

**FC CE0681①**

***Edition***

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***Trademarks***

All product names used in this manual are the properties of their respective owners and are acknowledged.

### ***Safety and battery use***

- Read and follow any warnings in this manual.
- Read the regulatory compliance notice on page 14 .
- When not in use, remove any batteries and store them in a cool dry place.
- Do not use the camera in temperatures below -10 or exceeding 55 degrees Celsius
- Don't dispose of used batteries with household waste. Return the batteries to your dealer or to a special disposal service.
- Any servicing must only be done by qualified personnel.
- Do not set up or use the receiver or camera in a wet or damp environment.
- Save these instructions for future reference.

### ***About this manual***

This manual is designed to assist users with setting up and operating #ACT-205.

Information in this document has been carefully checked for accuracy; however, no guarantee is given as to the correctness of the contents. The information contained in this document is subject to change without notice.

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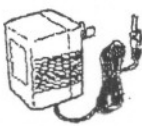



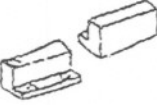

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## 1—Getting started

Congratulations on your purchase of the remote *system*. Use this *system* to monitor locations wirelessly, as a stand-alone solution or integrated into an existing alarm system.

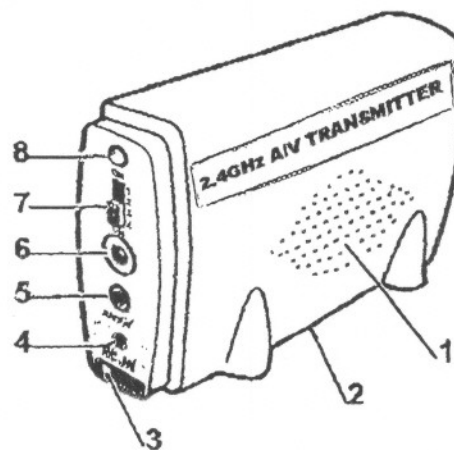
### Checking the packing list

Carefully unpack the projector and check that the following items are included:

		
Receiver	Transmitter	Receiver AC adapter
		
Transmitter AC adapter	R/C cable	Sensor cable
		
A/V cable	Reed switch	Audio terminator

IDENTIFYING PARTS**Identifying parts**

Refer to the following sections to identify components of the transmitter and receiver.

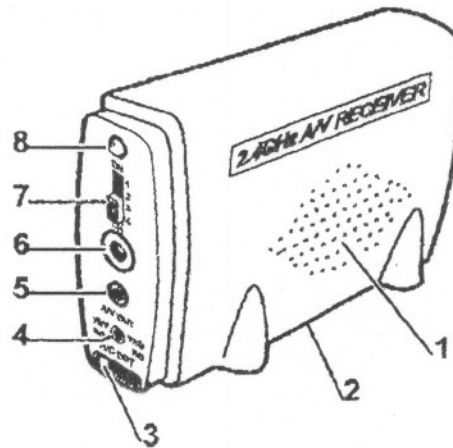
**Transmitter**

Item	Description	See page
1.	Speaker	—
2.	Socket mount	—
3.	NO NC switch	9
4.	R/C IN sensor jack	10
5.	A/V IN jack	6
6.	DC IN jack	6
7.	CH1-4.channel.switch	—
8.	ON power LED	—

1—GETTING STARTED

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**Receiver**



<b>Item</b>	<b>Description</b>	<b>See page</b>
1.	Speaker	—
2.	Socket mount	—
3.	Volume slider	—
4.	R/C OUT jack	5
5.	AV OUT jack	5
6.	DC IN jack	5
7.	CH 1-4 channel switch	—
8.	ON power LED	—

