



## INSTALLATION MANUAL

### **ST-CVTMD420-WPIR-W** **Covert Motion Detection Color Camera**



## PACKAGE CONTENTS

This package contains:

- One ST-CVTMD420-WPIR-W covert motion detection camera
- One installation manual

Note: The ST-CVTMD420-WPIR-W requires a minimum 12VDC 150mA power supply such as the ST-PS12VDC1A or ST-PS12VDC2A.

## PRODUCT DESCRIPTION

The ST-CVTMD420-WPIR-W is a covert indoor motion detection camera designed around a Color SONY CCD with 420TVL of resolution. The camera's design, size and packaging allow it to be easily and discretely installed. The rich color, high definition, stability and resistance to jamming make them attractive for CCTV security applications.

## SPECIFICATIONS

### ST-CVTMD420-WPIR-W Specifications (Typical)

1. Image Sensor	SONY Color CCD
2. Pixels (HxV)	510x492
3. Scanning System	NTSC
4. Horizontal Resolution	420 TV Lines
5. Vertical Frequency	59.94 Hz
6. Synchronization	Internal
7. Minimum Illumination	0.5 Lux @F1.2
8. Scanning System	2 :1 interlace
9. Auto Electronic Shutter	Up to 1/100,000 Sec
10. White Balance	Automatic White Balance
11. Auto Gain Control	Built in
12. Back Light Compensation	Built in
13. Lens	3.7mm Pinhole Lens
14. PIR Sensor	~23 feet/110° Anti-RFI
15. S/N Ratio	>48dB
16. Gamma Correction	0.45
17. Video Output	1.0Vp-p/75Ω
18. Alarm Output	NO/Ground
19. Operating Temperature	14°F - 113°F, 95% RH
20. Power Supply	DC12V 150mA
21. Power Input Connector	5.5mm Female Barrel
22. Video Output Connector	Female BNC
23. Weight	4.5 oz
24. Dimensions	~3.5"(L) x 2.4" (W) x 1.9" (D)

## INSTALLATION AND OPERATION



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions.



This symbol is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electrical shock.

**CAUTION: To reduce the risk of electrical shock do not remove the cover or back of this unit. No user serviceable parts are inside.**

**CAUTION: To prevent electric shocks and risk of fire hazards, do not use other than specified power source.**

### 1. UNPACKING and HANDLING

Each unit is shipped assembled and factory tested.

Ensure that all accessories are removed from the container before discarding packing material

### 2. MECHANICAL INSPECTION

Inspect the front and rear of the equipment for shipping damage. Make sure the equipment is clean, and no connectors are broken, damaged, or loose. If equipment appears to be damaged or defective please contact your distributor or Securitytronix at 1-610-429-1511 for assistance.

