



SENTINEL™ OUTDOOR PROFESSIONAL PAN/TILT/ZOOM CAMERA SYSTEM



MODEL VK84A

**INCLUDES SENTINEL PAN/TILT/ZOOM CAMERA (XC35A)
AND DOME WITH REMOTE CONTROL (CR15A)**

OWNER'S MANUAL

(Please keep for future reference)

INTRODUCTION

Congratulations! You have purchased X10's premier video surveillance solution. The Sentinel Pan/Tilt/Zoom Camera has superior image quality, a high powered zoom, and pan and tilt motion. You can operate the camera through walls using the supplied remote control.

It comes with a weather resistant dome for outdoor mounting under an eave, on your patio, or deck, for example.

The camera uses X10's 900 Megahertz wireless technology to transmit live video through walls to a television up to 100 feet away. If you prefer a secure video connection, you can use a video cable to connect the camera directly to your TV.

The camera is also designed so that you can combine multiple cameras to provide comprehensive coverage of your home or business. Use the remote control to switch between cameras so that you don't miss anything that goes on.

This owner's manual will take you through setting up and using the camera. A new world of sophisticated video surveillance is waiting for you!

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BASIC CAMERA SETUP

Your Sentinel Camera is ready to go out of the box! Follow these steps for a quick setup of your new camera.

1 Unpack these items.



You should have: the camera and its power supply; the camera remote; the camera mounting bracket, a weather resistant dome, and the screws to install the bracket. A wireless video receiver, and its video cable and power supply (shown above but sold separately) is also required if you want to use the camera wirelessly.

Basic Camera Setup

First you'll set up and test the camera before you install the camera into the dome. Make sure you read this entire manual first in case you want to change a setting on the base of the camera before installing it in the dome.

2 Connect the camera to power.



Plug the camera's power supply into a standard wall outlet. Plug the other end into the camera. Remove the protective cover from the camera's lens.

- 3** Insert batteries into the remote.



Remove the battery cover and put four (4) AAA batteries into the camera remote. Make sure to match the batteries to the + and – marks inside the battery case.

- 4** Connect the wireless video receiver to power.



Put your video receiver in a convenient place near or on your TV. Plug its power supply into a standard wall outlet and the other end into the video receiver.

5 Connect the video receiver to your TV.



Connect the video cable into the video-out jack on the video receiver and into the video-in jack on your TV.

6 Turn on the video receiver.



Make sure the power switch on the video receiver is set to “ON.”

7 Turn on your TV.



Turn on your TV and select its video input. Use the Video or Select buttons on your TV remote control, or try channel 0 and then Channel Down. The camera's picture should appear. Note, the picture will be upside down because the camera is intended to be mounted on a ceiling or overhang, after installing it into the dome. See page 22 if you want to flip the picture.

8 Fine tune the antennas.



Once the camera and receiver are in place, adjust their antennas so that they face each other. The side of the camera's antenna with the dot on it should face the side of the receiver's antenna marked with four squares. Adjust the positions to improve the picture on your TV.

BASIC CAMERA OPERATION

Once you have the camera set up, you're ready to start using it. It's easy to get started. Here's how you use the remote to control the camera:

Select the camera

Press C1 to select the camera.

Move the camera

Use the arrow buttons to turn the camera left or right (called panning) and up or down (called tilting).

Focus

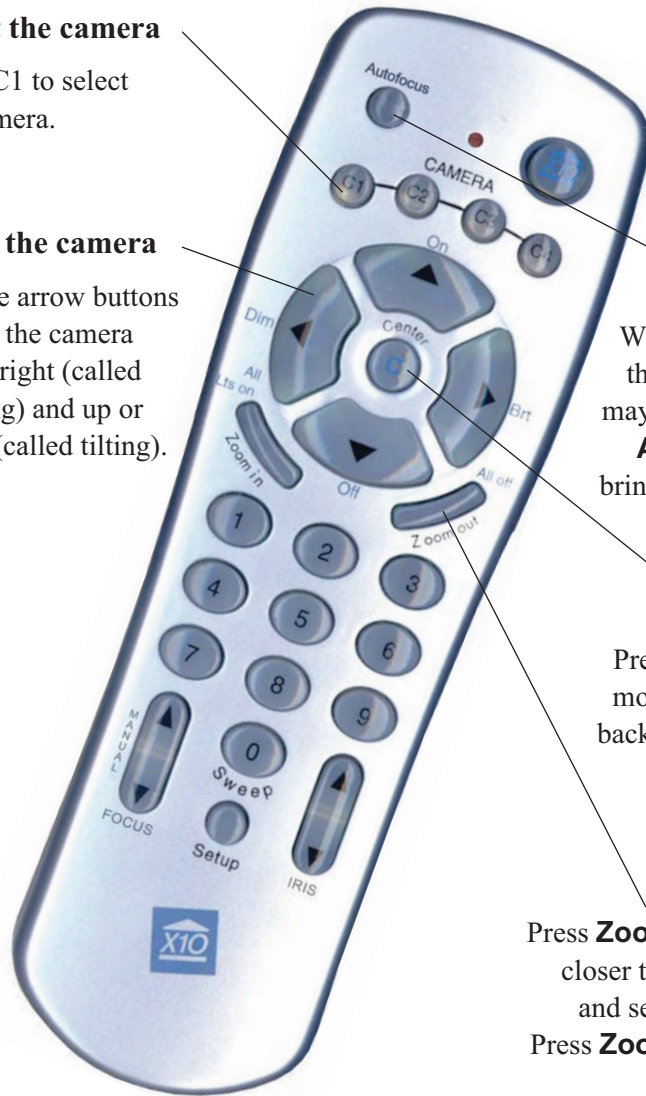
When you move the camera, you may need to press **Autofocus** to bring your subject into focus.

