# 2.4 GHz Digital Wireless NVR Camera System



**User Manual** 

Chapter 1: About Your USB WiGuard1
Introduction
Features
Out of the Box
Product Views
LED Definitions
Night view support LED on Camera TX 6
Chapter 2: Hardware Installation
General Information
General Requirements
Important Installation Information
Determine a Location
Line of Sight Considerations
Camera TX Installation
Mounting Modes
Desktop Mounting
Hanging
Wall Mounting 1
Charging the Battery
USB RX Installation
Chapter 3: Installing the Software15
Introduction
System Requirements
Installation16
Chapter 4: Functions of the WiGuard21
Introduction
Menu Elements
Monitoring Screen22

Channel Status	22
Option Menu	23
Snapshot	23
Detect	
Web Server	23
Setup	23
Playback	24
Camera/Screen Control	25
Channel Information	26
Chapter 5: Operation	27
USB RX Installation	
Pairing a USB WiGuard	
Adjusting the Antenna on Camera TX	
Adjusting the Antenna on USB RX	
System Setup	
Setting Up the Language Support	
Setting Up the Mail Server	
Setting Up the Startup Options	
Setting Up the Recurring Recording	
Setting Up the Storage Location	
Setting Up the Web Server	
Determining the IP Address	38
Using the Web Server	39
MSN Webcam Setup	41
Skype Webcam Setup	
MMS Setup	
Camera Settings	42
Basic Settings	42
Image Adjust	43
Record Setting	44
Add New Schedule	45
Motion Detect	
Alert Setting	49

Appendix A	51
Specifications	.51
Certification	.55
FCC Interference Statement	55
FCC Radiation Exposure Statement	56
Troubleshooting	.57

# **Chapter 1: About Your USB WiGuard**

## Introduction

Welcome to the 2.4GHz Digital Wireless NVR Camera System user manual.

# **Features**

- Digital wireless NVR camera with built-in rechargeable LI-MH batteries
- USB powered, wireless NVR receiver
- One receiver connects up to four different cameras
- MPEG-4/J-MPEG dual video stream
- VGA display with 640x480 resolution
- · Remote live surveillance through the internet
- Motion detection with triggered email alerts
- Real time or scheduled A/V recording
- Security ID coded to provide communication privacy
- Supports MMS, MSN, and Skype connection
- Motion detection triggers audio alert
- Outstanding 2.4 GHz digital wireless A/V transmission with up to 300M in L-O-S (line-of-sight)

## Out of the Box

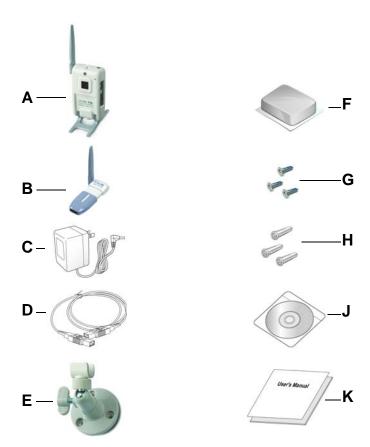


Figure 1. Out of the Box

- 1 X Wireless digital camera (A)
- 1 X Wireless USB receiver (B)
- 1 X Mini USB AC adapters (C)
- 1 X USB cable extender (**D**)
- 1 X Wall mount (E)
- 1 X Tack adhesive putty (F)
- 3 X screws (G)
- 3 X screw anchor (H)
- 1 X Installation disk (J)
- 1 X User manual (K)

# **Product Views**



Figure 2. Camera TX Front View



Figure 3. Camera TX Rear View

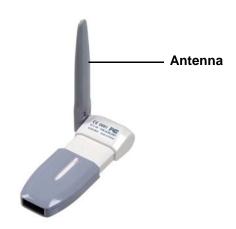


Figure 4. USB RX

# **LED Definitions**



Figure 5. Camera TX LED Location

#### Camera TX

LED/Battery Power	Definition	
Green light On	Power On	
Green light flashing	Fast: During pairing process	
	Slow: Paired	
LED/AC Adapter	Definition	
Red light On	When camera is plugged into the USB AC adapter	
Green light On	Power On	
Green/ Red light	Fast: During pairing process	
Alternating Flash	Slow: Paired	
<b>NOTE:</b> Red light on or green/red light alternating flashing all means battery is charging.		

NOTE: When camera turned on and paired, do not press pairing switch. Once pressed the device will lose connection and will need to be paired again.

### Night view support LED on Camera TX

When the Camera TX and USB RX are paired and functioning, the sensor on the Camera TX (top-right side) will automatically turn on the LED support light (above the camera lens) when it detects the environment is lacking light. The light will turn off automatically when the light strong enough.

**NOTE:** When the Camera TX is unplugged, the LED support light will be at half brightness.

**NOTE:** It is recommended to plug the Camera TX in when using it for extended periods of time.



Figure 6. USB RX LED Location

#### **USB RX dongle**

LED	Definition
Red light on	First time use or not paired with Camera TX
	No connection
	Camera off or out of power
Red light flashing	Paired and functioning properly

# **Chapter 2: Hardware Installation**

#### **General Information**

This chapter contains step-by-step instructions for installing the USB WiGuard hardware.

