

WiDiGuard

Wireless Digital Camera Sets



User's Manual

FEDERAL COMMUNICATIONS COMMISSION

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, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B Digital Device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiated radio frequency energy and, if not installed and used in accordance with the instruction, may cause harmful interference to radio communication. However, there is no grantee 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 tuning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Notice: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

CE DECLARATION

This device complies with CE . These limits are designed to provide reasonable protection against harmful interface in a residential installation.

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FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This device has been evaluated to be safe to use close to human body. It will not cause any harmful interference if client use this device within distance 20cm between the radiator and body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

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1.1 Introduction

WiDiGuard- The Wireless Digital camera sets is a new generation wireless camera that eliminated the interference problems usually found with standard analog wireless camera. USB receiver to works with a computer for an inexpensive home security system to make recording and monitoring from single camera to 4 cameras. Unique MSNEyes software function to make you monitoring from remote location via MSN.

1.2 Features

- High reliability and noise immunity digital wireless technology.
- 2.4GHz Wireless Transmission technology.
- Unique MSNEyes software makes remote monitoring via MSN.
- Motion detection video recording.
- Video display angle adjustment on 0°, 90°, 180°, 270°.
- Audio transmission.
- Plug & Play USB receiver
- 1/5-Inch Color CMOS VGA Digital Image Sensor.
- Support 640x480 up to 15 fps recording mode.
- MPEG4 format recording and JPEG still image capture
- Support up to 4 cameras in quad mode
- Wireless range up to 400ft. at open site area.

1.3 Specifications

- Video:
 - Supports resolution up to 640 x 480.
 - Sensitivity : 6.0 V/(Lux-sec)
 - Lens : f=3.6mm / view angle: 92 degrees.
 - 0.3M pixel.
 - Angle adjustment of 0°, 90°, 180°, 270°.
- Modulation :
 - Frequency Hopping Spread Spectrum (FHSS)
- Audio :
 - Omni directional Mono mic.
 - Built-in Microphone.
- Wireless Transceiver :
 - Frequency 2402MHz ~ 2483MHz
 - Hopping : 40/sec, 2 MHz channel space
 - 2Mbps air data rate.
 - TX output power : 17~20dBm.
 - RX Sensitivity : -80dBm.
- Camera power consumption : :
 - 5V DC , 400 mA (max.)

- Dimensions :
 - Camera : 82 x 67 x 39 (mm)
 - USB dongle : 87 x 33 x 13 (mm)
- Antenna :
 - Sender & Receiver : Omni directional Antenna.
 - Built-in Antenna.

1.4 System Requirements

- Windows XP X86/64 / Windows Vista X86/64 / Windows 7 X86/64
- Intel Pentium 4; 1Ghz or above or equivalent AMD processor
- Computer equipped with USB port.
- 512MB of RAM (1G recommended)
- CD-ROM drive (For software installation)
- Sound Card or On-board Sound Chip (AC'97 or HDA) (For audio recording)

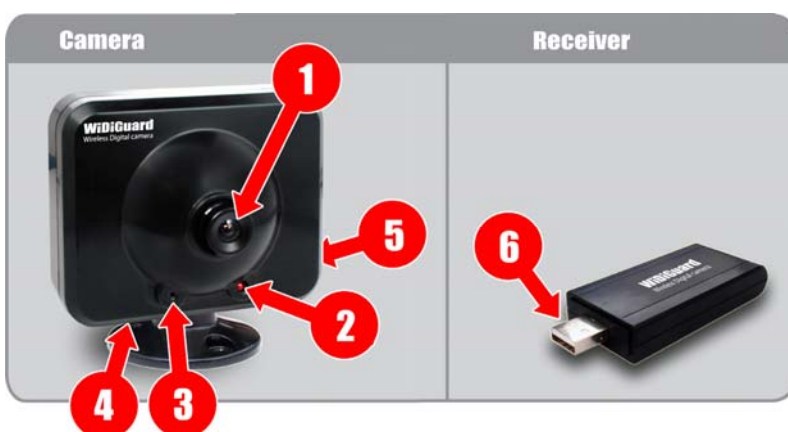
1.5 Package Contents

- WiDiGuard Camera x 1
- WiDiGuard USB Receiver x 1
- Camera Mounting Bracket x 1
- DC5V power adapter x 1
- WiDiGuard and MSNEyes Software / Driver / Manual CD x 1
- Quick Installation Guide x 1