Center

Press **Center**, to move the camera back to its starting position

Zoom

Press **Zoom In** to zoom closer to your subject and see more detail. Press **Zoom Out** to see a bigger area.



SECURE VIDEO CONNECTION SETUP

If you prefer a secure video connection, you can use a video cable to connect the camera directly to your TV. This setup does not use the wireless video receiver.

1. Turn off the camera's wireless transmitter: Locate the transmission switch on the bottom of the camera (see picture below). Select Transmit Disable. This turns off the wireless transmission of the video signal from the camera.

Select Transmit Disable.



2. Connect the camera to power: Plug the camera's power supply into a standard wall outlet. Plug the other end into the camera. Remove the protective cover from the camera's lens.



Secure Video Connection Setup

3. Connect the video cable: Plug one end of a video cable into the camera. Run the rest of the cable to your TV.
4. Connect the other end of the cable to the video-in jack on your TV.



Turn on your TV and select its video input. Use the Video or Select buttons on your TV remote control, or try channel 0 and then Channel Down. The camera's picture should appear. Note, the picture will be upside down because the camera is intended to be mounted on a ceiling or overhang, after installing it into the dome. See page 22 if you want to flip the picture.

REMOTE CONTROL FEATURES

Your Sentinel Camera includes many versatile and powerful features. This section will show you how to get the most from your camera.

Stored Positions

Your Sentinel Camera can remember nine locations, including vertical/horizontal positions, and zoom settings.

Storing a Position

You can store up to nine positions in your camera. Here's how:

1. Press and release C1.
2. Press and hold the Setup button on your remote control until the C1 button lights green.
3. Move the camera to the position you want to store. Press Autofocus to set the focus for that position.
4. Press the number button (1 through 9) on the remote to store the position under that button.
5. Repeat steps 2 and 3 for each position you want to store.
6. When finished, press Setup to save the positions you entered.

Selecting Positions

Once you've stored positions in the camera, press the desired number button on the remote to move to that position. If you press **Sweep**, the camera will automatically switch through all the positions you've stored. Press any of the movement buttons on the remote to stop the camera from sweeping.

Changing Stored Positions

You can store new positions over positions you've already stored, by following the instructions above. Just store the new position using a button that you programmed before.

Remote Control Features

Clearing Stored Positions

You can delete all stored positions. Here's how:

1. Press and release C1.
2. Press and hold Setup until the C1 button lights green.
3. Press Center.
4. Press Setup again.

Focus Controls

In addition to the auto focus feature, you can control the focus of the camera manually. Press the focus buttons, Up or Down, to adjust the focus. Use this feature to improve the picture after auto focus, or to adjust the focus of a specific object in the camera's view.

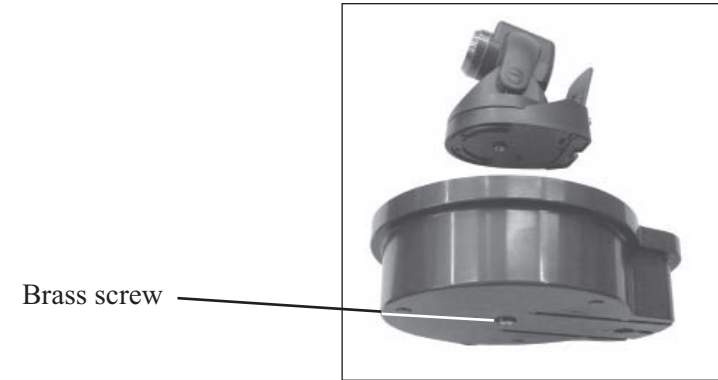
Iris Controls

The camera's iris controls the amount of light that enters the lens. The camera automatically adjusts the iris when it focuses so that it has the right amount of light for your subject. If you want to brighten the picture, press the Iris Up button to open the iris wider and let more light in. To limit the amount of light in the picture, press Iris Down to close the iris more.

Mounting the Camera

You can install the Sentinel Camera into the supplied dome and mount it on a ceiling, or you can use the supplied mounting bracket to mount the complete assembly on a wall. In either case make sure the ABCD channel switch, and Transmit Enable/Disable switch on the base of the camera are set as you desire before installing the camera in the dome.

You can then attach the camera to the base of the dome using the brass screw on the outside of the dome's base.



Warning! The power supply is intended for indoor use only. Do not install the power supply outdoors.

Mounting the Camera, cont.

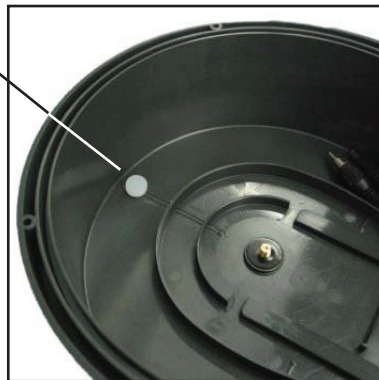
Camera should be installed into the base of the dome after knocking out the holes, knock out 3 holes for mounting on a ceiling or 1 hole for the wall mounting bracket:

Mounting the camera on a ceiling

1. Knock out the three holes on the base of the dome using a screwdriver and hammer.



2. Insert the white rubber plugs into the knockout holes on the inside of the base.

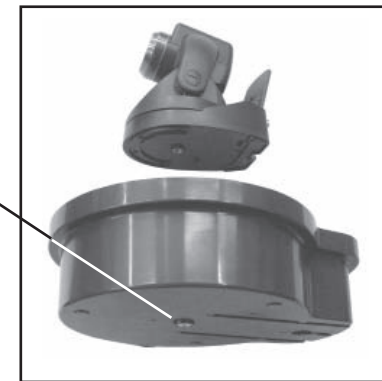


3. Attach the black rubber washers on the outside of the base.

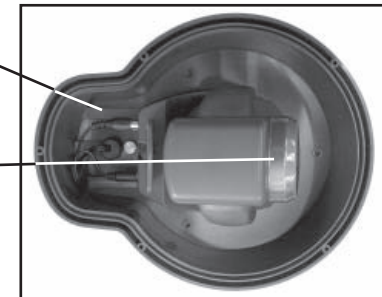


Mounting the Camera, cont.

