

# Smart Wireless Color Baby Monitoring System

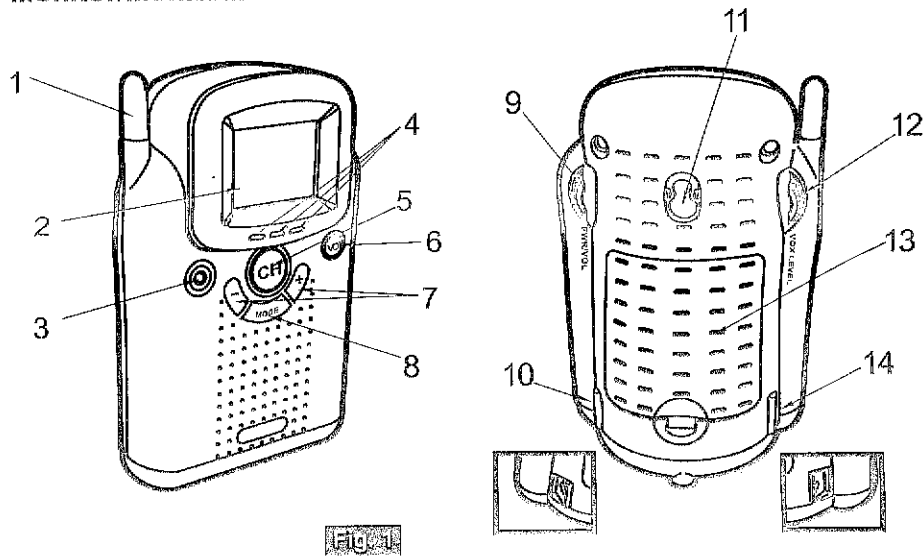
User's Manual  
Manuel d'utilisation  
Manual del Usuario  
Benutzerhandbuch  
Manuale utente

October 2004  
P/N: 408-000268-00

## Figures and Quick Guide/Figures et guide rapide /Figuras y Guía Rápido/Abbildungen und Schnellanleitung /Figure e guida rapida

