

**2.4**  
**GHZ**

# Digital Wireless Monitoring System

*Model:FR-DW7304 / DW7561 / DW7563*

## USER'S GUIDE



Thank you for purchasing this product, this brochure contains important information about this product, please read carefully and save it, if you install this product for others, be sure to leave this brochure or a copy of it to the final consumers.



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## Product features

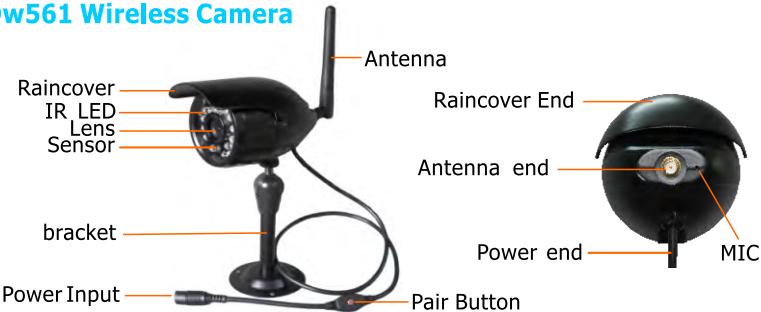
- Digital wireless audio and video transmission system, digital matching technology, digital automatic identification, and 18 channels intelligent frequency hopping are making our products avoiding interference, Frequency range is 2400Mhz-2483.5Mhz, while broadband transmission is 3M.
- MP4 video compression technology, and the speed of image Transmission which is VGA(640X480)@30FPS/QVGA(320\*480)30FPS, are both smoothing the image. Built in camera MIC and built in monitor speaker, synchronize picture and sound.
- Camera transmission is CMOS high quality sensor (640\*480 pixel) while the receiver is 7" LCD monitor (800\*480 pixel), which shows hi-def video. Transmit power: +20dbm. Receiver sensitivity: -90db.
- OSD menu with IR remote controller.
- RTC clock function.
- Motion detection function, and automatic alarm function.
- SD card and MMC card (Max:32G) accepted.
- From 1 to 4 cameras accepted, monitor can display, photograph, or play back 4 images together or separately.
- Support PAL/NTSC Analog Video output, even connect bigger video monitor or TV.
- 24PCS built in infrared LED, IP66 class dustproof and waterproof, 24 hours monitoring.
- 30-50M indoor distance, 150-200M outdoor distance.

## Packing List

①	Wireless camera	x4
②	FR-LW0700 LCD Monitor	x1
③	Camera bracket	x4
④	USB Cable	x1
⑤	AV Cable	x1
⑥	Adapter 5V/1A	x5
⑦	Instructions	x1
⑧	Remote Control	x1

# Structure

## Dw561 Wireless Camera



## Dw563 Wireless Camera



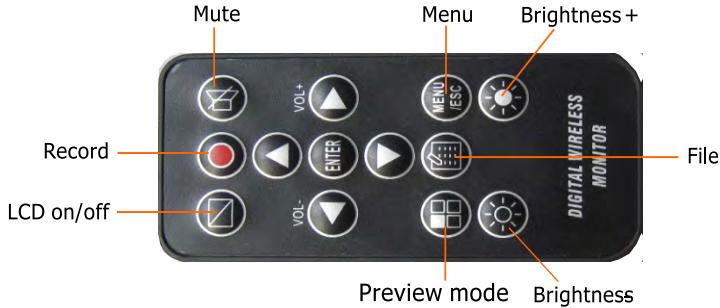
## Dw304 Wireless Camera



## Monitor



## Remote



# Installation

1. Install the camera at the proper monitoring location, at least 2.5M away from the floor.



(1)Upright installation :  
Install the camera on a level plane



(2)Hanging type installation :  
Install the camera on the wall

2. Place the monitor :



Upright



Horizontal

3. SD Installation :



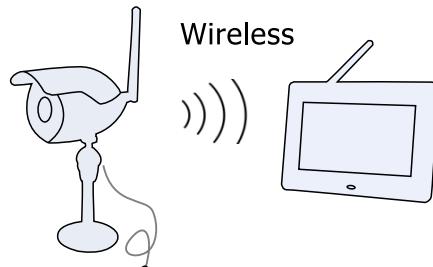
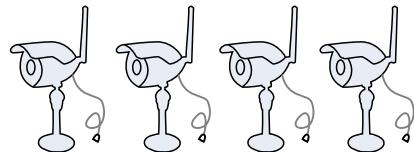
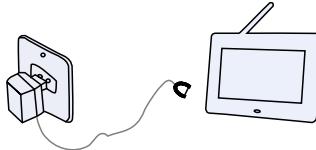
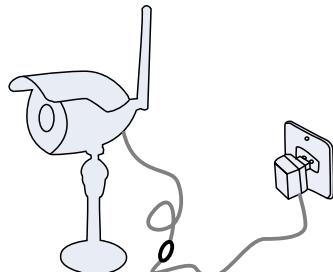
**Note :**

- (1)Receiver support SD card, HDD.
- (2)SD card should be FAT16/FAT32, most 32GB.
- (3)Please format the SD card before use.