4. Attach the camera to the base of the dome using the brass screw on the outside of the dome's base.



5. Plug the power and video cables into the camera.



6. Remove the lens cap. (Don't touch the lens).



7. Attach the base of the dome to a ceiling by inserting three screws into the knockout holes on the inside of the base.
8. Point the pip on the camera's antenna in the direction of the TV that you connected the receiver to (if you're using the wireless feature).
9. Attach the clear dome cover to the base of the dome, using the 5 screws provided.

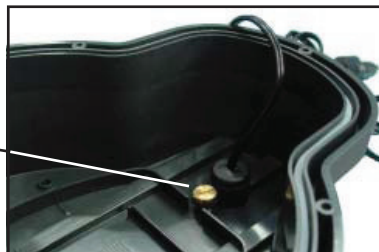
Mounting the Camera, cont.

Mounting the camera on a wall using the bracket provided

1. Knock out the ONE hole shown here on the base of the dome using a screwdriver and hammer.



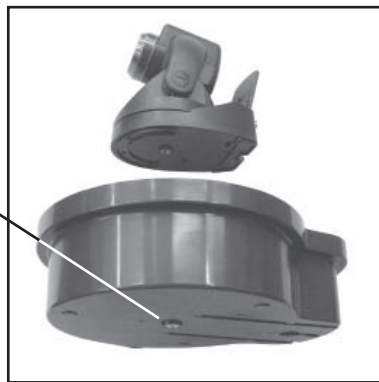
2. Put a black rubber washer on the inside of base of the dome and then insert a brass screw into the hole. Make sure that the end of the screw does not protrude from the wall of the base.



3. Attach a black rubber washer on the outside of the base.

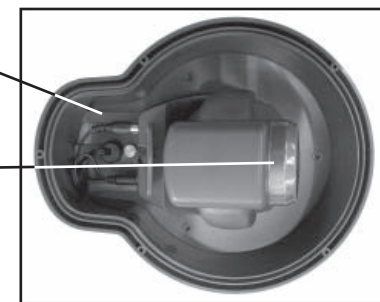


4. Attach the camera to the base of the dome using the brass screw on the outside of the dome's base.



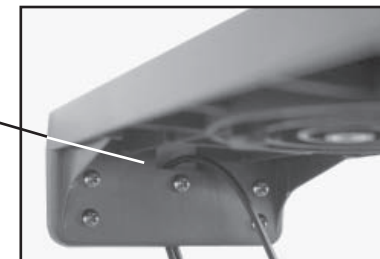
Mounting the Camera, cont.

5. Plug the power and video cables into the camera.



6. Remove the lens cap (Don't touch the lens).

7. Pass the cables through the hole in the mounting bracket and attach the bracket to a wall.



8. Attach the base of the dome to the mounting bracket. Then, tightly fasten the dome assembly to the bracket, by fixing the brass screw inside the dome.



9. Point the pip on the camera's antenna in the direction of the TV that you connected the receiver to (if you're using the wireless feature).



10. Attach the clear dome cover to the base of the dome, using the 5 screws provided.

Additional Setup Options

Picture Orientation

Vertical Orientation: If you choose not to mount the camera upside down. Here's how to flip the picture **vertically** in the camera so that the display on the TV is the right way up:

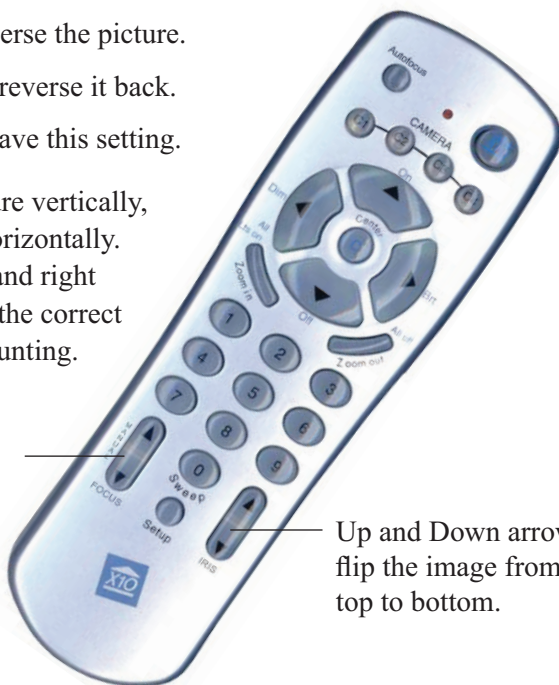
1. Press and release C1.
2. Press and hold Setup on the remote until the C1 button lights green.
3. Press Iris Up to flip the picture. Press Iris Down to flip it back.
4. Press Setup again to save this setting.

Horizontal Orientation: You can also use the camera like a rearview mirror by reversing the picture **horizontally** from left to right:

1. Press and release C1.
2. Press and hold Setup on the remote until the C1 button lights green.
3. Press Focus Up to reverse the picture.
Press Focus Down to reverse it back.
4. Press Setup again to save this setting.

