

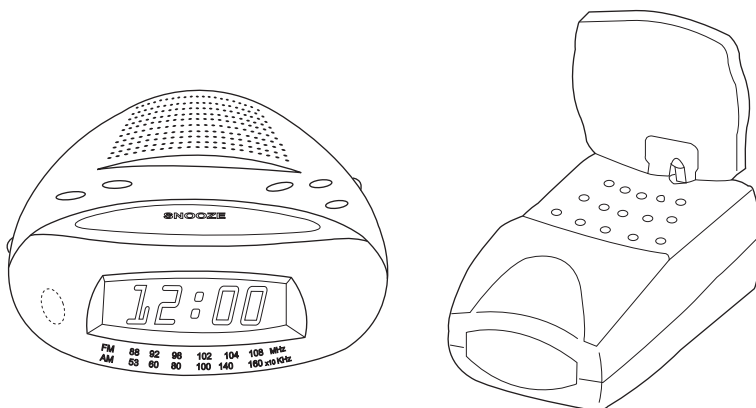
Navigator[®]

User's Manual

Model No.: RC-820

2.4 GHz Wireless Color Hidden Camera with AM/FM Radio Alarm Clock System

- AM/FM 2-Band Radio Alarm Clock
with Build-In Camera and Microphone
- Receiver with Patch Antenna



PLEASE READ CAREFULLY AND SAVE

This manual contains important information about this product's operation.

If you are installing this product for use by others you must leave this manual -or a copy- with the end user.

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2.4 GHz Wireless Color Hidden Camera with
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Important Safety Precautions

Please read before Installing

Congratulations on your purchase of the 2.4GHz Wireless Color Hidden Camera with AM/FM Radio Alarm Clock System. Please read these safety and operating instructions carefully before installing and using this system.

- Keep the camera/radio, receiver, AC/AC and AC/DC adapter cords out of reach of children.
- Do not place the camera/radio, receiver, AC/AC or AC/DC adapter cords in a crib or playpen.
- Do not use the camera/radio near water or damp and wet environments, such as a bathtub, laundry tub, kitchen sink, or wet basements.
- Locate the camera/radio, receiver, AC/AC and AC/DC adapters where there is adequate ventilation. Do not locate the camera/radio in direct sunlight.
- Do not locate the camera/radio, receiver, AC/AC and AC/DC adapters near heat sources such as heat registers, radiators, ovens, furnaces or other appliances with high operating temperatures.
- Do not use with extension cords. Use only the AC/AC and AC/DC adapters provided with this system. Use of other adapters may damage the units and void your warranty.
- Only plug components into standard household voltage outlets (110V - 240V AC, 50Hz or 60 Hz).
- Do not place cords from the AC/AC and AC/DC adapters and camera/radio, receiver where they can be pinched or stepped on. Protect the cords by keeping them out of the way of children, pets and routine household traffic. Do not place heavy objects on power cords or cover cords with rugs or carpet.
- When cleaning, use a DRY, lint-free cloth. Unplug the camera/radio, receiver, AC/AC and AC/DC adapters before cleaning. NEVER immerse any components in water and do not spray cleaners or solvents on the units. Doing so may damage the units or cause electrical shock.
- Unplug the AC/AC and AC/DC adapters from the wall outlet when the system is not in use.
- Mishandling, alterations or modifications not approved by the manufacturer will void the warranty.



CAUTION!

- Connect this unit ONLY to other compatible units. Do not connect it to any other type of alarm or auxiliary device. Connecting anything else to this unit may damage it or prevent it from operating properly.



CAUTION!

- Do not paint over the camera.



CAUTION!

- This system uses public airwaves for wireless operation. The sound and video may be broadcast to and picked up by other 2.4 GHz receiving devices. Conversations and images from other rooms near the camera may be broadcast and picked up. To protect your privacy.

Additional Notice- Do not place video monitor or equipment on an unstable cart, stand or table. The video monitor or equipment may fall causing serious injury to a child or adult.

