



# Security Camera

Indoor/Outdoor CCD Security Camera w/ Night Vision



## INSTRUCTION MANUAL v1.0

**IMPORTANT! PLEASE READ!**



**NEED  
HELP?**

**DO NOT RETURN THIS  
PRODUCT TO THE STORE**

Please contact a **DEFENDER®** customer support representative first regarding any additional information on product features, specifications or help with set-up.

Please contact us via one of the methods below:



Email:

**support@defender-usa.com**

Online live web chat:

**Visit [www.defender-usa.com](http://www.defender-usa.com)**



Telephone:

**1.866.946.7828**



Fax:

**1.888.771.1701**

For more product information visit **[www.defender-usa.com](http://www.defender-usa.com)**

Note: You may find updated versions of this manual by visiting our website

## PRODUCT WARRANTY INFORMATION

**Please visit our website at [www.defender-usa.com](http://www.defender-usa.com) for information about your product's warranty.**

We take quality very seriously. That is why all of our products come with a one year warranty from the original purchase date against defects in workmanship and materials. If you have warranty or support issues please contact us using any of the following methods:

Phone: 1.866.946.7828

Fax: 1.888.771.1701

Email: [support@defender-usa.com](mailto:support@defender-usa.com)

Website: [www.defender-usa.com](http://www.defender-usa.com)

DEFENDER USA

60 Industrial Parkway #Z64

Cheektowaga, NY

USA 14227

DEFENDER CANADA

4080 Montrose Road

Niagara Falls, ON

Canada L2H 1J9

### Warranty Terms

1. Defender products are guaranteed for a period of one year from the date of purchase against defects in workmanship and materials. This warranty is limited to the repair, replacement or refund of the purchase price at Defender's option.
2. This warranty becomes void if the product shows evidence of having been misused, mishandled or tampered with contrary to the applicable instruction manual.
3. Routine cleaning, normal cosmetic and mechanical wear and tear are not covered under the terms of this warranty.
4. The warranty expressly provided for herein is the sole warranty provided in connection with the product itself and no other warranty, expressed or implied is provided. Defender assumes no responsibilities for any other claims not specifically mentioned in this warranty.
5. This warranty does not cover shipping costs, insurance, or any other incidental charges.
6. You **MUST** call Defender before sending any product back for repair. You will be sent a Return Authorization number with return instructions. When returning the product for warranty service, please pack it carefully in the original box with all supplied accessories, and enclose your original receipt or copy, and a brief explanation of the problem (include RA #).
7. This warranty is valid only in Canada and the continental U.S.
8. This warranty cannot be re-issued.



### CAUTION

RISK OF ELECTRIC SHOCK



TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE THE COVER (BACK).  
NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

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## WHAT IS INCLUDED



1 Indoor/Outdoor  
Night Vision CCD Color  
Camera



2 Window  
Security Stickers



4 PIN DIN to RCA (male)  
Video/Power Wire

- BNC to RCA Connector
- 1 Power Adapter for Camera
- Mounting Hardware
- Instruction Manual
- 1 Year Warranty
- Lifetime Live Customer Support

## FEATURES



### SP301-C Camera

- 1. Sun Shield:** Helps prevent glare from bright lights
- 2. Infrared (IR):** LEDs Allows the camera to see in the dark up to 15ft away.
- 3. CDS Sensor:** Automatically turns on the infrared LEDs when it gets dark
- 4. Camera Housing**
- 5. Camera Mount**
- 6. 4 PIN DIN Female Connection**

### IMPORTANT INFORMATION

While this camera is weatherproof, it is not waterproof. Please do not install it in areas that receive direct rain or under eaves trough draining spots. Do not cut the DC power cable of this camera to fit with another power source. Do not cut the video connection wire to fit with a different video connection type. Any unauthorized modifications will void your warranty.

