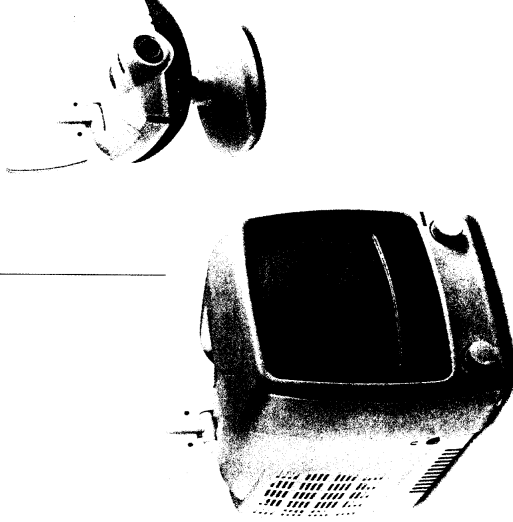


**2.4 GHz Wireless Baby Guard  
User's Manual**



Please read all these safety and  
operating instructions completely.



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Instruction Manual  
Federal Communication Commission 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 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 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.

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

This device complies with Part 15 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."

# Contents

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Congratulation on purchasing FUNET 2.4 GHz Wireless Baby Guard. Before operating your Wireless Baby Guard, please read all these safety and operating instructions completely and then retain for future reference.

- To prevent entanglement, never place the transmitter in a crib or playpen.
- Do not place the transmitter on any surface or mount it on any wall where the transmitter or its AC adapter cord are within reach of baby.
- Keep the transmitter and receiver out reach of children.
- Never use the transmitter or receiver near water. For example, do not use near a bathtub, washbowl, laundry tub, kitchen sink, in a wet basement. etc.
- Disconnect the AC adapters from wall outlets during long periods of non-use.
- Position the transmitter, receiver and AC adapters to allow adequate ventilation.
- Keep the transmitter out of direct sunlight.
- To prevent overheating, keep the transmitter, receiver and AC adapters away from heat sources such as radiators, heat registers, stoves or other appliances (including amplifiers) which produce heat.
- Use only the AC adapters provided. Use of any others may damage the transmitter and/or receiver.
- Plug into an electrical outlet with standard household power(120 volt AC outlet).
- Changes or modifications not approved by FUNET could void user's authority to operate the equipment.
- Do remember that you are using public airwaves when you use the Wireless Baby Guard and that sound and video may be broadcast to other 2.4 GHz receiving devices. Conversations, even from rooms near the transmitter, may be broadcast. To protect the privacy of your home, always turn the transmitter off when not in use.

## What You Get in This Package

2

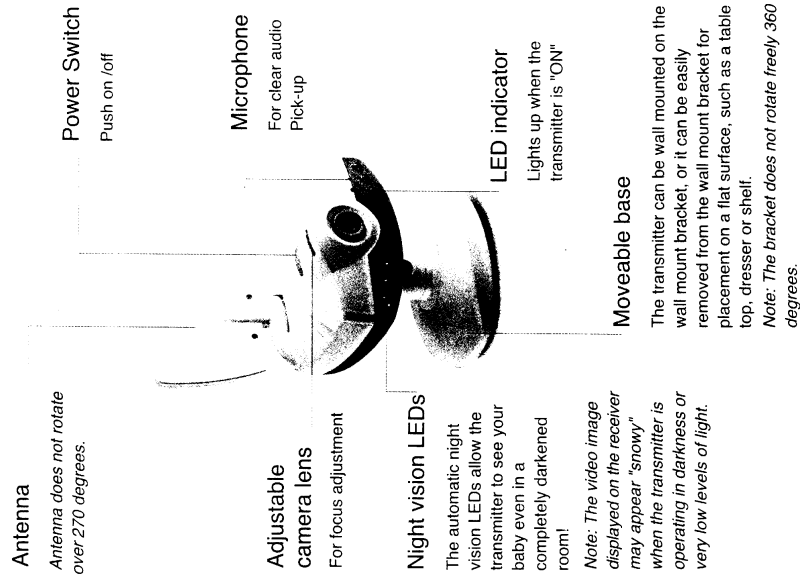
The following elements should be included in the box. Please check that you have them all before installation.

- A transmitter with camera
- A receiver with monitor
- A 7.5V DC adapter for transmitter only
- A 13.5V DC adapter for receiver only

**Warning:** Two DC of adapters are included with the Wireless Baby Guard. The DC adapters can not be interchangeably used. Use the adapter labelled OUTPUT: 7.5V DC with the transmitter. Use the adapter labelled OUTPUT: 13.5V DC with the receiver

3

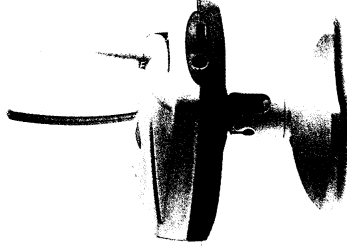
## Transmitter-----Front View



**Transmitter-----Rear View**

7.5V DC In

7.5V power adapter plug.

