PiXORD

Moving Pictures Around the World

PB731P / PB731I
Wi-Fi Network Camera

Getting Started Handbook

Version 1.2

PiXORD Corporation

May 2013

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Revision History

Doc. Version	Revision Description	Date
1.0	Initial Official Release	2013/01/18
1.1	Rearranged and Reformatted Contents	2013/04/29
1.2	Correct some descriptions for more detail	2013/05/14

Read Me First!

Important Notes

This handbook is intended for administrators and users of the PiXORD PB731P/731I Cloud Wi-Fi Network Camera, including instructions for using and managing the camera on your network. The use of surveillance devices may be prohibited by law in your country or area. It is therefore the user's responsibility to ensure that the operation of such devices is legal before installing this unit for its intended use.

Before the Network Camera is installed, carefully read and follow all the safety and operating instructions to avoid damage due to faulty assembly and installation. This also ensures that the device is used properly as intended.

Heed All Warnings

- **Do not drop or hit the device.**

  Sensitive electronics inside the camera are vulnerable to excessive impact.

- **Do not install the device under high temperature (less than 45°C) environment (45.**

  Excessive heat could damage the equipment.

- **Do not cover device with any object or install it in a poorly ventilated vicinity.**

  Overheating could damage the camera.

- **Do not expose the device to rain or moisture. Do not touch the power connection with wet hand.**

  Risk of short circuit, electric shock, or fire

- **Do not damage the power cord or leave it under pressure.**

  Risk of fire or circuit electric shock

- **To reduce the risk of electric shock or damage, do not remove the front or back cover.**

  There is no user-serviceable parts inside. Misusage, improper, or negligent handling could damage the device. Refer to qualified service personnel from PiXORD distibutor/dealer for any device related trouble shooting need.

- **Do not continue to operate the device if it appears to malfuntion.**
  Contact qualified service personnel from PiXORD distibutor/dealer for help.
- **Installation of the product should be made by qualified service personnel or system installers from PiXORD distibutor/dealer.**

Customer Support

If you require any technical assistance, please contact your nearest PiXORD distributor/dealer. You may also access the PiXORD website at www.pixord.com for following supports**:**

- Find answers to resolved your problems from FAQ database or contact our FAE at technical support (http://www.pixord.com/contact2.asp).
- Download latest user documentation and firmware updates at PiXORD Support (http://www.pixord.com/support/support.asp)

Registration

To receive the latest updates of product information in the future, register your equipment at http://register.pixord.com/register/.

1 Introduction

PiXORD **PB731P/731I** Cloud Wi-Fi Network Camera delivers superior H.264-AVC performance, state of the art design, and function. It is specifically designed for maximum performance at cost-effective indoor applications, such as elderly care monitoring, overseeing baby, home security, convenient store /office surveillance, etc.

1.1 Hardware Overview

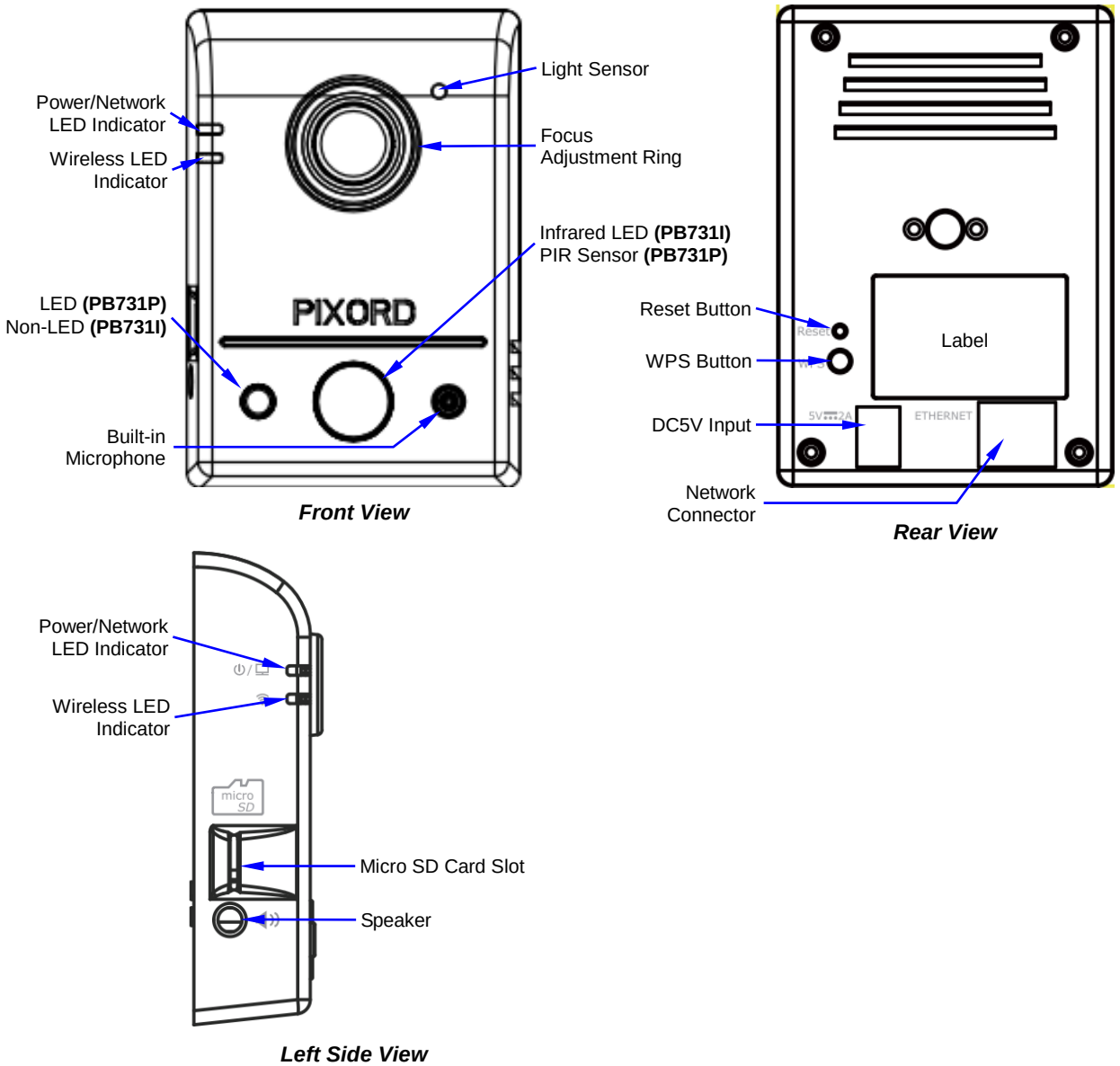


Figure 1-1 PB731P/731I Cloud Wi-Fi Network Outer Shell Profiles

1.1.1 Package Contents

Each **PB731P/731I** Network Camera comes with the following accessories**:**

- A mounting bracket with 2 sets of wood screws & anchors
- A power adaptor (Output: DC5V, 2A; Input: 100~240V 50/60Hz)
- A network RJ45 cable (2.0M)
- A printed copy of "PB731P/731I Quick Guide"
- A CD containing the "Installation Guide Wizard" (a step-by-step guide to camera installation/setup, *i*PIXORD cloud NVR registration process, etc.). It also contains the PDF file of this handbook and other documentations.
- An *i*PIXORD reference card containing the default user name/password, barcode, QR code, alphanumeric code, etc. to use for *i*PIXORD cloud NVR (network video recorder) registration.

2 Installation and Setup

2.1 Table, Ceiling, and Wall Mounting of Camera

1. Use the 2 supplied screws to mount the mounting bracket to a flat surface.
2. Loosen the lock ring to adjust the Camera to the desired angle.
3. Tighten the lock ring to firmly fix the angle position.

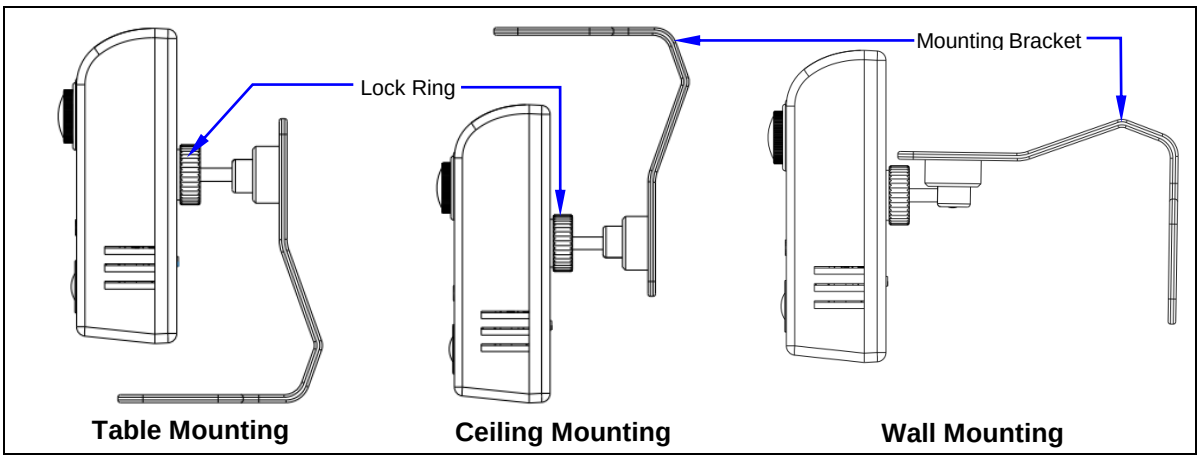


Figure 2-1 Camera Mounting Methods

NOTE

Always mount the Camera on mounting bracket to prevent over heating.

2.2 Connecting Camera to Network

2.2.1 Through LAN Router Cable

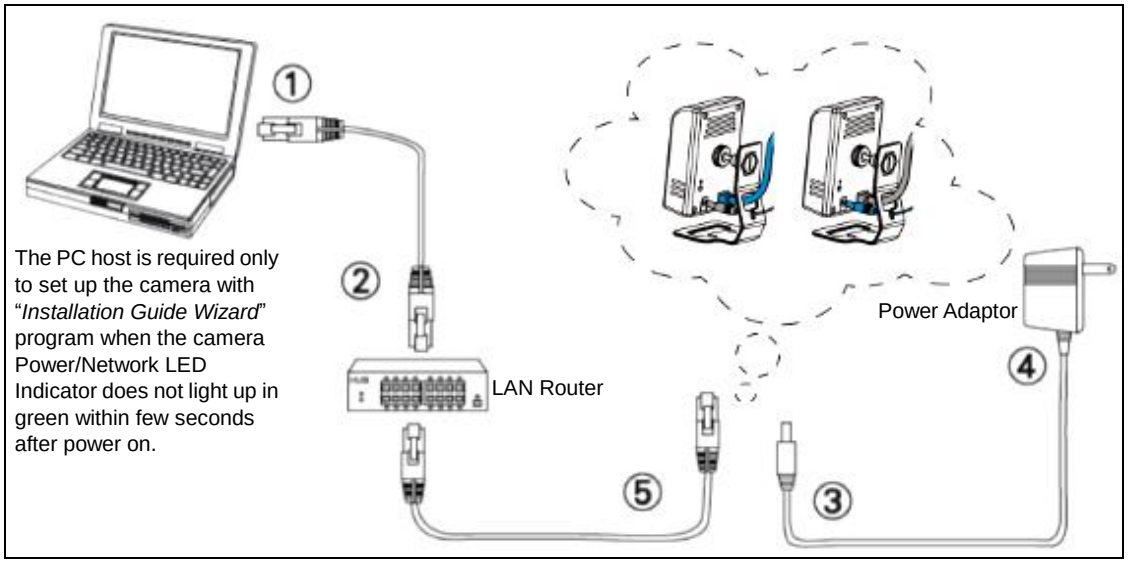


Figure 2-2 Connecting IP Camera to Network

1. Prepare a smartphone/tablet or PC/notebook/ultrabook with Ethernet link to the network.
2. When PC/notebook/ultrabook is used, connect the LAN port of the device to the network router with an RJ45 network cable (① ②).

> ***NOTE***
>
> *If you are going to use smartphone/tablet as monitoring device the PC/notebook/ultrabook is required only to set up your camera with the "Installation Guide Wizard" program from the CD (included in the camera package).*

3. Plug the DC power jack of the power adaptor (③ ④) to Camera and connect the power adaptor to power outlet (110V or 220V).
4. Connect the network router to the LAN port of Camera with an RJ45 network cable (⑤).
5. With power switched on, check the status of the two LEDs at the left corner of camera:

   If the Power/Network indicator (upper LED) turns into green color, it confirms that the Camera has successfully linked with the Internet. Then proceed to start iPIXORD registration and binding process as discussed in Chapter 3.

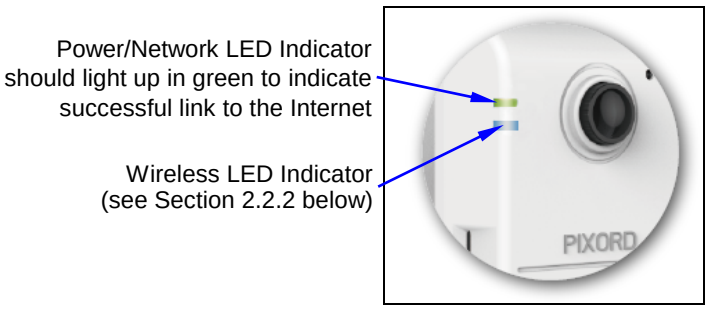


Figure 2-3 Power/Network (Upper LED) & Wireless LED (Lower LED) Indicators

If the upper LED does not turn green, refer to the "Installation Guide Wizard" application program in the CD which will further guide you in detail on how to properly setup your camera for Internet connection.

2.2.2 Through Wi-Fi Protected Setup (WPS)

To connect the Camera in wireless mode, you need to have a Wi-Fi router with WPS button.

1. With Camera power connected and switched on, press and hold the WPS button (at the back of the Camera) for 3 to 4 seconds and then release button. The Wireless LED Indicator (lower LED) will then start to flash and keep on flashing in blue once every second.
2. Within one minute, press the Wi-Fi router WPS button to interface with the Camera.

Figure 2-4 WPS Buttons on Both Camera & Wi-Fi Router

3. When successful connection is established between Camera and Wi-FI Router, the lower LED Indicator will then stabilize and lights up in blue while the upper LED remains lit in green. Then proceed to start iPIXORD registration and binding process as discussed in Chapter 3.

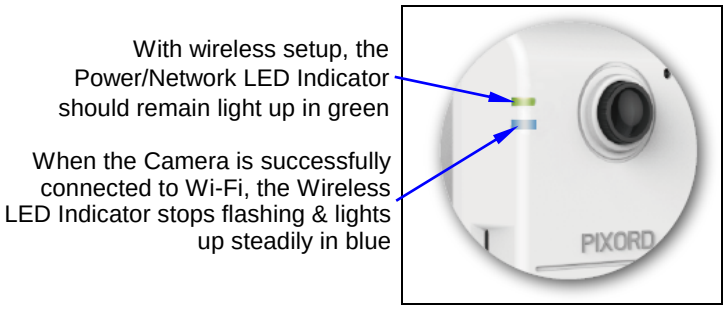


Figure 2-5 Wireless LED (Lower LED) Indicator

If the LED does not turn steadily in blue, refer to the "Installation Guide Wizard" application program in the CD which will further guide you in detail on how to properly setup your Camera for Internet Wi-Fi connection.

3 Registration and Binding of Camera

iPIXORD is a Cloud NVR (Network Video Recorder) server that provides multiple Live View and Event Recording, and Playback of videos taken by your Camera. It also allows you to make changes to your settings remotely.

There are two methods with which you can register and bind your Camera into iPIXORD, i.e., through your Internet connected PC/notebook (see Sections 3.1 & 3.2) or by using your smartphone/tablet (see Section 3.3 &3.4). However, it is highly recommended that you create the Camera account through PC/notebook as it is more convenient to use than smartphone/tablet which has limited functions and smaller screen size.

3.1 iPIXORD Account Registration by PC/Notebook

Visit iPixord website http://www.ipixord.com. When the following dialog displays, click **Create Account** button. If you already have an existing Google account, you may click **Google Login** button to use it as stand-in for your iPIXORD account.

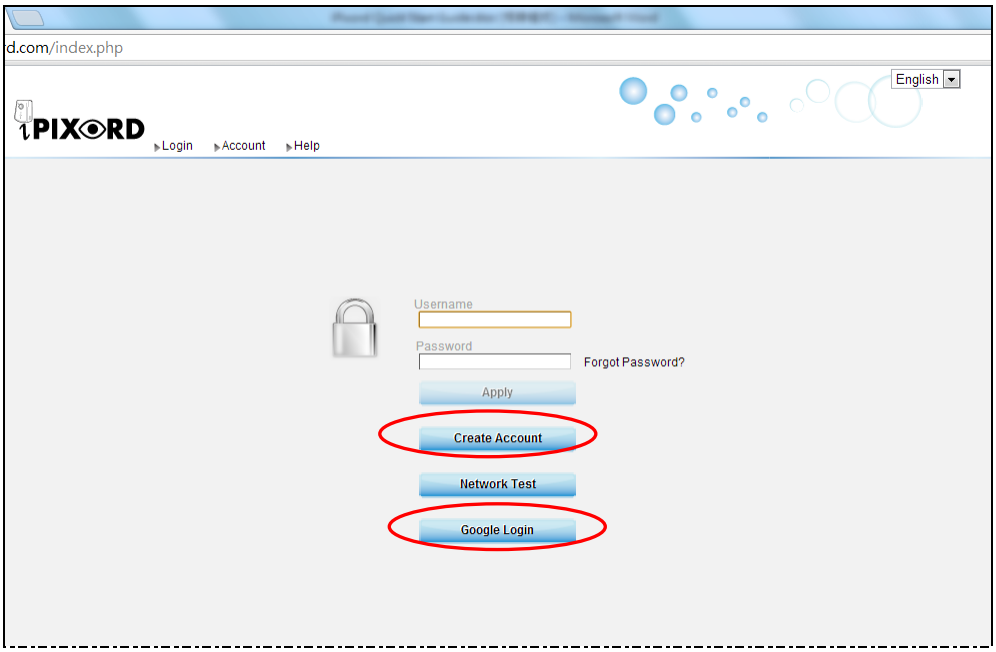


Figure 3-1 iPIXORD Account Registration Initial Dialog

3.1.1 Registration through iPIXORD "Create Account"

1) After clicking **Create Account** button, the following dialog will then display to prompt you to define your own User Name, Password, and valid Email address to start the account registration process.

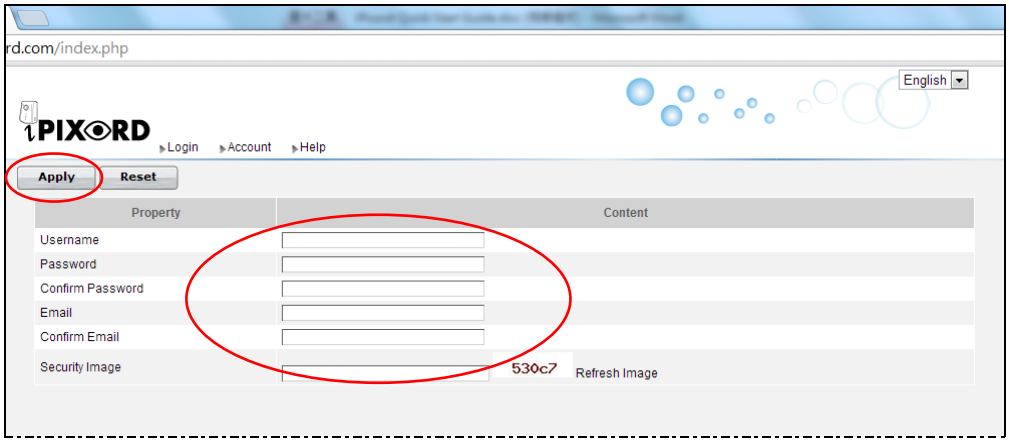
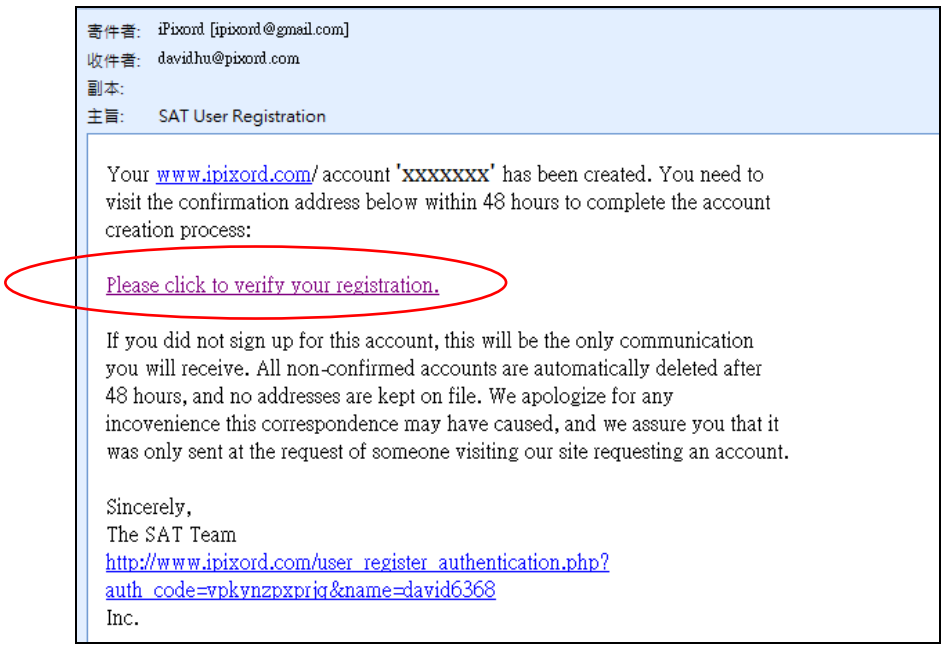


Figure 3-2 iPIXORD "Create Account" Sign-in Dialog

2) After you have filled-in all the necessary data, click Apply button (see figure above). A few minutes later, iPIXORD will send you an Email message (shown below) into your mailbox to advise you of your newly created account number with instruction to verify your registration.


