

# 2.4GHz Wireless Monitor

Model No.:DJ-506

## OWNER'S MANUAL

### IMPORTANT SAFEGUARDS

#### What You Get in This Package

The following elements should be included in the box. Please check that you have them all before installation.

- A transmitter with camera
- A receiver with monitor
- A 15V AC adaptor for transmitter only
- A 13.5V AC adaptor for receiver only
- A "AA" battery box for camera (Optional item, not included in package, see page 9)
- A "D" battery box for monitor (Optional item, not included in package, see page 9)
- A bracket and clip for camera installation
- A user's manual

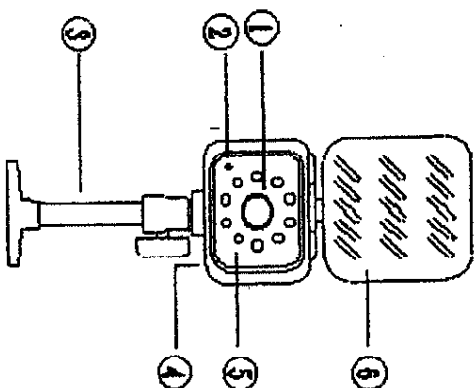
**Warning:** Two AC adaptors are included with in the package. The AC adaptors cannot be interchangeably used. Use the adapter labeled OUTPUT: 15V DC with the transmitter. Use the adapter labeled OUTPUT: 13.5V DC with the receiver.

#### Caution:

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

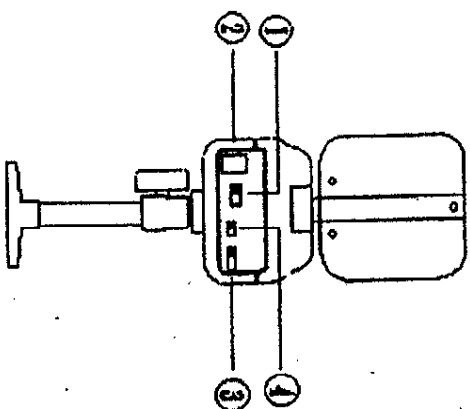
# Getting To Know Your Wireless Monitor Transmitter

## Front View



1. Camera lens: 1/3" CCD or 1/4" CMOS  $f=3.6$
2. LED indicator: Lights up when the transmitter is "ON".
3. Support: The transmitter can be install on the wall, it can be easily revolve any degrees.
4. Microphone: For clear audio pick-up.
5. Night vision LEDs: The automatic night vision LEDs allow the transmitter to see in a completely darkened room! *Note: the video image displayed on the receiver may appear "snowy" when the transmitter is operating in darkness or very low levels of light.*
6. Antenna: See page 7 (Orienting Antenna for optimal Performance).