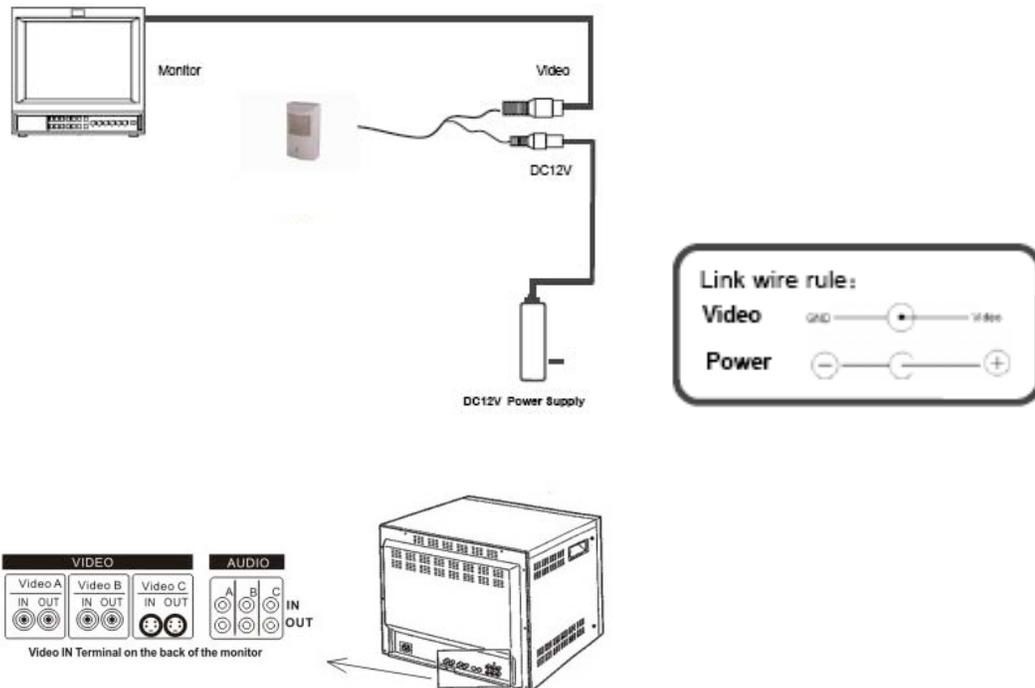
### 3. SPECIAL ATTENTION

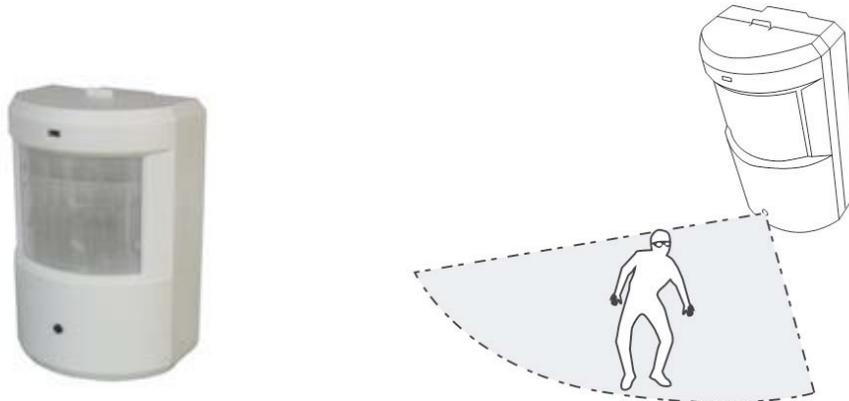
- a. The installer must comply with electrical safety standards. There must be sufficient space between the camera’s power supply and video line and any high voltage equipment and/or cables.
- b. To help ensure the camera’s life and proper operation do not point the camera towards the sun or strong light.
- c. Do not install the camera in an indoor environment where the temperature is above 113° F. Do not install the camera outdoors.
- d. Do not install the camera near a magnetic field or a high-power motor.
- e. Do not mount the camera near a radiator or heater.
- f. Only use a dry cloth to clean the camera. If there is dirt that is difficult to remove wipe gently with a mild detergent. Never use strong or abrasive detergents.
- g. A minimum 12VDC 150mA power supply must be used. AC power cannot be applied. Using an AC or other incorrect power supply will damage the camera.
- h. Only qualified installers are allowed to install, test and disassemble the camera.
- i. The camera is a low voltage product. If installed outdoors proper safety and lightning grounding are required.

#### 4. MOUNTING and WIRING CONNECTIONS

Run coaxial cable for video, 18 gauge wires for power and UTP (unshielded twisted pair) wire for alarm output to the installation location prior to installing the camera. The coax cable must be terminated with a male BNC connector. The power wires are to be terminated with a male 5.5mm power pigtail. The alarm terminal block will accept bare wire.

- a. This camera must be mounted on a wall or other vertical surface. Proper image cannot be attained with ceiling mounting.
- b. Hold the camera on the wall while monitoring the image with a portable monitor or meter.
- c. Observe the image while rotating the camera. When the desired view is achieved, mark the mounting holes on the wall.
- d. Connect the power supply's 5.5mm male power pigtail to the camera's female power connector.
- e. Connect the camera's female BNC video output connector to the video coaxial cable's male BNC connector.
- f. Feed all wires up into the wall.
- g. NOTE: The camera can pivot approximately 45° in any direction once the camera is mounted. Ensure proper positioning prior to securing the camera.
- h. Connect power supply's AC plug to a suitable AC power outlet.
- i. The alarm output is a Normally Open (N.O.) switch. When the PIR motion detector senses movement the N.O. switch closes momentarily. When connecting the camera's alarm output to a DVR's alarm input, be sure to use a N.O. input or set the input to N.O. in the DVR's menu. The alarm output can also be used in any security system as a standard motion sensor.





## 5. TROUBLESHOOTING

- a. No picture after applying power – (i) check all plugs and cables are securely connected to the proper connectors; (ii) ensure your power supply is providing the correct voltage and current.
- b. The picture has ripples – (i) check to see if the power supply is experiencing AC ripple, if so a filter may be required; (ii) determine if the monitor is faulty; (iii) determine if other peripheral equipment is causing ripple and if so make the necessary adjustments.
- c. The picture background continuously changes color – a fluorescent lamp’s magnetic field may cause color roll, therefore, reduce the number of fluorescent lamps or increase the distance between the camera and the lamps.
- d. The picture appears smeared – (i) the power supply voltage level may be unstable, therefore, try another power supply; (ii) ensure the cables are correctly connected and/or the cables are of the correct impedance.
- e. Other interference may require a Securitytronix ground loop isolation filter.
- f. Additional troubleshooting assistance can be found on-line at [www.securitytronix.com](http://www.securitytronix.com) in addition to support from Securitytronix sales engineers at 1-610-429-1511.

**Disclaimer: Consult all regulatory laws regarding hidden & covert video and audio recording. It is solely the buyer’s responsibility, not the seller, to ascertain and obey all applicable local, state, and federal laws regarding the possession and use of any item offered by Securitytronix. By placing an order, the buyer represents that all products purchased will be used in a lawful manner and that he/she is of legal age.**