寄件者: iPixord [ipixord@gmail.com]
收件者: davidhu@pixord.com
副本:
主旨: SAT User Registration

Your www.ipixord.com/ account 'xxxxxxx' has been created. You need to visit the confirmation address below within 48 hours to complete the account creation process:

Please click to verify your registration.

If you did not sign up for this account, this will be the only communication you will receive. All non-confirmed accounts are automatically deleted after 48 hours, and no addresses are kept on file. We apologize for any incovenience this correspondence may have caused, and we assure you that it was only sent at the request of someone visiting our site requesting an account.

Sincerely,
The SAT Team
http://www.ipixord.com/user_register_authentication.php?auth_code=vpkynzpxprjq&name=david6368
Inc.

Figure 3-3 Email Message from iPIXORD Advising the Newly Created Account Number

3) Click the hypertext "**Please click to verify your registration**" and you will be automatically connected to iPIXORD and prompt you with the process of binding the new Camera into iPIXORD as discussed see Section 3.2.

3.1.2 Registration through Google Account

iPIXORD server allows you to use your Google account "User Name" and "Password" for your iPIXORD account. This method is recommended and is easier and faster. Furthermore, iPIXORD can use 5GB free space of your Google account to store backup video recorded in your Camera SD card.

1) After clicking **Google Login** button (see Figure 3-1), the following dialog will then display to prompt you to sign in your Gmail address and password.

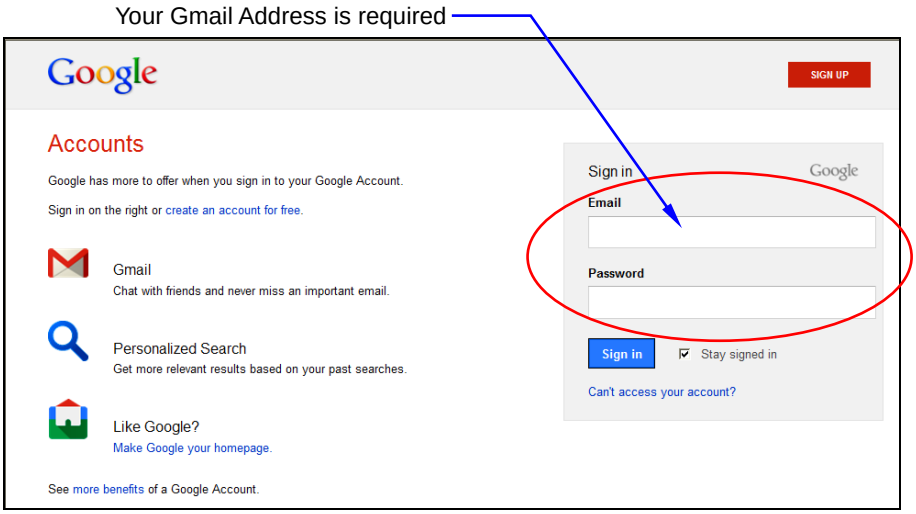


Figure 3-4 Google Account Sign-in Dialog

NOTE

- *Google Account provides 5GB free space for recorded video storage.*
- *With "Google Account" used to create the iPIXORD account, you have to use your Gmail Address as Email addres and click the "**Google Login**" button every time you need to log-in into iPIXORD again.*

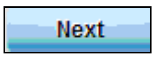
2) Click the **Sign in** button and you will be prompt with the process of binding the new Camera into iPIXORD as discussed in the following section (Section 3.2).

3.2 Binding Camera into iPIXORD by PC/Notebook

3.2.1 Binding Camera for the First Time

At this stage, you already have your personal account registered with iPIXORD but with no Camera attached to your account. So the next step is to bind the Camera that you have just setup into your new iPIXORD account in order to establish link with the network.

1) After clicking the hypertext "**Please click to verify your registration**" under **Create Account** (see Section 3.1.1), or clicking the **Sign in** button under **Google Account** (see Section 3.1.2), the "Connect IP Camera" window (shown at right) will pop-up after confirming your name & password. This is to remind you again to properly connect the Camera to power and router. If connection is okay, click the **Next** button.



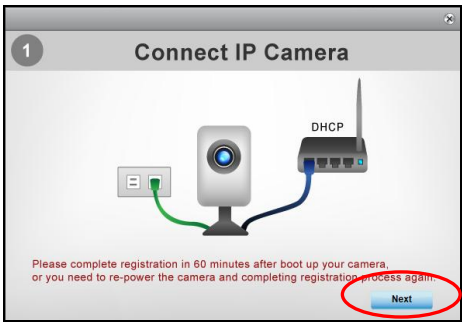


Figure 3-5 "Connect IP Camera" Window

2) The "Bind IP Camera" window (shown at right) will pop-up to remind you to get ready with your Camera's MAC Address and Activate Code. Then click the **Next** button.

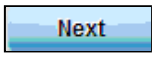


Figure 3-6 "Bind IP Camera" Window

3) The **Binding** dialog will then display to prompt you to provide the Camera's MAC Address and Activate Code (serial number).

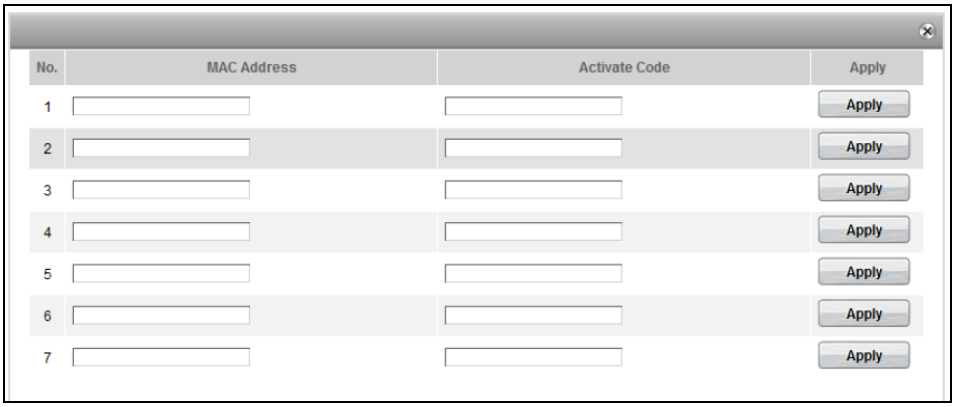


Figure 3-7 New Camera MAC Address & Activate Code Registration

Note that the required data are available from the Activation Card (illustrated below) provided with your Camera and/or on the label at the back of the Camera. Note that these numbers are unique for each Camera.

Figure 3-8 Unique Activation Card for Individual Camera

4) After the MAC Address and Activate Code are entered, click the **Apply** button at the right end of the row and the button position will switch from "**Apply**" to "**Success**" to indicate successful binding of the Camera with iPIXORD as illustrated below.

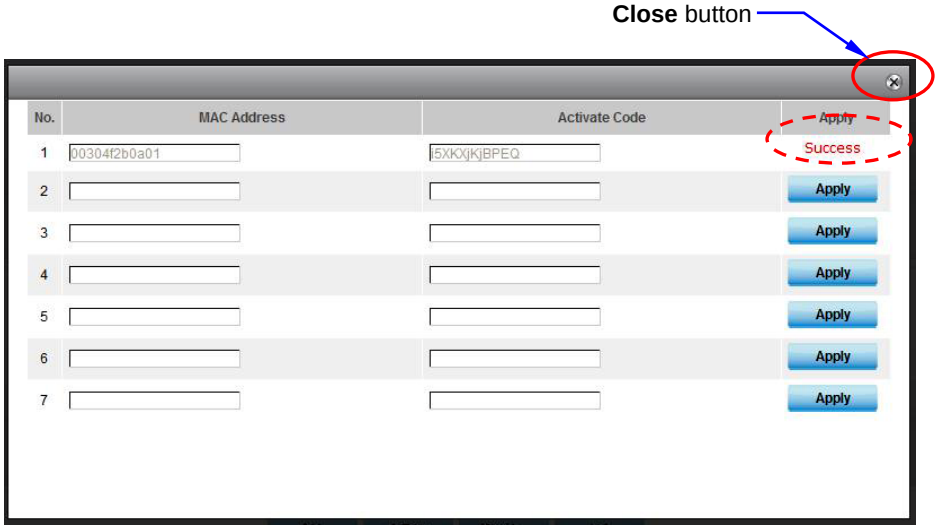


Figure 3-9 Sample Display of Successful Binding of the Camera

Note that if error occurs, an error message is displayed to the right end of the MAC Address value as shown below.

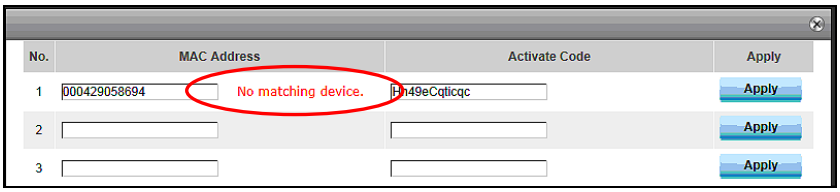
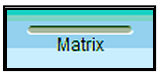


Figure 3-10 Sample Display of Unsuccessful Binding of the Camera



5) After successful binding, click the **Close** button (see Figure 3-9 above) at the top-right corner. The **Setting Table** then displays. Click the **Matrix** button at the bottom of the window to display the live view Camera surveillance from the **Matrix** window (shown below).

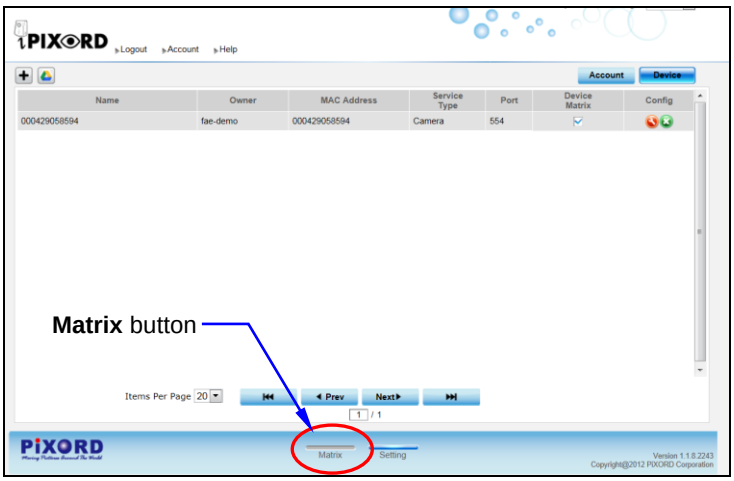


Figure 3-11 "Setting Table" Window

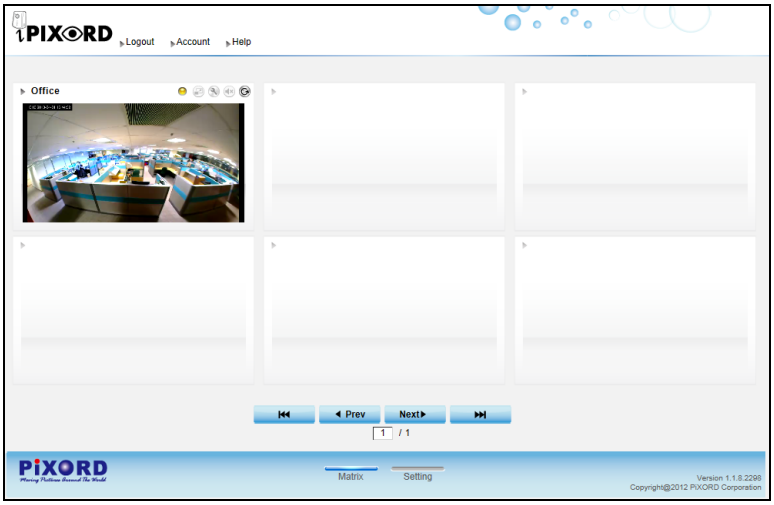


Figure 3-12 Live Surveillance Display Sample of a Successfully Bound Camera

6) Click the **Full Screen** button to zoom and view the live display in full screen.

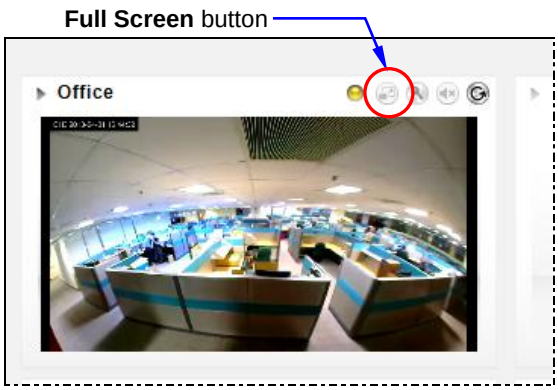
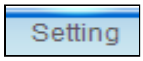


Figure 3-13 Surveillance Live Display "Full Screen" Button

3.2.1 Binding More Cameras into iPIXORD Account

To add more installed Cameras into your iPIXORD account, perform the following steps.



1) Click the **Setting** button at the right-bottom of the **Matrix** window. The **Setting** dialog (Figure 3-14) will then display.

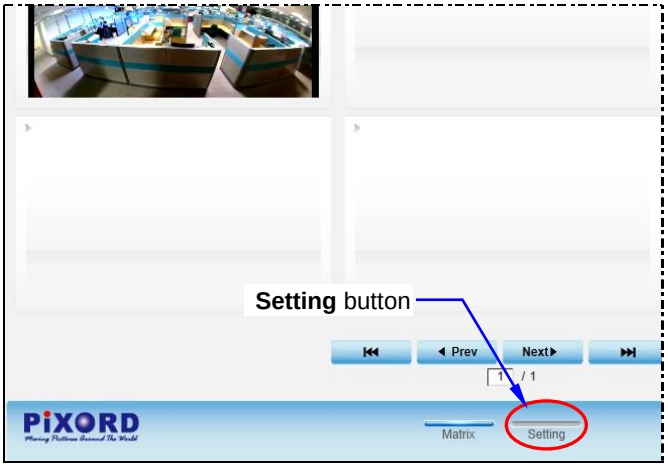


Figure 3-14 "Setting" Button at the Bottom of Matrix Window

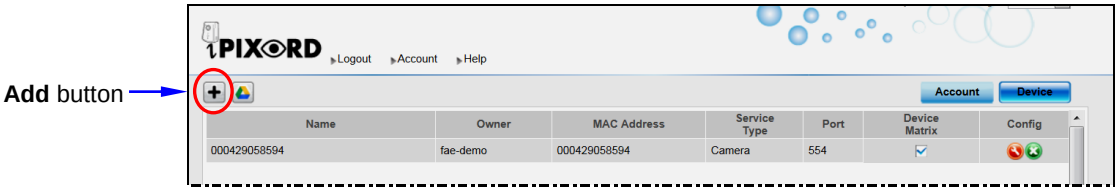


Figure 3-15 "Setting" Dialog Display of a Successfully Bound Camera

2) From the **Setting** dialog, click the **Add** button. The pop-up "Connect IP Camera" window (shown at right) will display after confirming your name & password to remind you again to properly connect the Camera to power and router. If connection is okay, click the **Next** button.

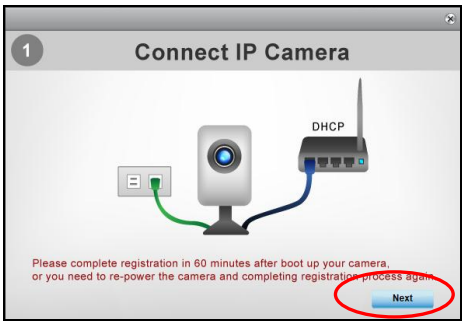
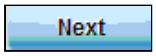
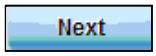


Figure 3-16 "Connect IP Camera" Window



3) The "Bind IP Camera" window (shown at right) will pop-up to remind you to get ready with your Camera's MAC Address and Activate Code. Then click the **Next** button.

Figure 3-17 "Bind IP Camera" Window



4) When the **Binding** dialog appears, fill in the MAC Address and Activated Code of the to be added Camera. Note that the required data are available from the Activation Card provided with each Camera or from the label at the back of the Camera.

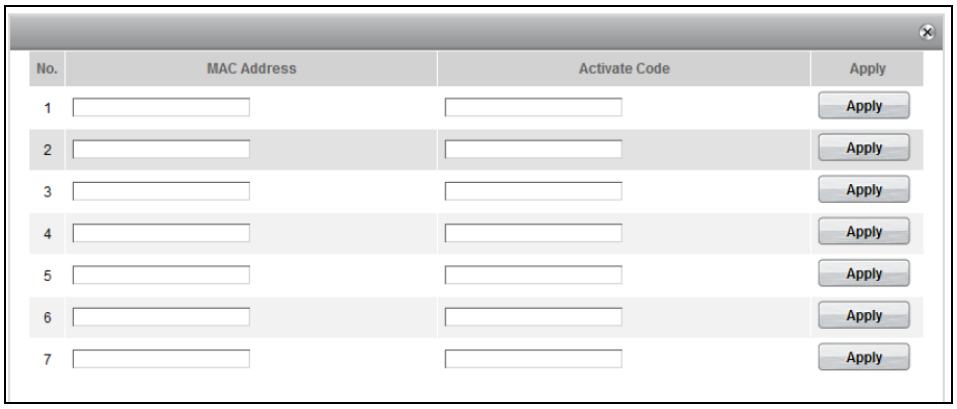


Figure 3-18 "Binding" Dialog for Registration of Additional Camera(s)

5) After the MAC Address and Activate Code of the new Camera is entered, click the corresponding **Apply** button at the right end column and the button position will switch into "**Success**" display to indicate successful binding of the new Camera with iPIXORD as illustrated below. Then click the **Close** button.

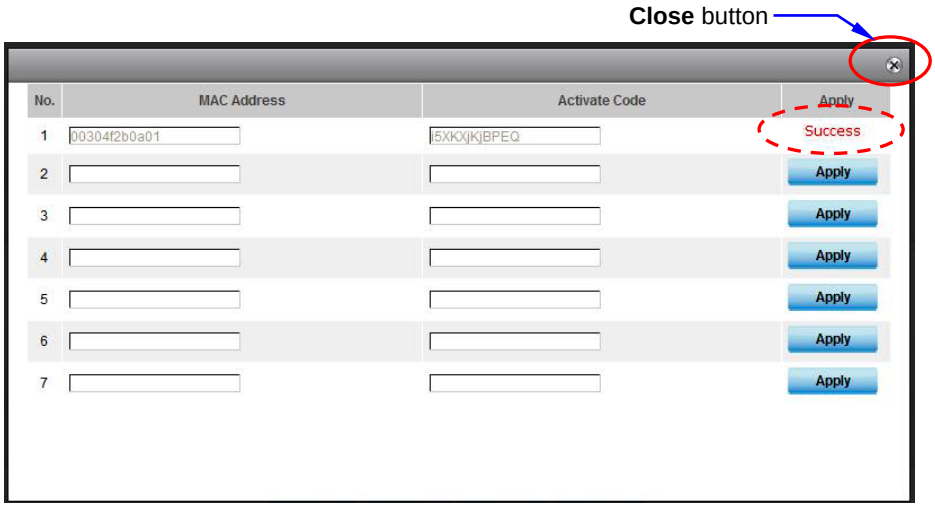
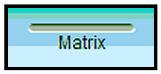


Figure 3-19 Sample Display of Successful Binding of the Newly Added Camera

NOTE

The example in the above figure, shows only one new Camera is added. Actually you can simultaneously add several Cameras into the dialog at the same time



6) The **Setting Table** (shown below) displays the newly added Camera being listed at the bottom of previous ones. Then click the **Matrix** button at the bottom of the window.

