to cancel changes.

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Device Information

System Information – Displays the complete system information of the camera.

System Ir	nformation	Network Settings	Video/Audio Settings Client Information		
	I	AN MAC Address	00:26:82:B6:3C:7B		
	Firmware Version		v3.1.0.2		
	Product Name		CB-100Ap		
	Hardware Version		V2		
	Company Name		Brickcom Corporation		
		UPnP Name	CB-100Ap-3c7b		

Network Settings – Displays the complete network settings information of the camera.

ystem Information Network S	ettings Video/Audio Settings Client Information
	IP Information
IP Setting Type	DHCP
IP Address	192.168.1.21
Subnet Mask	255.255.255.0
Default Gateway	192.168.1.2
Primary DNS	192.168.1.2
Secondary DNS	192.168.1.2
	Network Services
UPnP	Enabled
DynDNS	Disabled
TZO	Disabled
NO-IP	Disabled

Video/Audio Settings - Displays the complete video/audio settings information of the camera.

stem Information	Network S	ettings	Video/Audio Settings	Client Information	
				Stream 1	
Video	Codec	H.264			
Video F	lesolution	1280x800			
Video F	rame Rate	25 fps			
Video	Bitrate	4000 Kbps			
Audio	Codec	N/A			
Multi	cast IP	N/A			
				Stream 2	
Video	Codec	MJPEG			
Video R	esolution	1280x800			
Video F	rame Rate	25 fps			
Video	Quality	3			
Audio	Codec	N/A			
Multi	cast IP	N/A			

Wireless - Displays the complete wireless information of the camera.

System Information Netv	ork Settings Video/Audio Settings Wireless			
Wireless MAC Address	00:26:82:1B:DB:92			
Radio Band	Auto-20/40MHz Channel			
Network Mode	BGN-Mixed			
Security	Disabled			
Network Name (SSID)	Brickcom_MARS			
Wireless Channel	6			
Wireless Signal Strengt	85%			
Status	Connected			

Client Information- Displays the RTSP Client .You will see a list of RTSP clients with the following information: IP Address and channel.

System In	nformation	Network S	ettings	Video/Audio Settings	Client Information			
[Index				P Address		Channel	
				Refresh				

Storage Management (*)

Storage Management is used to view all the recorded files on the Micro-SD/SDHC card.

Storage Management Advanced Settings						
	Local Storage Information					
Item						
Total Capacity	7.41GB					
	2.27GB					
Available Space	5.14GB					
Memory Card Management	Reload Remove Format					
Storage Management	sd schedule snapshot videoclip (

Click Reload to refresh the list of recorded files.

Click **Remove** to safely remove the Micro-SD/SDHC memory card.

Click Format to format the Micro-SD/SDHC memory card.

Left click on the folder to list the recorded files. The user can either play the snapshot of the recorded files by moving the mouse pointer over the file or double click on a file to play it. Right click on the folder to download, play or delete the recorded files.

NOTE – The user may need to install QuickTime multimedia framework to play the

video clips.

Advanced Settings

Automatic Recycle Enable Image: Constraint of the second of th	Storage Mar	nagement	Advanced Setti	ings			
Enable Offline Record Enable File Encryption Enable Password Password Encryption Ciphers AES128 • If the Automatic Recycle function is disabled, there must be at least 50MB Hard Drive space available for the network camera to recorvideo. If the Automatic Recycle function is enabled, it will automatically overwrite the recorded files when the available space remaining is less							
Offline Record Enable File Encryption Enable Password Password AES128 • If the Automatic Recycle function is disabled, there must be at least 50MB Hard Drive space available for the network camera to recorvideo. If the Automatic Recycle function is enabled, it will automatically overwrite the recorded files when the available space remaining is less					Automatic Recy	/cle	
Enable File Encryption Enable Password Password Password Encryption Ciphers AES128 If the Automatic Recycle function is disabled, there must be at least 50MB Hard Drive space available for the network camera to recorvideo. If the Automatic Recycle function is enabled, it will automatically overwrite the recorded files when the available space remaining is less		I	Enable				
Enable File Encryption Enable Password Password Password Encryption Ciphers AES128 If the Automatic Recycle function is disabled, there must be at least 50MB Hard Drive space available for the network camera to recorvideo. If the Automatic Recycle function is enabled, it will automatically overwrite the recorded files when the available space remaining is less							
File Encryption Enable Password Password Encryption Ciphers AES128 If the Automatic Recycle function is disabled, there must be at least 50MB Hard Drive space available for the network camera to recorvideo. If the Automatic Recycle function is enabled, it will automatically overwrite the recorded files when the available space remaining is less				_	Offline Recor	d	
Enable Password Password		I	Enable				
Enable Password Password							
Password Encryption Ciphers AES128 ▼ If the Automatic Recycle function is disabled, there must be at least 50MB Hard Drive space available for the network camera to recorvideo. If the Automatic Recycle function is enabled, it will automatically overwrite the recorded files when the available space remaining is less					File Encryptio	'n	
Encryption Ciphers AES128 - If the Automatic Recycle function is disabled, there must be at least 50MB Hard Drive space available for the network camera to recorvideo. If the Automatic Recycle function is enabled, it will automatically overwrite the recorded files when the available space remaining is less		l	Enable				
If the Automatic Recycle function is disabled, there must be at least 50MB Hard Drive space available for the network camera to recorvideo. Video. If the Automatic Recycle function is enabled, it will automatically overwrite the recorded files when the available space remaining is les		Pa	assword				
video. If the Automatic Recycle function is enabled, it will automatically overwrite the recorded files when the available space remaining is les		Encryp	tion Ciphers	AES128 -			
Apply Cancel				nction is enabled, it will	video. automatically overwrite	the recorded files when the available .	