1.6 Application



1.7 Hardware device description



1. Lens
2. Power LED
3. Microphone
4. DC5V input
5. SET (Back)
6. USB

2.1 Camera Installation

1. Connect the camera to the accessory omni-directional bracket and fasten it tight.
2. Loosen the side rotator of the bracket (* over-loosening may cause the camera to fall) and fasten it after setting the camera a proper orientation for the best surveillance.
3. Stick the accessory screws through the screw hole to the screw shells on the wall.
4. Connect DC5V adapter to DC5V input port



2.2 Driver Installation

*** Do not connect WiDiGuard Receiver to computer before driver installation.**

- 2.2.1 Please insert "Multimedia Installation Kit" CD-ROM into your CD-ROM drive; AutoRun will running. (if AutoRun didn't run, please go to "My Computer", click CD-ROM drive)
- 2.2.2 Please select "WiDiGuard" product.
- 2.2.3 Please select "Device Driver"
- 2.2.4 Setup wizard is running. Click "Next"
- 2.2.5 License Agreement, if you are agreeing to be bound by the terms of this agreement, please click "I Accept".
- 2.2.6 Choose destination location, select folder where setup will install files. Click "Next"
- 2.2.7 Setup wizard will be completed automatically, please click "Finish".

2.3 Application Software Installation

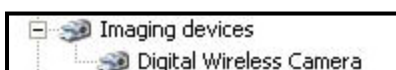
- 2.3.1 Please insert "Multimedia Installation Kit" CD-ROM into your CD-ROM drive; AutoRun will running. (if AutoRun didn't run, please go to "My Computer", click CD-ROM drive)
- 2.3.2 Please select "WiDiGuard" product.
- 2.3.3 Please select "Application Software"
- 2.3.4 Setup wizard is running. Click "Next"
- 2.3.5 Choose destination location, select folder where setup will install files. Click "Next"
- 2.3.6 Setup wizard will be completed automatically, please click "Finish".

After AP software is installed correctly, you should now see the following icon on your desktop.



2.4 USB Receiver Installation

- 2.4.1 Properly connect USB receiver to computer USB port.
- 2.4.2 System will now automatically detect USB receiver, Please wait for a few minutes.
- 2.4.3 Please go to Device Manager to check WiDiGuard driver is installed successful in your computer.



Please click the “WiDiGuard” icon
see video window as below:



on your desktop. After starting application, you can

- (1) Display
- (2) Recorder
- (3) Snapshot
- (4) Function
- (5) Setting
- (6) Hide Control Panel
- (7) Minimize / Full Screen / Exit



At the first time to start WiDiGuard, you should match the WiDiGuard Camera and USB receiver frequency first.

1. Go to **Setting -> Camera -> Camera Matching Set**.
2. Select a camera you want to match.
3. You have 10 seconds to poke the “**SET**” hole in back of WiDiGuard Camera.
4. You will see “**Success**” showed on Matching Info.



3.1 Display

- The camera screen will show up one by one when clicking on “**Camera I through IV**” individually in four display window.
- Click on “**Sequence**” will continuously show the Cameras in one display window.
- Click on “**Quad Mode**” will show 4 Cameras at a time.
- Right-click Function :



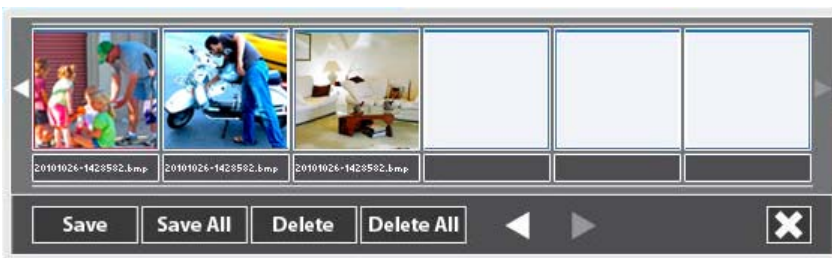
- (1) **Single Display**: Choose to display you want to show.
- (2) **Recorder**: Recording from any camera you can choose.
- (3) **Sequence**: Continuously show the Cameras.
- (4) **Delete One Motion Rectangle**: Undo the particular areas of each camera in Motion Detector Setting Mode.
- (5) **About**: Show the WiDiGuard software version.
- (6) **Exit**: Close WiDiGuard software.
- (7) **Always on Top**: Make WiDiGuard