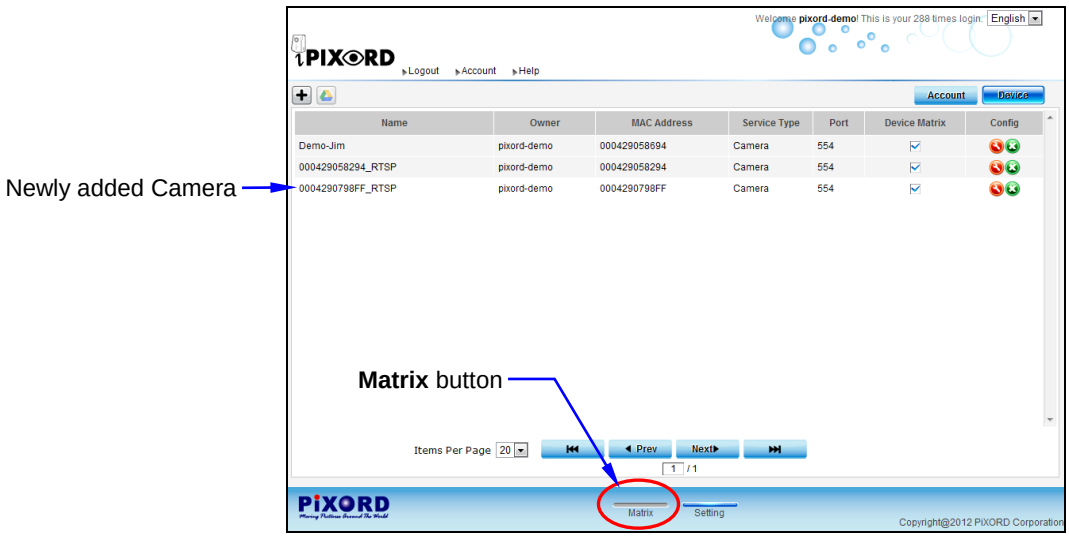


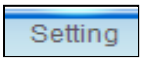
Figure 3-20 Setting Table Listing the Successful Binding of the Newly Added Camera

7) All bound Cameras as listed in the **Setting** table are then displayed live view in the **Matrix** window (illustrated below).

Figure 3-21 Matrix Window with the Second Newly Added Camera Displayed to the Right

3.2.2 Modifying Camera Default Names

With several Cameras being installed, you may have a hard time identifying which Camera is installed where from their MAC Addresses. Hence, you may assign unique names to each Camera for easy identification, e.g.; names that are related to Camera positions. To do so, carry out the following steps.



1) From the bottom of the **Matrix** Window, click the **Setting** button

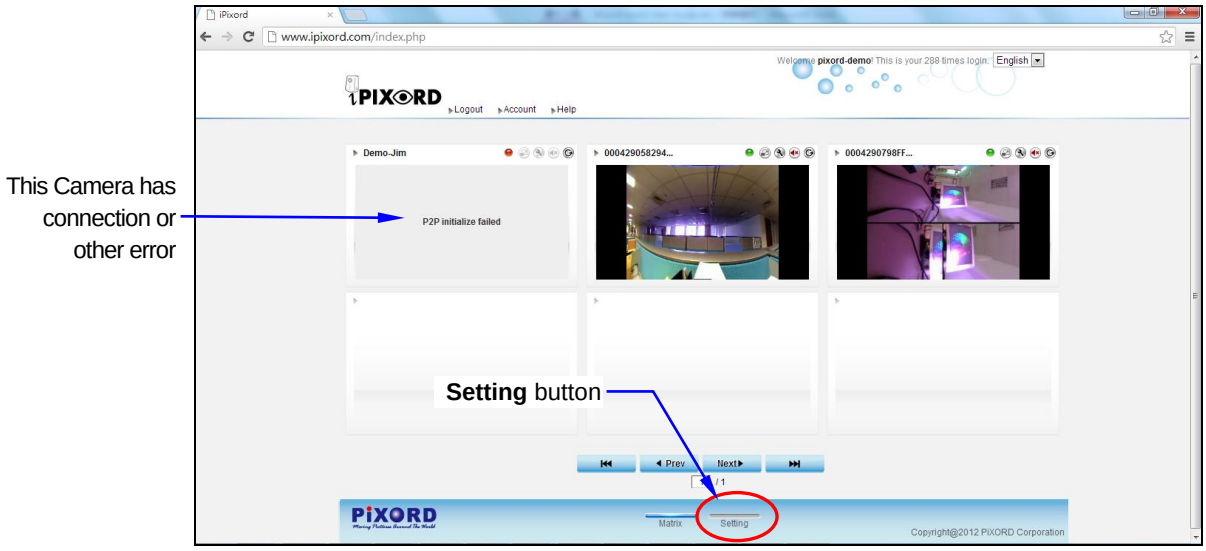


Figure 3-22 "Setting" Button at the Bottom of Matrix Window

2) When the Camera **Setting** table appears (illustrated below), click on the **Setting** button of the Camera you want to change name.

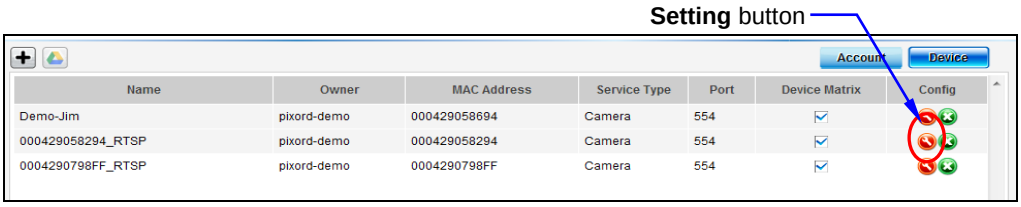


Figure 3-23 Setting Table Showing Existing Bound Cameras

3) The **Modify** dialog will then appear as illustrated below. Click on the **Name** text box to enter a new Camera name. You can also change video by clicking on the Video Quality option buttons. Then click **Apply** button to execute the changes.

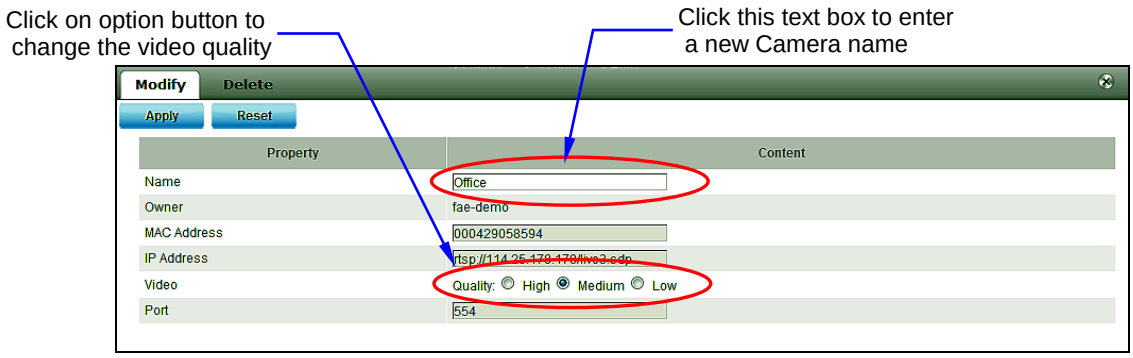


Figure 3-24 Modify Camera Name & Video Quality Dialog

3.3 iPIXORD Account Registration by Smartphones /Tablets

3.3.1 Downloading iPIXORD App

First of all, you need to download the "**iPIXORD App**" store into your smartphone/tablet. This is done by touching the Apple "**APP Store**" icon on your iPhone/iPad, or the "**Google Play**" store icon on your Android Mobile device. Then search for "**iPIXORD App**" by keying "i-P-I-X-O-R-D". The "**iPIXORD App**" is then installed into your device and its icon displayed.

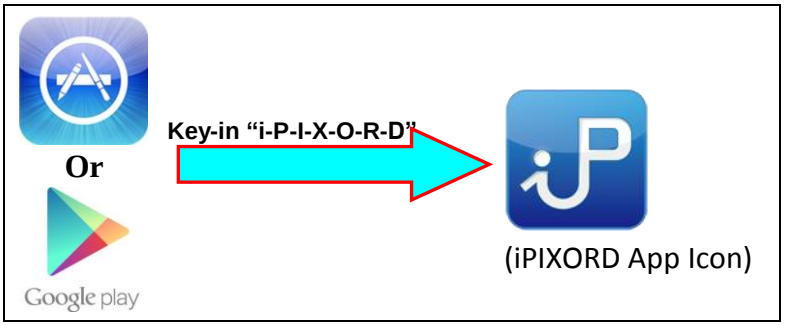


Figure 3-25 Installing "iPIXORD App" into Smartphones/Tablets by Keying "iPIXORD"

Alternatively, you may scan the QR Code below with your device to automatically download URL and "**iPIXORD App**" into your smartphone/tablet.

Figure 3-26 Scan QR Code to Directly Install "iPIXORD App" into Smartphones/Tablets

3.3.2 iPIXORD Registration through "Create Account"

1) From your device apps display, tap the "**iPIXORD App**" icon to launch iPIXORD. When the following dialog displays, tap the **Create Account** button to create or register your new iPIXORD account.

(iPhone/iPad Display) *(Android Mobile Display)*

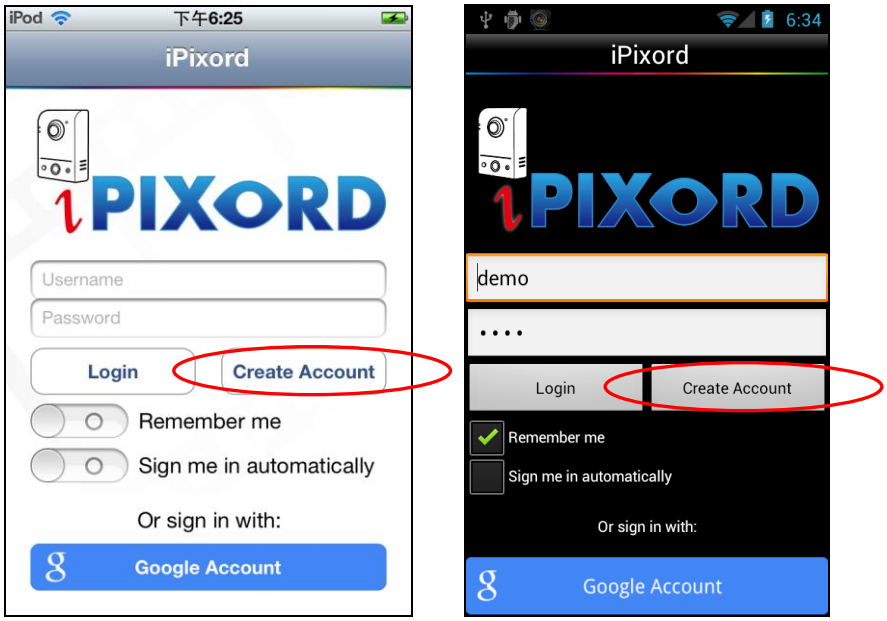


Figure 3-27 Registering New iPIXORD Account through "Create Account"

2) When the **iPIXORD Create Account** dialog (see right figure) pops-up, enter the required information in the text boxes.

3) Tap **Apply** button to start binding your Camera as explained in Section 3.4.

Figure 3-28 "iPIXORD Create Account" Dialog

3.3.3 iPIXORD Registration through "Google Account"

1) If you already have a Google account, you can tap the **Google Account** button to register with iPIXORD.

(iPhone/iPad Display) *(Android Mobile Display)*

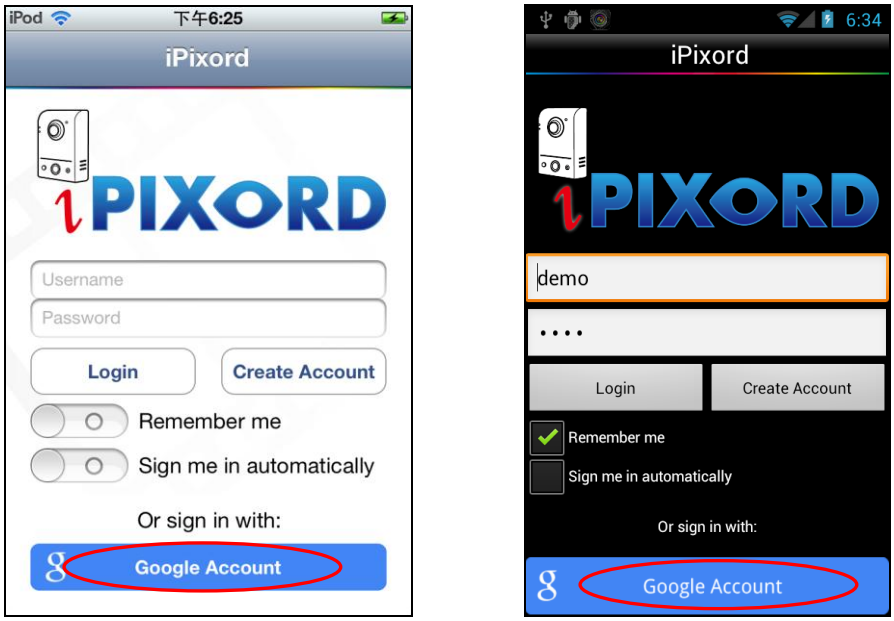


Figure 3-29 Registering New iPIXORD Account through "Google Account"

2) When the Google **SIGN UP** dialog (see below) pops-up, enter the required information in the text boxes.

3) Tap **Sign In** button to start binding your Camera as explained in Section 3.4.

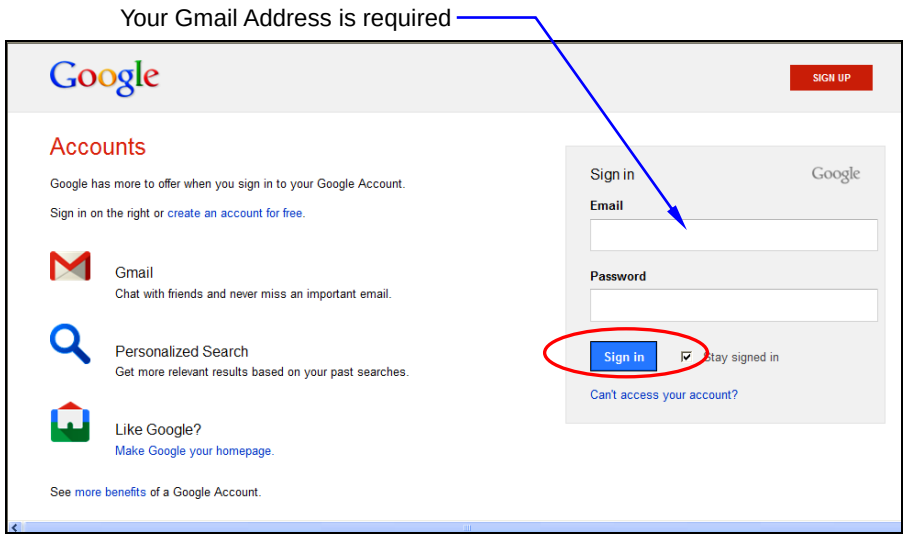


Figure 3-30 Google SIGN UP Dialog

NOTE

- *Google Account provides 5GB free space for recorded video storage.*
- *If "Google Account" is used to create the iPIXORD account, you have to use your Gmail Address as Email addres and tap the "**Google Account**" button every time you need to log-in into iPIXORD again.*

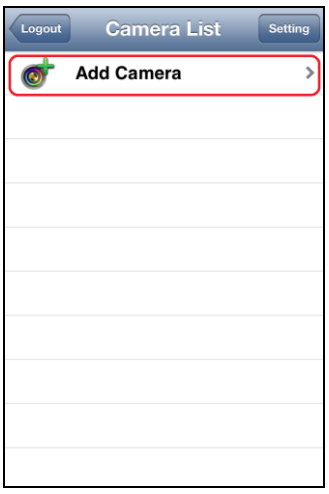
3.4 Binding Camera into iPIXORD by Smartphones /Tablets

NOTE

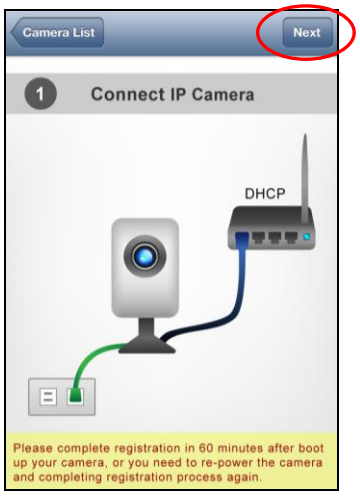
Make sure the Camera power is on and is properly connected with Internet.

With iPIXORD account successfully implemented, the **Camera List** dialog will display to prompt you to start binding your new Camera(s) to iPIXORD by following the process described in below**:**

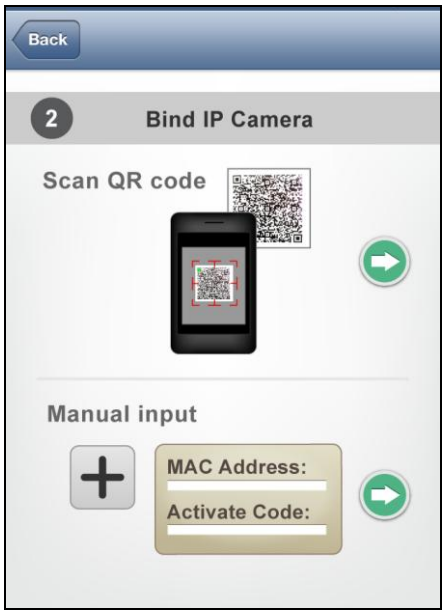
1) Tap the **Add Camera** button



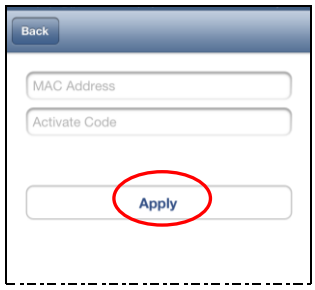
2) Tap the **Next** button if the Camera connection is okay.



3) "Bind IP Camera" window pops-up to prompt for MAC Address and Activate Code input into iPIXORD. This is done by either scanning the unique QR Code card (see Figure 3-8, Section 3.2), or by manually keying the data.

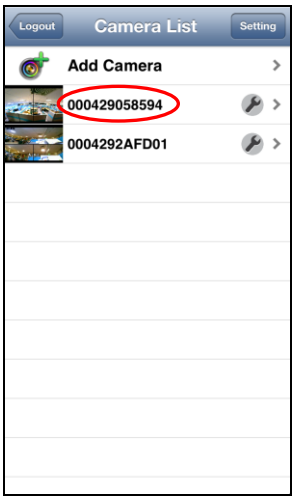


Scanning QR code will automatically bind the Camera into iPIXORD

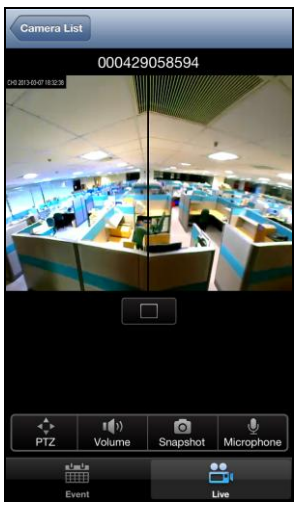


"Manual input" will prompt you to enter the Camera's data into a Text Box. Then tap **Apply** button.

4) The MAC Address (serial number) of the new Camera is now being added to the existing list. Tap the serial number to view the Camera on-line video.



5) Live on-line video is now on display.



