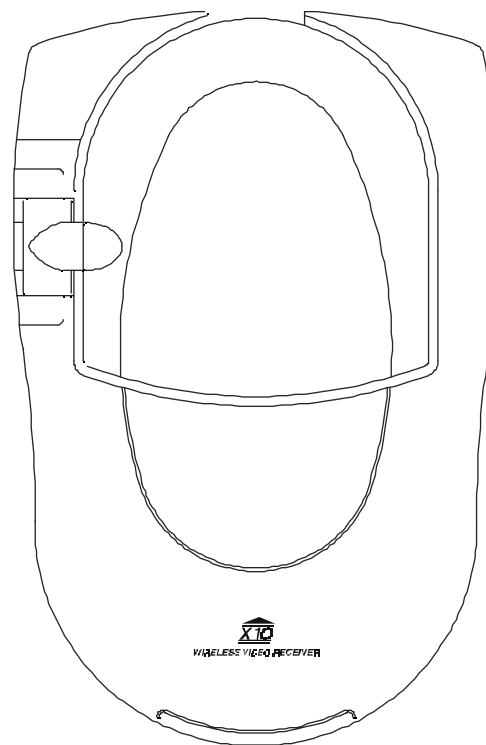




*Audio/Video Receiver for use with
X10 Wireless Camera Systems*

MODEL VR31A OWNER'S MANUAL



INTRODUCTION

The VR31A Audio/Video Receiver works with X10's Wireless Cameras. The Camera converts video and sound into wireless radio frequency (RF) signals and transmits them (even through walls) to the Audio/Video Receiver which you connect to a TV anywhere in your home (up to 100 ft. away from the Camera). The Audio/Video Receiver converts the signals back to video and audio signals which are fed through a cable to your TV's COAX or Audio/Video input jacks. If you purchase additional VR31As you can view and listen to your camera(s) on more than one TV.

FCC CAUTION

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES.

OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS:

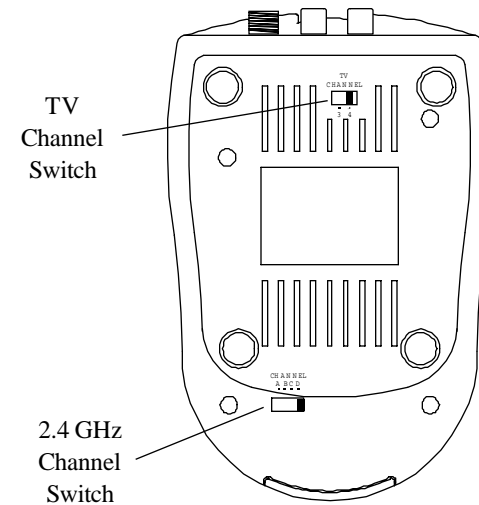
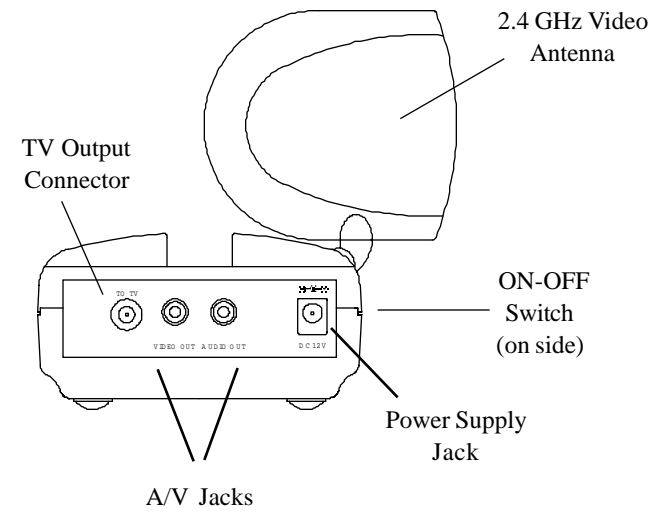
- (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND
- (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRE OPERATION.

This equipment generates and uses radio frequency energy, and if not installed and used properly, that is, in strict accordance with the manufacturers instructions, it may cause interference to radio and television reception. It has been type tested and found to comply with the limits for remote control devices in accordance with the specifications in Sub-Parts B and C of Part 15 of FCC Rules, 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 unplugging the equipment, try to correct the interference by one or more of the following measures.

- Reorient the antenna of the radio/TV experiencing the interference.
- Relocate the equipment with respect to the radio/TV.
- Move the equipment away from the radio/TV.
- Plug the equipment into an outlet on a different electrical circuit from the radio/TV experiencing the interference.
- If necessary, consult your local Dealer for additional suggestions.

