

## Troubleshooting

- No Image on Screen** - Ensure power is correctly connected and turned on. Check that the **Video Cable** is correctly connected and that **BNC** connectors have been turned to lock position.
- Blurry Image** - Ensure lens is correctly fitted and if necessary re-adjust focus until image is clear. Make sure lens is clean. Clean with a soft cloth if necessary.
- Spotty or Hazy Image** - This usually happens when the available light is very low and the **AGC** is set to high. Adjust Aperture ring and set the **AGC** to **ON (Auto)** and if necessary provide additional lighting to area(C500R only).
- Image is too bright** - Adjust **Aperture Ring** to close aperture and let less light in to sensor. Switch **BLC** to **Off** position for strong light behind subject area(C500R only).
- Background appears to have Blue tinge** - This can be caused by some types of lighting. Try different lighting methods to obtain the best image.
- Auto Iris Lens doesn't operate** - Check that your **Auto Iris** lens is wired in the correct sequence to suit the plug on the C500R. There is a pin description of the plug on the previous page. Make sure the Lens switch is set to the appropriate lens type. Consult the manufacturer of your lens for information on which type of control is required(C500R only).
- Image is upside-down** - This can happen if you have mounted the camera the wrong way up. Connect the stand to the mounting point on the opposite side of the camera.
- Screen Image is opposite to view (left is right and right is left)** - Switch the **Nor - Mir** switch to the other side to flip the image horizontally(C500R only).

## Help Desk / Support Details

### Swann Technical Support

All Countries E-mail: [tech@swann.com.au](mailto:tech@swann.com.au)

### Telephone Helpdesk

UNITED STATES toll free - 877-274-3695 (Sun-Thurs, 2pm-10.30pm PST)

USA Exchange & Repairs - 562-777-255 (Mon-Fri, 9am-5pm PST)

AUSTRALIA toll free - 1300 13 8324 (Mon-Fri, 9am-5.30pm Aus EST)

International - +61 3 8412 4610 (Mon-Fri, 9am-5.30pm Aus EST)

See <http://www.worldtimeserver.com> for information on different time zones and the time in Melbourne Australia compare to your local time.

## Warranty Information

Swann Communications warrants this product against defects in workmanship and material for a period of one (1) year from its original purchase date. You must present your receipt as proof of date of purchase for warranty validation. Any unit which proves defective during the stated period will be repaired without charge for parts or labour or replaced at the sole discretion of Swann. The repair or replacement will be warranted for either ninety days or the remainder of the original one year warranty period, whichever is longer. The end user is responsible for all freight charges incurred when shipping from and to any country other than the country of origin. The warranty does not cover any incidental, accidental or consequential damages arising from the use of or the inability to use this product. Any costs associated with the fitting or removal of this product by a tradesman or other person or any other costs associated with its use are the responsibility of the end user. This warranty applies to the original purchaser of the product only and is not transferrable to any third party. Unauthorised end user or third party modifications to any component or evidence of misuse or abuse of the device will render all warranties void.



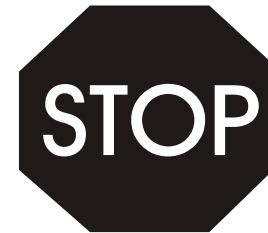
[www.swann.com.au](http://www.swann.com.au)



English

# CCTV Security Camera 4 Pack

The complete all purpose surveillance solution.  
Total safety for the home, office or retail space