# **General Requirements**

- Mini network camera
- USB powered wireless receiver
- USB cable extender (optional)
- Wall mount with screws and anchors (optional)
- Phillips screwdriver (optional)
- Tack adhesive putty (optional)

# Important Installation Information

- This product is operated under a 2.4GHz open channel. To prevent interference, do not install the unit close to household electronic products such as a microwave, a 2.4GHz wireless phone, or a wireless AP.
- Avoiding metal furniture or electronic equipment can extend the transmission range and improve the signal reception. This product uses a digital micro-wave band. For the best transmission, place the unit on a higher position (using USB extension cord).
- 3. Please do not use the unit under high temperature and humidity. This product is not waterproof.
- The lens of the camera should always be clean. Do not touch the lens with hands or wipe with an unknown solvent. Only wipe the lens gently with a clean, soft cloth.
- 5. Do not try to dissemble or change the unit. Please follow troubleshooting instructions to resolve problems.
- 6. The tack adhesive putty included in the package should be used for temporary mounting. Please use the mounting kit for permanent use.
- 7. The attached antenna is a coaxial transmission antenna. Please do not twist or wrench it.
- 8. Please keep away from infants or children under 10 years old.

#### **Determine a Location**

- Elevate the cameras and receiver to improve signal strength
- Make sure the cameras and receiver are not blocked by any objects that could weaken the signal or block the view of the camera
- To prevent interference, avoid placing the camera or receiver close to household electronic products such as a microwave, a 2.4GHz wireless phone, or a wireless AP.

# **Line of Sight Considerations**

When considering locations for the camera and receiver, the more direct the line of sight is from the camera to the receiver, the stronger the signal will be.

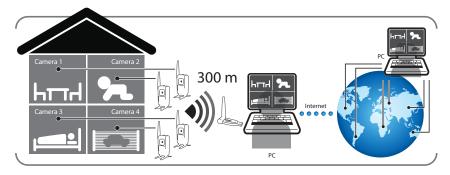


Figure 7. Line of Sight

#### Camera TX Installation

# **Mounting Modes**

The camera can be mounted various ways. Users can mount the camera to a desktop, a wall, or hang it from an object.

## **Desktop Mounting**

When mounting the camera to a desktop, use the attached camera stands.

**NOTE:** It is recommended to lower one stand before lowering the other.



Figure 8. Desktop Mount

# Hanging

When hanging the camera, use the loop hole on the top on the camera.



Figure 9. Hanging

# Wall Mounting 1

When using the wall mount, use the included screw anchors to strengthen the connection to the wall.



Figure 10. Wall Mount 1

#### Wall Mounting 2

When using the tack adhesive putty, work the putty with your fingers to make it more sticky. Also, clean the surface of where you want to place the camera.



Figure 11. Wall Mount 2

# Charging the Battery

Use the mini USB adapter to charge the LI-MH battery in the camera. When the battery is charging, the LED on the camera will be red. The LED will turn green when the battery is fully charged.

NOTE: Charge the battery for three hours before using it.

## **USB RX Installation**



Figure 12. Connect to USB port

- 1. Install the software first.
- 2. Install the USB RX receiver into the USB port of your computer.
- 3. Please click the .exe file on the Windows desktop to start the system.

**NOTE:** It is recommended to use the USB cable extender and make sure there are no objects blocking the line of sight of the dongle.

# **Chapter 3: Installing the Software**

# Introduction

This chapter describes the installation procedure for the USB WiGuard Software.

# **System Requirements**

#### **System Requirements**

Device	Minimum	Recommended	
CPU	Pentium 4, 2.0 GHz or above	Pentium 4, 3.0 GHz or above	
RAM	512 MB or above	1 GB or above	
Network	Ethernet port	Ethernet port	
Resolution	800 x 600 (24 bits)	1024 x 768 (24 bits)	
IP Cam	1 or more	1 or more	
Operating Software	Windows 2000 <sup>®</sup>	Windows XP® or Vista®	
Windows Media Player <sup>®</sup>	Windows Media Player 9 <sup>®</sup>	Windows Media Player 9 <sup>®</sup> or above	

## **Installation**

- 1. Power on your computer and make sure no other applications are running.
- 2. Insert the installation disc into the computer.
- Using Windows Explorer<sup>®</sup>, browse to your disc drive to locate the setup\_WUSB\_WHQL\_Driver\_A1009\_A1007\_NVR\_Big5\_100917.exe file and double click on the file.
- The install wizard for the WUSBCamera will launch. Click *Next* to continue the installation.

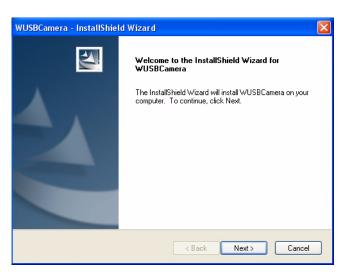


Figure 13. Installation wizard

 Read the following license agreement and select accept if you agree to the terms and click *Next*. If you do not agree to the terms, click *Cancel* to end the installation wizard.