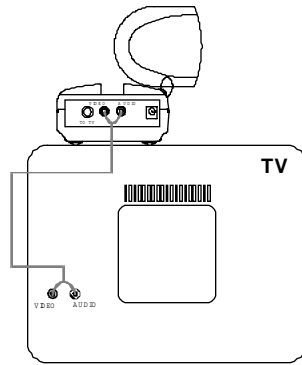
NOTE: Modifications to this product will void the user's authority to operate this equipment.

CONTROLS AND CONNECTIONS



CONNECTING UP

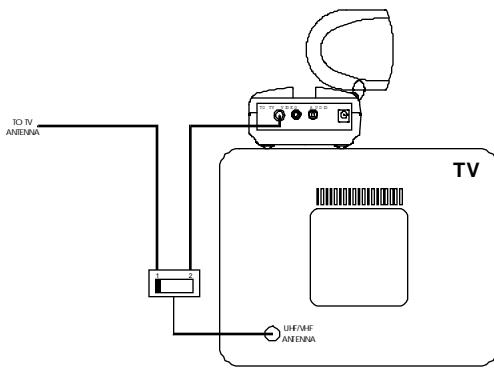
1. Connect a set of Audio/Video cables to the A/V OUT jacks on the Audio/Video Receiver. Connect the other end to your TV (use Yellow for video, and either L or R channel for audio).
2. Plug the Audio/Video Receiver's Power Supply jack (the power supply with NO code wheels) into the Audio/Video Receiver and plug the power supply into a 120 volt wall outlet.
3. Turn the Audio/Video Receiver's power switch (on side of unit) on.
4. Set the channel switch to the same letter as you set on the camera, A, B, C, or D.
5. Position the Audio/Video Receiver in a convenient location such as on top of the TV and orient the antenna so that the flat side points in the direction where you set up the Camera.



IF YOUR TV DOES NOT HAVE A/V CONNECTORS

You can use the supplied coaxial cable to connect the TV OUT socket on the Audio/Video Receiver to the Antenna input on your TV.

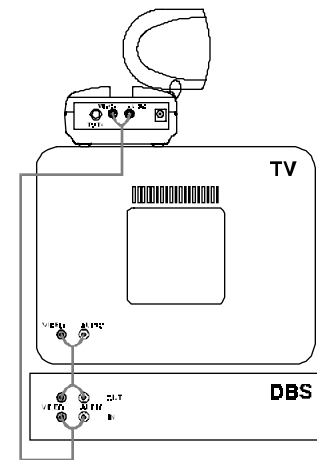
If you already have an antenna connected to your TV, you will need to use a TV antenna splitter. Set your TV and the TV Channel switch on the Audio/Video Receiver (on bottom) to the same channel (3 or 4).



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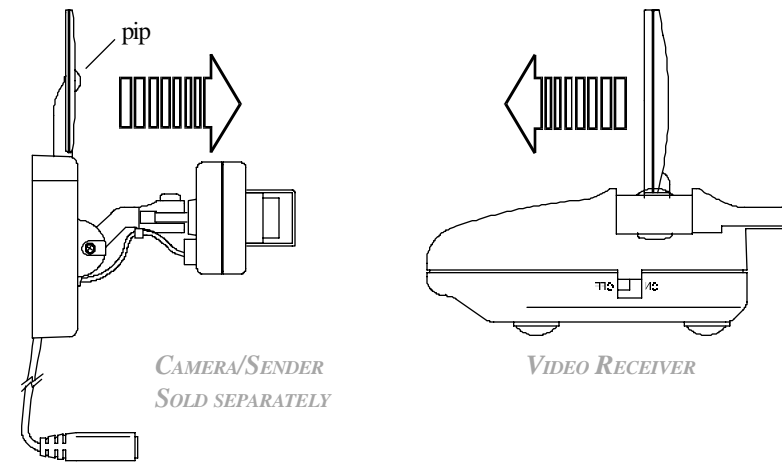
IF YOUR TV IS ALREADY HOOKED UP TO A DBS RECEIVER OR OTHER A/V DEVICE

If a DBS Receiver or other A/V component is connected to the TV using A/V cables, you can connect the Audio/Video Receiver to the free LINE IN jacks on the component. If there are no LINE IN jacks, you will need to use a TV antenna splitter as described earlier.



FINE TUNING YOUR SYSTEM

The system usually works best with the "pip" on the Camera's antenna facing the flat side of the Receiver's antenna (see diagram below). Sometimes, however, reflections and other effects in the home may affect the signal so that some adjustment of either the Camera or Receiver antenna may be necessary to get the best signal. If you have more than one Camera, sometimes pointing the Receiver's antenna up towards the ceiling works best.