Note, if you flip the picture vertically, you also need to flip it horizontally. This also makes the left and right movement buttons work the correct way for upside down mounting.

Up and Down arrows flip the camera image from left to right (mirror image).



Up and Down arrows flip the image from top to bottom.

MULTI-CAMERA SYSTEMS

The Sentinel Camera System is designed so that you can use up to four cameras together. Follow the steps in this section to set up and use your additional cameras.

Setting Up Multiple Cameras

Each camera comes pre-programmed as camera 1 (C1). The first camera you set up will stay C1. Program the additional cameras as C2, C3, and C4:

1. Pick the camera to use as C2. Follow the instructions at the beginning of the manual to set it up.
2. Set the mode switch on the bottom of that camera to **Program**.
3. Press C2 on your remote control to set this camera to C2.
4. Set the mode switch back to **Transmit Enable**.



Bottom of camera



Repeat these steps for the rest of the cameras, using C3 for the third camera and C4 for the fourth camera.

Controlling Multiple Cameras

Pressing any camera button (C1, C2, C3 or C4) turns on that camera and turns the other cameras off. When you press a camera button, all of the camera controls on the remote—moving the camera, zooming, storing positions, etc.—apply to that camera. To use stored positions, press the button for the camera you want to control then follow the instructions for Stored Positions on page 15.

Note: for multiple camera systems that include different types of X10 Cameras (XCam2 or Ninja cameras) a Transceiver is required.

Turning All Cameras Off

To turn all your cameras off, press the X10 button on your remote control followed by the number 1 button (not C1) on the number pad, and then the Off (tilt down) button. All cameras will now be off.

Removing or Restoring the Onscreen Label

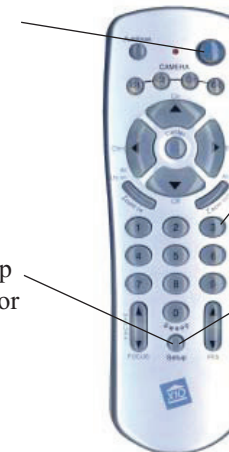
After changing the code for the camera, as described on the previous page, the House and Unit Code is shown at the bottom of the TV screen. If you do not want the House and Unit Code displayed on the screen, set the mode switch to **Program**, then press the camera button (C1, C2, C3, or C4) once to remove it. Press again to restore it. Set the mode switch back to **Transmit Enable** or **Transmit Disable** for normal operation.

To remove or restore the onscreen label (while NOT in **Program** mode) press Setup (until the green light stays on) then press Sweep (0) then Setup.

Changing the House Code for the Remote

The Camera and Remote come set to House Code A by default. To change the House Code on the remote follow steps 1 through 4 below:

1. Press and release the X10 button (red indicator flashes).
2. Press and hold Setup until the red indicator lights steadily. Release the Setup button.
3. Use the number buttons to enter the number equivalent to the chosen Housecode (1=A, 2=B....16=P).
4. Press the Setup button to confirm the Housecode. The red indicator blinks to indicate the code set, (twice for B, three times for C, etc.), then turns off.



Changing the camera's code: Once you change the House Code on the remote control, you have to change the House Code on the Sentinel Camera. Change the mode switch on the bottom of the camera to Program, then press the C1 button on the Sentinel Remote Control. The camera is now set to the new house code. Put the mode switch back to Transmit Enable (or Transmit Disable if you are using the secure video connection).

To learn how to use the remote to control your X10 lights, see page 39.

Changing Unit Codes for Buttons C1, C2, C3, and C4

The Sentinel Remote comes set to control cameras set to units 1 through 4. If you want to set your Sentinel Cameras to different Unit Codes, follow these steps to reprogram the remote:

1. Press C1. The button will flash.
2. Press and hold SETUP until C1 lights steady.
3. Press: C2 to program the remote to Units 5-8; press C3 for Units 9-12; or, press C4 for Units 13-16.

Once you have changed the group Unit Codes on the remote control you have to reprogram the cameras. Follow the Multiple Camera Setup instructions on page 23.

Advanced Setup Options

Recording with a VCR

Whether you have set up your camera to use the wireless receiver or the secure video connection, you can configure your Sentinel Camera so that you can record its video signal on your VCR. It's easy:

1. Make sure your VCR is connected to play back on your TV.
2. Set up your camera according to the instructions on pages 4 thru 11 (for wireless transmission) or pages 13 and 14 (for secure connection).
3. Connect the video cable from the camera or video receiver into the Video In jack on your VCR.

With the camera connected to the VCR, you will be able record surveillance video while watching on your TV. Check your VCR owner's manual if you aren't sure how to select the Sentinel Camera as the video source.



ADVANCED ONSCREEN MENU OPTIONS

The onscreen menus change the low-level, technical operation of the Sentinel camera. In most cases you do not need to change any of these settings.

1. Press C1, C2, C3, or C4 to select the camera you want to control.



3. Press the Right arrow button to bring up the onscreen menu.

2. Press and hold Setup until the camera button light stays on. Press and hold setup again until the camera button stays on again.



The onscreen menu is displayed over the picture from the camera.

1. Use the Up and Down arrow buttons to select items from the main menu.
2. Use the Right arrow button to select a menu item and move into its submenu.
3. Use the Up or Down arrow buttons to select a submenu item.
4. Use the Right arrow button to select a submenu item.
5. Use the Right arrow button to save the new setting.
6. To exit the onscreen menus, press the Left arrow button repeatedly until the menu disappears. Then press Setup to exit the menu mode.