### Product Layout/Disposition du produit/Aspecto del producto /Produkt-Layout/Struttura del prodotto

#### Monitor/Moniteur



#### Camera/Caméra/Cámara/Kamera/Videocamera

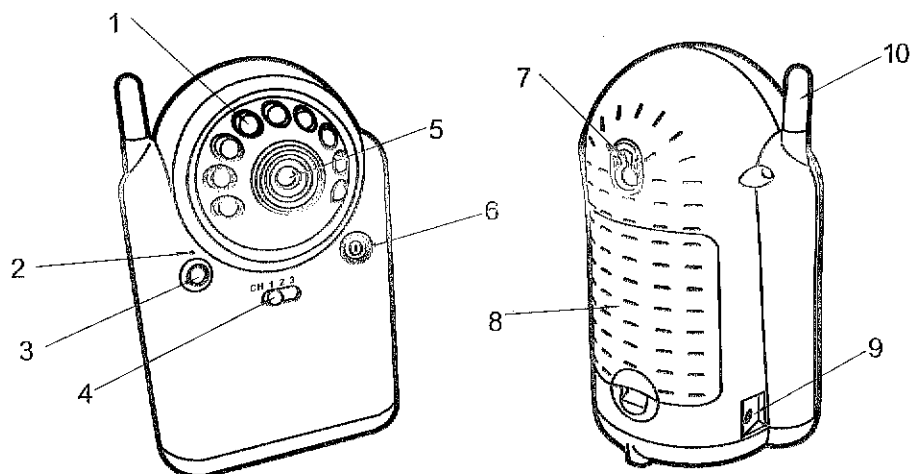


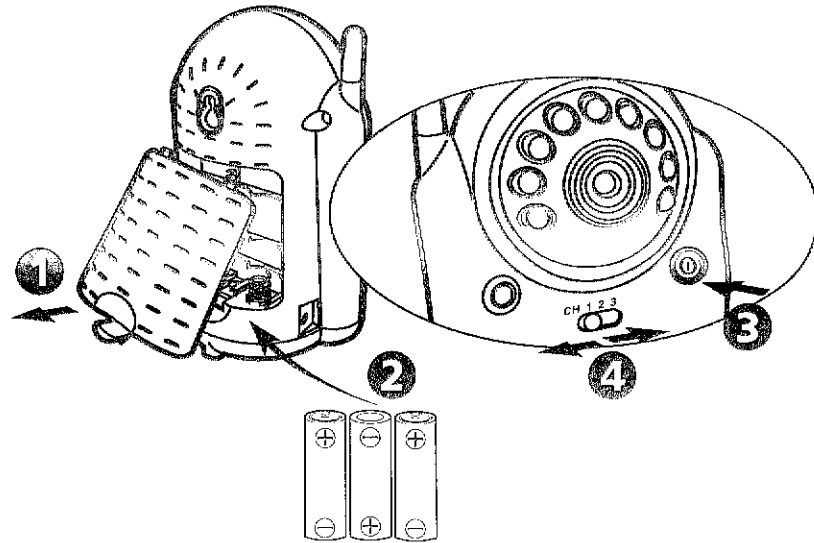
Fig. 2

## Setting UP/Installation/Configuración/Einrichten/Installazione

### 1. Setting up the Camera/Installer la cámara /Configuración de la cámara/Einrichten der Kamera /Installazione della videocamera

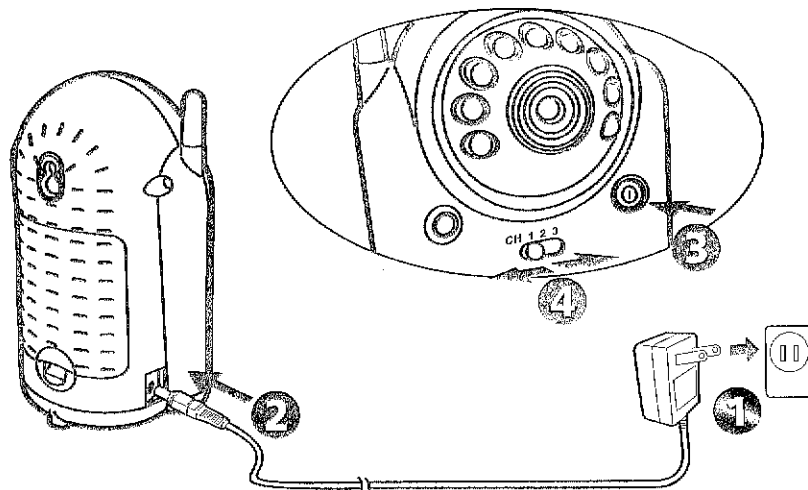
#### 1.1 Power Supply/Alimentation/Suministro de corriente/Netzgerät /Alimentazione

*Battery Operation/Fonctionnement sur pile/Manejo de las pilas  
/Betrieb mit Batterie/Operazioni per le batterie*



**Fig. 3**

*Using AC Power/Utiliser l'alimentation CA  
/Conexión del suministro de corriente alterna  
/Anschließen an den Netzstrom/Utilizzo dell'alimentazione CA*