3.2 Recorder

- Recorded one by one when clicking on camera I through IV individually.
- In Quad Mode mode, you can still chose to record from the cameras individually; results in one video file for each chosen camera.
- Recorded file save as YYMMDD_hhmmss.avi file name YY : Year; MM : Month; DD : Day; hh: Hour; mm : Minute; ss : Second

3.3 Snapshot

- During Camera video display, clicking on camera I through IV individually, will allow you to capture an image of the current viewing camera screen.
- After SnapShot, the captured image will show on snapshot window, you can Save / Save All / Delete / Delete All



Right-click the capture image, you can choose Save / Delete / Preview / Print.

3.4 Function

3.4.1 FullScreen: View your current camera(s) in full screen mode. Double click the full screen mode will back to normal mode.

3.4.2 Playback: Click on “Playback” to bring up the Playback window.



- Video Output Screen Shows the current video being played
- There are several ways to find the file you recorded.
 - (1) In the “Search option”, specify which camera(s) then click Find. This will list all of the files recorded by that specific camera(s)
 - (2) You can also search by Event and choose from Motion, Normal or Schedule.
 - (3) If you know the exact Date and/or Time, you can also choose to check the box beside Date and Time in order to look for the file(s) you recorded.

(4) If you are unsure of the exact Date and/or Time, you can still find your recorded file by input a Start and End date, and/or Start and End time.

- **Play:** Play the video file you currently selected.
 - (1) Double click the file in the list that you want to play.
 - (2) Choose file and click “Open” to play.
- **Pause:** Pause the current video being played.
- **Stop:** Stop the current video being played.
- **SnapShot:** Capture the current frame on the video being played captured image is saved as YYMMDD-hhmmss.avi file name (JPG)
YY : Year; MM : Month; DD : Day; hh: Hour; mm : Minute; ss : Second
- **Record File Info:** Display information about the current video being played:
File Name / Size of the file / Recording start time / Recording end time/ Duration of the video.
- **Quickly Seeking File:** Allow you to quickly search for a specific time segment of your recorded video file (one currently in Playback); specify the date first then pressing Seek
(format : Date YYYY/MM/DD Time AM/PM hh/mm)
- **Arrow on the bottom right** of the Playback window returns to the WiDiGuard main screen.

3.4.3 Motion Detect

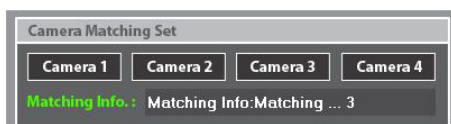
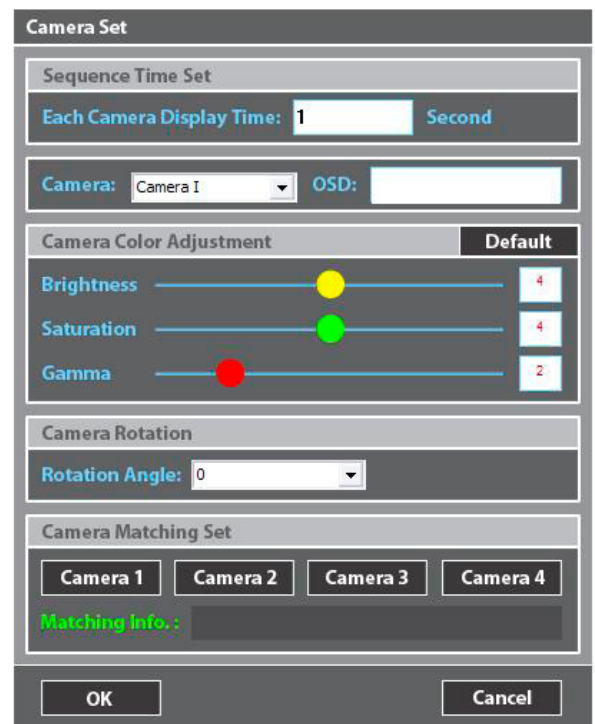
- Click on “MotionDetect” to allow the camera to record immediately upon detecting any sort of movements.

*Camera will stop recording after 5 seconds when no movement is detected.