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TROUBLESHOOTING

If you do not see a picture on your TV:

Check that the Receiver and the Camera are on the same letter channel (A, B, C, or D). On the Receiver the switch is on the bottom. On the Camera the switch is located under the rubber plug on the base of the unit. Make sure you replace the plug afterwards if you intend to use the camera outdoors.

There is a power light on the front of the Receiver. Check that the power switch on the side of the Receiver is ON.

Check that the Camera is turned on. For single camera systems the power supply for the Camera will normally be on (it powers up on). For Multi-Camera systems you need to purchase a TM751 Transceiver for the remote control to be able to turn Cameras on. When you turn any one on, in a group of 4 on, the others in the group turn off. Groups must be 1-4, 5-8, 9-12, or 13-16. Check that all camera power supplies are set to the same Housecode as the Transceiver and remote control.


Verify that your connections to the TV are correct. If you are using the RCA jacks, make sure you are using the appropriate input mode for your TV, try pressing the A-B button or Video button on your TV's remote control to change the input mode (consult your TV's owner's manual, if necessary). If you are using the Coax cable, verify that the Receiver and the TV are on the same channel (3 or 4).

If you connected the Receiver to a VCR and then connected the VCR to your TV, you might need to turn the VCR OFF to see the Camera's picture on your TV. Or you might need to turn the VCR on, AND set it to record the picture from the Camera, in order to see the picture on your TV. Or you might need to press the A-B button on your VCR's remote control. Consult your VCR's owner's manual from more information.

If you get a picture but the quality is poor:

Try different positions for the antennas on the Camera and Receiver. Normally they should point at each other. Sometimes, due to reflections, you might get a better picture with the Receiver's antenna pointing to the ceiling.

Take a look at what the video signal is passing through or near to get to the Receiver. Metal objects and electromagnetic fields can distort the signal. Try to keep the Receiver as far away from other devices as the cables allow.



In most cases, relocating the Camera or Receiver a few feet is enough to avoid the source of interference.

Try unplugging/turning off any electromagnetic interference producing devices, such as a microwave oven, baby monitor, computer, wireless LAN, wireless speakers, cordless phone, cell phone, etc.

Other 2.4 GHz devices can distort the Camera's picture and/or cause buzzing in the audio. If you are experiencing interference between X10 Cameras and some other equipment that uses 2.4 GHz, check the other device's owner's manual for the frequencies of each channel that it uses. X10 cameras use the following frequencies: Channel A: 2.411 GHz, Chan B: 2.434 GHz, Chan C: 2.453 GHz, Chan D: 2.473 GHz. We recommend using a frequency on the other device that is farthest from channel A or D, depending on which side of the band the other device is transmitting. Otherwise you will need to discontinue use of the device while using the Cameras.

If the camera is out of focus:

The camera is shipped preset to be in focus for normal use, but if you want to change the focus you can remove the clear plastic cover and rotate the inner portion of the lens. It might be a bit tight. Try turning it counterclockwise first. If you turn it clockwise do not force or over tighten it. For outdoor use, replace the clear plastic cover to keep the rain out.

If you are having difficulty turning the Camera on/off remotely:

Plug the Transceiver (the white module with an antenna) into a different outlet. Note a Transceiver (sold separately) is REQUIRED for Multi-Camera systems. It is not required if you only have one camera as the camera's power supply powers up on when you plug it in.

If the Remote Control (sold separately) doesn't do anything.

Check that the red light on the remote comes on when you press any button. Check that you have the batteries installed correctly, replace if necessary with 4 AAA alkaline batteries. Try the Transceiver in different outlets (see above).

For more help with setup please visit www.x10.com/support



12 MONTH LIMITED WARRANTY

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IF SERVICE IS REQUIRED UNDER THIS WARRANTY:

1. CALL 1-800-675-3044, OR VISIT WWW.X10.COM, OR E-MAIL SALES@X10.COM TO OBTAIN A RETURN MERCHANDISE AUTHORIZATION (RMA) NUMBER.
2. RETURN THE DEFECTIVE UNIT POSTAGE PREPAID TO THE ADDRESS BELOW
3. ENCLOSE A CHECK FOR \$4.00 TO COVER HANDLING AND RETURN POSTAGE.
4. ENCLOSE A DATED PROOF OF PURCHASE.
5. X10 IS NOT RESPONSIBLE FOR SHIPPING DAMAGE. UNITS TO BE RETURNED SHOULD BE PACKED CAREFULLY.

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