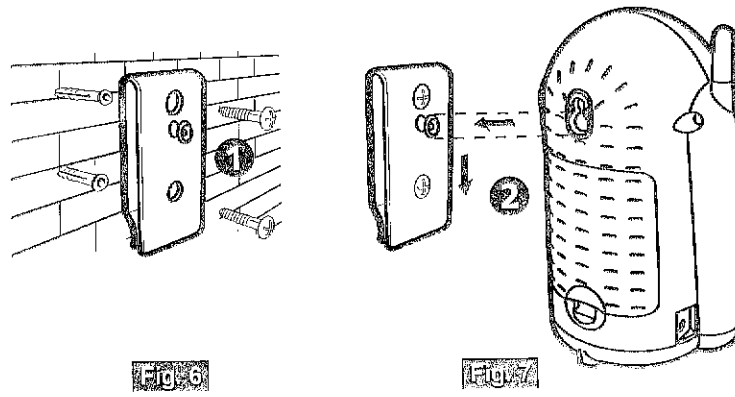


**Fig. 4**

#### 1.2 Fine Tuning/Réglages/Ajuste preciso/Feinabstimmung /Messa a punto



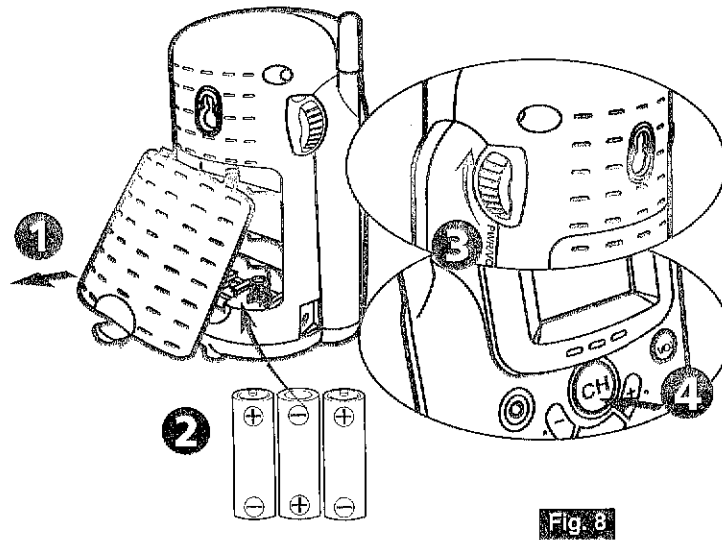
**1.3** Wall Mounting the Camera/Fixer la caméra au mur  
/Instalación de la cámara en la pared/Wandmontage der Kamera  
/Montaggio a parete della videocamera



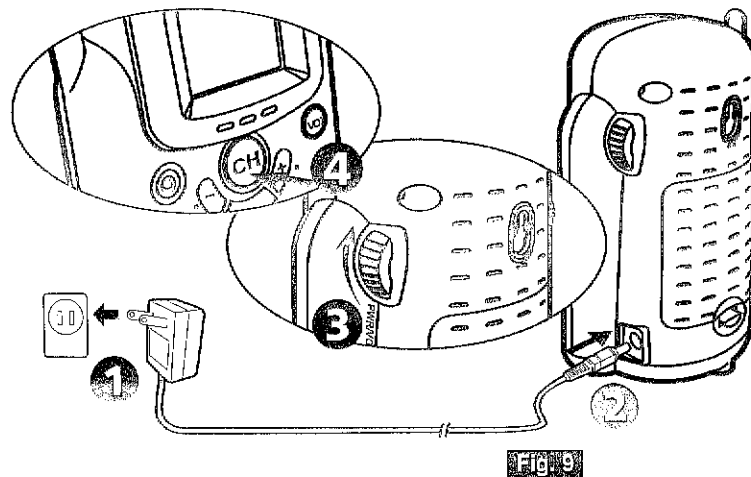
**2** Setting Up the Monitor/Installer le moniteur  
/Configuración del monitor/Einrichten des Monitors  
/Installazione del monitor

**2.1** Power Supply/Alimentation/Suministro de corriente/Netzgerät  
/Alimentazione

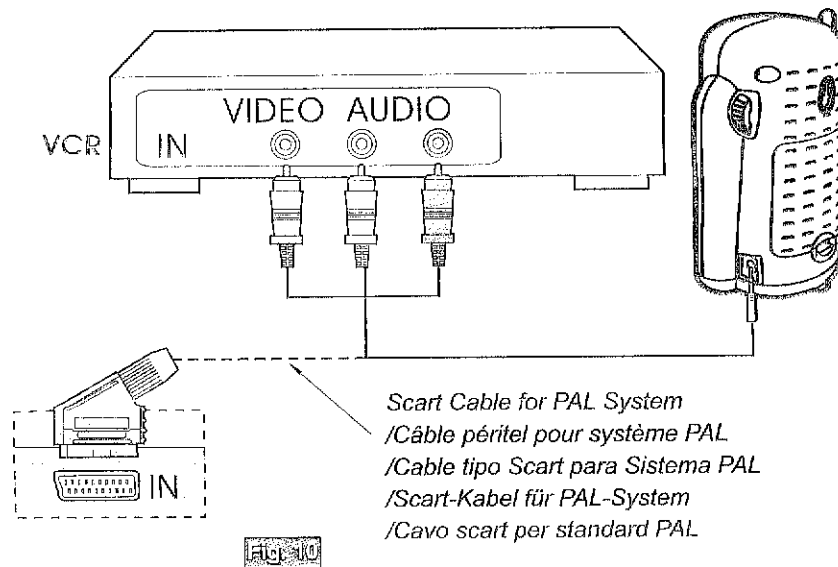
*Loading Batteries/Charger les piles/Inserción de las pilas  
/Einlegen der Batterien/Inserimento delle batterie*



*Using AC Power/Utiliser l'alimentation CA  
/Conexión del suministro de corriente alterna  
/Anschließen an den Netzstrom/Utilizzo dell'alimentazione CA*



**2.2** Recording on a VCR/Enregistrer sur un magnétoscope  
 /Grabar en un reproductor de vídeo/Aufnehmen mit einem VCR  
 /Collegamento a un videoregistratore