3.5 Setting

3.5.1 Camera

- **Sequence Time Setting:** “Each Camera Display Time” allows you to specify the period of time between switching from one camera screen to the next in Sequence display.
- **OSD:** Allow you to rename your cameras.
- **Camera All Color Adjustment:** Adjust different values, which includes Brightness/Saturation/Gamma. Click on Default will restore original setting. Click on “OK” to accept and save your setting. Click on “Cancel” to return to WiDiGuard AP main screen without saving your settings.
- **Camera Rotation:** Video display angle adjustment on 0°, 90°, 180°, 270°
- **Camera Matching Set:** To match the WiDiGuard Camera and USB receiver frequency.



10 seconds



Poke the Set hole in back of WiDiGuard Camera.

Detect Camera and Receiver USB frequency and match.

3.5.2 Record

- **Time stamp:** Time Stamp will show up while recording from your camera(s)
- **Camera stamp:** Camera Stamp will show up while recording from your camera(s)

- **Record Path and Mode:**

- (1) Linear mode, it will allow you to keep recording until there is only about 12Mbs of free space left on your Hard Disk

Recording requires at least 30Mbs of free space left on your Hard Disk!

- (2) Circular mode, it will allow you to keep recording by going back on your current recorded file and overwrites it as needed, if there's not enough free space on your Hard Disk.
- (3) You can change your Default saving path of your recorded videos if you wish to do so. Change the path by typing in the text box, or by selecting a new folder by pressing the [...] button located on the right of the path.

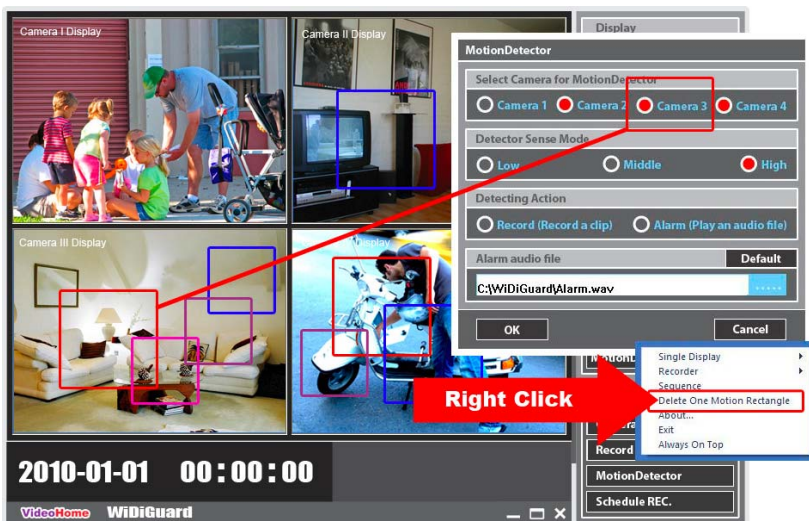
Click on OK to accept and save your settings. Click on Cancel to return to WiDiGuard main screen without saving your settings.



3.5.3 MotionDetector

- **Select camera for Motion Detector:**

- Here you can select any camera to use Motion Detector recording.
- After select camera for Motion Detector, you can scroll the particular areas (up to 4 rectangles) for Motion Detect.



- **To cancel the particular area of Motion Detector Function:**

- (1) Select the camera I ~ IV under the Motion Detector Option to cancel the whole particular areas of each camera.
- (2) Right click on screen and select Delete One Motion Rectangle to undo the particular areas of each camera.

- Detector Sense Mode (Low, Middle, and High):

you can select the sensitivity for your camera before activating Motion Detector recording.

- Detecting Action:

Here you can specify what the action will do right after your camera(s) detect any sort of movement

- Recording will immediately start when Record is checked.

- Select Alarm will play a preset alarm audiofile immediately when Motion Detector recording starts.

- Alarm Audio File: You can change your **Alarm Audio**.

Click OK to accept and save your settings. Click on Cancel to return to WiDiGuard mainscreen without saving your settings.

3.5.4 Schedule REC.

- Select camera which you want to record.

You can pick and schedule your cameras to start recording and end on any specific date and time.