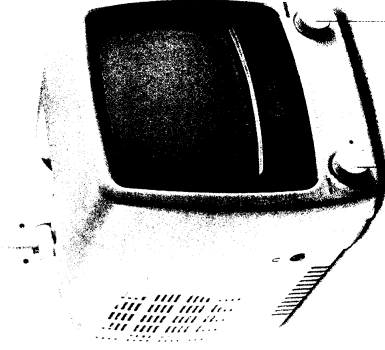


**Channel 1 2 3 4**

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.

**Front View**

Antenna



Volume/Power Knob

Brightness

## Rear View

## Video Output

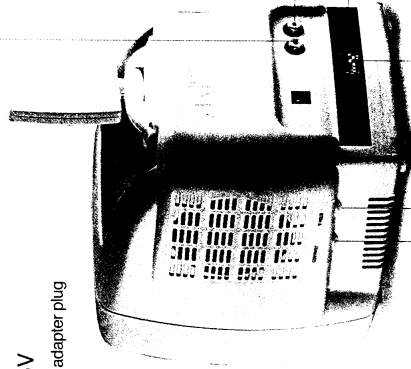
See page 10  
(Monitor to AV function)

## Audio Output

See page 10  
(Monitor to AV function)

## DC 13.5V

13.5V power adapter plug



## Contrast

## V-Hold

## Function

Auto-sequence function switch.  
See page 9 (Auto-sequence function)

## Ch.1 2 3 4

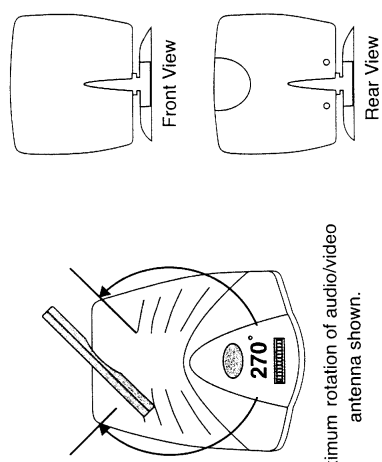
Channel selection. It is possible for the receiver to pick-up sounds or display interference from other signal producing devices. To minimize this potential problem, four channels are available for use. Make sure that the transmitter and receiver are set to the same channel.

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 "If you Have Any Questions". You may need to select a different location in the room for mounting. The following setps show you how to sey up the Wireless Baby Guard:

- Make sure the transmitter and receiver are set to the same channel. (1,2,3 or 4)
- Plug the jack on the 7.5DC adapter cord into the DC adapter socket on the back of the transmitter.
- Plug the DC 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 and focus of the camera lens for best view of baby. Point the microphone pick-up directly toward baby.
- Position the antenna so that it points to the ceiling.
- Plug the jack on the 13.5V DC adapter cord into the DC adapter socket on 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 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."

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

*Warning: See instructions shown below for rotating antennas. Rotation antennas beyond the specified range will result in permanent damage to both antennas and the mechanical stopper. Antenna does not rotate over 270 degrees.*



Maximum rotation of audio/video antenna shown.

In most situations, the flat pitted face of the AV 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 AV antennas flat in their casings.

**Auto-sequence function**

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

|     |   |   |   |   |     |     |
|-----|---|---|---|---|-----|-----|
|     | 1 | 2 | 3 | 4 | 4/8 | 4/B |
| OFF |   |   |   |   |     |     |
| ON  |   |   |   |   |     |     |

(Factory-preset mode)

**DIP 4/B: The automatic channels sequence function**

ON: Enables the "CH 1 2 3 4" switch and stops the auto-sequence function. When stopping the auto-sequence function, slide all four channel dip switches to the "OFF" position.

*Note: If one or more of the four dip-switches remains on, the auto-sequence function will continue on these channels, even though the 4/B dip-switch is in the "OFF" position.*

OFF: Disable the "CH 1 2 3 4" switch and start the auto-sequence function.

**DIP 4/8: Sequence interval timer**

ON: Displays at four second intervals

OFF: Displays at eight second intervals

**DIP 1~4 channel switch: setting up the automatic channel 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 transmitters and their channels are set on CH 1 and CH 3, and you wish to monitor the two different channels in sequence, you must first slide the "4/B" dip-switch to the "OFF" position, this means the "CH 1 2 3 4" switch is now disabled. Then slide the first and third dip-switches to the "ON" position. (See the following diagram.) If you wish these two channels to be displayed at eight second intervals, slide the "4/8" dip-switch to the "OFF" position; or you can keep it at "ON" position, and it will be displayed at four second intervals.

|     |   |   |   |   |     |     |
|-----|---|---|---|---|-----|-----|
|     | 1 | 2 | 3 | 4 | 4/8 | 4/B |
| OFF |   |   |   |   |     |     |
| ON  |   |   |   |   |     |     |

When you want to stop the auto-sequence function:

Slide the "4/B" dip-switch to the "ON" position to activate the "CH 1 2 3 4" switch.