Figure 14. License agreement

Select the destination folder of where the files will be installed and click Next.

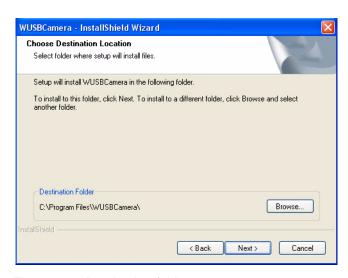


Figure 15. Destination folder

7. The install wizard for the WirelessCamera will launch. Click *Next* to continue the installation.

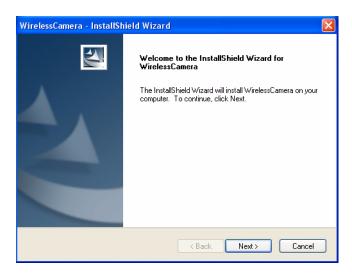


Figure 16. Installation wizard

8. Click *Install* to begin the installation.

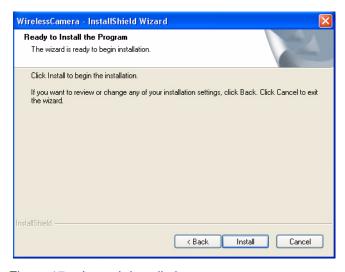


Figure 17. Launch installation

The wizard will confirm if the software has installed successfully. If it has
installed correctly, click *Finish*. If the software did not install completely,
click *Cancel* and reinstall the software beginning at step 3.



Figure 18. Finish installation

10. Select option No, I will restart my computer later and click Finish.

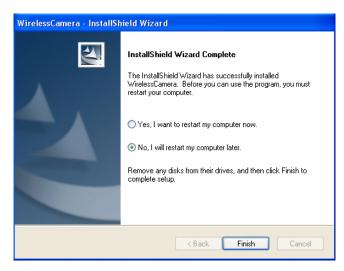


Figure 19. Restart

**NOTE:** The computer does not need to be restarted to run the application.

# **Chapter 4: Functions of the WiGuard**

## Introduction

This chapter describes functions of the USB WiGuard software.

#### **Menu Elements**

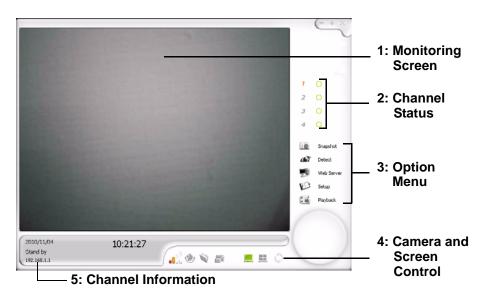


Figure 20. USB WiGuard Interface

# **Monitoring Screen**

This area will show the camera's view. It can be customized to show one screen or multiple screens.

# **Channel Status**

This area will show the status of individual cameras.

#### **Channel Status**

Icon	Description
€	Indicates the camera is monitoring.
0	Indicates the camera is in standby mode.
•	Indicates the camera is recording.

# **Option Menu**

This area allows users to perform actions shown in Table .

#### **Option Menu**

Icon	Item	Description
10	Snapshot	Takes a snapshot of the monitoring screen.
Ø	Detect	Turns the motion detection on/off.
<b>9</b>	Web Server	Turns the web server option on/off.
V	Setup	Launches the System and Setting setup menus.
	Playback	Launches the playback interface.

#### **Snapshot**

The snapshot function allows you to take an instant image of what is showing on the screen. When the snapshot button is clicked, it stores a .jpg file in the snapshot folder.

#### Detect

The detect function turns the motion detection option, ON or OFF. When the image changes, the software will capture a .wmv file and save it in the video folder.

#### Web Server

The web server function turns the web server option, ON or OFF. When the web server option is turned on, users can log in through the internet to view the cameras live.

**NOTE:** When the web server option is on, the setup option will be locked.

#### Setup

The Setup option lets you configure the Digital Wireless NVR Camera System to your own specifications. See "System Setup" on page 30.

## Playback

This section allows you to search for and playback recorded videos.

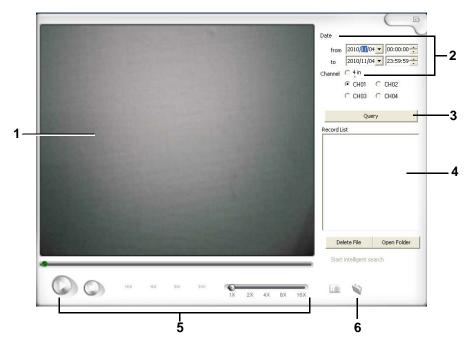


Figure 21. Playback

- Main Display Screen: This area will display the video output of the recording
- 2. Date and Channel selection: This filters out when and which channels the videos within that search criteria.
- 3. Once the search criteria has been determined, click the *Query* button to perform a search.
- Record list: This area will show a list of videos within the search criteria. Users have the option to delete it or open the file directory of your videos.

