



**V60 Night Hawk®
CCTV Camera
Quick Setup Guide**

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Overview

The V60 Series CCTV Camera comes fully assembled from the factory. The die-cast zinc enclosure and tamper-resistant screws make this camera ideal for use in the most extreme environments.

Before You Begin

Please read this guide carefully before you install the V60 Series CCTV Camera.

Keep this guide for future reference.

Unpack Everything

Check that the items received match those listed on the order form and packing slip. The V60 packing box should include, in addition to this Quick Setup Guide:

- One camera enclosure
- One V60 hardware kit
- One Product Warranty Card

If any parts are missing or damaged, please contact the dealer you purchased the camera from, or call Silent Witness Customer Service (see “Service” on page 6).

Equipment Required

You will require the following tools to complete the installation:

- Phillips screwdriver.
- Mounting screws. Use mounting screws appropriate to your installation.

Installation

Mounting the Camera

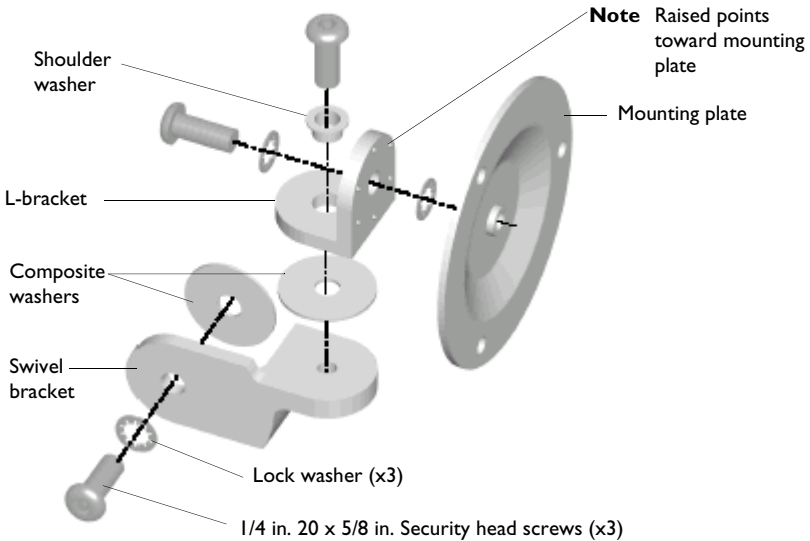
To mount the V60 camera:

1. Assemble the V60 mounting base following *Figure 1*.

Note The insulating shoulder washer and composite washers must remain installed as shown to ensure that the camera is electrically isolated from the mounting surface.

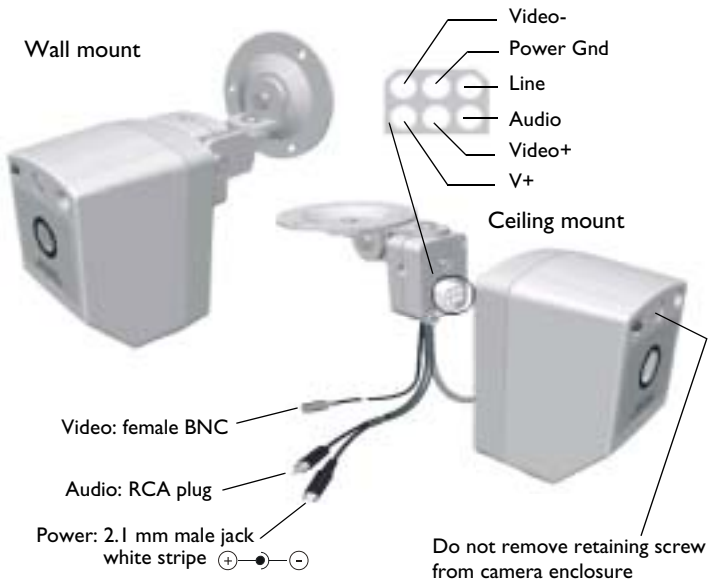
Install the L-bracket with the raised points toward the mounting plate.

Figure 1 Mount Components



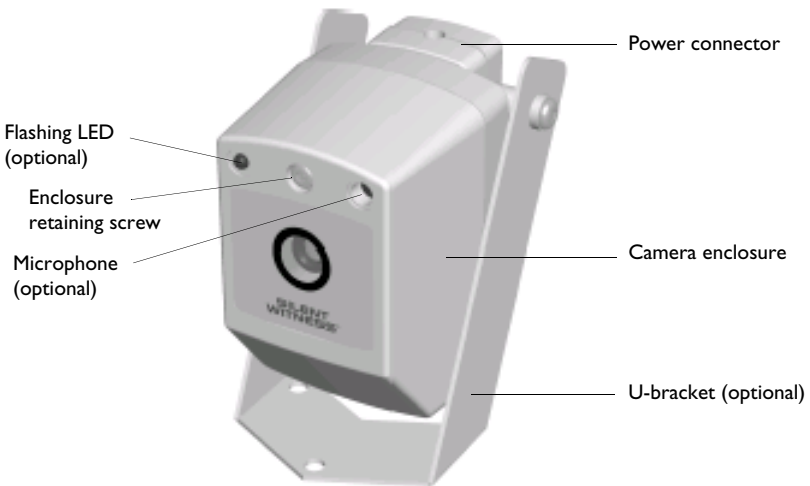
2. Mount the mounting plate to a flat surface on a wall or ceiling, using mounting screws appropriate to your installation.
3. Attach the V60 enclosure and power connector to the swivel bracket (see *Figure 2*).