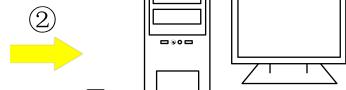
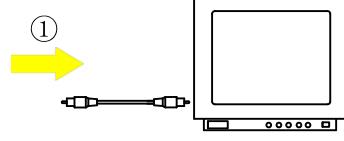
# Connection & Debugging

1. Connect the antenna and camera.
2. Set AV power socket near the camera.
3. Connect the power adapter between the camera and power socket, the light will turn red if it works.
4. Connect the receiver with the power adapter.
5. The light will turn green if monitor connect camera successfully. Now, you can see image and hear the sound
6. Please adjust the camera to the best angle.

Note: Well matched before sale.  
If you find not, please match again according to the Guide.



Wireless Monitoring System



# Basic Operation

Cameras and receiver are well paired before package, there is no need to pair them by yourself. The light turn red when connect the power.

Press POWER at least 5 seconds to start, press again to be off.

Preview:

Touch ENTER on the monitor or PREVIEW in the remote controller to be in preview mode.

One image: view one image, press ▼ to the next.

Four images: view four images at the same time, sound comes from the last channel before displaying four images together.

View take turns: display every view every fixed time one by one.

Remote Controller:

Press "LCD on/off" to open or close the screen.

Press ▲► to control the volume.

Press "Brightness+/-" to adjust the brightness.

Record:

Make sure inserting the SD card.

Under PREVIEW mode, press ▲ on the monitor to start or end record.

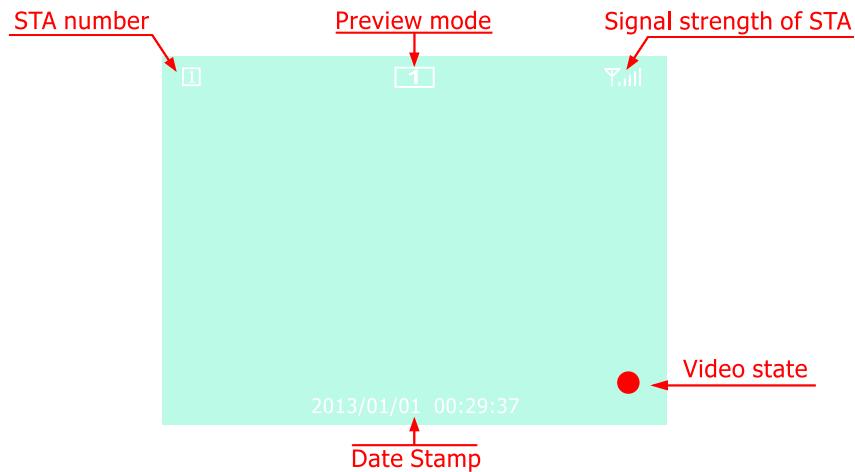
Under PREVIEW mode, press ► on the monitor or ▲ in the remote controller to screen shot, and stored as picture format.

Playback:

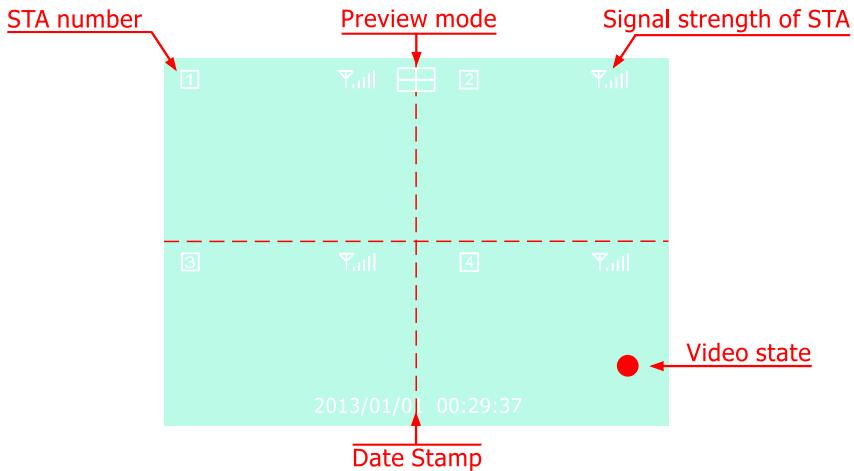
Under the playback mode, press ▲► to speed up or draw back, press ENTER to stop or go on, press MENU to return, press ▲▼ to choose the last or next file.