- 5. Playback controls: (From left to right)
  - Play
  - Stop
  - Previous track
  - Rewind
  - Fast forward
  - Next track
  - Playback speed (1x, 2x, 4x, 8x, 16x)
- 6. Capture options: Use the camera to capture a picture on the main display screen and use the folder to access the captured picture(s)

#### Camera/Screen Control

This area allows users to perform actions shown in the Camera and Screen Control Table .

#### Camera and Screen Control

Icon	Item	Description
-08	Signal Strength	Displays the signal strength of the wireless camera.
<b>9</b>	Cruise	Pairs cameras to camera numbers.
9	Pictures	Opens the snapshot folder.
	Screen size	Adjusts the screen size on the monitoring screen.
	Single View	Displays one channel on the monitoring screen.
	Tile View	Displays multiple channels on the monitoring screen.

# **Channel Information**

Shows the current channel information.

#### **Channel Information**

Item	Description
Date	Shows the current date
Camera Status	Shows the status of the camera
IP Address	Shows the IP address

# **Chapter 5: Operation**

# **USB RX Installation**



Figure 22. Connect to USB port

- Install the software first.
- 2. Install the USB RX receiver into the USB port of your computer.
- 3. Please click the .exe file on the Windows desktop to start the system.

**NOTE:** It is recommended to use the USB cable extender and make sure there are no objects blocking the line of sight of the dongle.

# Pairing a USB WiGuard

- Launch the USB WiGuard Software. Start Menu→All Programs→Wireless Camera→WUSB Camera.
- Click on the *Cruise* button in the Camera and Screen Control menu to launch the Match Setting window.



Figure 23. Cruise Button

3. Select the camera number you want to pair with a camera.



Figure 24. Match Setting

4. Within 10 seconds, turn on the camera TX and press the pairing button on the camera. The LED will flash quickly when pairing and slowly when paired. The Match Setting window will also display the pairing status. Repeat steps 3 and 4 for each camera.

**NOTE:** Place the camera and receiver close to each other when pairing them.

# Adjusting the Antenna on Camera TX

1. Lift the antenna on the wireless camera as shown in Figure 25.



Figure 25. Camera Antenna

# Adjusting the Antenna on USB RX

1. Lift the antenna on the USB dongle as shown in Figure 26.

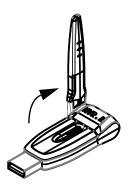


Figure 26. USB RX Antenna

# System Setup

The Setup option allows you to Set up the Digital Wireless NVR Camera System. In the options menu, click **Setup** to open the System Settings window. (Figure 27)



Figure 27. Setup Button

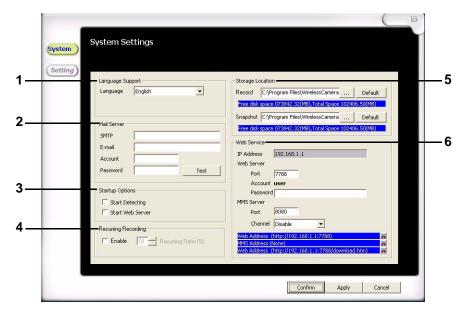


Figure 28. System Setup

- 1. Language Support: Sets the language used in the interface
- 2. **Mail Server**: Lets users change mail server settings for e-mail notification when motion detection occurs
- 3. Startup Options: Allows user to pre-determine start up options including:
  - Start Detecting: Starts the viewer in detection mode
  - Start Web Server: Starts the viewer web server
- 4. Recurring Recording: Records over older files to save space for the hard disk
- Storage Location: Locations of where the files are being saved for recorded videos and captured images
- 6. Web Service: Settings for the web server
  - IP Address: The IP address of the web service for the viewer
  - Web Server Port: The port for the web server is 7788
  - Web Server Account: Default is "user"
  - Web Server Password: Password for the web service
  - MMS Server Port: The port for the MMS server is 8080
  - MMS Server Channel: The channel for the MMS service

### Setting Up the Language Support

 In the options menu, click **Setup** to open the System Settings window. (Refer to Figure 29)

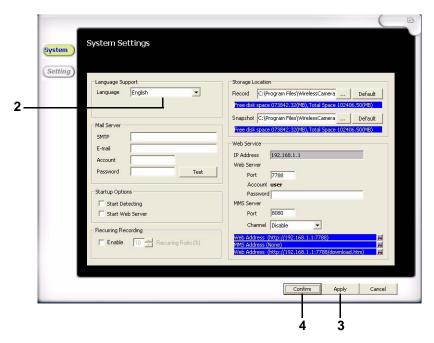


Figure 29. Language Support

- 2. Select the applicable language from the drop down menu.
- 3. Click *Apply* to approve the setting.
- 4. Click Confirm to exit the System Settings window.