NOTE

You cannot use your smartphone to change the Camera default designations. You need to use a PC/notebook/ultrabook to accomplish it as explained in Section 3.2.2

4 Camera Live View UI Settings

Using PC/notebook/ultrabook, you may change and reconfigure the Camera live view user interface (UI) settings to suit your need by following the procedures below.

1) Access the Camera live view page through your local network (or via iPIXORD). Then click the **Tool** button.

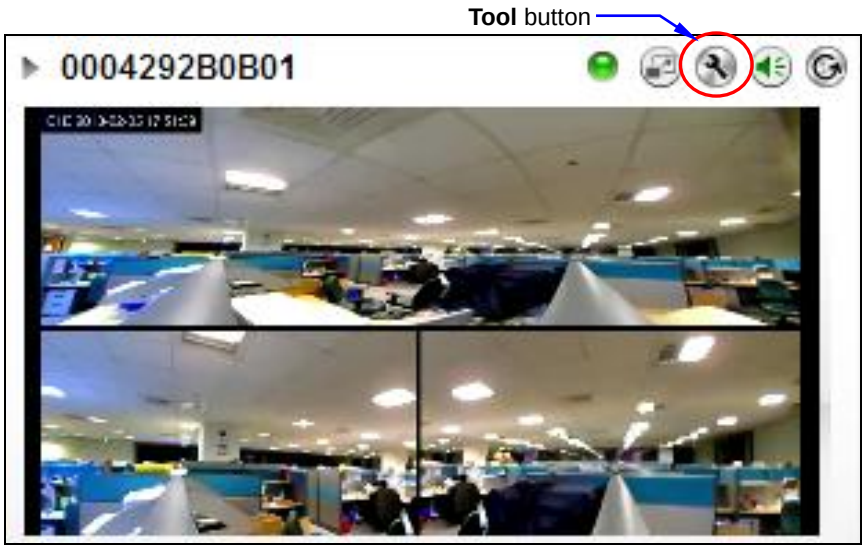


Figure 4-1 Camera Live View Configured in Triple View

NOTE

- *For first time user, there will be a prompt to install the ActiveX control. Conply with the ActiveX installation as it is needed to view the video stream and some other operations.*
- *Use of Microsoft IE browser is recommended as it offers a better compatibility.*

2) Then the "Windows Security" dialog displays. Enter a username and password. You may enter "admin" for both. Click **OK** button when completed.

Figure 4-2 "Windows Security" Dialog

3) The "Live View Setting" window will then display offering all the necessary set up tools for changing the live view reconfigurations. The functions of each of these tools are explained in the following sections.

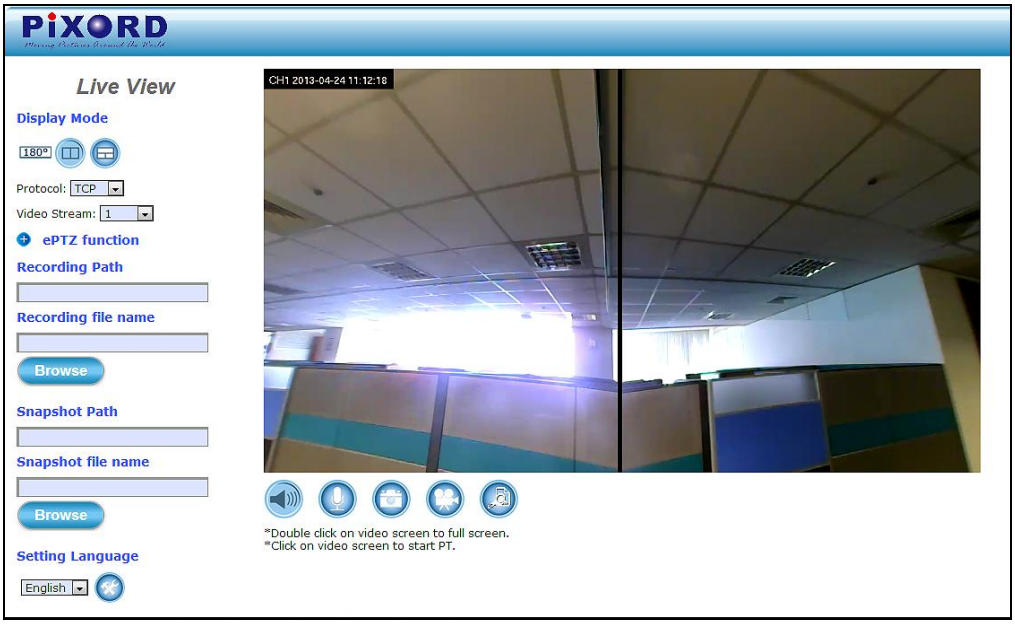


Figure 4-3 Camera "Live View Setting" Window (Twin PTZ View)

4.1 Quick Access Buttons

The following buttons provide the basic interactive functions between the Camera and the host computer as described below.

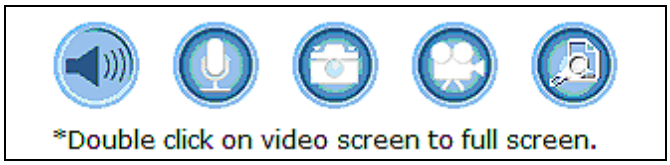


Figure 4-4 Camera Quick Access Toolbar Buttons

	Mute: Turn On/Off the host computer speaker.
	Talk: Click this button to talk to someone facing the network Camera from your computer. For ideal voice reception, the distance of the person on view, should be kept within 2 meters from the Camera.
	Snapshot: Click this button to capture still images taken from the Camera and save them in the host computer,.
	Recording: Click this button to record live video clips from the Camera into your computer.
	Digital Zoom: Digital "zoom in" & "zoom out" of a particular area of the live view. To display the whole live view into full screen, double click on the video.

4.2 Camera Live View UI Setting Tools

When Twin or Triple PTZ display mode is selected, click the "ePTZ function" tool for more live view setting tools.

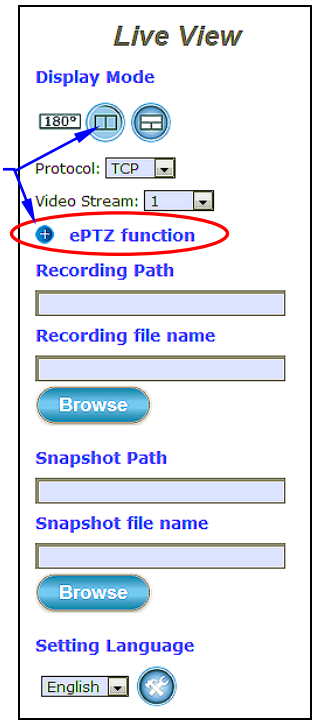
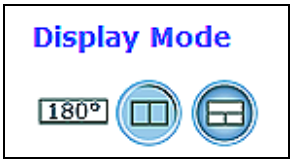


Figure 4-5 Camera Live View Reconfiguration Tools

The Live View tools (left figure) offer a variety of methods in changing the live view configurations of the Camera.



With its fisheye lens (180° wide angle panoramic view), the Camera can offer the following live view display modes:

180°	180 degree Ultra Wide Angle View
	Twin PTZ (pan–tilt–zoom) Views
	Triple views (1 Ultra Wide Angle View + Twin PTZ View)

When the Twin or Triple PTZ display mode is selected, click the **ePTZ function** tool to display the PTZ setting tools as shown and explained below.

Click either buttons to close the "ePTZ function" pane

Click & drag **Plus** (**+**) button to move "ePTZ function" pane to a convenient location in the window.

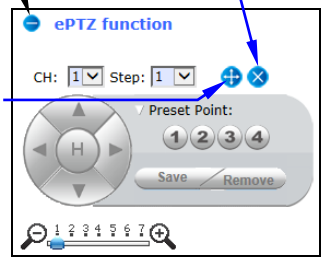


Figure 4-6 ePTZ Function Tool

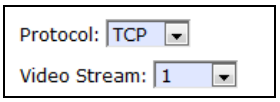
CH: Select the PTZ channel or display window (1 or 2) to implement PTZ setting.

Step: Adjust and set the speed of live view panning motion.

Directional Buttons: Use to manually pan the scene to select and zoom a specific area (1 of 4 maximum) to be monitored. To reset the scene back to its previous status, click the center **Home** (**H**) button. You can also directly click on the video to pan, zoom, and tilt a selected area.

Preset Point: After panning and zooming, assign the selected area a Preset Point (1 to 4) and click **Save** button to store the setting. The pre-defined point of view areas will be monitored in sequence. To cancel the selection, click **Remove** button.

Zoom Slider: Drag slider to zoom-in and zoom-out the selected scene. Zoom setting is saved with the selected pre-defined point of view area.



Protocol: Option for TCP or UDP transmission protocol with H.264/MPEG4 streaming is available.

Video Stream: Two simultaneous streaming is supported for live viewing.

Click **Browse** button to define Recording Path and Recording Filename for the video you are preparing to record.

Recording Path: Specify a storage destination path for the video you are going to record.

Recording file name: Define a base filename for the video recordings you are going to take. The base filename will auto-expand for each saved video recording.

To start recording, click the **Recording** button.

Click **Browse** button to define Snapshot Path and Snapshot Filename for the snapshots you are preparing to capture.

Snapshot Path: Specify a storage destination path for the snapshot images you are preparing to capture.

Snapshot file name: Define base filename for the snapshots you going to capture. The base filename will auto-expand for each saved snapshot.

To start capturing snapshots, click the **Snapshot** button.

Click **Setup** button to change or update more Camera & iPIXORD settings.

Setting Language: Select the default language of the user-interface.

As you get familiar with features and functions of your Camera and iPIXORD, you may want to change or update a number of its settings to further upgrade its performance. This can be accomplished by clicking the **Setup** button (indicated in the above figure). The **Setup** dialog (see following figure) will then display to provide the range of setup categories you will be able to change.

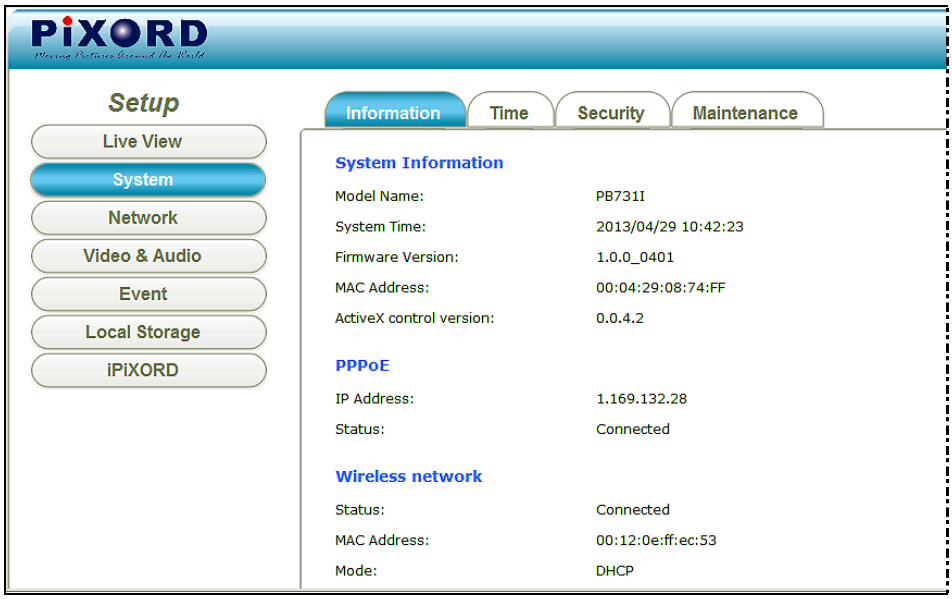


Figure 4-7 Camera Setup Dialog

Refer to pertinent PB731P/731I Webpage Setting User's Guide for details in implementing the changes for each of the indicated categories.

PiXORD

Moving Pictures Around The World

PB731P / PB731I
Wi-Fi Network Camera

Webpage Setting User's Guide

Version 1.0

PiXORD Corporation

June 2013

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Revision History

Doc. Version	Revision Description	Date
1.0	Initial Official Release	2013/06/28

1 Introduction

This document provides professional in depth setting arrangements for PiXORD **PB731P/731I** Cloud Wi-Fi Network Camera to meet your preferences and suit your needs.

For basic installation and setup, please refer to the pertinent "**PB731P/PB731I Getting Started Handbook**"

1.1 Accessing Webpage Setup Dialogs

1) Access the Camera live view page through your local network (or via iPIXORD). Then click the **Tool** button from the live display.

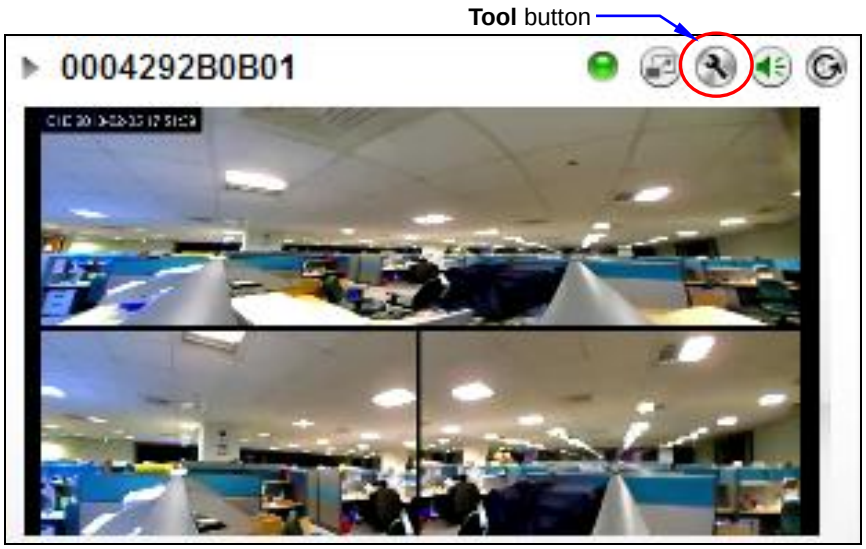


Figure 1-1 Camera Live View Configured in Triple View

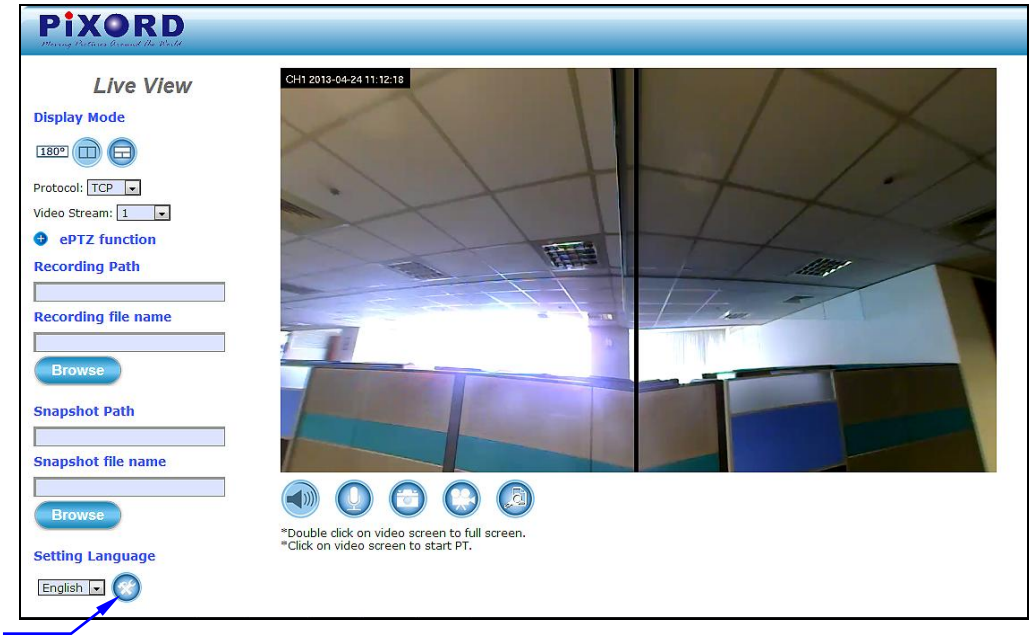
NOTE

- *For first time user, there will be a prompt to install the JAVA/ActiveX control. Conply with the ActiveX installation as it is needed to view the video stream and some other operations.*
- *Use of Microsoft IE browser is recommended as it offers a better compatibility.*

2) When the "Windows Security" dialog displays, enter a username and password. You may enter "admin" for both. Click **Log In** button when completed.
(Note that same Browser with different version or different vendor Browser will behave different dialog window. Below picture is belonging to IE Browser's diagram.)

Figure 1-2 "Windows Security" Dialog

3) The "Live View" Setup window will then display offering all the necessary set up tools for changing the Camera live view reconfigurations (the functions for each of these "Live View" tools are explained in the pertinent "**PB731P/PB731I Getting Started Handbook**").



Setup button

Figure 1-3 Camera "Live View Setting" Window (Twin PTZ View)

4) Click the **Setup** button to further implement the in depth settings arrangements for your Camera to meet you professional needs.

5) The **Setup** dialog (see following figure) will then display to provide the professional range of setup categories you will be able to change. The detailed steps are explained in the next chapter.

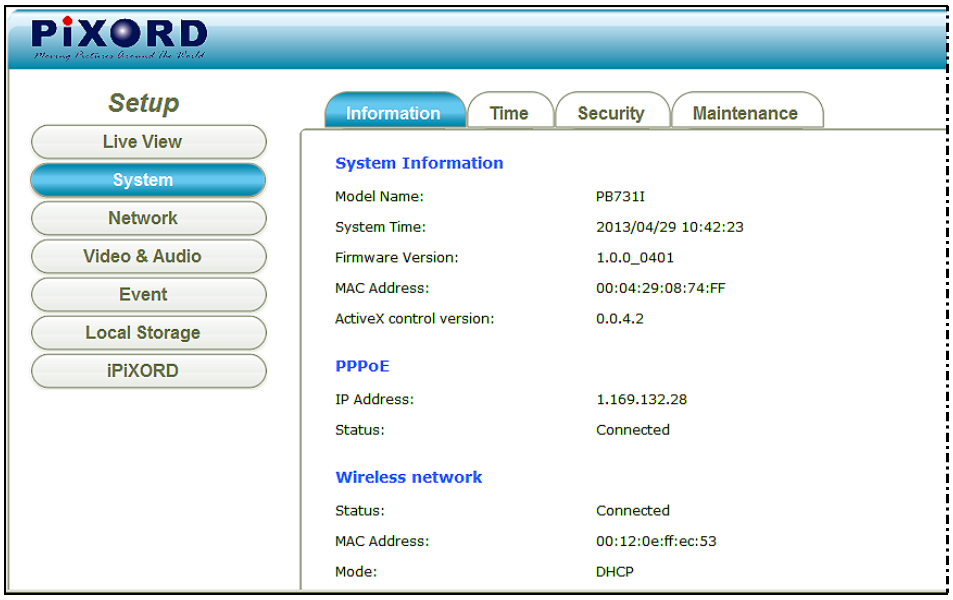


Figure 1-4 Camera Setup Dialog

2 Setup Execution

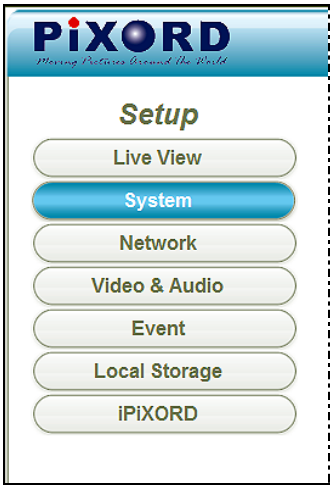


Figure 2-1 Camera Setup Selection Buttons

NOTE

For "Live View" setup execution, please refer to the pertinent "PB731P /PB731I Getting Started Handbook"

2.1 System Setup Execution

Clicking the **System** button will display the following tabbed panes relative to system configurations.