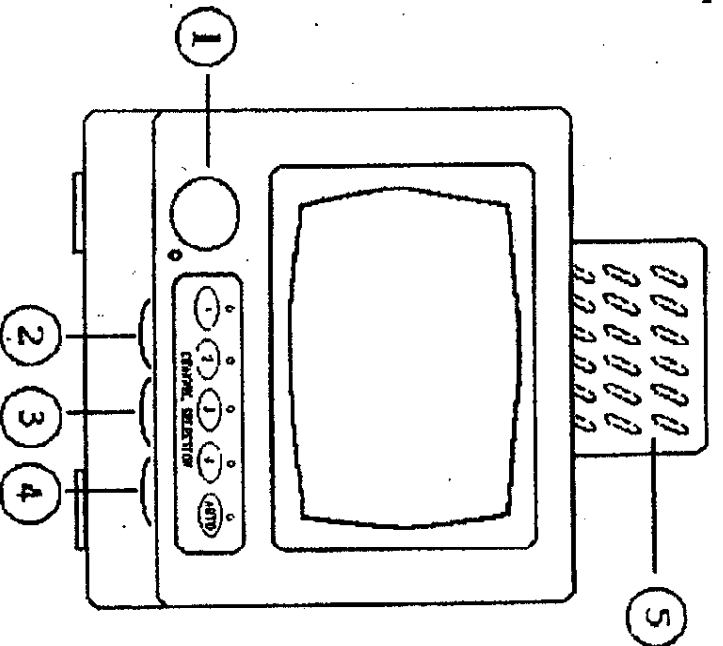
## Rear View



1. ON/OFF: power on/power off.
2. 15V DC IN: 15V power adapter plug.
3. CHANNEL 1 2 3 4 : Channel selection, it is possible for the receiver to pick up sounds or display interference from other signal producing devices. To minimize the potential for this problem, four channels are available for use. Make sure that the transmitter and receiver are set to the same channel.
4. Night vision LED's switch: When the transmitter used in dark environments, you can slide the IR-LED switch to the "ON" position. If the transmitter operated in enough brightness environments, you can slide the switch to the "OFF" position. The transmitter will work longer when it is powered by battery.

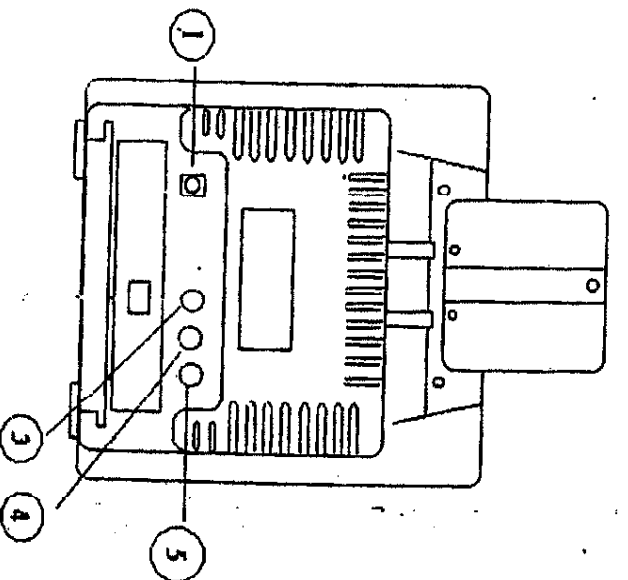
# Receiver

## Front View



1. **Volume/Power knob:** Turn the knob in clock-wise direction to power on or off the monitor, and adjust the level of the sound.
2. **Brightness:** To adjust the brightness of the monitor.
3. **Contrast:** To adjust the contrast of the monitor.
4. **Video-off:** To save power when used with battery, or to eliminate brightness when the unit set beside parent's bed, turn this knob to switch off the video. The unit would still keep a audio monitoring function.
5. **Antenna:** See page 7 (Orienting Antennas for optimal performance).

## REAR VIEW



1. **DC 13.5V:** 13.5V power adapter plug.
2. **V-HOLD**
3. **VIDEO OUTPUT:** See page 8 (Monitor to A/V function).
4. **AUDIO OUTPUT:** See page 8 (Monitor to A/V function).

## Setting Up Your Wireless Monitor

If you wish to wall mounting the transmitter, it is recommended that the reception of the Video Monitor be tested before installing the wall mount bracket. Have one adult hold the transmitter against the wall at the selected mounting area while another adult moves the receiver to a variety of locations throughout the house to check reception. If interference or other problems develop, please refer to the section of this User's Guide titled "Trouble Shooting". You may need to select a different location in the room for mounting.

The following steps show you how to set up the Wireless Monitor:

Make sure the transmitter and receiver are set at the same channel (1,2,3, or 4)

Plug the jack of the 15V AC adapter cord into the socket at the back of the transmitter.

Plug the AC adapter into a standard wall outlet.

Slide the ON/OFF switch on the side of the transmitter to the "ON" position. The power indicator will light.

Adjust the angle of camera against the object which you want to monitor.

Position the antenna so that it points to the ceiling.

Plug the jack of the 13.5V AC adapter cord into the socket at the back of the receiver.

Plug the AC adapter into a standard wall outlet.

Turn the receiver on.

Adjust the volume switches to a comfortable level.