### Setting Up the Mail Server

 In the options menu, click **Setup** to open the System Settings window. (Refer to Figure 30)

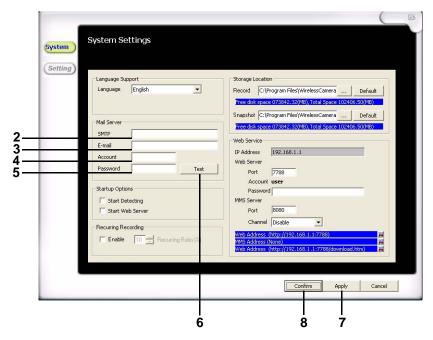


Figure 30. Mail Server

- Enter the SMTP information in the SMTP field.
- Enter the email address that will receive the notifications in the email field.
- Enter the account name for the email address you want to receive the notifications in the account field.
- 5. Enter the password for the email address you want to receive the notifications in the password field.
- Click *Test* to make sure that the settings are working correctly. If the test was successful, a window will pop up confirming the test and an email will be sent to the email address.
- 7. Click Apply to approve the setting.
- 8. Click *Confirm* to exit the System Settings window.

### Setting Up the Startup Options

 In the options menu, click **Setup** to open the System Settings window. (Refer to Figure 31)

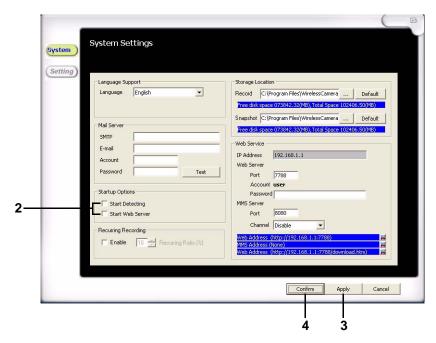


Figure 31. Startup Options

- Put a check mark in the startup options you want to automatically run when the software is started.
- 3. Click *Apply* to approve the setting.
- 4. Click Confirm to exit the System Settings window.

### Setting Up the Recurring Recording

 In the options menu, click **Setup** to open the System Settings window. (Refer to Figure 32)

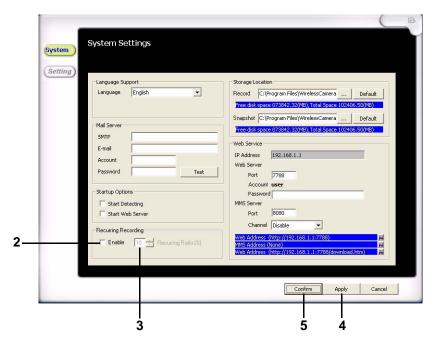


Figure 32. Recurring Recording

- 2. Click *Enable* to turn Recurring Recording on.
- 3. Enter in the percentage of free disc space you want to make available for the video recording.
- 4. Click Apply to approve the setting.
- 5. Click Confirm to exit the System Settings window.

### Setting Up the Storage Location

1. In the options menu, click **Setup** to open the System Settings window. (Refer to Figure 33)

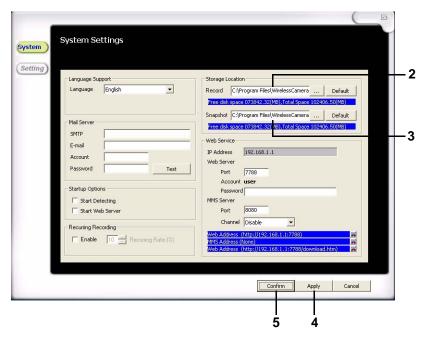


Figure 33. Storage Location

- In the Record field, enter the file path or click the ... button to select the location the video files will be stored. Click *Default* to store the files in the default location. To locate the default folder, refer to Installation on page 16.
- In the Snapshot field, enter the file path or click the ... button to select the location the image files will be stored. Click *Default* to store the files in the default location. To locate the default folder, refer to Installation on page 16.
- 4. Click Apply to approve the setting.
- Click Confirm to exit the System Settings window.

### Setting Up the Web Server

 In the options menu, click **Setup** to open the System Settings window. (Refer to Figure 34)

**NOTE:** IP address is automatically aquired from network settings.

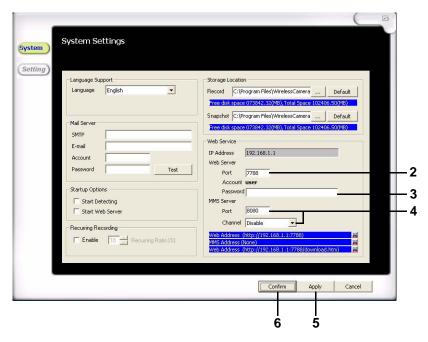


Figure 34. Web Service

- 2. Enter a Port number, such as 7788 into the Web Server Port field.
- Enter the web server password in the password field. This is the administrator password of the computer running the USB WiGuard Software.
- 4. If you are using a multimedia server, enter **8080** in the MMS Server Port field and set the MMS Server Channel field to Enabled.
- 5. Click **Apply** to approve the setting.
- 6. Click Confirm to exit the System Settings window.