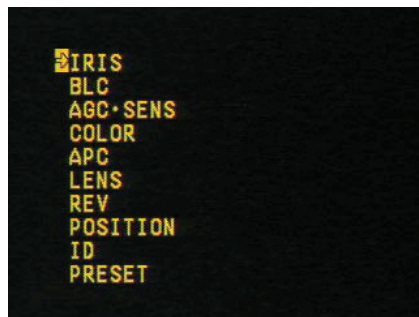
To discard all changes made in the onscreen menus and restore the default settings to the camera, select the PRESET submenu, and change the PRESET option to ON. See page 37 for more details.

If you leave the onscreen menu open for a while without pressing any buttons on the remote, you will stop being able to control the menu. Follow the steps 1 through 3 above to enter the menu mode again. You can then close the menu by pressing the Left arrow button, or continue working with menu options.

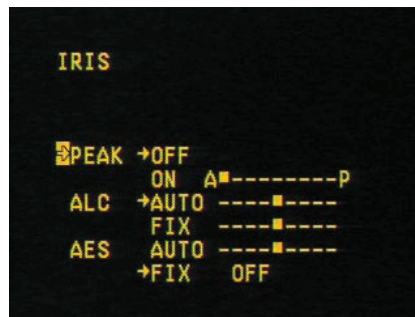
Iris Settings

Iris settings control the amount of light let into the Sentinel camera. Changing these settings affect how bright your picture will be, and how the camera reacts to changes in lighting conditions. Your options are:

- **PEAK:** This setting controls the reaction of the automatic iris adjustment in relation to the average light level in the picture. A higher level of peak sets the camera so that the automatic light controls adjust to a higher average light level.
- **ALC:** Automatic Light Control determines whether the camera should adjust for light differences automatically or manually. If you set this to manual, you can set the level of lighting control that will be used.
- **AES:** (Automatic Exposure Setting) selects whether to use automatic or manual exposure settings, how long the exposure should be. This affects how fast the camera “sees” an image – a long exposure time lets more light in and could give you a clearer picture, but it will mean that motion is harder to see.



Use the Up and Down arrows to select IRIS (use the Left Arrow (Dim) to back out of the menu). With IRIS selected, when you press the Right arrow button the screen above right is displayed.

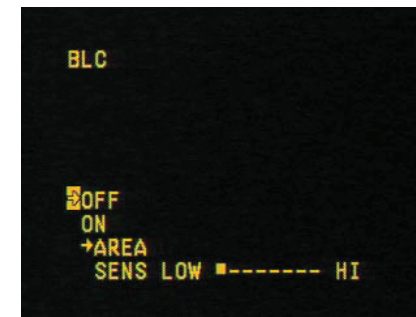
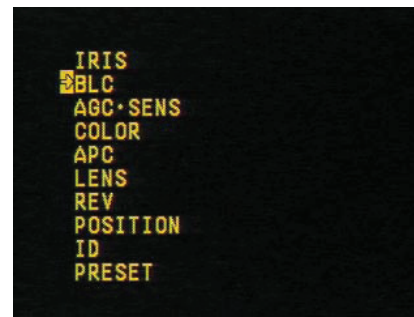


Use the up and Down arrows (On and Off) to select the desired menu item from the screen above right (Peak, ALC, AES). Then select the item with the Right Arrow. Adjust the item with the Up and Down arrows. Select with the Right Arrow, and then back out of the menu with successive presses of the Left arrow.

Backlight Compensation

Backlight compensation settings affect how the camera adjusts for light sources behind the camera’s view or focus. You can use this to adjust for the silhouette effect you might get when looking at things with light behind them.

- **BLC:** Turns Backlight Compensation On or Off. Turning BLC On will brighten the part of the picture that is being silhouetted, but will also brighten the background.
- **AREA:** If BLC is on, the AREA setting allows you to set the sensitivity separately for different parts of the camera’s field of view. The default setting only turns on BLC in the center of the camera’s viewing field.
- **SENS:** Adjusts the sensitivity of the Backlight Compensation. Low means that the camera responds less to backlit conditions, higher settings means that compensation turns on more quickly.

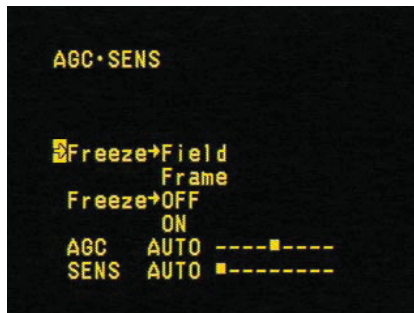
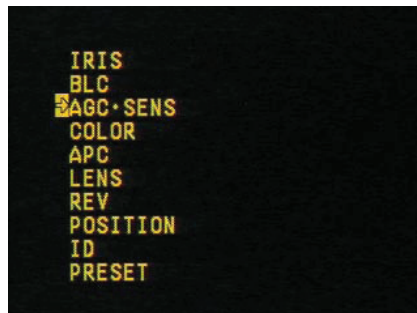


Freeze, Automatic Gain Control & Sensitivity

The settings for Automatic Gain Control (AGC) affect the brightness and picture levels of the video produced by the camera. AGC amplifies existing video to help the camera reproduce a video signal at low light levels.

Sensitivity controls adjust how the camera works in low light conditions.

- **FREEZE:** Freezes the Field or the Frame in a still mode until you select Off, or until you move the camera with the remote control.
- **AGC Levels:** Selects the base level of gain control used when automatic gain control is on.
- **SENS:** Changing the sensitivity changes how the camera compensates for low light. The higher the setting is called “**Starlight**” Mode (square cursor to the right). In this mode the camera lets more light in when in the dark, and a better picture results.