Swann Helpdesk  
Has the answers



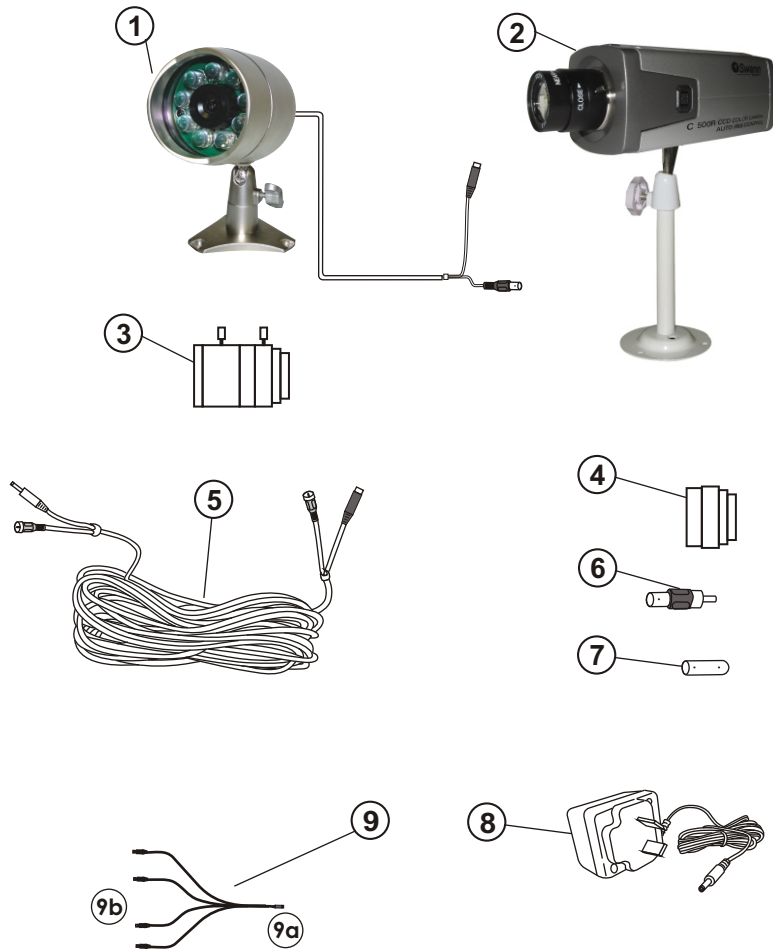
**If this device does not work when you first plug it in,  
do not take it back to the store.**

- ✓ Contact the Swann Helpdesk using our fast e-mail service [tech@swann.com.au](mailto:tech@swann.com.au) or call us on one of the Toll-Free numbers shown on the back cover of this booklet.
- ✓ Most problems can be quickly and easily fixed with a simple e-mail or a quick chat with one of our friendly technical staff. (Toll-Free available in the US and Australia only)

## Installation Guide

## Contents and Parts Identification

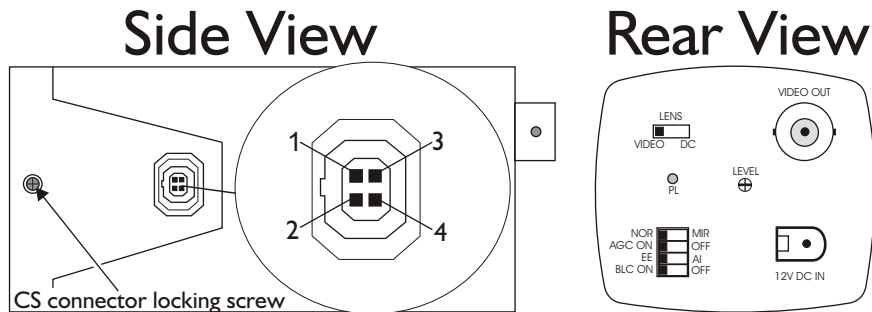
1. 2 x Bulldog Outdoor Cameras with Stands and fixed cables.
2. 2 x C500R Indoor Cameras with Stands.
3. 3.5mm~8mm Manual Vari-Focal Lens (For C500R)
4. 4mm fixed lens (For C500R)
5. 5 x 18m Power and Video Extension cables.
6. BNC (female) to RCA (male) adaptor.
7. BNC (female) to BNC (female) cable joiner/adaptor
8. DC Power Adaptor to suit cameras (adaptor design varies depending on country).
9. 1-4 way power adaptor splitter cable  
connect (9a) to the power adaptor and (9b)x4 to power the cameras