**NOTE:** Must have priveleges to change the network settings.

### Determining the IP Address

#### Windows XP®:

- From the Start menu, right-click My Network Places, and then click Properties.
- To view the IP address of a wired connection, double-click Local Area Connection.
- To view the IP address of a wireless adapter, double-click Wireless Network Connection.
- 4. Click the **Support** tab, and then click **Details**. The window that appears will display the IP address.

#### Windows Vista®:

- 1. From the **Start** menu, right-click **Network**, and then click **Properties**.
- To view the IP address of a wired connection, click View Status to the right of Local Area Connection.
- 3. To view the IP address of a wireless adapter, click *View Status* to the right of *Wireless Network Connection*.
- 4. Click **Details**. The address is next to IPv4 IP Address.

#### Windows 7<sup>®</sup>:

- 1. In the system tray, click the network connection icon and select *Open Network and Sharing Center.*
- To view the IP address of a wired connection, click Local Area Connection.
- 3. To view the IP address of a wireless adapter, click *Wireless Network Connection (Network Name)*.
- Click **Details**. The address is next to IPv4 IP Address.

### Using the Web Server

 Once the web service has been set up, click the Web Server button on the options menu to turn on the web server. (Figure 35).

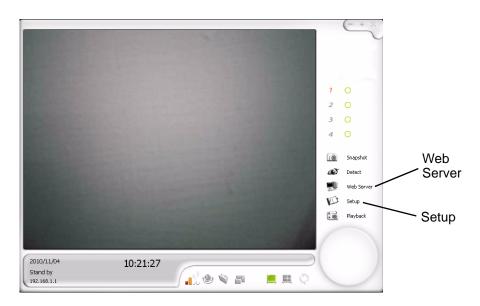


Figure 35. Web Server Button

- 2. Open a browser.
- 3. Enter the IP address & port as shown in Figure 36 (Ex. http://192.168.0.100:7888).

**NOTE:** To see the IP address, see Determining the IP Address on page 38.

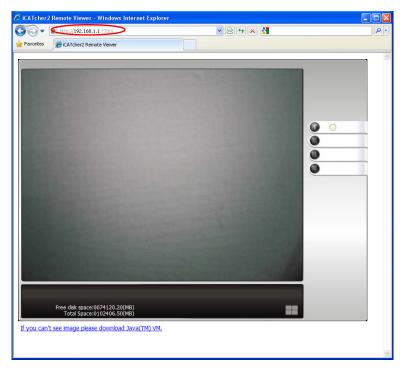


Figure 36. IP Address

4. The browser will display the camera view.

### MSN Webcam Setup

- 1. Make sure the Camera TX and USB RX have been paired.
- Turn off NVR software.
- 3. Start MSN (Windows® Live).
- 4. Select **Tools**→**Audio and Video Setup**
- 5. Select the webcam and start the camera view

### Skype Webcam Setup

- 1. Make sure the Camera TX and USB RX have been paired.
- 2. Turn off NVR software.
- Start Skype™.
- Select Tools→Options→Video Settings.
- 5. Select the webcam and start the camera view.

### MMS Setup

- 1. Make sure the Camera TX and USB RX have been paired.
- Start NVR software.
- 3. Click **Setup** and enable the MMS server.
- The Port number is 8080.
- Click Confirm.
- Click the Web Server button on the options menu to turn on the web server.
- 7. Open a web browser.
- 8. In the same location shown in Figure 36, type the MMS IP Address and port. (Ex. mms://192.168.0.100:8080).
- 9. After entering IP address, a pop-up menu will appear.
- 10. Click **Allow** in the pop-up menu for Windows Media Player ® to launch and stream video.

**NOTE:** Using MMS as webserver is high recommended.

## Camera Settings

### **Basic Settings**

The Basic Settings tab allows you to show custom information on the main screen, such as channel name, date and time, and watermarks.



Figure 37. Basic Settings

- Channel: Contains a personal name and description of the camera
  - Channel Name: Add a channel name
  - Note: Add a channel description
- Text Display: Customize the information that can be displayed on the channel's screen
  - Channel Name: Shows the channel name
  - Channel Information: Shows the channel number and/or channel name
  - Date and Time: Shows date, time, and/or week

- Font Size: Adjust the size of font on the screen
- Text Color: Adjust the text color on the screen
- Background: Adjust the text background color on the screen
- Watermark: Add a watermark image to the screen (.bmp or .jpg files only)

### Image Adjust

The Image Adjust tab allows you to adjust settings such as brightness, saturation, gamma, and image rotation.

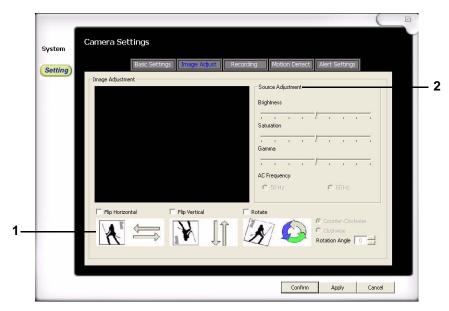


Figure 38. Image Adjust

- 1. The image properties can be changed using the following options:
  - Flip Horizontal: Turns the image horizontally
  - Flip Vertical: Turns the image vertically
  - Rotate: Rotates the image based on rotation angle and direction
- 2. Adjust video parameters to change brightness, saturation, gamma, and AC frequency.