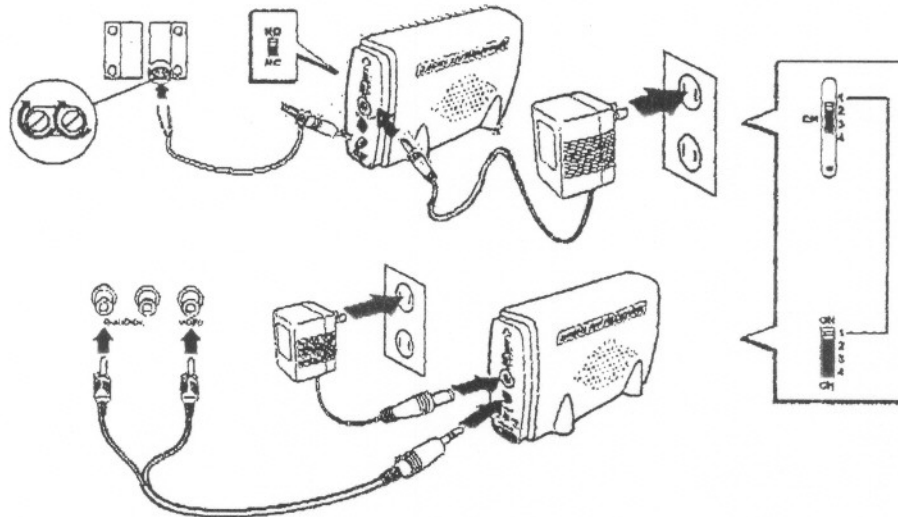
## 2—Setting up

This section explains the mounting options and setup of the remote camera. However, before installing the camera check that all the parts are working as described below.

### *Pre-setup testing*

For the pre-setup test do the following:

- Connect the A/V cable from the receiver to the monitor. Ensure the monitor is set for video playback.
- Connect the sensor cable from the transmitter to the reed switch.
- Connect the AC adapters.
- Match the channels on the receiver and camera.



- Check that video and sound are available on the monitor.

## 2—SETTING UP

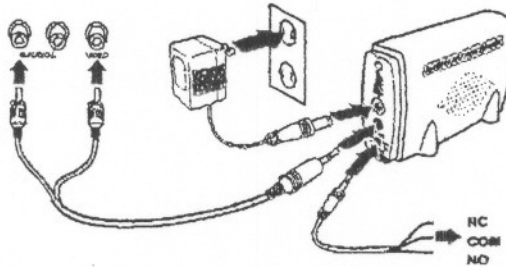
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- Test the sensor operation by moving the reed switch apart and changing the NO NC setting on the transmitter.
- If some functions do not work, check the corresponding section in this manual before installing the system.

### **Making connections**

The receiver is designed to connect to different devices such as a TV, VCR, or digital video recorder (DVR).

#### **Receiver setup**

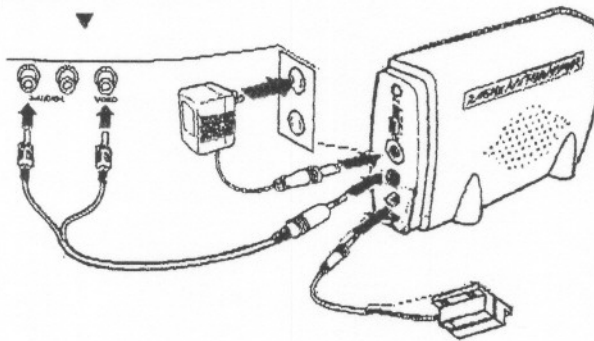


- Connect the AV cable to a TV monitor, VCR, DVR, or computer.
- Connect the AC adapter to a power outlet.
- Connect the R/C cable to a video recording device switch, DVR, or external alarm.



### Transmitter setup

Camera  
Cancorder  
CD-Player  
Computer (need an A/V grabber)  
Dvr  
Video recorder  
Tape-Deck  
Tuner



- Connect the AD adapter to a power outlet.
- Connect AV cable to the unit from which the signals shall be transmitted (e.g. camera, video recorder, dvr, CD player).
- Insert the sensor cable wires into the reed switch or other sensors (not supplied), and secure them by tightening the screws

## **3—Operation**

The chapter describes the operation of the system.

### ***Operating restrictions***

- Avoid using the camera in humid locations. If condensation occurs, allow the camera to dry before operating.
- Do not use in temperatures below -10 degrees Celsius or above 55 degrees Celsius.
- Proximity to microwave ovens can cause interference and reduce the quality of the audio and video signals.
- Using two cameras in the same vicinity may result in sound and picture interference.