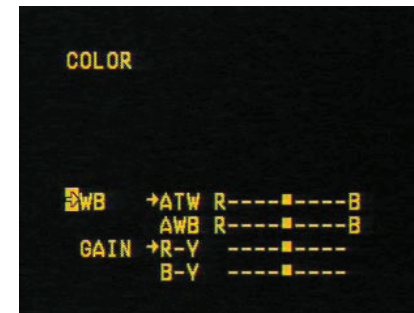
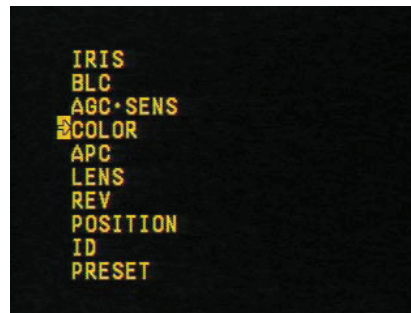


1. After following step A, B, and C on page 27 to bring up the main menu, use the down arrow to select AGC·SENS.
2. Select AGC·SENS with the Right arrow button.
3. Use the Down arrow button to select SENS.
4. Select it with the Right arrow button.
5. Use the Up arrow button to move square cursor to the right (most sensitive to light). Or the Down arrow button to move the cursor to the left. The new setting takes several second to stabilize.
6. Save the new setting with the Right arrow button.
7. Press the Left arrow button to repeatedly to back out of the menus.
8. Then press Setup on the remote to exit the menu mode.

Color Settings

The options in the color settings menu control the appearance of the video picture you get from the camera.

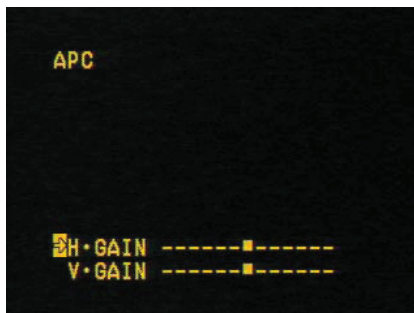
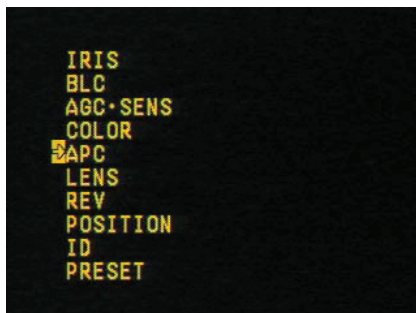
- **ATW:** Adjusts the settings for Auto Trace White Balance (ATW). ATW automatically adjusts the picture to accurately show white in response to varying light conditions. Change the setting towards R (red) or B (blue) to tell the ATW how to adjust for your specific light conditions more accurately.
- **AWB:** Auto White Balance works with ATW to maintain accurate levels of white in the video from the camera. Change the setting towards R (red) or B (blue) to tell the AWB how to adjust for your specific light conditions more accurately.
- **R Gain:** Adjusts the saturation of red in the video produced by the camera. Set this to higher levels to correct for low levels of red in your picture, or vice versa.
- **B Gain:** Adjusts the saturation of blue in the video produced by the camera. Set this to higher levels to correct for low levels of blue in your picture, or vice versa.



Automatic Picture Control

Automatic Picture Control (APC) changes the geometry of the picture produced by the camera. These changes are slight and it can be hard to notice how the picture is different.

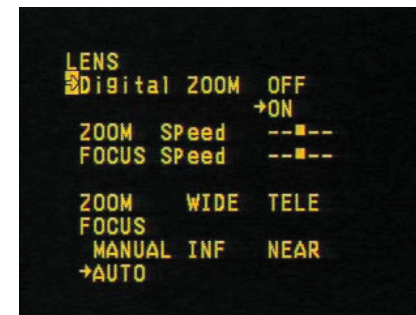
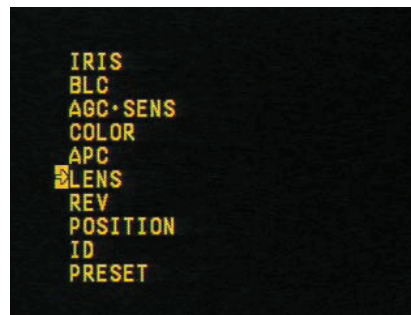
- **H-GAIN:** The Horizontal Gain setting adjusts the horizontal (left to right) line of the picture.
- **V-GAIN:** The Vertical Gain setting adjusts the vertical line of the picture.



Lens Settings

These settings control how the lens in the Sentinel Camera behaves during normal use.

- **Digital ZOOM:** The camera uses digital zoom (10X) after reaching the maximum optical zoom level (22X). Digital zoom produces a slightly less clear picture than optical, and can be turned off.
- **ZOOM Speed:** Controls how quickly the camera zooms in.
- **ZOOM Type:** Choose WIDE or TELE.
- **Focus Speed:** Controls how quickly the camera focuses.
- **Focus:** Choose between Auto (automatic continuous) and Manual focus (the default setting). If using Manual Focus you can select a long focal length (INF, or infinite) to allow the camera to focus on objects any distance away, or a short focal length (NEAR) if you are using the camera only to view objects relatively close. In Manual mode the camera will set focus automatically after a zoom in or out. If you select Auto, you can use the automatic continuous setting until you zoom in or out, at which point the camera sets back to Manual.