# Preview screen

## No Scan Mode



## Quad Mode



Preview mode: 1 No Scan Mode 2 Quad Mode 3 Scan Mode

Video state: ● Recording ▶ Playing ■ Pause

# System Operation

## MENU

Home menu includes 8 choices, please choose them as below:

- Camera Setting
- Record Setting
- Record Trigger Setting
- System Setting
- Event List
- Alarm Switch
- Pan/Tilt/Zoom
- SD Capacity

## Main Menu



Use **◀▶▲▼** to activate every icon, then press "ENTER" into next option, and press "MENU" to return.

# 1 . Camera Setting

Under this interface, you can set up Pairing, Activation, Brightness, Volume, MD Sensitivity, and MD Area.



## 1.1 Pairing

Under Camera Setting interface, Press "Enter" into Pairing option.



Use **◀▶▲▼** to activate camera icon, then press "ENTER" you will see "Pairing", it means searching camera. At the same time, press the "Pairing" button from the camera, then "Pair" on the monitor means matched.



Pairing operation will be quit if the receiver monitor can not search the signal from camera within 10 seconds.



Press "Enter" again can cancel "Pairing".



## 1.2 Activation

You can select camera(s) by this option, to set on or off status.



## 1.3 Brightness

You can adjust brightness by this option, 6 level to choose.



## 1.4 Volume

You can adjust volume by this option, 6 level to choose.



## 1.5 MD Sensitivity

You can adjust movement sensitivity by this option, 6 level to choose.



## 1.6 MD Area

You set effective monitoring area with 48 cells by this option.



## 2. Record Setting

Record Time ,Date Stamp,Snapshot Quality , Pre-Record , SD Over Write, SD Format can be set up this interface.



### 2.1 Record Time

Here to set up the duration of every file, use  $\blacktriangleleft\blacktriangleright\blacktriangledown$  to choose the time then press "Enter".



### 2.2 Date Stamp

Here to set up insert Date Stamp or not, use  $\blacktriangleleft\blacktriangleright$  to choose the ON or OFF then press "Enter".



## 2.3 Snapshot Quality

Here to set up the image quality of screen shot, HIGH means normal, LOW means 1/2 of the normal, choose the option then press "Enter".



## 2.4 Pre-Record

Here to set up to record the picture before movement or not, only for movement detect, not for fixed time monitor, choose the option then press "Enter".



## 2.5 SD Over Write

Here to set up over write circulation. If start the function, system will cancel the earliest file to keep the latest record when overwrite. If end the function, system will not keep record any more when overwrite.



## 2.6 SD Format

Here to format the SD card, then press "Enter" to revise.



### 3. Record Trigger Setting

Includes Schedule Record and Motion Detect Record. Original set up NONE means manual operation only. Choose the mission and press ENTER till turn red, then press **▲▼** to choose start time, over time and motion mode, press **◀▶** to adjust time or mode. Press **◀** and ENTER can delete mission and press ENTER only to confirm.



#### 3.1 Schedule Record

To set up schedule record here, press **▲▼** to set the beginning time and press ENTER to confirm.



#### 3.2 Motion Detect Record

To set up motion detection here. Press **▲▼** to adjust the time and press ENTER to confirm.



## 4. System Setting

Includes Time Setup, TV Output, Power Saving, Camera Switch Interval, Resolution, USB Output, and Default Setting.



### 4.1 Time Setup

To set up the time here. Press **▲▼** to choose year, month, day or time, then press **◀▶** to revise.



### 4.2 TV Output

To set up TV Output mode here. Press **▲▼** to set up and press ENTER to confirm. Please note that LCD will not display any more when connect TV or monitor via AV line Under NTSC or PAL mode.



## 4.3 Power Saving

To set when how long no operate it will be closed. Press **▲▼** to se up and press ENTER to confirm. Any key can restart the LCD under power saving status.



## 4.4 Camera Switch Interval

To set a scan mode here. Under this mode, monitor will show every view one by one every 5 seconds. Press **▲▼** to set up and press ENTER to confirm.



## 4.5 Resolution

To set the resolution of the preview and record picture here. Press **▲▼** to choose and ENTER to confirm.



## 4.6 USB Output

Choose **PCAM** or **MSC** here. Default setting is no USB. Press **▲▼** to choose and ENTER to confirm.