## Things to consider when operating the Swann Cameras

1. The C500R can help you monitor your child while playing or sleeping, but it is not a substitute for correct parental supervision. This product should not be used to prevent or monitor any medical conditions. Monitoring of premature babies, or babies considered to be at risk, should be carried out only under the supervision of a doctor or health professional.
2. To extend the operating distance of the camera from your TV or VCR you will need to purchase a suitable A/V extension Cable and gender changers where necessary. It is better to use one cable of the correct length than 3 or 4 shorter cables with adapters. Use of more adaptors can degrade the picture quality and reduce the effective cable length. Many electronic and hardware stores can make suitable cables and terminate them for you. Consult with your local dealer for more information.
3. The camera **must not** be placed where it looks directly into the sun or any other bright light source, as this will not only result in a poor image, but will eventually damage the electronics of the camera.
4. Areas with a high degree of contrast in the light levels may require re-positioning of the camera in order to obtain the best image.
5. When using the Bulldog camera in an environment where the waterproof casing is not important (eg. Indoors) unscrew the front cover, then the glass retaining collar inside. When this is done, you can remove the glass for increased IR range and low light clarity. Once the glass is removed, screw the front cover back on to the Bulldog camera to protect the lens and LEDs. Store the removed components for later use if required.
6. The best viewing angle is achieved by placing the camera in a position where it is looking down on the subject and the light source is behind the camera lens. If the C500R is to be used in a low light situation, we recommend that you use a movement activated floodlight or similar to provide additional light to ensure the best quality image is obtained. The C500R camera is not capable of showing Infra-red images and will not benefit from Infra-red LED lighting.
7. **IMPORTANT:** For night-time use or when situated in a dimly-lit environment the Bulldog camera will show a black & white image of objects within the range of the Infra-Red LEDs.

## C500R Control and Socket Description



### Description of connectors and controls on side of C500R

#### Pin arrangement for Auto Iris lens socket

Pin 1 - Video AI (+12V)	DC AI (DAMP -)
Pin 2 - Video AI (Not Connected)	DC AI (DAMP +)
Pin 3 - Video AI (VIDEO)	DC AI (DRIVE +)
Pin 4 - Video AI (GROUND)	DC AI (DRIVE -)

**CS connector locking screw** - Tighten this screw to lock the CS connector. Loosen to adjust the CS connector to assist with focussing the lens if you cannot get a clear image using the focus ring.

### Description of controls and connectors on the back panel of the C500R camera

#### Lens:

**Video** - Switch to this if using a Video Drive auto iris lens (ignore if using Manual Iris lens)

**DC** - Switch to this if using a DC (Direct) drive auto iris lens (ignore if using Manual Iris lens)

#### PL:

**Power LED** - Lights up when power to camera is on

#### Dip Switches:

**Nor** - Normal picture on screen

**MIR** - Mirror image shown on screen (swaps left to right and right to left)

**AGC** - Auto Gain Control On/Off (On = Low gain control, Off = High gain control)

**EE** - Electronic Exposure control (In EE mode, a continuously variable electronic shutter is employed to automatically control the exposure time of the CCD image sensor according to the incoming light level. With this mode selected, a fixed or manual iris lens can be used instead of an auto iris lens)

**AI** - In AI mode, the CCD shutter speed is fixed to 1/60(1/50) second. And the incoming light level is controlled by the auto iris lens.

**BLC** - Back Light Compensation On/Off (On=Auto BLC, Off=Strong BLC (very bright background))

#### Level:

**Phase Adjustment** - When using a DC drive Auto Iris lens adjust this control for best image quality

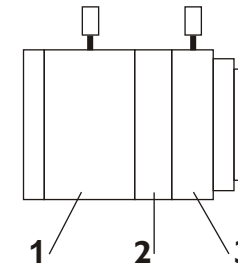
#### Video Out:

**BNC Female connector** - Connects to BNC Male connector as fitted to supplied extension cable

#### 12V DC IN:

**5 Power connector** - Connect using supplied 12Volt Regulated Power Adaptor or extension cable

## Fitting and setting the C500R lens



### Fitting the lens:

Make sure the Lens Collar Locking Screw is tight, then carefully screw the lens into the lens collar on the front of the camera body making sure you do not cross the thread.