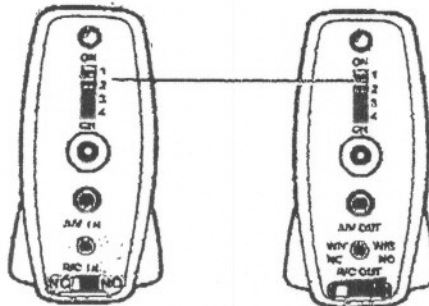
### 3—OPERATION

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#### **Matching channels**

A transmitter and receiver together form a pair. Set a paired transmitter and receiver to the same channel. If you are using two or more transmitter/receiver pairs be sure that each pair is set to different channels or there will be interference.

Up to four transmitter can be used with one receiver. Each transmitter must be set to a different channel. Video from each transmitter can then be viewed in turn by changing the channel on the receiver.

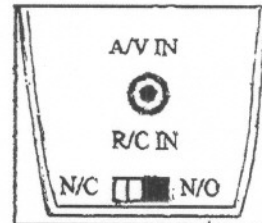


#### **Standard always-on operation**

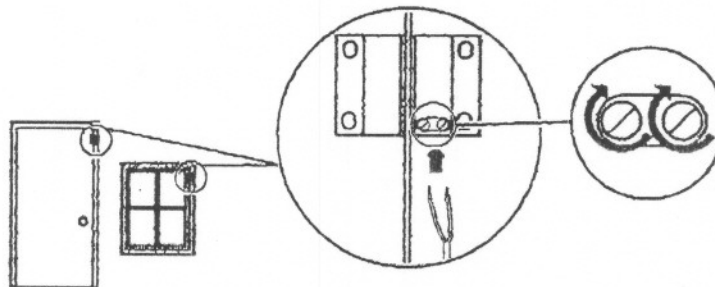
Standard operation allows continuous audio and video signals from the transmitter to the receiver. The video is monitored on a screen but not recorded. Audio is monitored through the AV device that is connected to the receiver. (Or through the receiver speaker when the audio terminator is used.)

REED SWITCH OPERATION***Reed switch operation***

A reed switch is a magnetically activated switch. The reed switch can be used with the sensor cable for detecting entry through doors and windows. The sensor cable plugs into the reed switch and the R/C IN connector on the transmitter. The NO NC switch stands for **Normal Open/Normal Closed** and refers to the status of the sensor.



**Note:** The sensor cable can be attached to other *sensors* as required.

**Reed switch installation**

Insert the sensor cable wires into the reed switch and secure them by tightening the screws.

**Set to NO (Normal Open)**

Set the NO NC switch to **NO** and set up the reed switch on a window. When the window is closed the alarm sounds on the receiver.

**Set to NC (Normal Closed)**

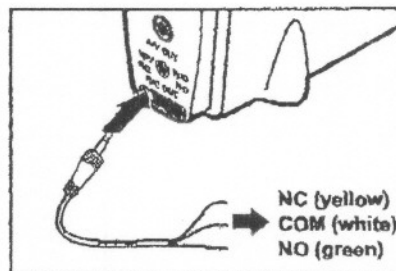
Set the NO NC switch to **NC** and set up the reed switch on a window. When the window is opened the alarm sounds on the receiver.

## 3—OPERATION

**R/C cable operation**

The R/C cable is a relay connecting cable, which allows recording of audio and video to be triggered by an alarm such as the supplied reed switch. This function saves recording space as recording only begins after an event such as a door opening or closing.

The R/C cable is connected to the receiver and to a video recorder. When the reed switch is triggered at the camera location, the R/C cable then triggers the video recorder to begin recording. (For connecting the R/C cable to a video recorder, see the recorder's user manual.)

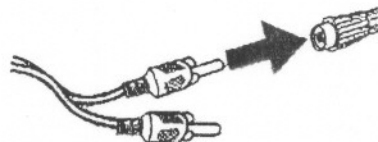


**Note:** An external alarm (not supplied) can be used as required.

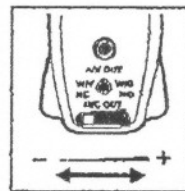
**Switching audio output**

The audio terminator forces audio from the microphone and alarm to the receiver speaker. The volume control on the receiver only affects the volume on the receiver and not a connected TV or other video device.

Plug the red audio RCA jack from the AV cable into the audio terminator.



Adjust the volume accordingly.



## Appendix

This appendix describes cleaning and troubleshooting procedures. Also covered are technical specifications, FCC compliance, and warranty information.