### **Record Setting**

The Record Setting tab allows you to adjust image quality and configure recording modes.



Figure 39. Record Setting

- 1. Image Quality: Changes the image resolution and quality
  - Resolution: Adjust the recording image size
  - Quality: Adjust the detail of the image
- 2. Surveillance Mode: Allows users to configure the recording mode
  - Schedule Based: Will go into detection mode based on a configured scheduled. This mode can be set to record in either full time or triggered mode.
  - Record (During Detection): Once in detection mode, it will record in either full time or triggered mode
  - View Only (No Recording): Will only monitor in detection mode; no recording will be done

**NOTE:** When set to Full-time, the Motion Detect and Alert Setting tabs will be disabled.

3. Schedule Based: Allows users to preset a time to record.

- Add New Schedule
- Edit Schedule
- Delete Schedule

#### Add New Schedule

When Surveillance Mode is set to **Schedule Based**, you can set a schedule to activate detection mode.

- In the Recording tab, set the first drop down menu under Surveillance Mode to Schedule Based.
- Click the Add New schedule button.
- 3. Set the Scheduling Type:
  - Periodically
    - Set the start date and time
    - Set the end date and time



Figure 40. Periodically

- Daily
  - Set the start time
  - Set the end time
  - Operative period: Set up the start and end dates of this recording



Figure 41. Daily

- Weekly
  - Set the start time
  - Set the end time
  - Operative period: Set up the start and end dates of this recording
  - Weekly scheduling: Select the days of the week the recording is active

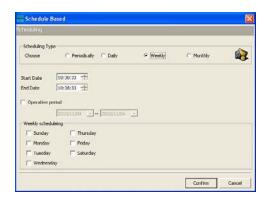


Figure 42. Weekly

- Monthly
  - Set the start time
  - Set the end time
  - Operative period: Set up the start and end dates of this recording

 Monthly scheduling: Select the days within the month the recording is active

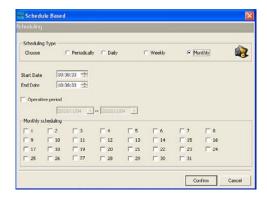


Figure 43. Monthly

#### Motion Detect

The Motion Detect tab will be available if the Surveillance Mode is set to *Triggered*. This particular area allows users to customize sections of detection and the sensitivity.

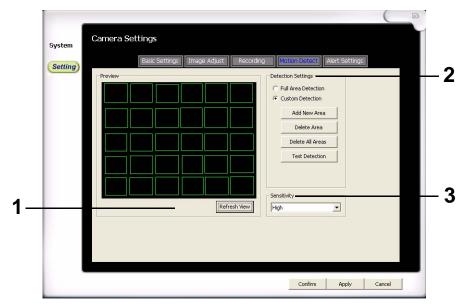


Figure 44. Motion Detect

- 1. Preview: Hit the *Refresh View* button to refresh the image
- Detection Settings: Allows custom areas to detect on the displayed screen
  - Full Area Detection: Detects all areas on the screen
  - Custom Detection: Detects user created detection blocks.
  - Add New Area: Creates a new block to detect. Hold down the right mouse button over the displayed screen area to create a new block
  - Delete Area: Select a block on the displayed screen and hit this button to delete it
  - Delete All Areas: Deletes all blocks on the displayed screen
  - Test Detection: Test the detection by moving an object in front of the camera, the blocks should change color when it detects motion
- 3. Sensitivity: Adjust the sensitivity of the motion detection

### Alert Setting

This section will be available if the recording option is set to "Triggered." This particular area allows users to set notification options in the event the viewer detects motion.

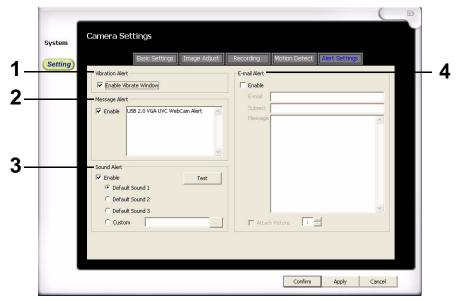


Figure 45. Alert Setting

- Vibration Alert: When enabled, it vibrates the whole viewer when motion is detected
- Message Alert: When enabled, it prompts a message alert on viewer when motion is detected
- Sound Alert: When enabled, it will playback the chosen sound when motion is detected
- 4. E-mail Alert: When enabled, a message will be sent based on the information filled out

# Appendix A

# **Specifications**

#### **Wireless NVR Camera**

Item	Description
Frequency	2.4GHz
Antenna	Dipole antenna
Transmission distance	300 M (L-O-S/ without interference)
Modulation	GFSK
Lens	FNO=2.0+/-5% (INFINITE)  Vertical:38.9°  Horizontal:50.5°  Diagonal:61.3°
Dimensions	7.5cm (excluded antenna) x 4.5cm x 2cm (base extended is 6.5cm)
Weight	60 Grams
Power	a) DC5V, 380mA b) Rechargeable LI-MH battery: 3.7V, 920 mA/H Full charge time: 3.5 Hours/Operating time: about 3.5 Hours
Connector	Mini. USB jack