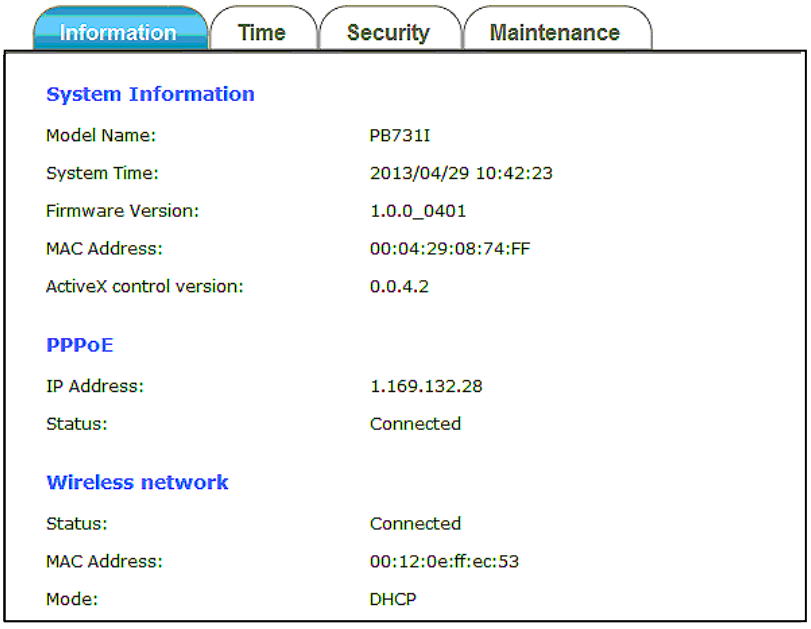


Figure 2-2 "System Setup" Tabbed Panes

2.1.1 Information Tab

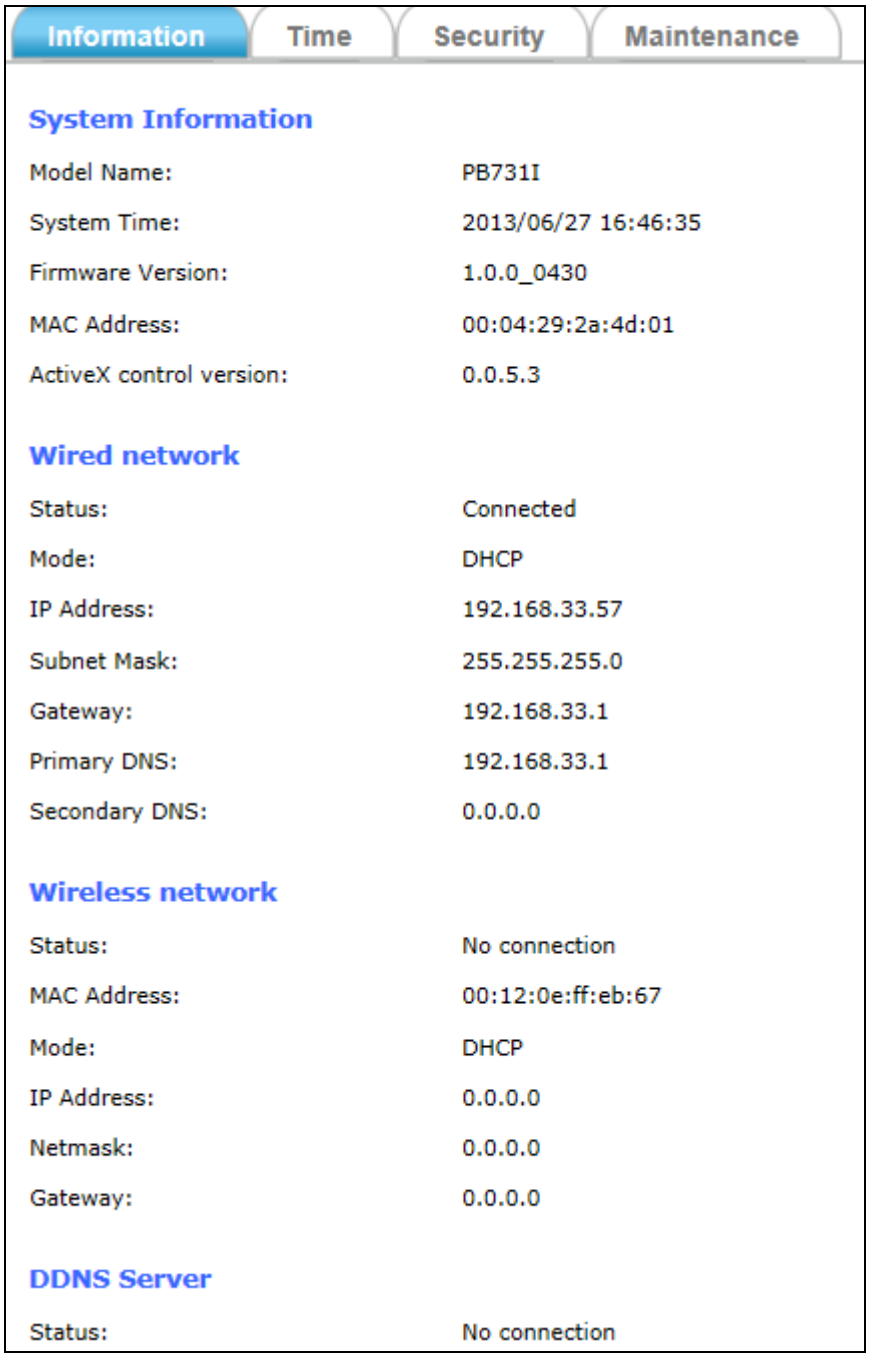


Figure 2-3 "Information" Tabbed Pane

The **Information** tabbed pane provides the existing system status of the Camera which includes Model Name, System Time, Firmware Version, MAC Address, ActiveX Control Version, Wired Network, Wireless Network and DDNS Server Status.

2.1.2 Time Tab

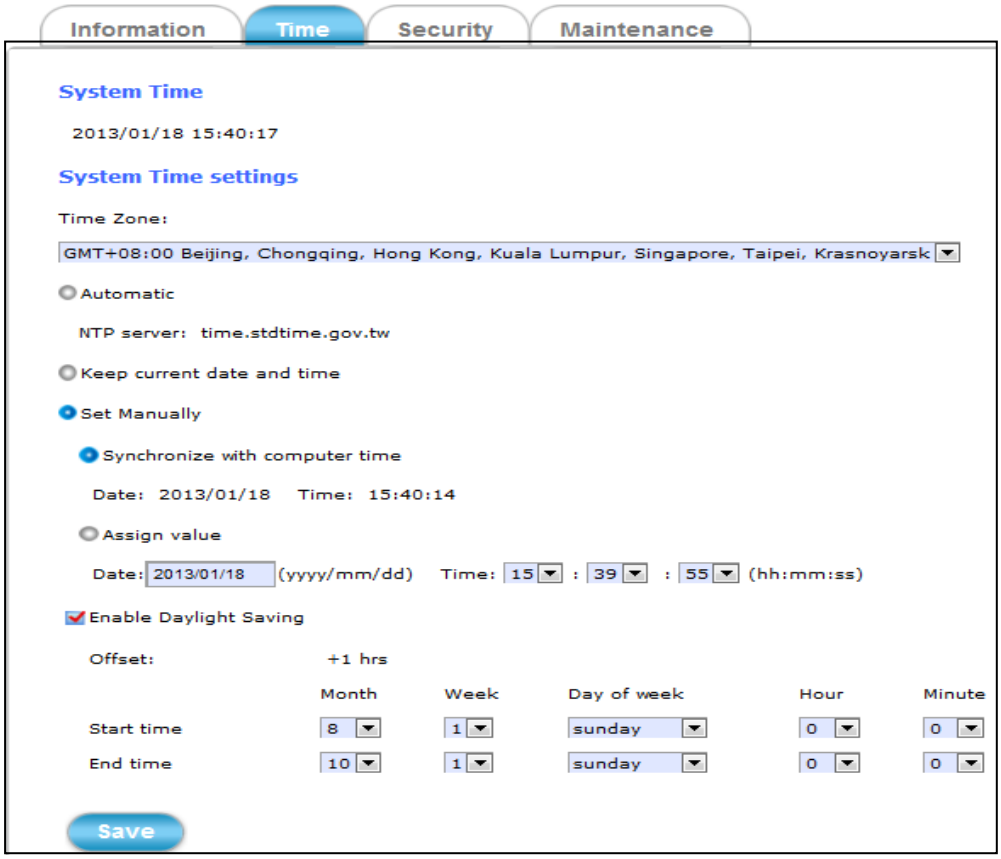


Figure 2-4 "Time" Tabbed Pane

The **Time** tabbed pane is where you set up the clock of your Camera to synchronize with your local time. Where:

System Time: The Network Camera current date and time is applied and displayed here based on the setup status of the System Time Settings as detailed below.

Time Zone: Select the applicable Time Zone of your city in reference to Greenwich Mean Time.

Automatic: Select this item if you want to automatically synchronize the Camera clock with that of Network Time Protocol (NTP) Server.

Keep current date and time setting: Select this option in lieu of automatic synchronization if the Camera is not connected to NTP Server and uses its own embedded clock.

Set Manually:

◎ **Synchronize with the PC Time:** Select this option to manually synchronize the Network Camera clock (date and time) with that of the local host computer.

◎ **Assign value:** Select this option to enter the date and time manually.

Enable Daylight Saving: Select this option only when applicable at your location. Two setup settings; the **Start time** and **End time** are needed to implement the feature.

After setups are completed, click **Save** button to apply the settings.

2.1.3 Security Tab

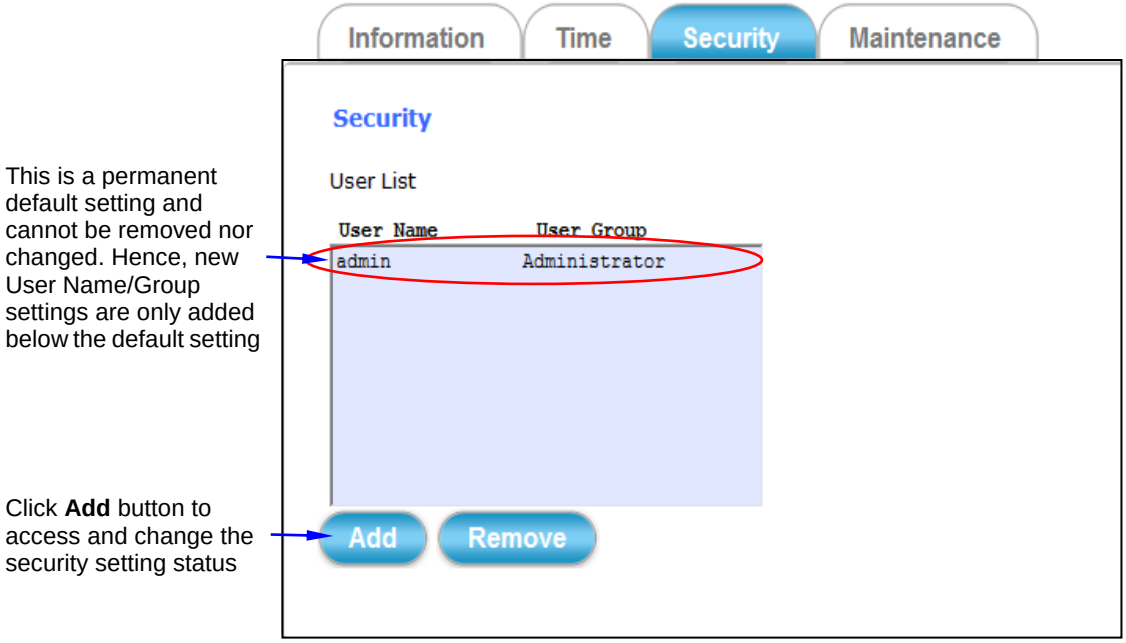


Figure 2-5 "Security" Tabbed Pane

The **Security** tabbed pane allows you to add new Camera User Name and change Password and the surveillance status or User Group. Click the **ADD** button to access the security setup dialog (shown below).

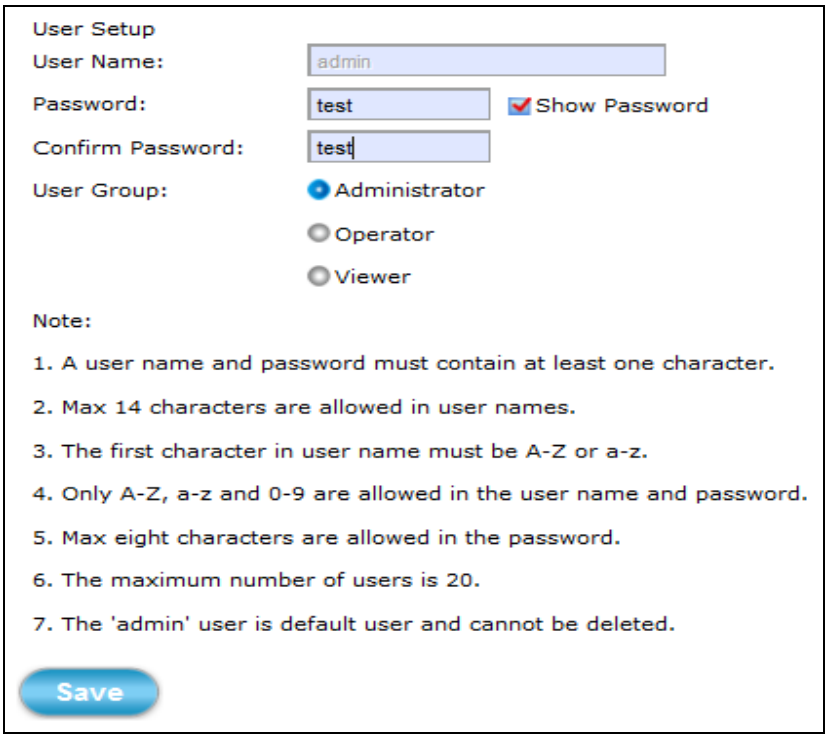


Figure 2-6 "Security" Setup Dialog

Where:

User Name: Enter the new user name to be added into the list (see Note 4 of dialog for proper entry).

Password: Enter the new password (see Note 4 of dialog for proper entry).

Confirm password: Enter the password again for authentication (encoded display).

Show Password: Displays the decoded password when check box is enabled.

User Group: Three group options are available, namely:

- **Administrator:** User is allowed to change Camera settings and perform all Camera functions.
- **Operator:** User is allowed to login "Live View" Webpage and perform all functions within this page. Except changing Video and Audio settings of Camera live stream, other adjustments of Camera parameter are prohibited.
- **Viewer:** User is only allowed to login "Live View" Webpage and perform all functions within this page. Changing Camera settings is prohibited.

After setups are completed, click **Save** button to apply the settings.

2.1.4 Maintenance Tab

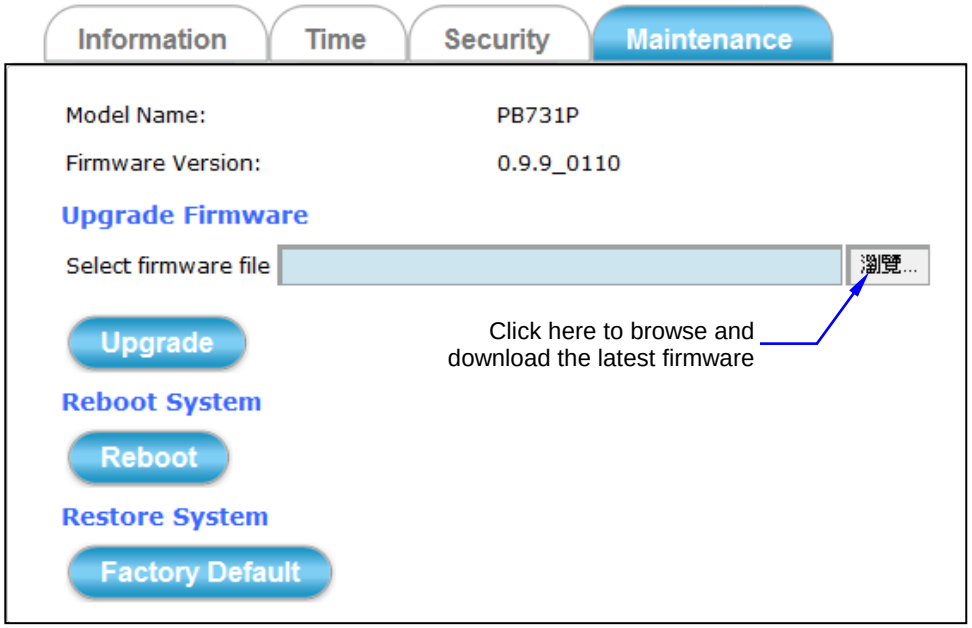


Figure 2-7 "Maintenance" Tabbed Pane

The **Maintenance** tabbed pane allows you to upgrade the firmware with the latest version and to restore the Network Camera settings to factory default. Where**:**

Select firmware file: Download the latest firmware file from the PiXORD website by executing the following steps**:**

1) Click the **Browse** button to access and select the appropriate firmware file from its folder.
2) Click the **Upgrade** button. The Network Camera will then start to upgrade the existing firmware. When upgrade is completed, the Camera will reboot automatically.

Reboot System: Clicking the **Reboot** button allows you to manually reboot the Network Camera.

Restore System: Clicking the **Factory Default** button will restore the Network Camera to its factory default settings status. Before Camera system proceed to restore step, there'll be a dialog window popped and then ask if you would like to let the following three settings remain current**:**

- Network setting
- Username/Password
- System clock (time & date)

2.2 Network Setup Execution

Clicking the **Network** button will display the following tabbed panes on configuring Camera connection with the network.

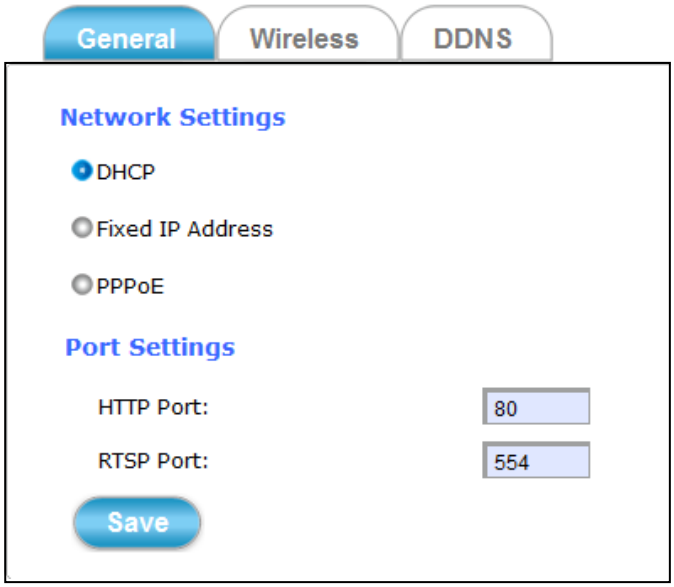


Figure 2-8 "Network Setup" Tabbed Panes

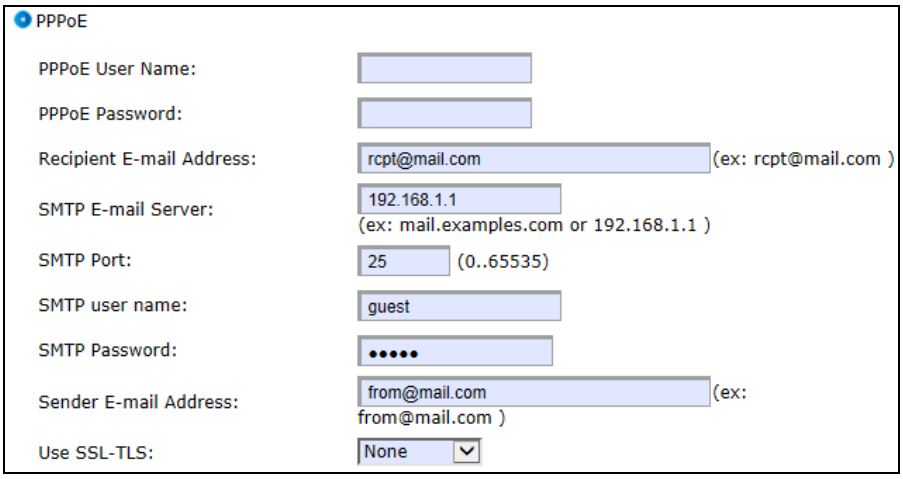
2.2.1 General Tab

The **General** tabbed pane (shown above) allows you to redefine the network and port protocol settings of the Network Camera.

Where**:**

Network Settings:

- **DHCP:** This option obtains the available dynamic IP address assigned by the DHCP server each time the Camera is connected to the network.
- **Fixed IP Address:** This option manually assigns a static IP address to the Network Camera.
- **PPPoE:** Select this option to set PPPoE account & password.



While PPPoE protocol is selected, you may have to enter some more information such as the above picture.

While Camera IP is changed dynamically because of PPPoE Network Connection, its new IP Address will be sent to "Sender E-mail Address" through SMTP service. So you won't worry about the difficulty in Camera's Webpage access.

※ As for the settings of SMTP Service, kindly please contact with your E-mail service provider。After you confirm all parameters are correct and working properly, you may enter them into the text area manually.