### Troubleshooting

<b>There is no picture on the screen.</b>	<ol style="list-style-type: none"><li>1. Make sure power cables are plugged in properly and that the outlets have power.</li><li>2. Make sure that the transmitter is plugged in.</li><li>3. Make sure that the receiver is plugged in.</li><li>4. Check that the AV cables are properly connected.</li><li>5. If using a television, make sure that the correct video channel is selected.</li><li>6. Make sure that the transmitter and the receiver are on the same frequency channel.</li><li>7. Ensure that the receiver is within the transmitting range of 300 meters (in L-O-S).</li></ol>
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## APPENDIX

<b>The picture quality is poor.</b>	<ol style="list-style-type: none"> <li>1. Make sure that nothing is obstructing the system.</li> <li>2. Don't use the system near a microwave oven.</li> <li>3. Don't use more than one camera in the same vicinity.</li> </ol>
<b>There is a picture but no sound.</b>	<ol style="list-style-type: none"> <li>1. Check the volume on the receiver and the audio device.</li> <li>2. Check that the audio terminator (if used) is securely plugged in.</li> <li>3. Check that the audio cable is properly plugged in to the receiver and the audio device.</li> </ol>
<b>There is sound but no picture.</b>	<ol style="list-style-type: none"> <li>1. Check the brightness on the display.</li> <li>2. Check that the video cable is properly connected to the receiver and the monitor.</li> </ol>
<b>The alarm does not turn off or on.</b>	<ol style="list-style-type: none"> <li>1. Make certain the sensor cable is plugged in and that the connection to the sensor is secure.</li> <li>2. Check to see the <b>NC NO</b> switch is in the intended position.</li> <li>3. If using the reed switch, make sure the contacts are close enough for the switch to operate properly</li> <li>4. If using a different sensor, follow the manufacturer's troubleshooting steps.</li> </ol>
<b>Lines appear on the screen.</b>	Make sure there is no microwave operating nearby.
<b>The picture is ghosting.</b>	Relocate the receiver to avoid obstacles such as trees or buildings.
<b>The R/C cable does not initiate recording.</b>	<ol style="list-style-type: none"> <li>1. Make certain the R/C cable is plugged in and that the connection to the sensor is secure.</li> <li>2. Check to see the <b>NC NO</b> switch is in the intended position.</li> </ol>

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**TECHNICAL SPECIFICATIONS**

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**Technical Specifications****Transmitter**

Frequency:	2.4 ~ 2.4835 GHz
Channel:	4 selectable channels
Modulation type:	FM
Input level:	Video - 1Vp-p Audio - 1Vp-p
Impedance:	Video - 75 ohms Audio - 600 ohms
Input port:	A/V jack - RCA to RCA line jacks
Antenna:	Built - in directional antenna
Transmitter output power:	1mW, 10mW

**Receiver**

Frequency:	2.4 ~ 2.4835 GHz
Channel:	4 selectable channels
Antennas:	Built-in directional antenna
A/V mod/demod. method:	FM
Video output:	1Vp-p/75 ohm



**APPENDIX**

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Audio output:	0.8V/600 ohm
Audio bandwidth:	50 – 17000 Hz
Power supply:	DC 6V ~ 7.5V 300mA
Current consumption:	<=200mA
Dimensions (LxWxH):	119 x 41 x 74 mm (4.75 x 1.61 x 3 inches)
Weight:	102g
Operating temperature:	- 10°C – 55°C
A/V output RCA jack:	Video: yellow jack Audio: red jack
Remote control output:	Relay
Relay output connect rating	2A 24VDC
Remote control wires indication:	White wire – common connecting Yellow wire – N/C connecting Green wire – N/O connecting

**Federal Communications Commission (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.
- Consult the dealer or an experienced radio/TV technician for help.

## WARRANTY

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- Unauthorized changes or modifications of this device could void the user's authority to operate the equipment.

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.

### **Warranty**

The warrant is for one year from the date of purchase. Please retain the sales receipt as proof of purchase. During the one-year warranty period, the product is eligible for replacement in case of defects in material and workmanship. In such cases, the defective unit will be repaired or replaced by the manufacturer or an authorized distributor. However, this warranty does not cover damages caused by improper use or from unauthorized modifications by third parties. In addition, this warranty does not cover expendable materials and defects, which constitute as normal wear and tear.