**2.3** Voice-activated function (Auto mode)/  
 Fonction d'activation vocale (Mode Auto)  
 /Función activada por la voz (Modo Automático)  
 /Auto-Modus (Voice-aktivierte Funktion)  
 /Funzione di attivazione vocale (Modalità Auto)

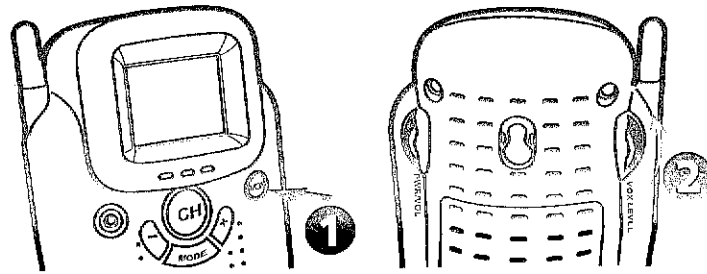
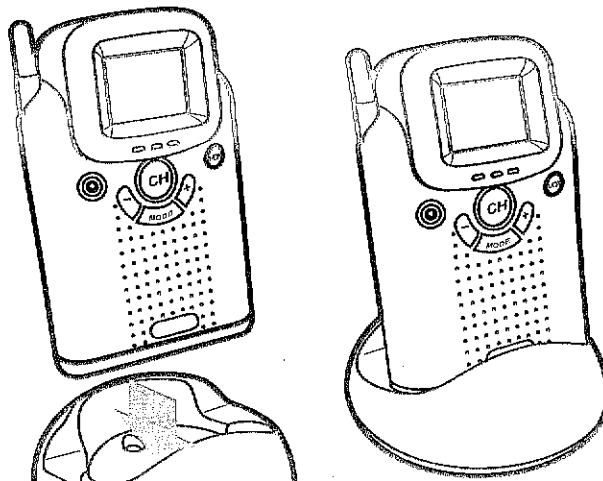


Fig. 11

Positioning the Monitor with the Provided Stand  
 /Utilisez le support fourni pour améliorer la stabilité de la moniteur  
 /Utilice el tripode suministrado para mayor estabilidad de la monitor  
 independiente/Der Monitor kann zum Freistehen auf dem mitgelieferte  
 Stützgestell aufgestellt werden/Usate il supporto fornito per aumentare  
 stabilità del supporto verticale



## What You Get

- One camera
- One monitor
- One A/V (audio/video) cable (mini-RCA or mini-Scart)
- One mounting clip
- Fixing screws and masonry plugs
- One supporting stand
- This User's Manual

## Product Layout

### Monitor (Fig. 1)

1. Antenna
2. LCD screen
3. Battery charging indicator LED
4. Channel indicator LEDs
5. CH: Channel selection button (Note: Both camera and monitor must be set to the same channel)
6. VOX: Voice Operated Switch button and VOX indicator LED
7. Settings adjustment buttons
8. Mode selection button
9. Power/volume control
10. Power adapter jack
11. Keyhole
12. VOX level: voice sensitivity control
13. Battery compartment
14. A/V OUT: A/V output jack

### Camera (Fig. 2)

1. Infrared LEDs
2. Microphone
3. Photo sensor
4. Channel selection switch (Note: Both camera and monitor must be set to the same channel)
5. Lens
6. Power switch and power indicator LED
7. Keyhole
8. Battery compartment
9. Power adapter jack
10. Antenna

## Setting Up

### 1 Setting Up the Camera

#### 1.1 Power Supply

The camera uses either three AA-Size batteries (rechargeable NiMH or Alkaline) or household AC current.

##### *Battery Operation*

1. Open the battery compartment cover on the rear of the camera. See Fig. 3.
2. Insert three AA-size batteries, making sure to match the positive (+) and negative (-) ends to the diagram inside the battery compartment. See Fig. 3.
3. Close the battery compartment cover, and make sure it is locked securely.  
*Note 1:* Never mix old batteries with new ones.  
*Note 2:* Remove the batteries from the camera if you do not plan to use it for a prolonged period of time.
4. Press the power switch to turn on the camera. The integrated power-switch LED lights up. See Fig. 3.

### *Mains Operation*

1. Plug one end of the provided power adapter into a wall outlet and the other end into the bottom of the camera. See Fig. 4.

*Note:* Use only the power adapter supplied with the camera.

2. Press the power switch to turn on the camera. The integrated power-switch LED lights up.

## 1.2 Setting Channels

Select the channel by sliding the slide switch. See Fig. 4.

*Note:* Select the same channel on the camera and on the monitor.