Port Settings:

◎ **HTTP Port:** Re-define the existing HTTP Port number in the text box.

◎ **RTSP Port:** Re-define the existing RTSP Port number in the text box.

After setups are completed, click **Save** button to apply the settings.

2.2.2 Wireless Tab

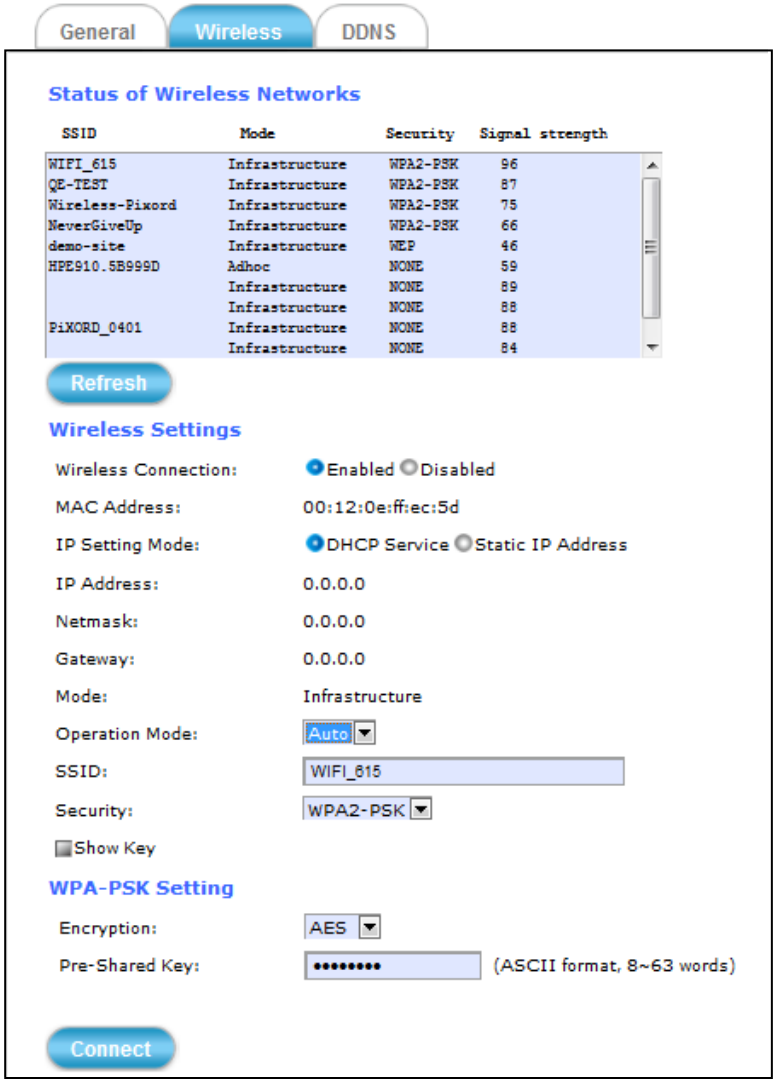


Figure 2-9 "Wireless" Tabbed Pane

The **Wireless** tabbed pane provides search and display of available wireless networks from which you can select the most suitable one for your Camera. Where:

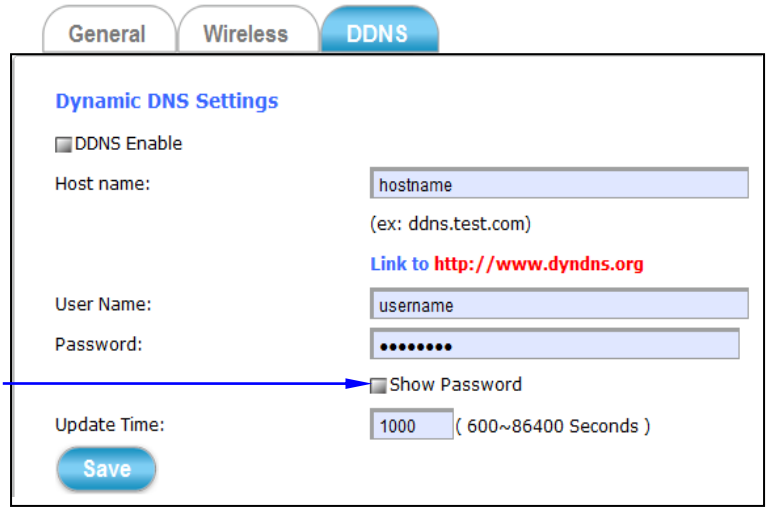
Status of Wireless Networks: Displays the list of wireless networks (Access Points) currently available; grouped under SSID, Mode, Security, and Signal Strength categories. Click the **Refresh** button to refresh the list for possible additional list of wireless networks not previously available.

Wireless Setting: Defines the configurations to enable the Camera to connect to the selected wireless network. Clients in the same network group are able to access to this Camera through wireless connection.

WPA-PSK Setting: Defines the Wi-Fi Protected Access setting in Pre-Shared Key mode relative to the selected wireless network.

After setups are completed, click **Connect** button to get connected with the selected wireless network.

2.2.3 DDNS Tab



Enabled check box to display password in decoded format

Figure 2-10 "DDNS" Tabbed Pane

The **DDNS** tabbed pane allows you to configure the Dynamic Domain Name System of your network device with a host name instead of the IP Address.

Where**:**

DDNS Enable: Enable the check box to support DDNS function.

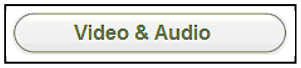
Host Name: Enter the Host name which you registered and got through DNS Service Provider. The assigned host name is used to access the network device instead of IP Address.

User Name/Password: Account authentication for logging into the website of DNS Service Provider.

Update Time: Define a time interval for the device to periodically update and check its access status with website of DNS Service Provider.

After setups are completed, click **Save** button to apply the settings.

2.3 Video & Audio Setup Execution



Clicking the **Video & Audio** button will display the following tabbed panes for defining Camera streaming, video, and audio functions.

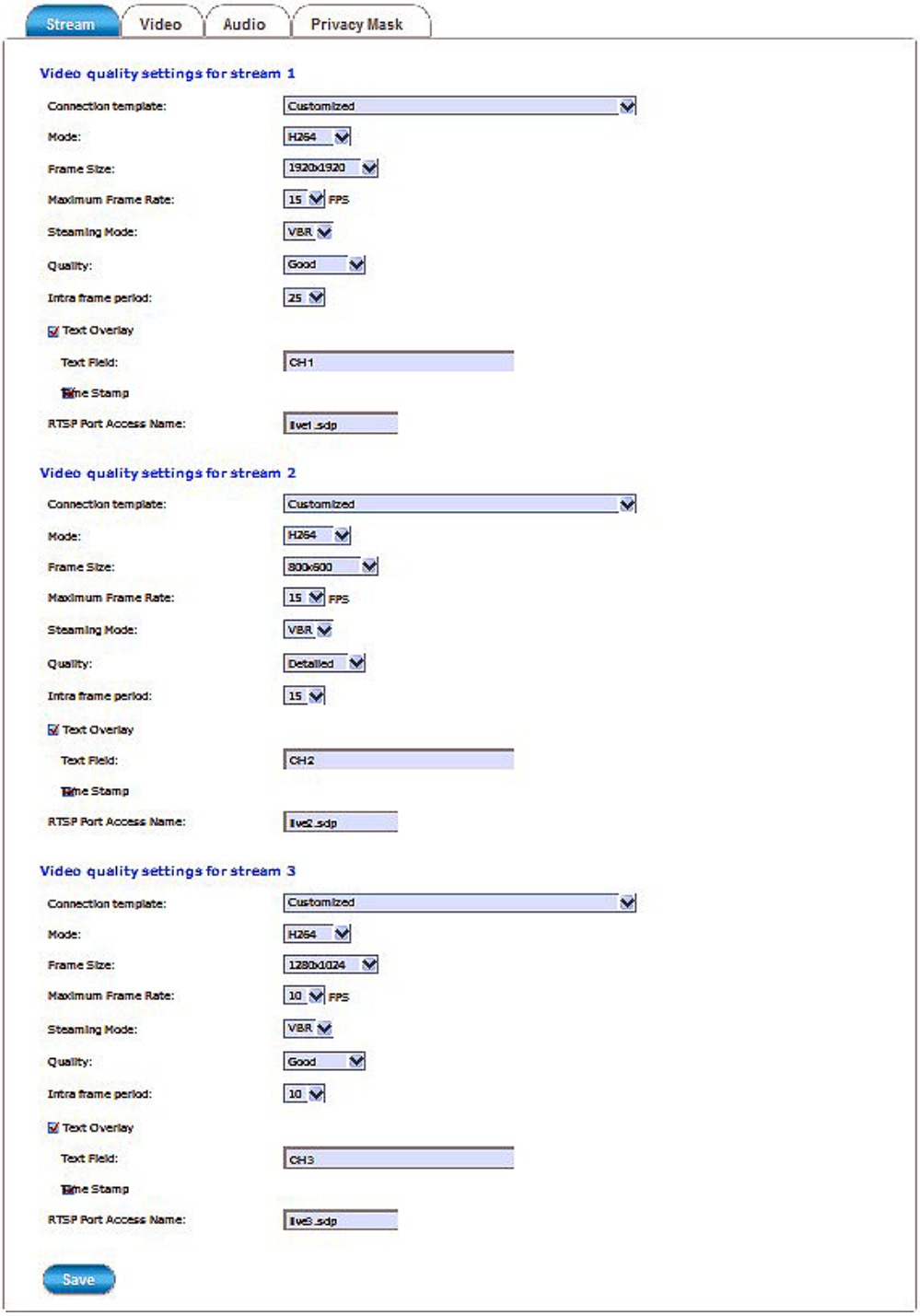


Figure 2-11 "Video & Audio" Tabbed Panes

2.3.1 Stream Tab

The **Stream** tabbed pane (see above figure) provides the adjustments for the video quality of the Camera streaming function. The pane offers the following three modes of video quality setting**:**

Video quality settings for stream 1: This is the primary quality setting for live view streaming.

Video quality settings for stream 2: This is the secondary quality setting for live view streaming.

Video quality settings for stream 3 (Mobile browser view only): This setting is geared for Mobile phone use.

> **NOTE**
>
> *If the "Video Event Alarm Setting by Video" (see Section 2.4.2) is enabled, an alert message will display requiring you to disable the feature first before proceeding to change the Streaming settings. Otherwise, adjustments to video quality streaming settings* ***cannot*** *be accomplished.*

The quality setting items on this pane are as follows**:**

Connection template: Four option modes are available; "Fast," "General," "Low," and "Customized" modes.

Mode: Three modes of encoding options are offered; "H264," "MPEG4," and "MJPEG."

Frame Size: Three 3 types of streamed frame resolutions are available to selection; "1280x720," "640x360," and "320x180."

Maximum Frame Rate: Available rate options are; 5, 8, 10, 15, 20, 25, & 30 frames per second (FPS).

Steaming Mode: Two choices of streaming modes are offered; "VBR (variable bit rate)" and "CBR (constant bit rate)."

Quality: The options for streaming mode quality are expressed differently between VBR and CBR**:**

- **VBR:** Standard, Good, & Detailed
- **CBR:** 64Kbps, 128 Kbps, 256 Kbps, 384 Kbps, 512 Kbps, 768 Kbps, 1M Kbps, 1.5M Kbps

Intra frame period: Available choices are; 5, 8, 10, 15, 20, 25, 30, 40, 50 & 60 frames per period. This function will let you choose how long distance between two I-Frames.
Lager value means longer distance between two I-Frames and this selection is suitable for the stable Network Bandwidth

Environment; so we suggest the smaller value selection is proper to the worse Network Bandwidth Environment.

Text Overlay: When enabled, each streamed frame will be overlaid with the Camera ID (text field) and stamped with date/time (if enabled) as illustrated below.

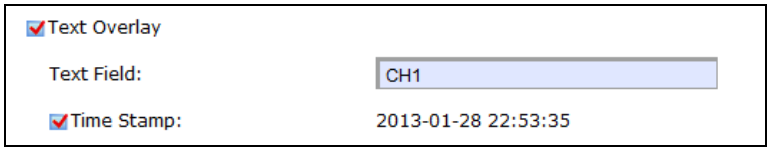
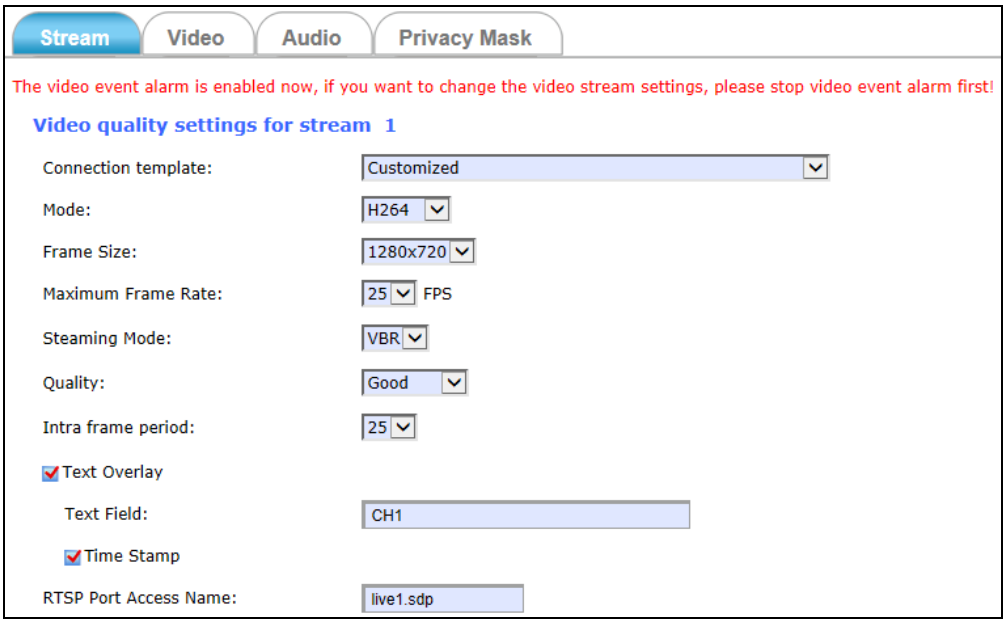


Figure 2-12 Text Overlay Setting Example

RTSP Port Access Name: When RTSP or VLC media-player is used, the port can be renamed with easy to remember pathname.
For example: the default RTSP Port Access Name is live1.sdp；it means your playback stream name would be "**RTSP://camera's IP address/live1.sdp**"



After setups are completed, click **Save** button to implement the settings.

2.3.2 Video Tab

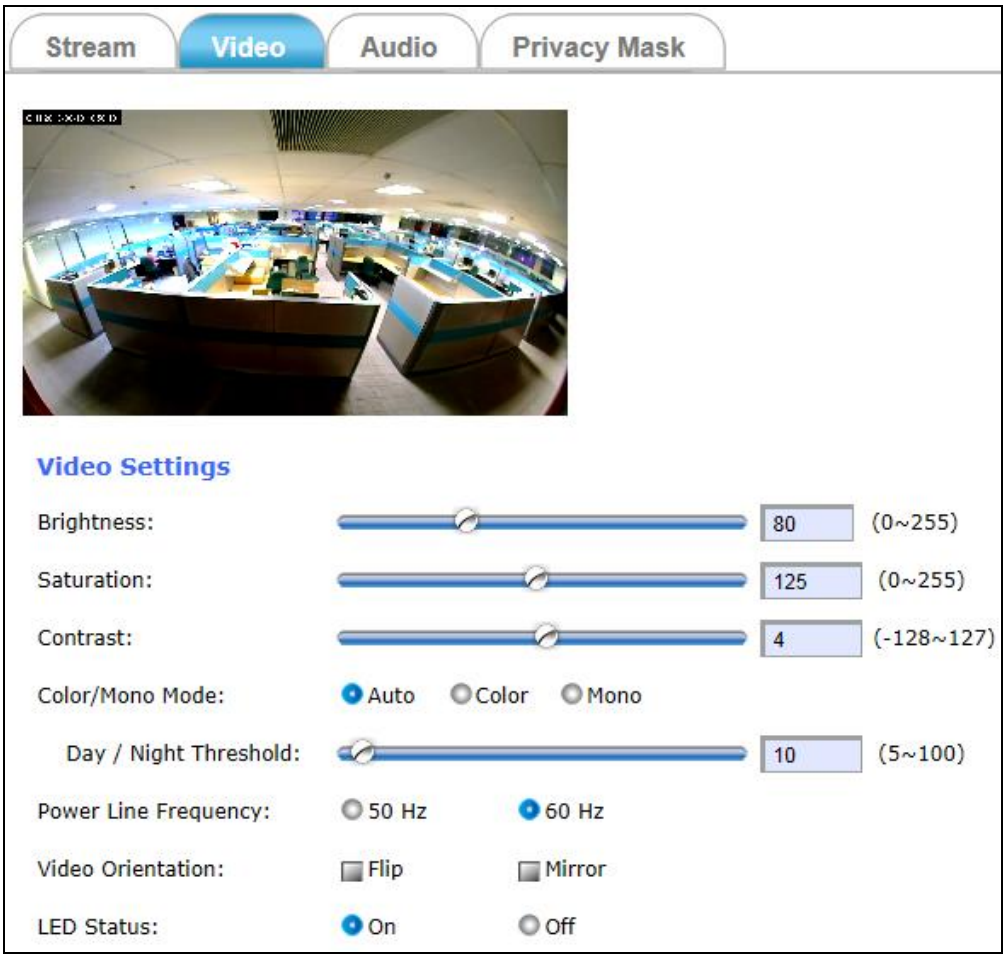


Figure 2-13 "Video" Tabbed Pane

The **Video** tabbed pane lets you to perform live adjustments and improvement of the Camera captured video effect relative to the target environment. If you experienced difficulty in implementing the adjustment parameters, it is recommended that you use the default setting by pressing the **Reset** button (see figure below) at the back of the Camera.

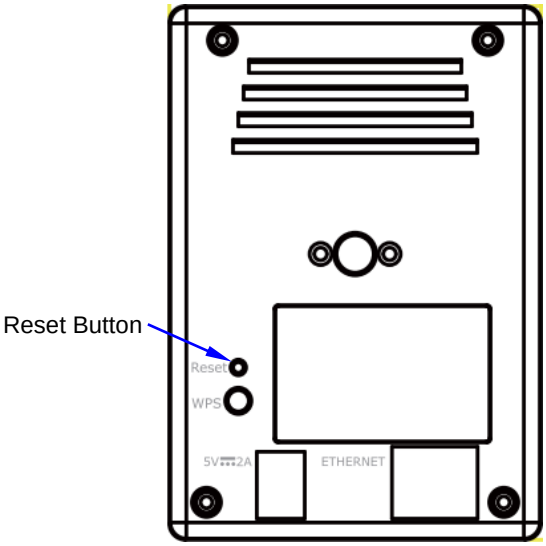


Figure 2-14 Reset Button at the Back of Camera

NOTE

Pressing the Reset button will also return all other new settings to its default status.

Where:

Brightness: The luminance of the captured image apart from its hue or saturation.

Saturation: The degree of intensity and purity of a specific color.

Contrast: The brightness ratio of the lightest to the darkest part of the video image.

Day/Night Threshold: Set the illumination lux value (5 ~ 100) to auto-trigger the Camera into "day" or "night" mode relative to luminance of the area under surveillance. When the environment luminance becomes higher than the set lux value, the Camera will auto switch to "day" or "color" mode. Otherwise, it will remain at "night" or "mono" mode.

2.3.3 Audio Tab

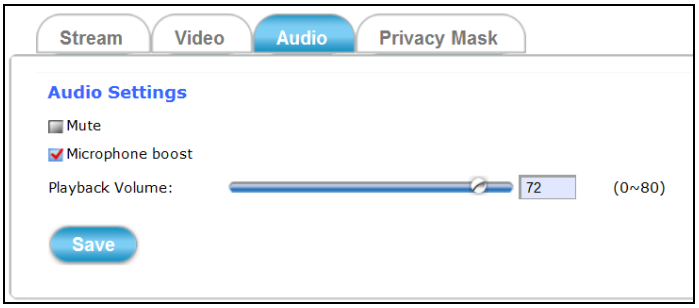


Figure 2-15 "Audio" Tabbed Pane

The **Audio** tabbed pane provides the following audio adjustments to your Camera microphone and speaker**:**

Mute: Enable or disable mute function of the Camera microphone.

Microphone boost: Enable or disable booster function of the Camera microphone. Enable this function will amplify the signal from the microphone jack.