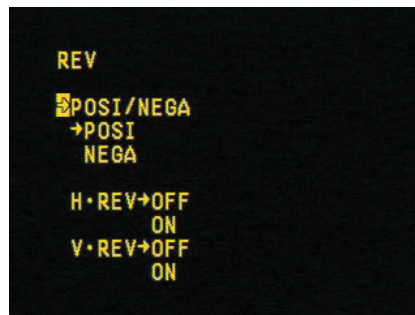
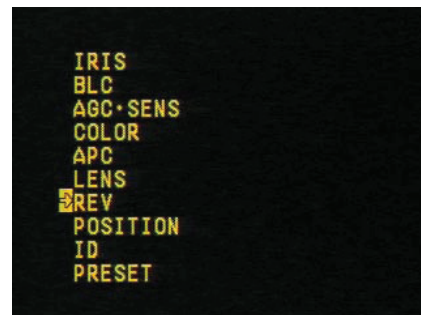
Advanced Onscreen Menu Options

Picture Reversal

You can set the Sentinel Camera to reverse, either horizontally, vertically the picture it produces. Or you can do both.

- **H. REV:** Reverses the picture horizontally, or from left to right. Set this to “ON” if you want to use the camera like a mirror for viewing objects behind you.
- **V. REV:** When set to “ON” this settings mirrors the picture vertically, allowing you to mount the camera upside down, as on a ceiling.

See page 22 for an alternate method of reversing the picture horizontally or vertically.

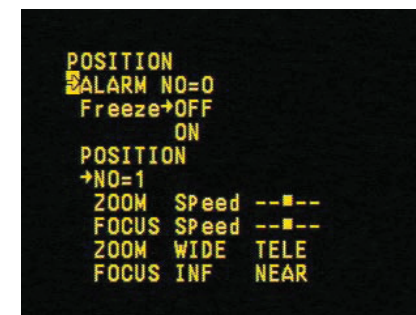
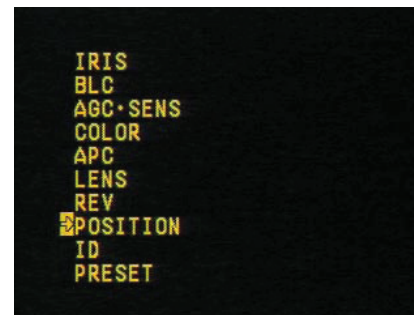


- **POSI/NEGA:** Lets you select a Positive or Negative image.

Advanced Onscreen Menu Options

Alarm Position

The Sentinel Camera does not use this feature.

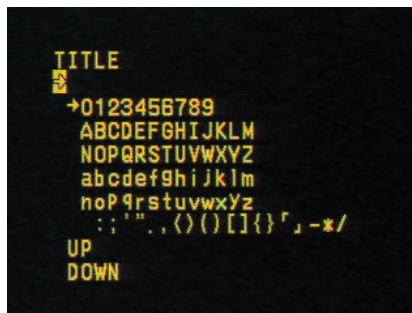
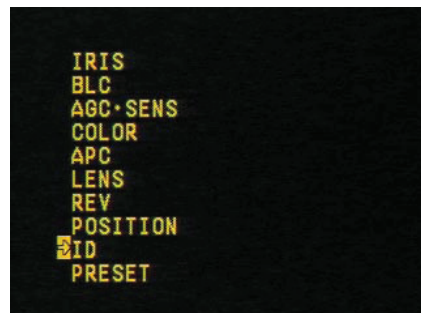


Onscreen Camera Label (ID)

The Sentinel Camera can display a title or label for the camera on screen. This can be useful when you have more than one camera and want to identify them easily.

- Select characters from the available list to set the title you want to use.
- **UP:** Sets the position for display of the title to the top of the screen.
- **DOWN:** Sets the position for display of the title to the bottom of the screen.

If you don't select your own title, the camera will default to displaying the camera's address setting as the title – "CAMERA A1" for example.

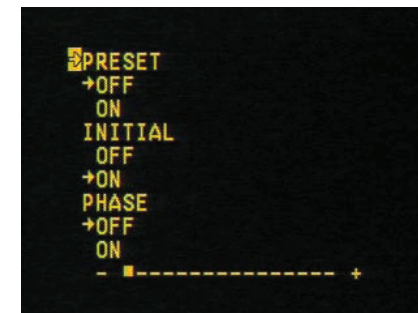
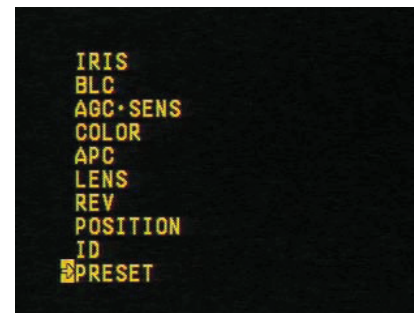


Use the Up and Down arrows to select the desired position on the screen (up/top or down/bottom). Then use the Up and Down arrows to select characters from the screen above, selecting each character with the Right Arrow. Then back out to the main menu with successive presses of the Left arrow.

Restore Presets (defaults)

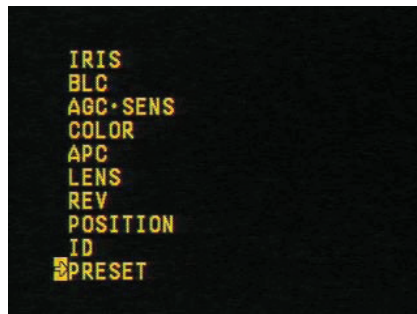
The settings in the PRESET menu work to set the camera back to its default configuration. This will discard any changes you made in any of the other video settings menus.

- **PRESET:** When you select this option and change it to "ON," all the settings in the camera will be changed to their defaults. The camera will reset itself, so the picture will go dark temporarily.
- **INITIAL:** When selected, the camera will initialize autofocus by focusing through the entire range of the lens.
- **PHASE:** This option is not enabled in the camera and cannot be changed.