# INSTALLATION

- The camera should be installed between 8 and 13ft above the area to be monitored
- Ensure there are no obstructions in the camera's view, to maximize viewing area
- Ensure that the sunshade is positioned to avoid glare and position camera away from direct sunlight
- Decide whether the camera will be wall-mounted or sit on a desk/table top. If wall mounting, use the mounting hardware in the package. We recommend that the mounting bracket is secured using the included screws for all installations
- This camera comes with 60ft of video/power wire. Please make sure that you mount the cameras no more than 60ft from the TV/monitor/VCR/DVR
- We recommend using a surge protected power bar to protect the cameras internal circuitry

## MOUNTING THE CAMERA

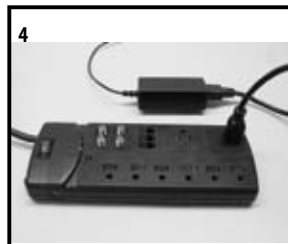
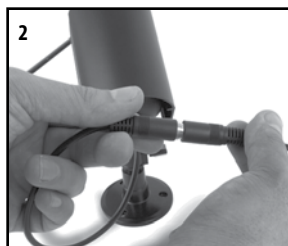
1. Screw the mounting bracket into the camera's mounting hole, turning it clockwise.
2. Mount the camera in the desired location no more than 60 feet from the TV/Monitor/VCR DVR unless you have purchased additional wiring. You may wall mount or desk mount these cameras.
3. Adjust cameras to the desired viewing angles.



## CONNECTING THE CAMERA

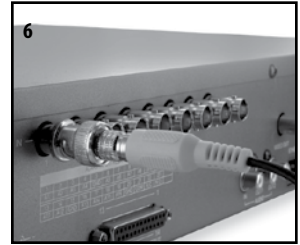
Follow these instructions for the installation of each camera. The 60ft video/power wire has two connections: one for video out, and one for power.

1. Plug the 4 PIN DIN female connection on the camera into the 4 PIN DIN male connection on the 60ft video/power wire.
2. Match the two arrows on top of both connecting cables.
3. Plug the camera's power supply into the power jack located on the 60ft video/power wire.
4. Plug the camera's power adapter into an AC outlet or surge protected power bar.



# INSTALLATION

5. Connect the 60ft video/power wire's male RCA plug to the VIDEO IN port of your TV/monitor/VCR/DVR.
6. If your VIDEO IN port is a BNC connection (common with DVR units), you will need to attach the BNC to RCA adapter before connecting the camera.



## TROUBLESHOOTING

<p><b>No picture/signal:</b></p>	<ul style="list-style-type: none"> <li>• Make sure your TV/monitor is on the correct video input channel. This is NOT channel 3 Common terms for this channel is INPUT, AV CHANNEL, LINE 1, LINE 2 and AUX. Please use your TV or VCR manual to correctly identify this channel</li> <li>• If your camera is connected to a VCR/DVR, make sure that it is properly connected to your TV/monitor</li> <li>• Check all connections to make sure they are secure and properly connected</li> <li>• Check your power supply to ensure that the camera is powered up</li> </ul>
<p><b>Picture is too bright:</b></p>	<ul style="list-style-type: none"> <li>• Make sure your camera is not aimed at direct sunlight</li> <li>• Adjust the sunshade by sliding it forwards to block out excess light</li> <li>• Make sure nothing is obstructing the CDS sensor on the camera. If the CDS sensor is blocked, night vision mode will be active and may produce extra light in your camera's picture</li> <li>• Move your camera to another location</li> </ul>
<p><b>Picture is too dark:</b></p>	<ul style="list-style-type: none"> <li>• If using at night, make sure your camera's subject is no more than 15ft away (may vary based on amount of ambient light available)</li> <li>• If using during the day, your camera may not be getting enough light. Adjust the sunshade by sliding it backwards to let in more light</li> <li>• Check the brightness and contrast settings on your TV/monitor</li> <li>• If your camera is connected to a VCR/DVR, check the brightness and contrast settings on the VCR/DVR</li> <li>• Move your camera to another location</li> </ul>
<p><b>Night Vision is not working:</b></p>	<ul style="list-style-type: none"> <li>• The night vision turns on automatically when light levels drop. Try the camera in a pitch black setting. The area that it is in may have too much light and may not activate the sensor</li> <li>• Cup your hands around the front of the camera and look at the LEDs. They should be glowing red. If they are not, check the power supply</li> <li>• LEDs need to reflect off of an object within range for the camera to display an image</li> </ul>