Automatic Recycle (*) – Enable to automatically overwrite older files when the available space remaining on the Micro-SD/SDHC card is less than 100MB. If the Automatic Recycle function is disabled, there must be at least 50MB hard drive space available for the camera to be able to record video files.

Offline Record – Enable to keep recording if the Network Camera is offline.

File Encryption – Enable the File Encryption to encrypt recorded video files. Files are encrypted using OPENSSL.

To unlock the encrypted file, please download and install the OPENSSL toolkit from the OPENSSL Web site.

http://gnuwin32.sourceforge.net/packages/openssl.htm

Use the following command to encrypted file:

openssl enc -ciphername [-in filename] [-out filename] [-pass arg] [-e] [-d] [-a/-base64] [-A] [-k password] [-kfile filename] [-K key] [-iv IV] [-S salt] [-salt] [-nosalt] [-z] [-md] [-p] [-P] [-bufsize number] [-nopad] [-debug] [-none] [-engine id]

For example: openssl enc -d -aes128 -in encryptfile -out decryptfile -k password

Click **Apply** to apply settings or **Cancel** to cancel changes.

LED Indicators

The LED on the front of the camera can be configured to remain unlit. Check "OFF" to enable

this function.

LED In	dicators			
[LED Indicator	s Configuration	
	OFF			
		Apply	Cancel	

Maintenance

User Management

This section explains how to enable password protection and create multiple accounts.

			Jser Management	
Index	Username		Privilege	
1	admin		Administrator	
		Ad	d Delete	

The administrator account name is "admin", which is permanent and cannot be deleted. Click **Add** to create an account.

User Management					
			User Management		
	Index	Username	Privilege		
	1	admin	Administrator		
			Add Delete		
	Username				
	Password				
	Confirm Password				
	Privilege	Viewer 🗸			
			Apply Cancel		

Enter the new user's name, password and confirm password. Administrators can add up to 10 user accounts.

Select the privilege level for the new user account from the drop-down list. Privilege levels can be assigned as:

- Administrator user has access to view and change the Configuration page. Users with administrator privilege can change other user's access rights and delete user accounts. Click **Delete** or **Update** to delete or modify a user's account.
- Viewer user can only access the main page for live viewing.
- Remote Viewer user can only access the main page for live viewing using TCP protocol.

Language

	Auto	O Deutsch	English	Español	
	Français	Italiano	◎ 日本語	Polski	
Language	Русский	Türkçe	◎ 简体中文	◎ 繁體中文	
	Português	🔘 Ελληνικά	Nederlands		

Select the desired language from the radio button.

Click **Apply** to apply settings or **Cancel** to cancel changes.

IP Filter

The IP Filter is used to filter the IP addresses which are able to access the network camera. Enable the IP Filter and select to allow or deny a range of IP addresses access to the server. Click **Add to list** to add the IP range to the IP filter list.

IP Filter		
Enable IP Filter	Allow Access List	Deny Access List
From	. To .	Add to List
	Apply	Cancel

Firmware Upgrade

This feature allows the user to upgrade the camera firmware. It will take a few minutes to complete the process.



NOTE - Do not power off the camera or camera during the upgrade.

Upgrade - Click Browse... and specify the firmware file. Click Upgrade. The camera will begin upgrading and will reboot automatically when the upgrade is finished.

Firmware Upgrade	
Select a File	Browse Upgrade

Configuration

This feature allows the user to export/import the configuration files of the network camera.

Import/Export - Click export to pop up a dialog to indicate the location and file to export. Click browse to indicate the location and file of the camera configuration and click import to import the configuration file back into the network camera.

Export Export Import Please select a file to import	Import / Export	
Import Please select a file to import Browse		
Import	Export	Export
	Import	Please select a file to import Browse
import	import	Import

Reset to Default

This section is used to restore the camera to default factory settings. Check the boxes to preserve the IP, Wireless, Date and Time, EasyLink, or Language settings. Click **Apply** to restore the camera to default factory settings.

eset to Default			
Press the Apply button	o restore the network camera to	o factory default except settin	gs in
IP settings			
Wireless settings			
📃 Date and Time set	ngs		
EasyLink settings			
🗌 🗌 Language settings			
Apply			
(Appl)			

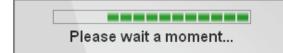
Reboot

Reboot	
Press Button	o Reboot Apply

This feature will reboot the camera. Click **Apply** to begin. A message will pop up asking "The device will reboot. Are you sure?" Click "OK" to continue. The camera will take about one minute to reboot.

Microsoft Internet Explorer
The device will reboot. Are you sure?
OK Cancel

The following message will show during the rebooting process.



When completed, the live video page will be displayed in the web browser.