**Monitor to AV function**

The Wireless Baby Guard 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 AV input on a TV set for a large screen display, or connect the outputs to a VCR to record transmissions for later viewing!

| Symptoms   | 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 adapter used.</li> <li>- Use the AC adapter labelled OUTPUT:7.5V with the transmitter, 13.5V with the receiver.</li> </ul>   |
| No sound or picture.<br>Noisy sound or picture.      | <ul style="list-style-type: none"> <li>• Channel switches are not the same setting.</li> <li>- Set the transmitter and the receiver to same channel.</li> <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> |

## Specifications

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### Receiver(Monitor)

| Rx Description                   |                      | NTSC                  | PAL                   |
|----------------------------------|----------------------|-----------------------|-----------------------|
| <b>Video System</b>              |                      |                       |                       |
| Receiver Frequency               | 2.4 GHz ~ 2.4835 GHz | 2.4 GHz ~ 2.4835 GHz  | 2.4 GHz ~ 2.4835 GHz  |
| Max. Range (clear line of sight) | 300 feet             | 750 feet              | 750 feet              |
| Receiver Antenna                 | Directional          | Directional           | Directional           |
| Receiver Sensitivity             | -25 ~ -90 dBm        | -25 ~ -90 dBm         | -25 ~ -90 dBm         |
| <b>Sound</b>                     |                      |                       |                       |
| Max. Output                      | 800 mW               | 800 mW                | 800 mW                |
| The output 10%                   | 500 mW               | 500 mW                | 500 mW                |
| <b>Picture</b>                   |                      |                       |                       |
| Hor. Pull-In                     | +                    | 200 Hz                | 200 Hz                |
|                                  | -                    | 200 Hz                | 200 Hz                |
| Hor. Hold                        | +                    | 400 Hz                | 400 Hz                |
|                                  | -                    | 400 Hz                | 400 Hz                |
| Vert. Range                      |                      | 6Hz                   | 6Hz                   |
| Linearity                        | V                    | 15 %                  | 15 %                  |
|                                  | H                    | 15 %                  | 15 %                  |
| Pincushion V/H                   |                      | 3 %                   | 3 %                   |
| Barrel Dist V/H                  |                      | 3 %                   | 3 %                   |
| Keystone Dist                    |                      | 3 %                   | 3 %                   |
| Scan Redisplay Rate              | V                    | 90 %                  | 90 %                  |
|                                  | H                    | 90 %                  | 90 %                  |
| Resolution at Center             | V                    | 250 Lines             | 250 Lines             |
|                                  | H                    | 300 Lines             | 300 Lines             |
| Luminance Max                    |                      | 100 cd/m <sup>2</sup> | 100 cd/m <sup>2</sup> |
| Current Consumption              |                      | 1200 mA               | 1200 mA               |
| Power Supply                     |                      | DC 13.5V              | DC 13.5V              |

## Specifications

### Transmitter(CMOS)

| Tx Description                   |                      | NTSC                 | PAL                  |
|----------------------------------|----------------------|----------------------|----------------------|
| <b>Video System</b>              |                      |                      |                      |
| Transmitter Frequency            | 2.4 GHz ~ 2.4835 GHz | 2.4 GHz ~ 2.4835 GHz | 2.4 GHz ~ 2.4835 GHz |
| Max. Range (clear line of sight) | 300 feet             | 750 feet             | 750 feet             |
| Transmitter Antenna              | Directional          | Directional          | Directional          |
| Transmitter Sensitivity          | 0 dBm FCC            | 10 dBm CE            | 10 dBm CE            |
| Number of Effective Pixels       | 320 X 240            | 352 X 288            | 352 X 288            |
| Picture of color                 |                      | B/W                  | B/W                  |
| Optical Size                     |                      | 1/3"                 | 1/3"                 |
| Scanning System                  |                      | 2:1 Interlace        | 2:1 Interlace        |
| Resolution(TV line)              |                      | 240 (h)              | 240 (h)              |
| Auto Exposure                    |                      | 1/60 - 1/6000 sec.   | 1/60 - 1/6000 sec.   |
| Gamma Correction                 |                      | auto                 | auto                 |
| Backlight Compensation           |                      | auto                 | auto                 |
| Indoor/Outdoor                   |                      | Indoor only          | Indoor only          |
| Night-time                       |                      | 1 to 2 m             | 1 to 2 m             |
| MIC. Sensitivity                 |                      | 2 - 3 meters         | 2 - 3 meters         |
| Aux. Input                       |                      | 1 X Video, 2 X audio | 1 X Video, 2 X audio |
| White Balance                    |                      | auto                 | auto                 |
| Number of Channels               |                      | 4                    | 4                    |
| Current Consumption              |                      | 300 mA               | 300 mA               |
| Power Supply                     |                      | DC 7.5 V             | DC 7.5 V             |