Adjust the video image using the V-Hold (vertical hold, Contrast and Brightness) adjustment switch on the side of the receiver.

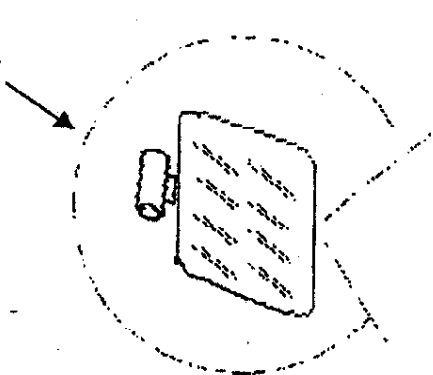
Locate and orient the antennas on both the transmitter and receiver according to the section of this User's Guide titled "Orienting Antennas for Optimal Performance".

## Orienting Antennas For Optimal Performance

The Wireless Monitor broadcasts its high-quality audio and video using directional antennas which must be oriented in certain configurations for best results. The 2.4GHz audio/video antennas have been designed to pivot and have limited rotation in either clockwise or counter clockwise directions.

**Warning:** Do not rotate the antenna beyond 270°. See instructions shown below for rotating antennas.

Rotating antennas beyond the specified range 270° will result in permanent damage to both antennas and the mechanical stopper.



In most situations, the flat pivoted face of the A/V antennas on both the transmitter and receiver should be facing one another. Since all rooms are different, for optimal reception, additional slight pivots or rotations may be necessary. If the transmitter and receiver are less than 10 feet apart, keep the A/V antennas flat in their casings.

## What else can the Wireless Baby Monitor do for you?

### Auto-sequence function

With the Wireless Baby Monitor, users can monitor a series of rooms for maximum supervision of the home (or office). The Wireless Monitor can use up with four transmitters at four different channels respectively. The receiver can receive signals up to four different frequencies and display them in sequence. The Wireless Monitor includes four dip-switches for various operating modes, as described in the following diagram:

	1	2	3	4
OFF	*	*	*	*
ON				

(Factory-preset mode)

DIP 1-4 channel switch: set up the automatic channels sequence function

Slide the channel dip-switch that you wish to view to the "ON" position or slide the channel dip-switch that you wish to deactivate to the "OFF" position.

### Example:

*When you want to use the auto-sequence function*

If you have two transmitter and their channels are set on CH1 and CH3, and you wish to monitor the two different channels in sequence, you must slide the "CH1" and "CH3" dip-switch to the "ON" position. (See the following diagram), these two channels can be displayed at five seconds interval.

	1	2	3	4
OFF		*		*
ON	*		*	

### Monitor to A/V function

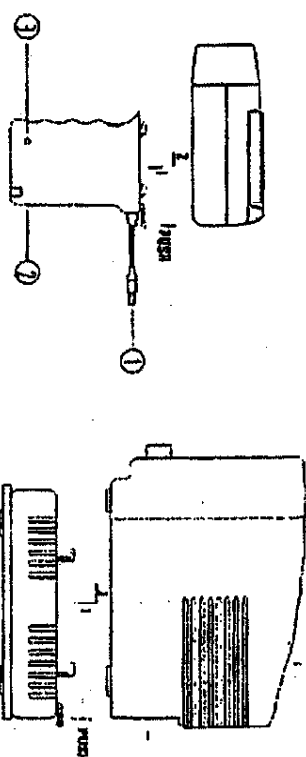
The wireless Monitor receiver unit has audio/video outputs which can be used to transfer the picture and sound from the monitor screen to a TV screen. Connect the outputs to the A/V input on a TV set for a large screen display, or connect the outputs to a VCR to record transmissions for later viewing!

## Optional Item - Battery Compartment

1. Remove the battery box cover.
2. Insert 10 pieces "D" size battery to the box of monitor, or 10 pieces of "AA" type battery to the box of camera. Either non rechargeable or rechargeable battery can also be used (not included), but do not mix them. Make sure the polarity of the battery is properly inserted.
3. Replace the battery box cover.
4. The battery box cover plug into the monitor DC jack.