FCC/CE WARNING

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacture's instructions, may cause interference to radio and television reception. It has been tested and found to comply with limits for a Class B digital device in accordance with Part 15 of FCC Rules and CE I-ETS 300 440, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause 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:

- 1. Reorient the TV/radio antenna.
- 2. Relocate the Receiver away from the TV/radio receiver.
- 3. Plug the Receiver into a different wall outlet so that the Receiver is on a different branch circuit.
- 4. If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions.

The user may find the following booklet prepared by the Federal Communication Commission helpful: "How to Identify and Resolve TV Interference Problems." This booklet is available from the US Government Printing Office, Washington, D.C. 20402, Stock No. 004-000-00345-4.

FCC/CE NOTICE

The user is cautioned that changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment. Linear radio controls provide a reliable communications link and fill an important need in portable wireless signaling. However, there are some limitations which must be observed.

The radios are required to comply with FCC Rules and Regulations as Part 15 devices and CE I-ETS 300 440. As such, they have limited transmitter power and therefore limited range. A receiver cannot respond to more than one transmitted signal at a time and may be blocked by radio signals that occur on or near their operating frequencies. Changes or modifications to the device may void FCC and CE compliance. Infrequently used radio links should be tested regularly to protect against undetected interference or fault.

Specifications

RECEIVER:

RECEIVING DISTANCE	Up to 300 Feet (Clear Line of Sight)
VIDEO OUT	1 Vp-p 75 Ohm
AUDIO OUT	1 Vp-p 600 Ohm
POWER SUPPLY	10V DC, 600 mA
OPERATING TEMP.	32°F - 122°F 0°C - 50°C
DIMENSIONS	Approx. 3.7" x 1.8" x 2.5" 9.5 x 4.7 x 6.3cm (LxWxH)
WEIGHT	Approx. 0.5LB/209.6g

RADIO & CAMERA:

IMAGE SENSOR	1/3" Color CMOS Image Sensor
RESOLUTION	330 Horizontal TV Lines
LENS	6mm
OPERATING TEMP.	32°F - 122°F 0°C - 50°C
POWER OPERATION	18V AC/AC Adapter, 110-240V 50/60 Hz, 350mA
FREQUENCY	AM 530-1600 KHz FM 88-108 MHz
DIMENSIONS	170 x 115 x 45 mm (approx.)
DC BACKUP POWER	DC 9V. One 6F22 or equi Size Battery (Not included)
ANTENNA	FM with 1m Wire Antenna. AM with Build-in Ferrite Bar Antenna
SPEAKER	2 1/4" 8 ohm Dynamic Loudspeaker

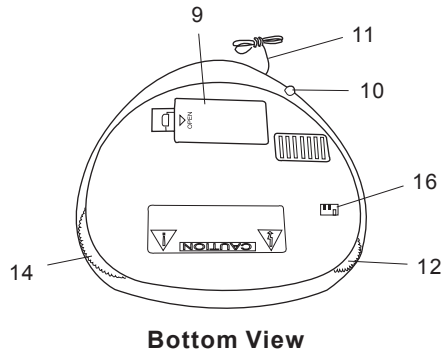
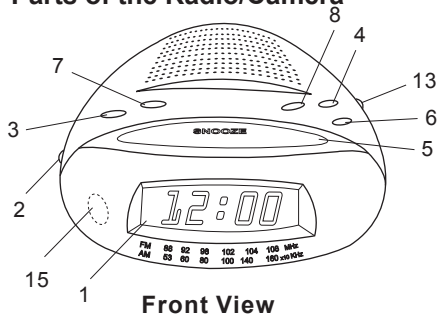
*Design and specification are subject to change without notice.

Parts Included with This System

- AM/FM Radio Alarm Clock with Build-In Hidden Camera
- 2.4 GHz Audio/Video Receiver
- Audio/Video Cable
- 10V AC/DC adaptor for Receiver
- 18V AC/AC adaptor for Camera/Radio