## 1.3 Fine Tuning

Place the camera in a convenient location, point the lens towards the observation area, and adjust the angle by rotating the lens head. See Fig. 5.

## 1.4 Wall Mounting the Camera

*Note:* The monitor reception should be tested before fixing the camera in place. Have someone hold the camera against the wall in the selected mounting area while you check the reception on the monitor. If interferences or other problems occur, refer to the Troubleshooting section. You may need to select a different location in the room for mounting the camera.

1. Drill two holes 52mm apart, at the camera mounting position. See Fig. 6.
2. Fix the provided mounting clip to the wall using the masonry plugs and fixing screws supplied. See Fig. 7.
3. Place the camera against the mounting clip so that the studs on the mounting clip are aligned with the keyhole on the back of the camera. Move the camera down to slide the studs into the cutout channels. See Fig. 7.

## 1.5 Night Vision

The camera has nine high-intensity LEDs for picking up clear images in dark locations. When the built-in photo sensor measures the ambient light level as low, the LEDs will automatically activate.

# 2 Setting Up the Monitor

## 2.1 Power Supply

The monitor uses either three AA-Size batteries (NiMH recommended) or household AC current.

### *Loading Batteries*

1. Open the battery compartment cover on the rear of the monitor. See Fig. 9.
2. Insert three AA-size batteries, making sure to match the positive (+) and negative (-) ends to the diagram inside the battery compartment. See Fig 9.
3. Close the battery compartment cover. Make sure the battery compartment cover is locked securely.

*Note 1:* Never mix old batteries with new ones.

*Note 2:* Remove batteries from the camera if you do not plan to use it for a period of time.

4. Turn the monitor on. The channel 1 indicator LED lights up. Set the same channel as camera by pressing the CH button. See Fig 9.
5. Adjust the volume to a comfortable level.

### *Charging the Batteries*

The monitor's battery compartment can be used as a battery charging system (NiMH rechargeable batteries only).

1. Open the battery compartment cover on the rear of the monitor.
2. Insert the NiMH rechargeable batteries, making sure to match the positive (+) and negative (-) ends to the diagram inside the battery compartment.
3. Close the battery compartment cover. Make sure the battery compartment cover is locked securely.
4. Plug one end of the provided power adapter into a wall outlet and the other end into the monitor socket marked **DC IN**.
5. The red battery charging indicator LED lights up to confirm the charging is in progress.
6. Once charging has taken place, the red LED goes out.

*Note 1:* Only NiMH rechargeable batteries may be charged with the monitor's charging system. The use of the wrong battery types may lead to an explosion.

*Note 2:* The batteries may also be charged with chargers specifically designed for this purposes.

*Note 3:* The battery charging indicator LED flashes in green indicates that

### *Mains Operation*

1. Plug one end of the provided power adapter into a wall outlet and the other end into the rear of the monitor. See Fig. 9.

*Note:* Use only the power adapter supplied with the monitor.

2. Turn the monitor on. The channel 1 indicator should light up. Set to the same channel as the camera by pressing the CH button. See Fig 9.
3. Adjust the volume to a comfortable level.

## **2.2 Recording on a VCR**

1. The monitor comes with an AV (audio/video) output jack for connecting to a VCR for recording.
2. Connect the mini plug of the provided AV cable to the AV jack on the rear of the monitor. Connect then the other end of the cable to the AV jacks (or Scart connector) of the AV component labeled LINE OUT. See Fig 10.

## **2.3 Voice-activated function (Auto mode)**

Voice-activated mode allows you to set the audio level that will trigger the monitor. To use the voice-activated function, follow these steps:

1. Set the sensitivity control on the monitor to the level you prefer.

*Note:* A value of 0 gives minimum sensitivity. A value of 9 gives maximum sensitivity.

2. Press the VOX button on the front of the monitor. This will turn off the screen but the channel indicator LEDs will still be on. See Fig. 11.
3. When sound levels at the camera site reach the set level, the screen will automatically turn on. It will turn off again after 30 seconds.

*Note:* In VOX mode the monitor can only detect signal input from one camera at a time.

## **2.4 Positioning the Monitor**

### *Wall Mounting*

1. Drill two holes 52mm apart, at the monitor mounting position. See Fig. 6.
2. Fix the provided mounting clip to the wall using the masonry plugs and fixing screws supplied.
3. Place the monitor against the mounting clip so that the studs on the mounting clip are aligned with the keyhole on the back of the monitor. Move the monitor down to slide the studs into the cutout channels.