### NOTE:

1. When the battery power is low, the size of picture will be shrunk. Replace the batteries with new ones or remove them from this box or recharge them.
2. Replace with equivalent type batteries (standard Zinc Carbon or Alkaline). Do not mix batteries of different composition. "D" size batteries are Alkaline.
3. To recharge battery (NICKEL CADMIUM only), plug the adaptor DC plug into the box DC jack (red LED is light). Recharge time, please refer to battery manufacture's recommended recharging time.
4. According to the diagram, you can connect this box to the monitor or take apart them.



## Trouble Shooting

Symptom	check points
No power is supplied to the transmitter or receiver	<ul style="list-style-type: none"> <li>Is the power cord disconnected?</li> <li>Connect it</li> <li>Transmitter/Receiver is not turned on</li> <li>Slide the ON/OFF switch to the "ON" position.</li> <li>Wrong AC adaptor used</li> <li>Use the AC adaptor labeled OUTPUT:15V with the transmitter, 13.5V with the receiver.</li> </ul>
No sound or picture.	<ul style="list-style-type: none"> <li>Channel switches are not in the same setting.</li> <li>Set the transmitter and the receiver to same channel.</li> </ul>
Noisy sound or picture.	<ul style="list-style-type: none"> <li>Signal interference due to microwave oven.</li> <li>Turn off the oven or remove it from path between transmitter and receiver.</li> <li>Signal interference due to other signal producing devices.</li> <li>Change the channel setting on both the transmitter and the receiver.</li> <li>Identify and eliminate the source of interference.</li> <li>Relocate the transmitter and/or receiver.</li> <li>Out of range</li> <li>Relocate the transmitter and/or receiver.</li> <li>Improper antenna position.</li> <li>Adjust transmitter/receiver antenna orientation.</li> </ul>

## Specification

Receiver (monitor)

Rx Description		EIA	CCIR
Video System			
Frequency		2.4GHz~2.4835Hz	2.4GHz~2.4835Hz
Max Range		300 feet	300feet
Receiver Antenna		Directional	Directional
Receiver Sensitivity		-25~90dBm	-25~90dBm
Sound			
Max. Output		800mW	800mW
Thd output 10%		500mW	500mW
Picture			
Hor. Pull-in	+	200Hz	200Hz
	-	200Hz	200Hz
Hor. Hold	+	400Hz	400Hz
	-	400Hz	400Hz
Vert Range		6Hz	6Hz
Linearity	V	15%	15%
	H	15%	15%
Pincushion	V/H	3%	3%
Barrel	V/H	3%	3%
Keystone	V/H	3%	3%
Scan Redisplay	V	90%	90%
Rate	H	90%	90%
Resolution at	V	300 Lines	300 Lines
Center	H	350 Lines	350 Lines
Luminance Max.		100 cd/m <sup>2</sup>	100 cd/m <sup>2</sup>
Current Consumption		1300 mA	1300 mA
Power Supply		DC 13.5V	DC 13.5V

# specification

## Transmitter (Camera)

Tx description		
Video System	EIA	CCIR
Frequency	2.4G-2.4835G	2.4G-2.4835G
Max. Range	300 feet	300 feet
Transmitter Antenna	Directional	Directional
Output Power	0 dBm FCC	10 dBm CE
Image Sensor	B/W CMOS	
Optical Size	1/4"	
Effective Pixels	320 × 240	352 × 288
Scanning System	* 2:1 interlace	
Resolution (TV lines)	240 (H)	
Auto Exposure	1/60 ~ 1/6000 sec.	
Gamma Correction	Auto	
Backlight Compensation	Auto	
Indoor/Outdoor	Indoor only	
Night-time	1 to 2 m	
Microphone Sensitivity	2 ~ 3 meters	
Aux. Input	1 × Video, 2 × Audio	
White Balance	Auto	
Number of Channels	4	
Current Consumption	400mA	
Power Supply	DC 15V	

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.