Parts of The System

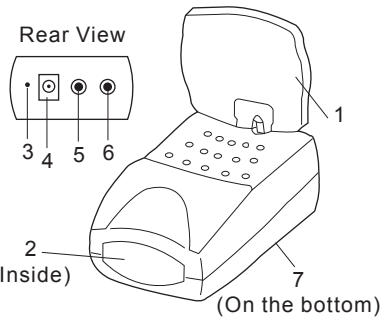
Parts of the Radio/Camera



- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| (1) Alarm Indicator ☐ | ☐ | ☐ | ☐ | (9) Battery Compartment |
| (2) ON/OFF/AUTO Switch ☐ | ☐ | ☐ | ☐ | (10) Power Input Jack |
| (3) Time Set Button ☐ | ☐ | ☐ | ☐ | (11) FM Wire Antenna |
| (4) Hour Button ☐ | ☐ | ☐ | ☐ | (12) Volume/OFF Control Knob |
| (5) Snooze Mode Button ☐ | ☐ | ☐ | ☐ | (13) Band Selector |
| (6) Minute Button ☐ | ☐ | ☐ | ☐ | (14) Tuning Knob |
| (7) Alarm Mode Button | | | ☐ | (15) Camera and Microphone (Inside) |
| (8) Sleep Mode Button ☐ | ☐ | ☐ | ☐ | (16) Channel Switch |

Parts of the Receiver

- | | |
|---|----------------------|
| 1. Antenna ☐ | 2. Channel LED |
| 3. Power LED ☐ | 4. 10V DC Input Jack |
| 5. Video Output Jack ☐ | 6. Audio Output Jack |
| 7. Channel Switch | |



The AM/FM Radio Alarm Clock

Power Supply

1. Back Up Battery
 - Open the battery compartment door on the bottom of the unit.
 - Insert a 9V battery (not included) in the compartment with the correct polarity as indicated by the "+" and "-" symbols.
 - During power interruption, the clock function still operation and not displayed.
 - You can not listen to the radio with the battery.
 - After the AC power operation, the displayed time may loss or gain less than ten minutes in each hour.

Note: Incorrect use of battery can cause electrolyte leakage and corrode the compartment or cause battery to bust. Please remove the battery if exhausted or if the unit is not to be used for a long time.

2. Power Operation by using the 18V AC/AC adapter

- Before use, check your local voltage and the rated voltage of your unit.
- If the AC power supply is interrupted, the battery supplies power to keep the clock operating and sustaining the alarm time setting.
- The backup battery power is not for radio operation.

Clock/Radio Operation

1. Clock Setting

- Press and hold TIME (3), then press HOUR (4) to set the Hour and MIN (6) to set the Minute. Depress the TIME to confirm Normal Time setting.

2. Radio Operation

- Set the ON/OFF/AUTO switch (2) to ON position.
- Set Band Selector (13) to the desired radio band.
- Use TUNING (14) knob to select the desired radio station.
- Use VOLUME/OFF (12) knob to adjust the volume loudness level.
- Set the ON/OFF/AUTO switch (2) to OFF position to turn off the radio.
- Extend the FM wire antenna for better FM reception.

3. Alarm Setting (Radio Alarm)

- Turn on the radio, tune into a desired station and adjust the volume level.
- Press and hold ALARM (7), then press HOUR (4) to set the Hour and MIN (6) to set the Minute. Depress ALARM (7), to confirm Alarm Time setting.
- Set the ON/OFF/AUTO switch (2) to AUTO position.
- ALARM INDICATOR (1) will light when alarm is set.
- Press ALARM (7) to check the Alarm Time.
- When the preset time comes, the radio turns ON. To turn the radio OFF, press VOLUME/OFF (7) and it will resume after 24 hours. Press SNOOZE (5) and it will come back after 9 minutes.

4. Alarm Setting (Beep Alarm)

- Same setting procedures as Radio Alarm, except set the VOLUME/OFF switch (2) to OFF position.
- Use the VOLUME knob (12) to adjust the desired beep alarm volume level.
- * Radio/Beep Alarm will shut off automatically after 119 minutes.

Sleep Timer

This unit is equipped with sleep time function which allows the unit to turn the radio OFF automatically after a preselected time period from 1 hour and 59 minutes to 1 minute.

- Set the ON/OFF/AUTO switch (2) to OFF or AUTO position.
- Press SLEEP (8) to activate sleep time at default time of 59 minutes.
- Hold SLEEP (8) and press MIN (6) to set sleep timer within 59 minutes time frame.
- Hold SLEEP (8) and press HOUR (4) once and press MIN (6) to set sleep timer within 1 hour and 59 minutes.
- Depress SLEEP (8) to confirm sleep timer setting.