#### **USB NVR Receiver**

Item	Description
Frequency	2.4GHz
Antenna	Dipole antenna
Modulation	GFSK
Wall mount	+/- 45°, angle is adjustable.
Dimensions	6.8cm (excluded antenna length) x 3.0cm x 1.2cm
Weight	15 grams
Power	USB bus power
Connector	USB output

#### **Functions**

Item	Description
No. of camera	4
Split display mode	1, 4
Operation	Mouse/ keyboard
Simultaneous operation	snapshot/ monitor/ motion detect/ alert/ record/ IE remote surveillance/ time stamp
Video compression	MPEG-4/J-MPEG dual video stream
Display resolution (VGA)	640 x 480
Display frame rate	1 Channel 15fps/ 4 Channel 30fps
Color	24-bit RGB
Net Surveillance	IE browser (1CH video) with PC surveillance software.

#### Record

Item	Description
Resolution	VGA: 640x480 / QVGA: 320x240
Frame rate	VGA: 15 fps / QVGS: 30 fps
Recording quality	Detect Mode: 5 levels
Motion recording	Yes, 1 event/ max. 300 KB
Email-recording	2 ~ 5 pictures (programmable only for pictures)

### Playback

Item	Description
Search mode	Smart search by file/ event/ channels
Playback speed	Pause, x1, x2, x4, x8, x16

#### Alarm/ motion

Motion detection:	24 (6x4) motion zones
Motion detection sensitivity	High/ Medium/ Low
No. of alarm inputs	4
No. of alarm output	1
Alarm type	Video Motion detection
Sound alert	4 (default 1~3 + custom)

#### **Event**

Item	Description
Motion Recorded Event	Max. 300 KB/event, 1GB HD for about 3000 events
Event source	Motion detection and discontinued record (picture to show last event)

#### IE browser

Item	Description
Remote viewing	IE, suggested resolution: VGA: 640x 480 (one channel)

### Backup

Item	Description
PC Hard disk	Record video on PC hard disk, 1GB HD for about 3000 events

### PC System Need (Suggested)

Item	Description
CPU	Pentium 4, 2.0 GHz or above
RAM	1GB or above
NET connector	RJ45
Resolution	1024 x 768 (24 bits)
Network Camera	1 pc to 4 pcs
Window Office	Windows XP, VISTA, or Window 7
Windows Media Player	Windows Media Player 9 or above

### Certification

### FCC 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 Federal Communication Commission 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:

- Adjust 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: To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. (Example - use only shielded interface cables when connecting to computer or peripheral devices).

### FCC Radiation Exposure Statement

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

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

The antennas used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be colocated or operating in conjunction with any other antenna or transmitter.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

FCC ID: YS8-ALM-A811 & A812 Made In Taiwan



## **Troubleshooting**

#### 1: The camera and receiver will not pair. Why?

A: Check that both devices are turned on and the antennas are extended. Try pairing the camera and receiver when they are close to each other before moving the camera to a specific location.

#### 2: Why are some of the cameras and/or screen controls not accessible?

A: Some of the controls can only be accessed when in single screen mode.

#### 3: Why can I not access the setup and playback options?

A: The setup and playback options are disabled when in detection or web server mode.

#### 4: Why can't I pan, tilt, and/or zoom?

A: The camera does not support pan, tilt, and/or zoom functions.

#### 5: The camera and receiver are paired, but the signal is very low. Why?

A: Make sure that there are no objects that could be blocking or weakening the signal. Adjusting the antenna or elevating the camera and receiver can also improve signal strength.

#### 6: I don't have static IP address, can I use DDNS?

A: Yes, the programs supports access through an IP address or a DDNS address.

#### 7: Why does the viewer not start recording after going into detection mode?

A: Check the channel's recording setup. Make sure that the recording options are correct. If it is set to full-time, it should record all the time. If it is set to triggered, it will record only when camera detects change in image displayed. Check that the detection area and sensitivity are set to the applicable settings.

# 8: When the web server is enabled, I can not view the image on a remote computer. Why?

A: Make sure the local area connection does not have a firewall blocking that particular program and that the IP address is correct.

#### 9: What does "Can not connect to following channel(s): CH\*\*" mean?

A: The viewer can not detect the IP camera. Make sure that your network is configured correctly.

#### 10: What does "Can not import to the following channel(s): CH\*\*" mean?

A: The web server could be conflicting with another IP address. Check the IP address assignment on all your network devices.

#### 11: What does "No buffer space error" and "Virtual RAM insufficient" mean?

A: Your computer could be running low on resources. Typically these errors occur when the RAM is insufficient. Upgrading your memory will most likely solve this issue. The recommended memory specifications are 1 GB of RAM.