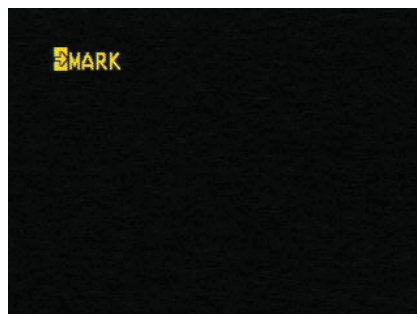
Advanced Onscreen Menu Options

- **MARK:** Selecting Mark ON puts a cross-hairs mark on the screen.



Follow the step on page 27 to bring up the onscreen menu. Then use the Down arrow to select past the last item (PRESET), or the Up arrow to select past the first item (IRIS).

This will display the MARK menu.



Select MARK with the Right Arrow. Then select OFF or ON with the Up and Down arrows. Select with the Right Arrow, and then back out to the main menu with successive presses of the Left arrow.

TROUBLESHOOTING

If there's no camera picture on your TV (wireless connection):

1. Make sure your Wireless Video Receiver is connected to power and turned On.



2. Select the appropriate video input on your TV. Usually you can select the input mode by pressing the VIDEO or INPUT button on the remote control. Or you might have to change the TV to Channel 0 or 2, and then use Channel Down to change video inputs. See your TV's owner's manual if you still aren't sure how to change the video source.
3. Make sure your camera is connected to power and turned on. Press C1 on the remote to turn it on.
4. Check that the mode switch on the bottom of the camera is set to Transmit Enable.

Bottom of camera



5. Follow the setup instructions again (pages 4 through 11), and check that you have done each step correctly.

If there's no camera picture on your TV (secure connection):

1. Select the appropriate video input on your TV. Usually you can select the input mode by pressing the VIDEO or INPUT button on the remote control. Or you might have to change the TV to Channel 0 or 2, and then use Channel Down to change video inputs. See your TV's owner's manual if you still aren't sure how to change the video source.
2. Make sure your camera is connected to power and turned on. Press C1 on the remote to turn it on.
3. Follow the setup instructions again (page 13 and 14), and check all of the connections you make.

If the picture on your TV isn't clear (wireless connection):

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 baby monitor, computer, wireless speakers, cordless phone, etc. Other 900 MHz devices can distort the Camera's picture. If you are experiencing interference between X10 Cameras and some other equipment that uses 900 MHz, check the other device's owner's manual for the frequencies of each channel that it uses. X10 cameras use 921MHz. We recommend using a frequency on the other device that is farthest from 921MHz. Otherwise you will need to discontinue use of the device while using the Cameras.

If the Sentinel Remote isn't working:

1. Press the C1 button. This makes sure that your camera is selected for control. Try moving the camera or zooming to see if the problem is fixed.
2. Check the batteries. If the C1 button doesn't light up when you press it, you may have put the batteries in incorrectly, or the batteries you used may be dead. Take the batteries out and make sure you put them in according to the diagram inside the remote. If it still doesn't work, try new batteries.

If Autofocus doesn't work correctly:

The Sentinel Camera's auto focus can't work correctly if the protective lens cap is on. Remove the protective lens cap and make sure the lens is clean. Try zooming out all the way. The camera should automatically refocus correctly.

If the camera label (like "Camera A1") is displayed on your TV:

You can turn off the onscreen label easily. Press and hold Setup on the Sentinel remote control until the green light stays on. Then, press Sweep (0), and Setup again. This will turn off the label. Repeat these same steps to turn the label on again.

For more help with setup please visit: <http://www.x10.com/support>

HOME CONTROL

The X10 button on the Sentinel Camera's remote control is your gateway to a world of useful control and automation solutions built by X10. Why enter a dark room when there is a simple and affordable solution that can keep you safe and secure? From a simple remote control that can turn on a lamp, to a full-blown automation system, X10 provides you with all the products you need.



With the correct components in your X10 system, you can have all of these powerful options at your control:

- Enhance the color, brightness and detail of your camera's subject by adding more light automatically
- Give your home a secure appearance by scheduling when lights and other electronics turn on and off
- Distribute audio and video to stereos and televisions using wireless technology
- Turn on house lights while sitting in your car
- Schedule sprinkler systems
- Control your lights and electronic devices using your personal computer

X10's control and automation products are easy to install and extremely affordable. Visit X10.com today for more information and the latest products to build and enhance your X10 system.

Home Control

Controlling X10 Modules

Here's how to control X10 modules with your Sentinel Remote Control. The remote is set to House Code A by default.

1. Press and release the X10 button.
2. Use the number buttons to enter the Unit Code number of the chosen module. (You can press 1, then 6 for Unit Code 16).



3. Press the appropriate button (labeled in blue) for the function you require (On, Off, Bright, Dim, All Lights On, All Units Off).

Note: when using buttons C1, C2, C3, and C4 to control cameras, they will also turn on X10 modules set to A1, A2, A3, and A4. To turn these modules off, use the procedure described above.

FCC & IC CANUION

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 UNDESIREED 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 specific cations 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.

This Class B digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

This device complies with Industry Canada licence-exempt RSS standard(s).

Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

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

X10 Wireless Technology, Inc. Limited

One Year Warranty

X10.com, a division of X10 Wireless Technology, Inc. (X10) warrants X10 products to be free from defective material and workmanship for a period of one (1) year from the original date of purchase at retail. X10 agrees to repair or replace, at its sole discretion, a defective X10 product if returned to X10 within the warranty period and with proof of purchase. If service is required under this warranty: Call 1-800-442-5065, visit www.x10.com, or e-mail support@x10.com.

For help or more information on setup, please visit:
<http://www.x10.com/support>

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