Sleep Time and Alarm Usage

You can fall asleep listening to the radio and still be awakened by the radio/beep alarm at a preset time.

- Set the Alarm according to your choice (either section 3 or 4).
- Set the Sleep timer as instructed in section 6.
- Turn OFF the Sleep Mode before the setting time, press the Snooze button.

Installing the Wireless Color Hidden Camera System

To install the system, follow these steps:

Receiver:

- 1. Plug the AC/DC adapter cord into the DC input jack on the back of the receiver.
- 2. Plug the audio/video cord to the audio/video output jack of the receiver. Plug the other end of the cord to the audio/video input jacks on your TV or monitor.
- 3. Plug the AC/DC adapter into a standard (110V-240V) outlet. The power indicator LED located on the top of the receiver should light.

Camera/Radio:

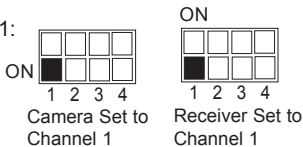
- 1. Plug the AC/AC adapter cord into the power input jack on the back of the unit.
- 2. Plug the AC/AC adapter into a standard (110V-240V) AC outlet. Set the camera/radio power switch to "ON". The alarm indicator should light.
- 3.

System Setup:

- 1. Select the channel (Channel 1-4) to be used on both the camera/radio and receiver.
NOTE: Make sure the camera/radio and receiver are set to **the same channel** (1, 2, 3 or 4).
- 2. Set the selected channel by gently pushing the dip-switch for that channel to the ON position on both the camera/radio and the receiver.

For example, to set both the camera/radio and receiver on Channel 1:

- (a) Push the Channel 1 dip-switch located on the back of the camera/radio and the side of the receiver to the ON position.
- (b) Make sure the remaining dip-switches are in the OFF position. In this case, channels 2 and 3 should be in the OFF position.



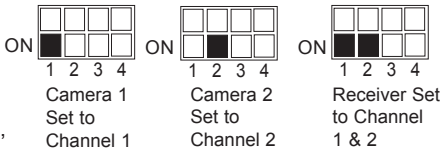
If more than one camera/radio is to be installed and operated at the same time:

Simply follow steps (a) and (b) and set the dip-switches for the other channels on the camera/radio and receiver to ON.

For example, to operate two camera/radios: set Camera/Radio 1 to Channel 1 (other channels off), set Camera/Radio 2 to Channel 2 (other channels off), and on the receiver, set channels 1 and 2 to ON.

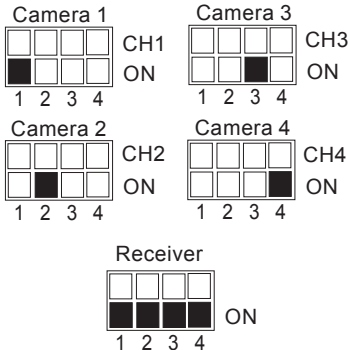
See "Camera/Radio and Receiver Setting Chart" below for more detailed instructions.

- 3. Position and Rotate/adjust the receiver antenna toward the camera/radio for best performance.



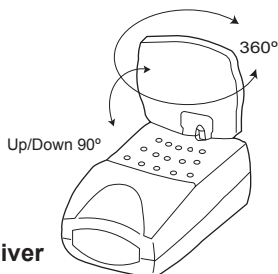
Camera/Radio & Receiver Channel Setting Chart

- 1. This 2.4 GHz system can be connected with up to 4 channels. Set channels on the camera/radio and receiver before starting the system.
- 2. Set camera/radio and receiver channels by gently pushing the switches with an object such as a pen or pencil to the ON or OFF position. Use the illustrations shown on the right as a guide. The switches are inset into the camera/radio and receiver housings to avoid accidentally changing the channel settings.
- 3. The Auto Sequential Scanning feature automatically activates when more than one switch is set to ON.