Playback Volume: Adjust the Camera speaker volume by moving the slider to the left to decrease and to the right to increase the volume.

After setups are completed, click **Save** button to implement the settings.

2.3.4 Privacy Mask Tab

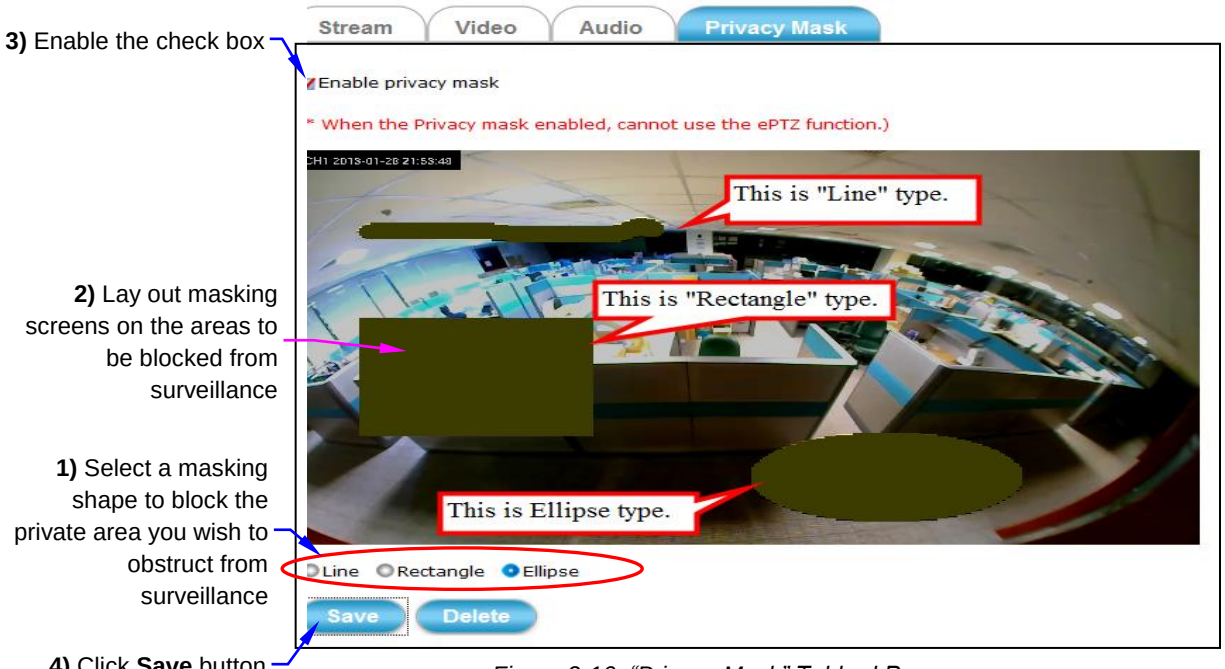


Figure 2-16 "Privacy Mask" Tabbed Pane

The **Privacy Mask** tabbed pane allows you to mask or block private areas from surveillance for privacy reason.

■ To block a private area from surveillance, follow the procedure below**:**

1) Initially select the masking shape, e.g., “Line,” “Rectangle,” or “Ellipse” (see figure above) you wish to use as screen to block the area from surveillance.

2) Click and drag the mouse cursor to lay out a masking screen on the area you wish to block, and then release the mouse right button. Notice that the laid out screen turns into phantom block.

3) If the laid out screen needs correction, click **Delete** button and redo the masking screen lay out process.

4) Once the masking screen is acceptable, click the **Enable Privacy Mask** check box followed by clicking of the **Save** button. This will turn the laid out screen into solid block.

■ To disable masking and remove the screen, do the following**:**

1) Click **Delete** button.

2) Click **Save** button and wait a while. Then the screen is permanently removed.

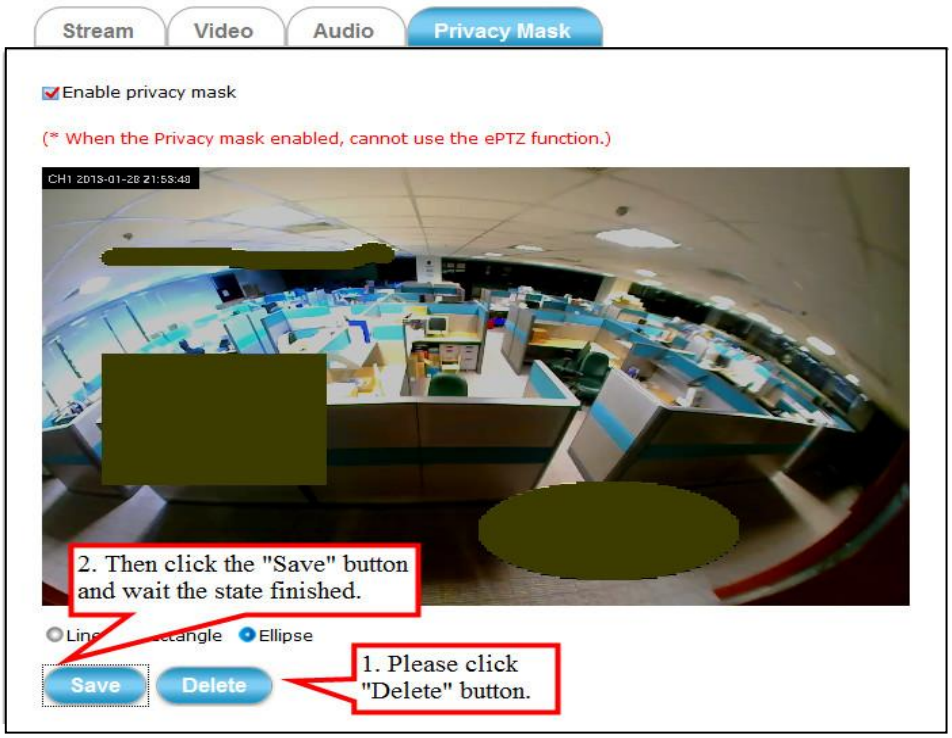


Figure 2-17 Removing “Privacy Mask” Screen from Camera

3) To permanently disable the **Privacy Mask** function, disable the **Enable Privacy Mask** check box

2.4 Event Setup Execution

Clicking the **Event** button will display the tabbed panes (see figure below) for defining event recording of the Camera. The PB731 is equipped with a card slot for Micro-SD/SDHC memory card. This storage card is utilized to store recording of local video and still JPEG images taken in response to set events. The recording operation of events is triggered according to the defined schedules.

2.4.1 Motion Tab

From the **Motion** tabbed pane, you can define specific target areas within the scope of surveillance to focus the motion detection function.

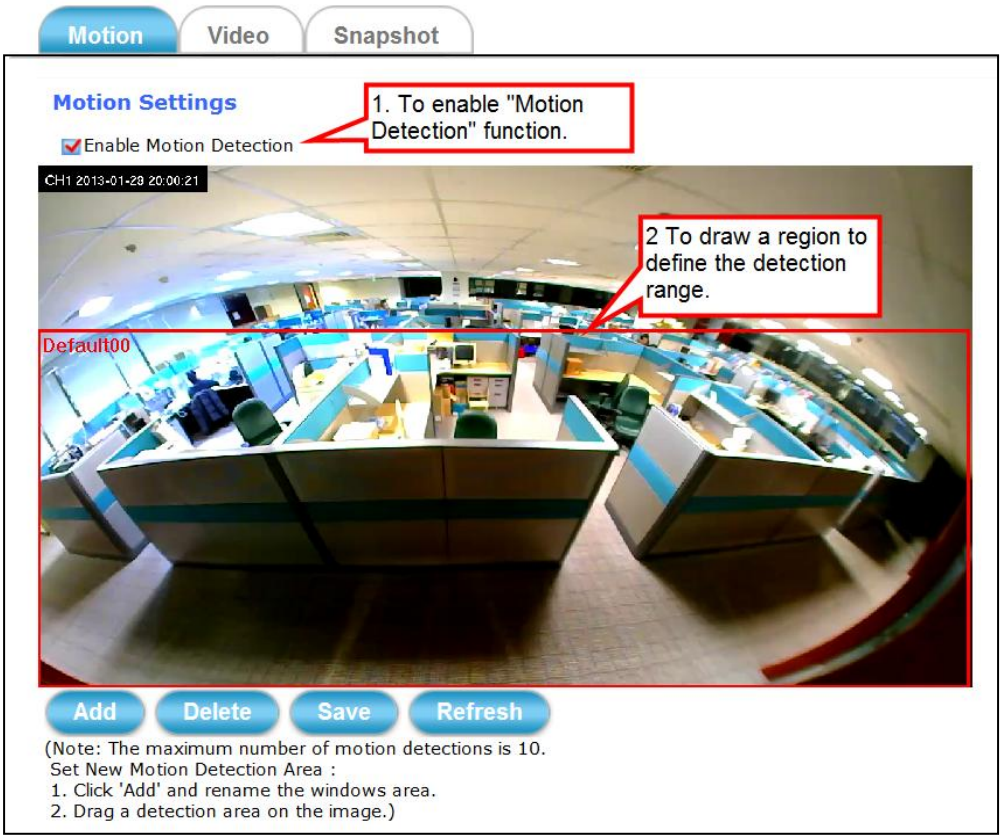


Figure 2-18 Defining a Single Motion Detection Area for the Camera

■ Defining a single motion detection area**:**

1) Enable the **Enable Motion Detection** check box.
2) Click **Add** button and a default frame will pop-up on the screen.
3) Click and hold inside the frame to drag it to the location where you want to focus detection. Resize the frame by dragging its corners or borders.

4) Click the **Save** button to apply.

■ Defining multiple motion detection areas**:**

1) After satisfactory positioning of the first detection area as described above, click the **Add** button again. A second default frame will pop-up on the screen. Drag & resize the frame at the desired location.

2) Repeat the above step to add more detection area frames.

NOTE

Total defined motion detection areas cannot exceed 10 frames.

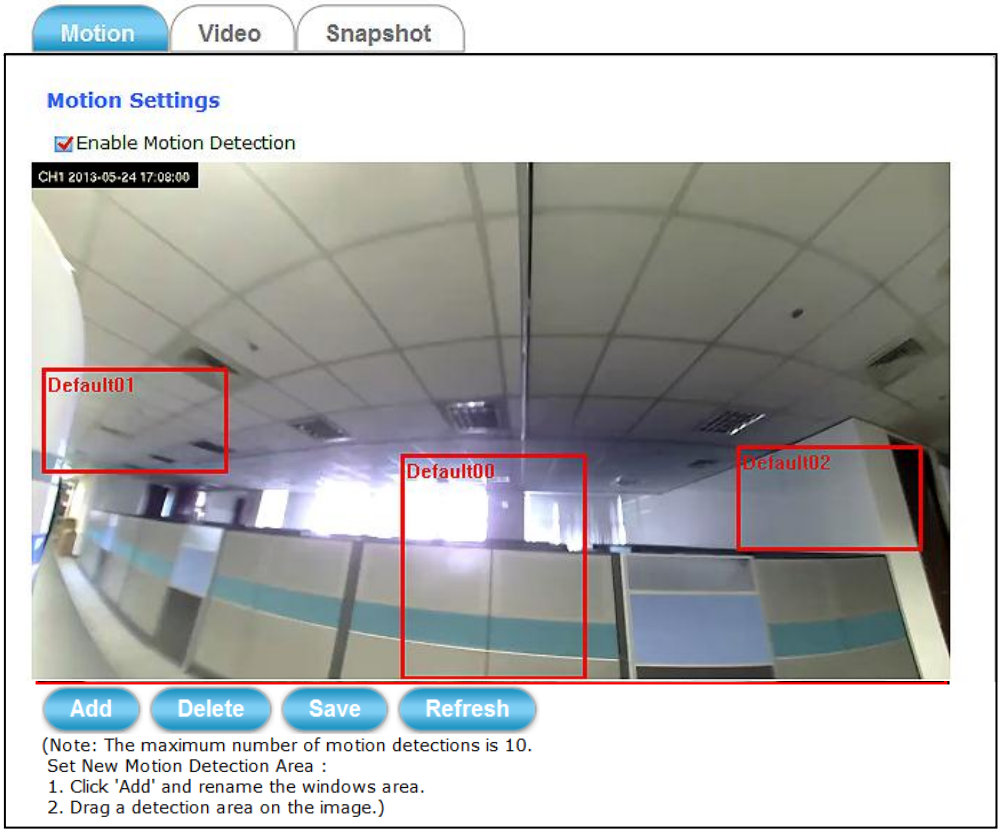


Figure 2-19 Defining Multiple Motion Detection Areas for the Camera

3) To assign unique names to each framed location for easy identification, click on the frame and a **Window Name** text box with the default name of the selected frame, will appear at the bottom of the pane (see figure below). Enter a new name and click the **Save** button. Wait for a while for the change to take effect.

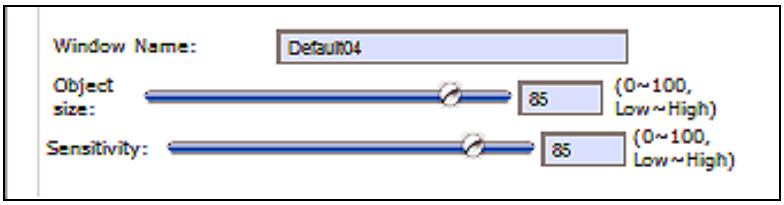


Figure 2-20 Detection Frame "Window Name" Textbox

4) To delete a frame that is no longer needed but was previously saved, click on the unwanted frame and click **Delete** button. The frame will disappear after a while.

5) To delete multiple frames that are not yet saved, directly click the **Refresh** button instead of deleting them individually. The **Refresh** button will automatically clears all unsaved frames.

2.4.2 Video Tab

The Video tabbed pane sets the video recording trigger method to use when motion is detected by the Camera. The four methods available for selection are Period, Schedule, Motion, and PIR (passive infrared), each of which can be set up with user scheduled recoding time and duration, as well as defining the video record file target destination.

※ Only the cameras enable Motion/PIR video recording trigger and bind into iPIXORD Cloud Service with Google account, the recorded video files in the SD Memory Card will be uploaded and backed-up to your Google Drive synchronously.

■ **Period:** This method will trigger the Camera video surveillance/recording operation for a defined duration (in seconds) whenever motion is detected. The video record may be sent to host by E-mail or stored in the SD card as selected.

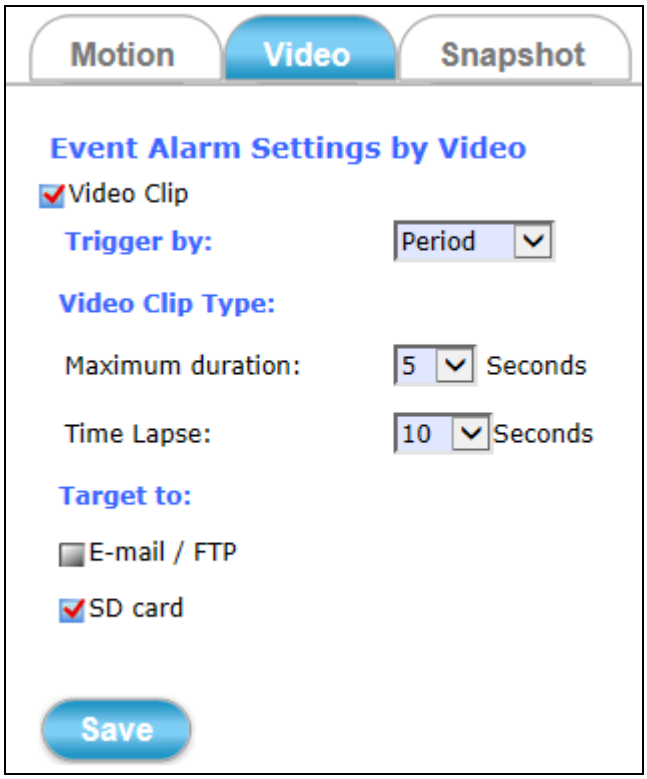


Figure 2-21 Video Recording with "Period" Method Selected

■ **Schedule:** This method activates the Camera video surveillance/recording operation continuously when the defined days of the week and set time of the set days are met. Motion is ignored with this method. Each recording time-span is in accordance with the set duration (in seconds) and the video record is stored in the SD card.

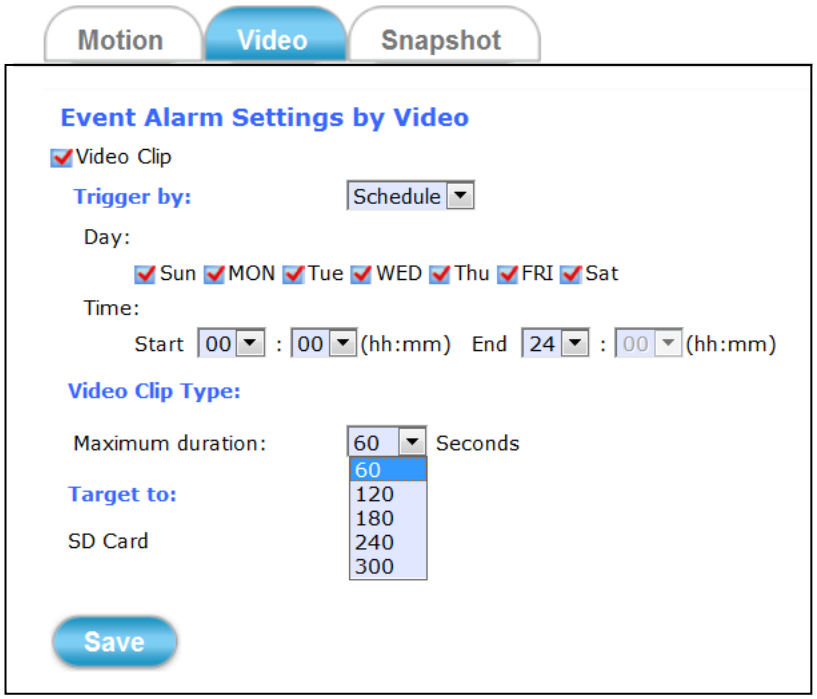


Figure 2-22 Video Recording with "Schedule" Method Selected

■ **Motion:** This method will trigger the Camera video surveillance/recording operation according to the set duration (in seconds) whenever motion is detected within the defined days of the week and at the time of the set days. The video record may be sent to host by E-mail or stored in the SD card as selected

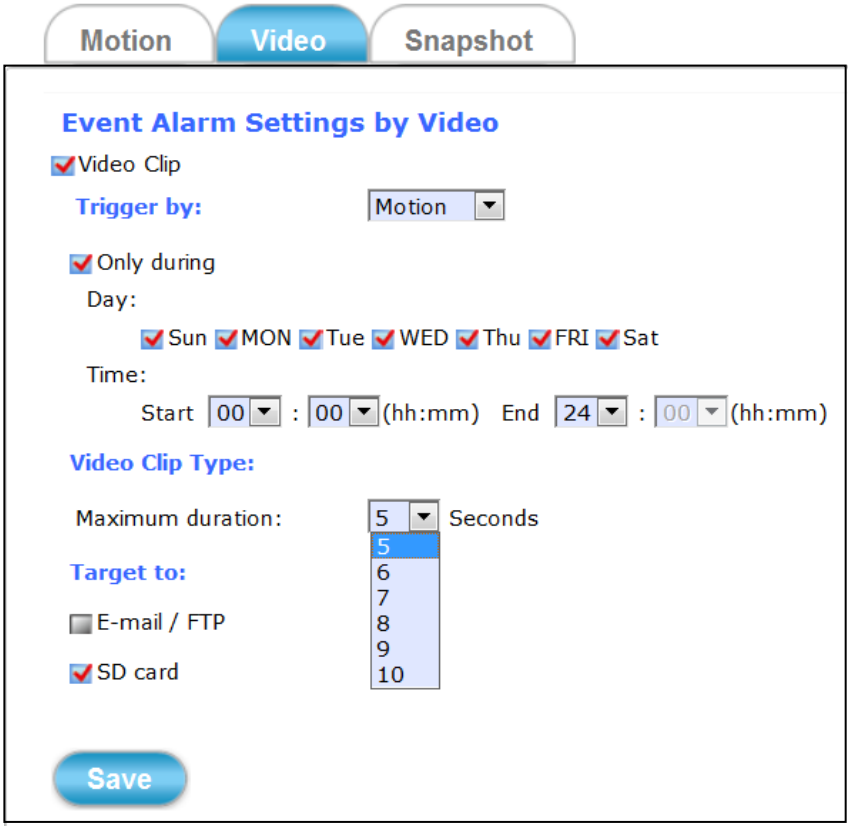


Figure 2-23 Video Recording with "Motion" Method Selected

■ **PIR:** On the defined days of the week and at certain time of the set days, the Camera will trigger its PIR operation when it senses abrupt changes in temperature or detects motion. Recording duration can be set in seconds and the video record may be sent to host by E-mail or stored in the SD card.