- TimeSet : Select from Camera I-IV (Only selectable when box is checked in Camera Select)
Make sure you are setting the correct Start and End Date first, before clicking on OK to accept and save your settings

- Your output file will automatically be saved as (YYMMDD_hhmmss) format. (e.g. 060901_131500)

Click on **Save** to accept and save your settings and Click **OK**, Click on **Cancel** to return to WiDiGuard main screen without saving your settings.

4.1 MSNEyes Software Installation

(After WiDiGuard install in server computer, you can log in MSN in any other client computer to watch WiDiGuard server computer's camera in MSN cam window)

*WiDiGuard do not support Windows 2000!

*Please make sure that WiDiGuard software (see 2.3) and Windows Live Messenger (ver 8.0 and above) have both completely installed in server computer before proceeding!

4.1.1. Launch Windows Live Messenger and log in.

4.1.2. Please insert "Multimedia Installation Kit" CD-ROM into your CD-ROM drive; AutoRun will start; (if AutoRun doesn't start, please go to "My Computer" click CD-ROM drive)

4.1.3. Please select "WiDiGuard" product

4.1.4. Please select "Application software"

4.1.5. Please select "MSN4eye"

Note: In Vista, windows will pop up a dialogue box, choose "Allow" to continue install Application software.

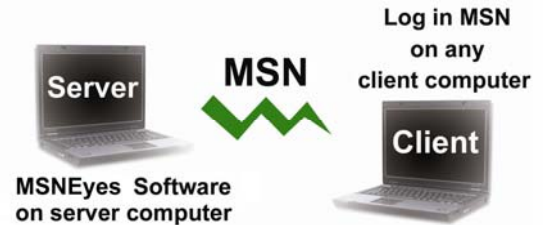
4.1.6. Run InstallShield Wizard, click "Next"

4.1.7. Choose destination location. Click "Next"

4.1.8. InstallShield Wizard Complete. Click "Finish"

4.1.9. Please restart your computer.

After AP software is installed correctly, you should now see the following icon on your notification area.



4.2 MSNEyes Operation (Log in MSN on any client computer)

4.2.1 Make sure Server computer is power on already

4.2.2 Use another MSN account and log in MSN on any client computer (because your original MSN account has logged in Server computer already and treated for WiDiGuard device)

4.2.3 After you log in MSN on client computer by another MSN account, you will see server computer MSN account in your MSN contact list on client computer or add new contact (server computer MSN account)

4.2.4 Chat with server MSN account in your client MSN list as normal. You can type command words on client computer to command server computer as below.

grab: start or exit MSNEyes function

cam(1~4): switch camera; e.g. cam1 means switch to camera 1

seq: sequence camera 1~ camera 4

rec: record the view camera video into server computer (record 4 camera if in seq mode)

Stoprec: Stop recording

Q1 : Why can't my system detect WiDiGuard?

A1 : Make sure you enable USB2.0 in the motherboard BIOS setup. Also, please make sure that your system has the latest USB2.0 host driver.

Q2 : Why does the my system show "High Speed device plug into Full speed USB port..."

A2 : Please make sure your system support USB2.0 hardware port.

Q3 : Why do I get unstable video during preview and recording?

A3 : If you are using Ultra DMA harddisk, please updated latest driver of IDE ATA/ATAPI controller. Some motherboard bundled drivers are not latest version, we suggest that you use XP system bundled driver.

Q4 : How can I get minimum number of dropped frames during video capture ?

A4 : The best recording performance depends on your computer system performance.

However, you can still take some of the steps below in order to improve the performance

1 Enable Hard Disk drive DMA :

2 Go to My Computer->Control Panel->System->Hardware->Device Manager->Disk drives to setup

3. Have more available free space in your Hard Disk

4 If possible, use a Hard Disk with speed of more than 7200 rotation per minute

5 Disable Power Management in BIOS

6 Close any other applications/programs you're not currently using

7 Try not to run any other program(s) during recording

8 Defrag your Hard Disk

Q5 : I can preview video but when recording, the system crashed/hanged

A5 : 1. Please make sure to install DirectX 9.0 or above on your system.

2. See if you can update your video card driver to see if it's a direct draw issue.

3 Your system might have too many programs open which are taking up memory. Please close unnecessary programs.

4. Please try and lower the hardware accelerator by the following:

My Computer->Control Panel->Display->Settings->Advanced->Performance to adjust it.

Q6 : In case of the flickering image while using notebook.

A6 : please connect the power adapter for notebook.