Rotating the Antenna for Best Performance

This system broadcasts its high-quality audio and video using directional antenna. The antenna can rotate in either clockwise or counterclockwise directions to obtain the best signal and picture clarity. In most situations, additional adjusting of the antenna may be necessary to get optimal performance. If the camera/radio and receiver are less than 10 feet apart, leave the antenna in the closed (down) position. See the instructions shown on the right to rotate the antenna.



The Auto Sequence Feature

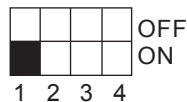
The Wireless Color Hidden Camera System can be set up to monitor a series of rooms in a home or office. The receiver can connect up to four cameras on four different channels for both Audio/Video reception, and display them in auto sequence. The system has dip-switches for 4 channels to allow various monitoring options.

When the channel dip-switches are set in the "ON" position, that channel is active on the receiver and can be seen on the TV or monitor. Channel dip-switches in the "OFF" position are inactive and will not be shown on the TV or monitor.

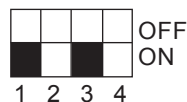
The auto-sequence feature is activated when more than one channel is switched ON. The channels switched ON will display on the monitor at five second intervals. **For example**, if you have two cameras, one set to Channel 1 and the other set to channel 3, the dip-switch on the receiver must be set for both channels 1 and 3. Then camera one [CH1] and camera two [CH3] will start to display on the TV or monitor in sequence at five seconds intervals. This interval time is preset by the factory and cannot be adjusted by the user.

To stop the auto-sequence function:

Slide the dip-switch of the channel(s) you do not want displayed to OFF on both that camera and the receiver. Channels in the OFF position will no longer be displayed.



Channel Dip-Switch
Diagram Channel 1 ON



Channel Dip-Switch Diagram
Channel 1 & 3 ON

Connecting the Receiver to a TV or Monitor

The receiver has an audio/video output which is for transferring the picture and sound from the camera/radio to a TV or monitor. Connect the A/V outputs to the A/V input on a TV or monitor for a screen display, or connect the A/V outputs to the A/V inputs on a VCR to record transmissions from the camera/radio.

Troubleshooting Guide

If the Camera/Radio and/or Monitor...	You should...
No Power	1. Check that the power cord(s) is properly connected. 2. Check that the monitor is turned ON. 3. Wrong AC/DC adapter used. Check if your are using the right AC/DC adapter.
No sound or picture. Distorted sound or picture	1. Check the channel switch settings on the camera/radio and receiver. Make sure the channels match on both units. 2. Signal interference from a microwave oven. Check if a micro-wave oven is in use or located in the path between the camera/radio and receiver. If so, turn it off or move it out of the path. 3. Signal interference from other signal producing devices. (a) Change the channel setting on both camera/radio and receiver. (b) Identify and eliminate the source of the interference. (c) Relocate the camera/radio and/or receiver closer to each other. 4. Camera/radio and receiver are too far apart. Relocate the camera/radio closer to the receiver. 5. Antenna is positioned improperly. Adjust the antenna on the receiver.

1 Year Limited Warranty:

JSW Pacific Corp., the maker of **Navigator** brand products, warrants that for a period of 1 year from the date of purchase, this product will be free from defects in material and workmanship. JSW, at its option, will repair or replace this product or any component of the product found to be defective during the warranty period. Replacement will be made with a new or remanufactured product or component. If the product is no longer available, replacement may be made with a similar product of equal or greater value. This is your exclusive warranty. This warranty is valid for the original purchaser from the date of initial purchase with JSW and is not transferable. This warranty does not cover normal wear of parts or damage resulting from any of the following: negligent use or misuse of the product, use on improper voltage or current, use contrary to the operating instructions, disassembly, repair or alteration by anyone other than JSW or an authorized service center. Further, the warranty does not cover acts of God, such as fire, flood, hurricanes and tornadoes or any batteries that are included with this unit. JSW shall not be liable for any incidental or consequential damages caused by the breach of any express or implied warranty.

Notice : The changes or modifications not expressly approved by the party responsible

for compliance could void the user's authority to operate the equipment.

IMPORTANT NOTE: To comply with the FCC RF exposure compliance requirements, no change to the antenna or the device is permitted. Any change to the antenna or the device could result in the device exceeding the RF exposure requirements and void user's authority to operate the device.