PS.: **PCAM** mode, it will be recognized as PC camera by computer and to monitor. **MSC** mode, it will be recognized as USB by computer to open file box.

## 4.7 Default Setting

Press ENTER to choose Default Setting to return to the original status.



## 5. Event List

View the files in the SD card, press ENTER into next step, press MENU to return.



When open the menu of files, press ENTER to display, press **◀** and ENTER to delete.



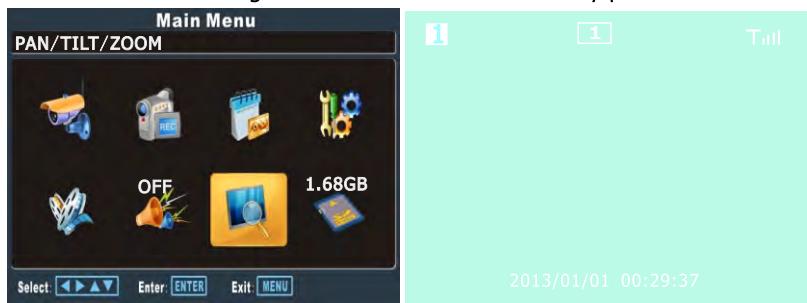
## 6. Alarm Switch

Press ENTER to choose on or off for alarm under motion detection.



## 7. Pan/Tilt/Zoom

This function is to zoom. Firstly press ENTER to the preview interface, press the ENTER again to enlarge the picture twice. Use  $\blacktriangleleft\blacktriangleright\blacktriangledown$  to move the picture. Press ENTER again to the standard size Finally press MENU to exit.



## 8. SD Capacity

It will show CARD OUT when no SD card inside.

It will show the remaining space when insert card with recognized format (FAT16,FAT32)

It will show UNKNOWN when insert card with unrecognized format



# Product parameter

## Wireless camera

Receive Frequency:	2.400~2.4835GHz
Modulation:	FSK/GFSK
Image Sensor:	1/4" Color CMOS
Picture Element:	640(H) x 480(V)
Lens:	f=3.6MM/90°wide angle
Resolution:	420 TV Line(TV OUT)
Max. Transmit Power:	100mW /CE
IR Night Vision Distance:	15 m
IR Wavelength:	850nm
Min. Illuminations:	0Lux
Weatherproof Level:	IP66
Electronic Shutter:	1/50~1/100,000
Power Supply:	DC5V/500mA
Dimensions(L x W x Hmm):	124x63x73mm
IR LED:	24PCS Φ5 LED
Operation Temperature:	-10°C~+55°C RH95%Max

## Monitor

Receive Frequency:	2.400~2.4835GHz
Nominal Input Impedance:	50 Ω
Receive Sensitivity:	-85dB
LCD Screen Type:	7" TFT LCD
LCD Screen Resolution:	800×480
SD Card:	Supports to 32GB
Video Frame Rate:	30fps(max)
Video Resolution:	VGA / CIF
Video Format:	AVI
Date Output:	USB 2.0
Video Output:	1Vp-p/75Ω
Audio Output:	1.5Vp-p/600 Ω
Power Supply:	DC5V/500mA
Dimensions:	203×142×21mm
Approx. Weight:	328g
Operation Temperature:	-10°C~55°C RH95 %Max
Operation Humidity:	15~85%RH

## Trouble Shooting

Problem	Cause	Remedies
No Power	The power adapter is not plugged	Check the power adapter is plugged in to ensure product power indicator light
No Picture	BNC connector is not plugged	Please check and make sure BNC connector is connected well
	not pair	please according to " Match code method of camera and receiver" as below to operate and finish the code re-matching .
No Sound	audio cable is not plugged	Please check and make sure the red audio cable connection
Image not fluent		Adjusts receiver's position or the antenna's direction
	Camera installed too far	Appropriate to shorten the distance between camera and receiver
Picture Gray	Surveillance cameras within the scope of strong light	The adjustment lens angle avoids the glare perpendicular incidence
	Environmental light dark, infrared light to open	Must maintain the picture color, please guarantee that monitors the region to have the enough illumination

### ▲ WARNING ▲

This product is able to produce and radiates radio waves, if not installed according to the instructions on the use may cause harmful interference to radio communications.

If this product indeed interferes with radio and television reception equipment, we recommend users to use as the following measures to correct the interferences:

Receiving antenna to adjust the direction or change its position.

Keep the receiver as far away from the electronic equipment.

Keep the receiver and other devices do not use common power outlet.

To the dealer or an experienced radio technician advice for other suggestions

## FCC Information

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

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

**Caution:** The user is cautioned that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one 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.