# SPECIFICATIONS

<b>Camera Type</b>	Weatherproof Color IR CCD Camera
<b>Image Sensor</b>	1/4" Color SHARP CCD
<b>Resolution</b>	420 TV Lines
<b>Outdoor Use</b>	Yes
<b>IP Rating</b>	IP65
<b>Focal Length</b>	3.6mm
<b>Focus Type</b>	Fixed
<b>Optimal Focal Distance</b>	20 ft
<b>Motion detection</b>	No
<b>Night Vision</b>	Yes
<b>Number of IR LEDs and Range</b>	12, up to 15ft
<b>IR LED Control</b>	Automatic (CDS Sensor)
<b>Min. Illumination</b>	0 lux
<b>IR Wavelength</b>	850nm
<b>Video Output</b>	4 PIN DIN to RCA
<b>TV System</b>	NTSC
<b>Viewing Angle</b>	60 Degrees
<b>Electronic Shutter</b>	1/60 ~ 1/100000 sec
<b>BLC</b>	No
<b>AGC</b>	Automatic
<b>ELC</b>	Automatic
<b>Line Lock</b>	No
<b>Iris Control</b>	No
<b>Gamma Correction</b>	>0.45
<b>White Balance</b>	Automatic
<b>Sun Shield</b>	Yes
<b>IR Cut Filter</b>	No
<b>Housing Material</b>	Anodized Aluminum

<b>Housing Color</b>	Black
<b>Signal/Noise Ratio</b>	>48dB
<b>Camera Bracket</b>	Yes
<b>Lens Mount type</b>	M12
<b>Pan/Tilt/Zoom</b>	No
<b>Operating Temperature</b>	-10° ~ 60°C / Degrees
<b>Operating Humidity</b>	98%
<b>Camera Power Input</b>	DC 12V 300mA
<b>Power Adapter Input</b>	120V 60Hz
<b>LED Power Indicator</b>	No
<b>Dimensions</b>	4.7"(L) x 2.5"(W) X 2.5"(H)
<b>Weight</b>	0.7 lbs

# NOTES

## Customer Information Card

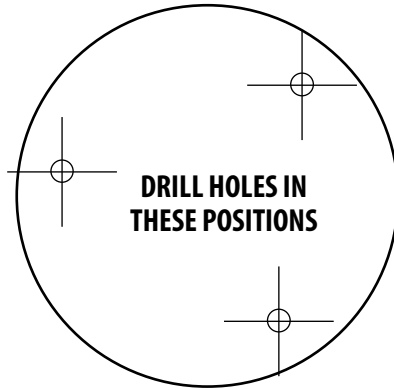
Contact Name:	
Company:	
Address:	
Postal Code:	
Phone Number:	
Email:	
Model Number of Product:	
Serial Number of Product:	
Purchase Date:	
Place of Purchase:	

**NOTE: We recommend that you keep a record of your purchase receipt with your manual for any future returns or support issues.**



# DRILLING TEMPLATE

To wall mount the camera, drill three holes using a 3/16" drill bit and the template below. Insert the supplied wall anchors into holes and secure camera to wall with supplied screws.



# VISIT US ON THE WEB!

- ▶ Product Information
- ▶ User Manuals
- ▶ Quick Start Guides
- ▶ Specification Sheets
- ▶ Software Updates
- ▶ Firmware Upgrades

**[www.defender-usa.com](http://www.defender-usa.com)**

## **Disclaimer**

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