### Adjust the lens to suit your application:

Loosen the adjuster screw on the **Focal Length Ring** (also called **Zoom**) (1) and turn the ring clockwise to show a **distant (Wide)** view of the subject with a wider view angle and anti-clockwise to show a **close up (Telephoto)** view of the subject with a narrow view angle. Gently tighten the locking screw when finished.

Turn the **Aperture Adjustment Ring** (2) clockwise to decrease the amount of light available to the sensor and anti-clockwise to increase the amount of light until you achieve the desired image quality. Loosen the adjuster screw on the **Focus Adjustment Ring** (3) and turn it clockwise or anti-clockwise to focus the camera. Once this is done gently tighten the locking screw.

## Mounting the camera on your wall or ceiling

- Once you have chosen the best position for the camera, switch the power to the camera off, and unplug the power lead from the camera.
- When mounting the camera to your ceiling or wall, please ensure that you rotate the camera so that at the top of the camera lens is 'up', otherwise you will find that your pictures are displayed upside down. (see images on right)
- Hold the camera base in the position you wish to fix it, and mark the holes with an appropriate pen or pencil. Once this is done, remove the stand and drill a hole with the appropriate drill bit for the material you are mounting your camera to and the screws you are using.
- Screw the camera stand to the surface you are mounting the camera to using appropriate fasteners for the material.
- Run the camera cable back to the TV/VCR, any holes that you drill need to be at least 14mm in diameter to allow the connectors to pass through.
- Reconnect the power and video leads to the camera and switch the camera power back on.



## How to connect the cameras to your monitoring device

Please refer to the diagram on the opposite page for detailed labelling of the components and their various connectors. Numbers indicate the main component as indicated in the contents list on page 1 of this guide, and letters indicate connectors attached to the component the number represents.

**Step 1:** Connect the **BNC male (5b)** of the **18m Extension Cable (5)** directly to the **Video Out (2b)** and the **DC Plug (5a)** to **I2V DC IN (2a)** on the rear panel of the **C500R camera (2)**. Plug the **BNC Female** connector (1a) on the **Bulldog camera (1)** into the **BNC Male (5a)** of the **18m Extension Cable (5)** and turn the outer ring to lock the connector.

**Step 2:** Plug the **BNC Male (5d)** at the opposite end of the extension cable into a BNC connector on your security device (usually located at the back of your DVR or Quad Switcher) or if the connectors on your security device are RCA type, connect the **BNC (female) to RCA (male) adaptor (6)** to the **BNC male connector (5d)** end of the cable and plug this into your device's RCA female socket.

**Step 3:** Connect the **Power Connector (8a)** at the end of the **power adaptor (8)** into the I-4 Way Power Splitter (9a), then plug the power adaptor on the I-4 Way splitter (9b) into your **C500R** or **Bulldog Camera's DC Jack (1a, 2a)**, or the **18m extension cable's DC Jack (5c)** if you are using it. Use whichever is located near the most convenient power outlet

**Step 4:** Plug the **power adaptor (2)** into the mains power point on your wall and switch on if required.

**Step 5:** If you have an **A/V TV** with RCA sockets you will need to use the **BNC to RCA adaptor (6)** in between the **BNC Connector (3d)** on the **Extension Cable (3)** and the **RCA Socket** of your **TV** or **VCR**. You will then need to switch the **TV** to the **AV** channel to view the camera. To connect the **Bulldog Camera** to your **VCR**, you will need to turn the **VCR** to the **A/V Input** selection and turn your **TV** onto the channel you would normally use to view a tape or movie on your **VCR**.

**Note:** The **Bulldog Camera** will automatically change to a black & white image using the **Infra-Red LEDs** when available light is too low to support a clear colour picture. Please read the **instructions** for your **VCR** or **TV** for more information on using their **A/V inputs**.

## How to connect the cameras to your monitoring device

Your Swann Camera is designed to transmit high quality colour images to your security device or television and is operated by a mains power adaptor. To help guide you through the process of setting up the Swann Camera, we have outlined the steps and numbered each of the components required in the diagram below. Detailed step by step instructions are also included on the previous page.