NOTE

The Passive Infrared Sensor feature is available only with PB731P Camera.

Figure 2-24 Video Recording with "PIR" Method Selected

2.4.3 Snapshot Tab

The Snapshot tabbed pane sets the Camera to take snapshot images when motion is detected. The four methods available for selection are Always, Schedule, Motion, and PIR (passive infrared), each of which can be set up with user scheduled recoding time and duration, as well as defining the video record file target destination.

■ **Always:** Under this method, the Camera automatically continuous to capture 6 snapshots of the area under surveillance at every 1 or 2 seconds interval. 3 previous snapshot frames are collected from the Camera buffer and 3 snapshot frames are captured live. The stream of accumulated snapshots may be sent to host by E-mail, FTP, or stored in the SD card as preferred.

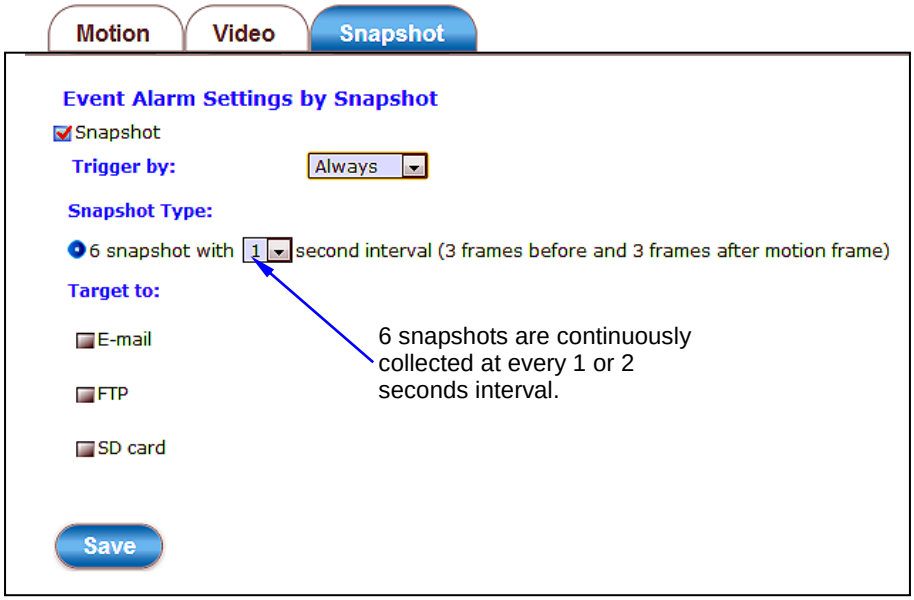


Figure 2-25 Snapshot Recording with "Always" Method Selected

■ **Schedule:** This method activates the Camera snapshot operation continuously when the defined days of the week and set time of the set days are met. The Camera will continuously capture 6 snapshots of the area under surveillance at every 1 or 2 seconds interval. 3 previous snapshot frames are collected from the Camera buffer and 3 snapshot frames are captured live. The stream of accumulated snapshots may be sent to host by E-mail, FTP, or stored in the SD card as preferred.

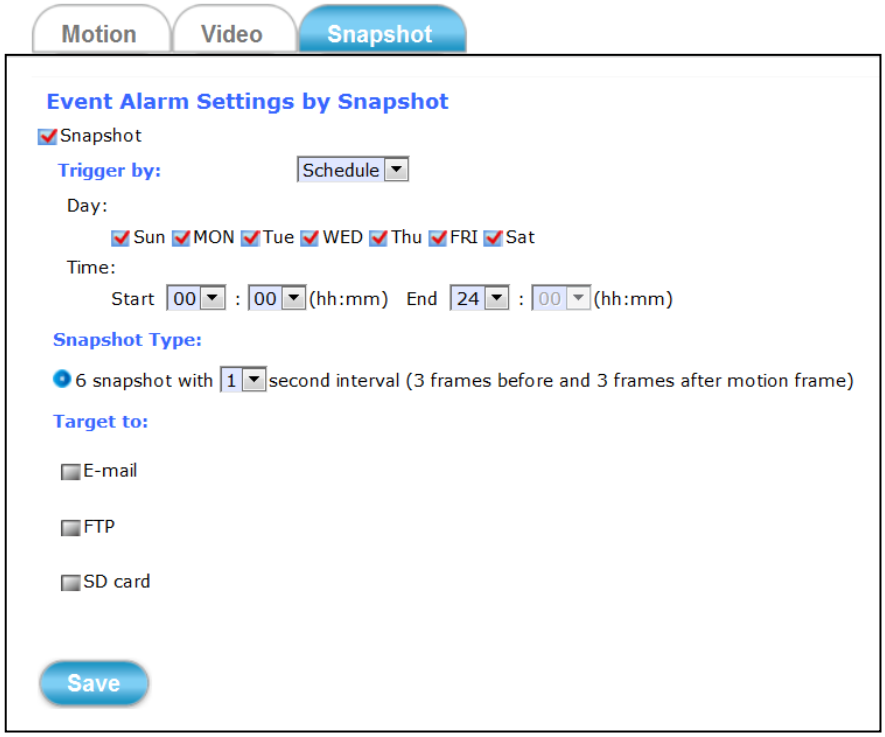


Figure 2-26 Snapshot Recording with "Schedule" Method Selected

■ **Motion:** This method will trigger the Camera snapshot operation according to the set time interval (in seconds) whenever motion is detected within the defined days of the week and at the time of the set days. Single or 6 snapshots may be captured as defined. The stream of accumulated snapshots may be sent to host by E-mail, FTP, or stored in the SD card as preferred.

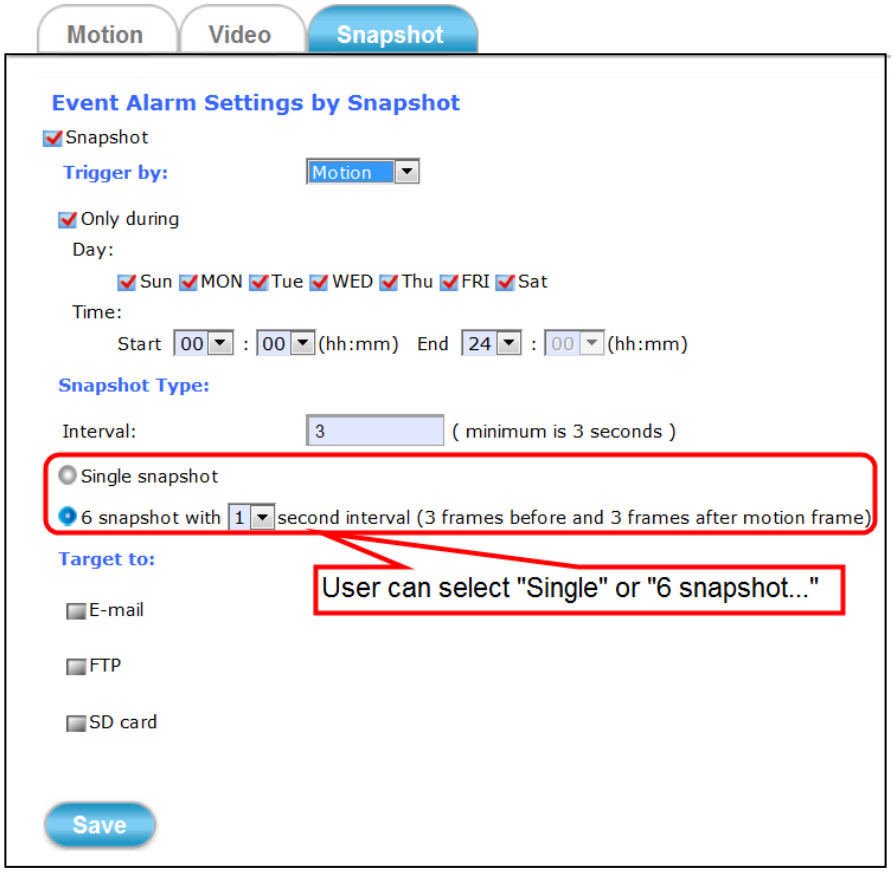


Figure 2-27 Snapshot Recording with "Motion" Method Selected

■ **PIR:** On the defined days of the week and at certain time of the set days, the Camera will trigger its PIR operation according to the set time interval (in seconds) when it senses abrupt changes in temperature or detects motion. Single or 6 snapshots may be captured at a time as defined.

NOTE

The Passive Infrared (PIR) Sensor feature is available only with PB731P Camera.

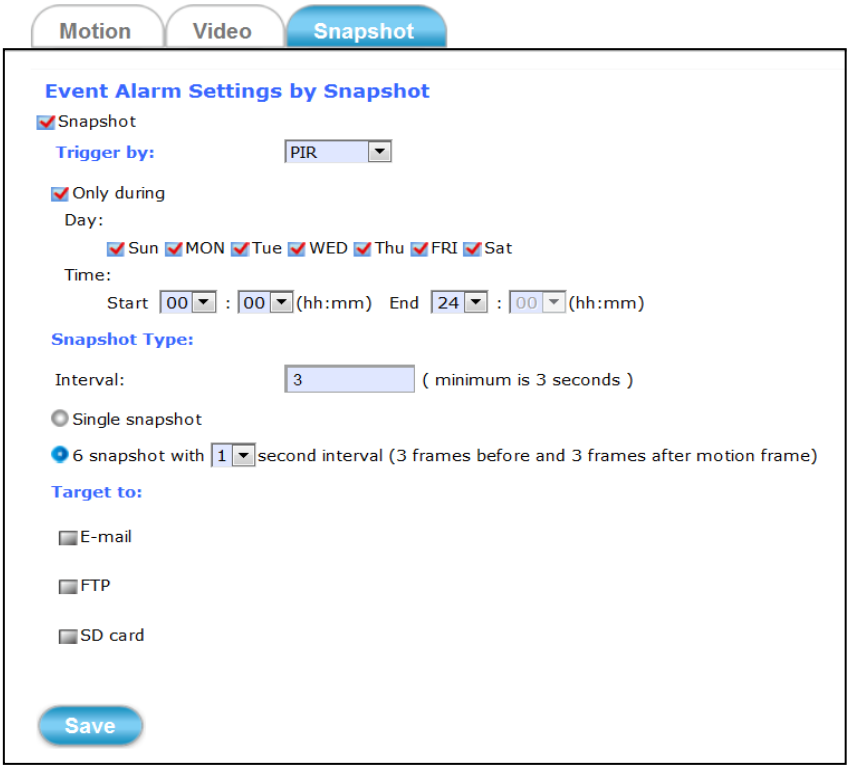


Figure 2-28 Snapshot Recording with "PIR" Method Selected

The stream of accumulated snapshots may be sent to host through E-mail, FTP, or stored in the SD card per selection or through all 3 available methods. When selected, the setup dialog for these methods will display is illustrated in the following figure.

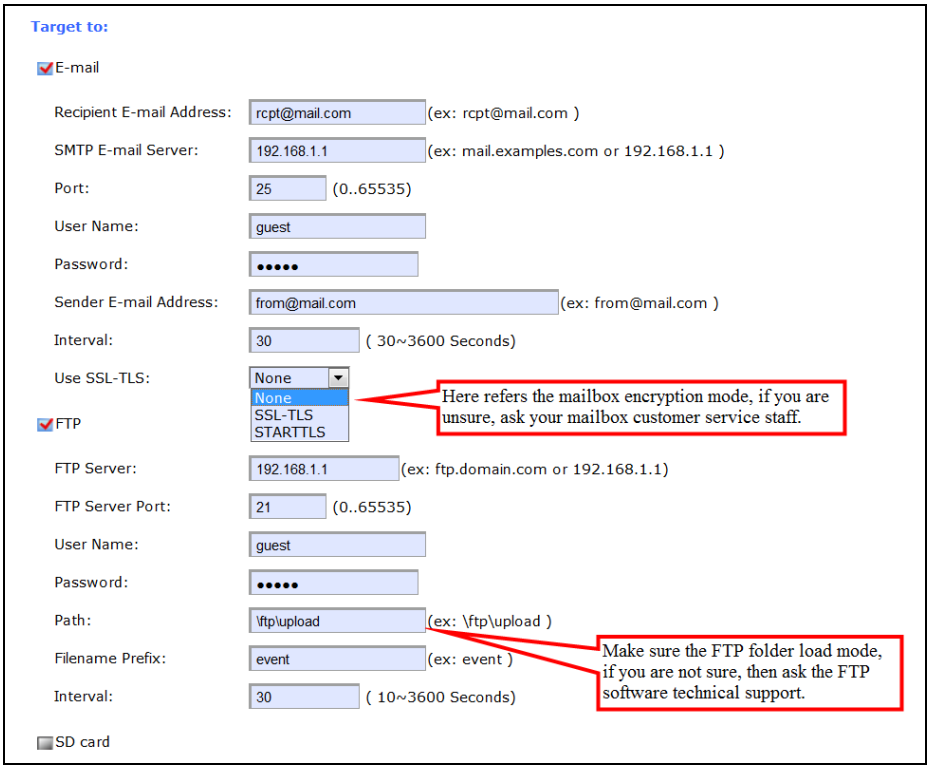


Figure 2-29 Transmitting Snapshots to Host Setup with "E-mail" & "FTP" Selected

※ As for the settings of SMTP Service, kindly please contact with your E-mail service provider。After you confirm all parameters are correct and working properly, you may enter them into the text area manually.

※ As for the settings of FTP Service, kindly please contact with your FTP service provider。While all parameters filled in Windows FTP Transferring Utility are correct and working properly under your Laptop or other PC, you may enter them into the text area manually.

2.5 Local Storage Setup Execution

Clicking the **Local Storage** button will display the following tabbed panes to provide information on existing local storage, such as disk size info, type, and status. If recording is in progress when clicking the **Local**

Storage button, a warning message will occur.

> **NOTE**
>
> *Do NOT remove the micro SD card while Camera is in recording process.*

2.5.1 Local Storage Tab

The **Local Storage** tabbed pane displays the SD card status. It shows the SD card total capacity (Total size), available memory (Free size), used memory (Used size) and used memory ratio (Use(%)). It also display the current Camera operation condition (Recording status) and provide "SD card control" option where user can select to allow the Camera to auto-overwrite earlier files in order to maintain the defined "Keep Free Space" memory size.

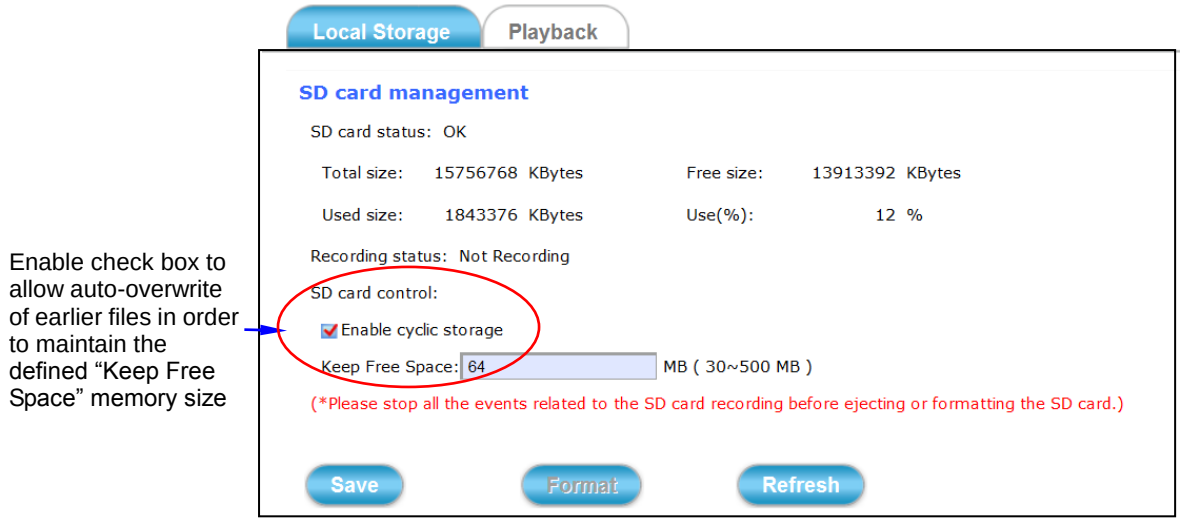


Figure 2-30 "Local Storage" Tabbed Pane

: Click this button to save changes to the SD card control setting.

: Click this button to format the SD memory card (take note of the message in red).

: Click this button to refresh the webpage.

2.5.2 Playback Tab

The **Playback** tabbed pane allows user to playback video and snapshot files stored in the SD memory card. These files were saved using the Event setup for video (see Section 2.4.2) and snapshots (Section 2.4.3) with the **SD card** check box enabled.

Playback of the stored videos or snapshots is performed from files recorded on particular date range as explained in the following figure.

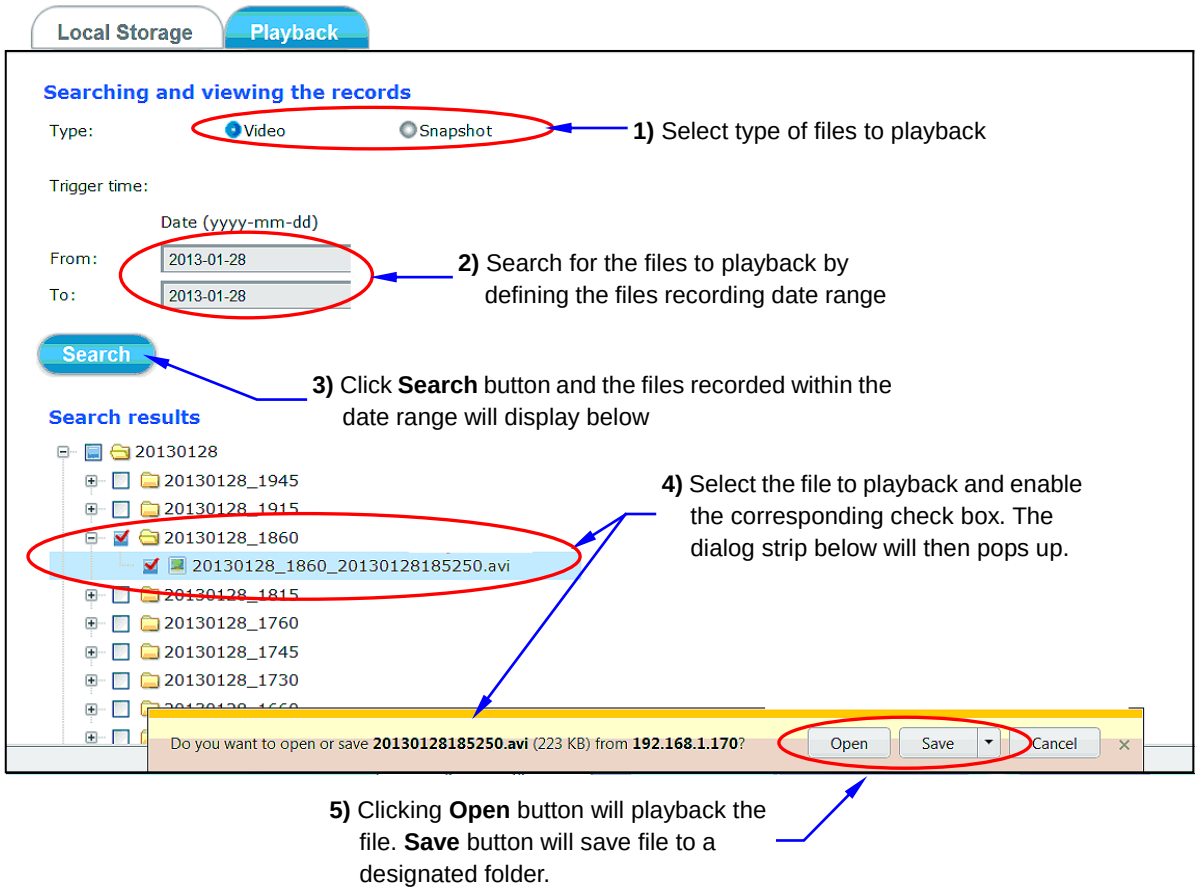


Figure 2-31 "Playback" Tabbed Pane