### *Belt Clipping*

Use the provided mounting clip to attach the monitor to your belt for easy portability.

### *Free-standing*

Use the provided supporting stand for second monitor viewing angle.

# **Other Functions**

### *On-screen Clock*

1. Press the + button to switch on the clock.
2. Press the - button to switch off the clock.
3. Setting the clock:

#### *Hour:*

- Press the MODE button until the hour setting is selected (the figures flash).
- Use the + & - buttons to adjust the setting.

#### *Minute:*

- Press the MODE button until the hour setting is selected (the figures flash).
- Press + & - buttons to adjust the setting.

### *Adjusting the Brightness*

1. Press the **MODE** button until the brightness adjustment on screen display appears.
2. Press + and - buttons to adjust the settings.

### *Adjusting the Contrast*

1. Press the **MODE** button until the contrast adjustment on screen display appears.
2. Press + and - buttons to adjust the settings.

### *On Screen Timer*

1. Press the **MODE** button until the contrast adjustment on screen display appears.
2. Press + and - buttons to adjust the settings.

### On Screen Timer

1. Press the **MODE** button until the timer appears.
2. Press the + button to start/stop the timer.
3. Press the - button to reset the timer.

## Troubleshooting

### If you are not getting any signal at all

- Make sure the camera and the monitor are turned on.
- Make sure the power plugs are pushed all the way in.
- Check that the channels on the camera and the monitor are set to the same number.
- If the camera/monitor is powered by batteries, replace all batteries with new ones.

### If the signal is poor, or there is interference

- Check that the channels on the camera and the monitor are set to the same number.
- If there is a microwave oven in use in the path between the camera and monitor, remove the microwave oven or turn it off.
- Make sure the camera and the monitor are within range of each other (range of approximately 300 feet; 100 meters in a clear line of sight).
- If the power LED is on but only voice signal input is detected, the monitor may be in voice-activated (VOX) mode. Press the **VOX** button to turn on the screen.

## Care and Maintenance

- Keep all parts and accessories out of young children's reach.
- Fingerprints or dirt on the lens surface can adversely affect camera performances. Avoid touching the lens surface with your fingers.
- Should the lens become dirty, use a blower to blow off dirt and dust, or a soft, dry cloth to wipe off the lens.
- Keep the camera dry. Precipitation, humidity, and other liquids contain minerals that will corrode electronic circuits.
- Do not use or store in dusty, dirty areas.
- Do not store in hot areas. High temperatures can shorten the life of electronic devices and warp or melt certain plastics.
- Do not store in very cold areas. When the system warms up (to its normal temperature), moisture can form inside the case, which may damage electronic circuit boards.
- Do not attempt to open the case. Non-expert handling of the device may damage the system.
- Avoid dropping or strong shocks.
- Operate this product using only with the power supply included or provided as an accessory.
- Do not overload electrical outlets or extension cords this can result in fire or electric shocks.
- Do remember that you are using public airwaves when you use the system and that sound and video may be broadcast to other 2.4 GHz receiving devices. Conversations, even from rooms near the camera, may be broadcast. To protect the privacy of your home, always turn the camera off when not in use.

## Specifications

<b>Camera</b>		<b>Monitor</b>	
Frequency	2.4 GHz	Frequency	2.4 GHz
Channel	3 selectable channels	Channel	3 selectable channels
A/V mod/demod. method	FM	A/V mod/demod. method	FM
Antenna	Built-in omni-directional antenna	Antenna	Built-in omni-directional antenna
CMOS Image Sensor	NTSC: 1/4", CCIR: 1/3"	Display	1.5" LTPS-TFT LCD
Effective pixels	NTSC: 510 (H) x 492 (V) CCIR: 628 (H) x 582 (V)	Display colors	Full-color
Lens	F 6.0mm, F 2.0	Dimensions	8.6(W) x 13.5(H) x 6.7(D) cm (3.3 x 5.5 x 2.1 inches)
Dimensions	8.6(W) x 13.5(H) x 5.8(D) cm (3.4 x 5.3 x 2.3 inches)	Weight	155g (5.46 ounces)
Weight	185g (6.52 ounces) without batteries	Power	DC 6V, 1000mA or 3 AA-size NiMH rechargeable batteries
Power	DC 6V, 400mA or 3 AA-size batteries	Operating temperature	0°C ~ 40°C (32°F ~ 104°F)
Operating temperature	0°C ~ 40°C (32°F ~ 104°F)		

*Specifications subject to change without notice*

**CE0678**

### FCC 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 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