Figure 2 Mount Options



Note The optional wall, ceiling, or pedestal mounting bracket shown in [Figure 3](#) can be ordered for installations that do not require any pan adjustment. This bracket is particularly useful in mobile applications where vibration may be a significant factor.

Figure 3 Optional Pedestal Mount



Wiring

Your V60 camera comes supplied with a power connector and wiring harness that allows the camera enclosure to be quickly changed and secured with a single tamper proof retaining screw.

See [Cable Guidelines](#) on [page 9](#) for cable gauge and length recommendations.

1. Ensure there is enough slack in the wiring harness to adjust the V60 through its full range of motion.

WARNING! The use of a **CSA Certified/UL Listed Class 2 power supply** is required to ensure compliance with electrical safety standards.

2. Read the voltage and current requirements of your V60 camera on the product label located on the back of the camera. Connect a suitable power supply to the black, 2.1 mm male jack on the V60 wiring harness.

For DC powered cameras, the positive voltage must be connected to the center pin of the jack or to the power wire with the white stripe.

Caution Severe over-voltage will damage your V60 and void your warranty.

3. Connect the V60 video output signal (female BNC connector) to the video output of a monitor or CCTV system.

4. For V60 cameras with the microphone option installed, connect the audio output signal (red RCA plug) to the audio input of a monitor or CCTV system.

Aiming

Adjusting the Mounting Bracket

The V60 mounting bracket adjustments are designed to lock in position.

Caution Always loosen the locking screws before adjusting the mounting brackets to avoid damaging the locking mechanisms.

To aim the mounting bracket:

1. Turn on the camera power and monitor the video signal.
2. Use the security hex key (supplied) to loosen the mounting bracket locking screws.
3. Adjust the pan and tilt angle of the camera to the desired view.
4. Retighten the locking screws to secure the camera in position.

External Polarizer (Optional)

The optional V60 External Polarizer is a self-adhesive, polarized light filter that can be mounted on the outside of the V60 camera window. This filter can improve video image quality by reducing glare and increasing contrast.

Note Do not use the External Polarizer on V60 Night Hawk cameras.

To install the V60 External Polarizer:

1. Clean the V60 camera window with isopropyl alcohol and a clean, soft cloth.
2. Do not remove the adhesive backing from the polarizer at this time. Remove the clear protective plastic from the front of the polarizer and set aside. Do not discard. Handle the polarizer by its edges to avoid finger prints.
3. Position the polarizer on the outside of the V60 camera window, directly over the viewing center of the camera. Rotate the polarizer to find the orientation that provides the best video image. Use the flat edge of the polarizer as a reference.
4. Replace the clear protective plastic on the front of the polarizer, and then remove the adhesive backing. Do not touch the adhesive side of the polarizer. Press the polarizer firmly onto the V60 camera window, in the position and orientation that gives the best video image.
5. Remove the clear protective plastic from the polarizer.

Routine Maintenance

Use regular, non-abrasive liquid cleaners to remove most dirt and grime.

Caution Do not use harsh or abrasive cleaners which can scratch the Lexan window in the enclosure and reduce visibility of the camera.

Service

Subject to the terms and conditions listed on the Product Warranty Card, during the warranty period Silent Witness will repair or replace, at its sole option, free of charge, any defective products returned prepaid.

In the event you have a problem with any Silent Witness product, please call Customer Service for assistance or to request a **Return Authorization (RA)** number.

In the U.S.A. and Canada, call 1.800.893.9513
Or call +1.604.574.1523

Be sure to have the model number, serial number, and the nature of the problem available for the technical service representative.

Prior authorization must be obtained for all returns, exchanges, or credits. **Items shipped to Silent Witness without a clearly identified Return Authorization (RA) number may be refused.**

Specifications

Note Specifications apply to all camera models, unless noted otherwise.

Audio/Video Signal Specifications

Pickup device:	1/3 in. CCD	
Electronic iris:	1/60 (1/50) to 1/100,000 sec.	
Video output:	1 V p-p @ 75 Ω	
Video signal:		
Monochrome	Standard EIA or CCIR	
Color	Standard NTSC or PAL	
Signal to noise ratio:	Better than 51 dB	
Surge suppression:	1.5 kW transient	
Light sensitivity:	High RES	Standard RES
Monochrome	0.3 lux @ f2.0	0.2 lux @ f2.0
Color	1.0 lux @ f2.0	0.8 lux @ f2.0
Desert Hawk (Monochrome)	0.3 lux @ f2.0	0.2 lux @ f2.0
Desert Hawk (Color)	1.0 lux @ f2.0	0.8 lux @ f2.0
Resolution TV lines:	High RES	Standard RES
Color	480	350
Monochrome	570	410
Desert Hawk ((Monochrome)	570	410
Desert Hawk (Color)	480	350

Power Requirements

Voltage and current or power:	
Monochrome	11 to 16 VDC, 250 mA max ^a
Color	11 to 16 VDC, 900 mA max ^a
Optional power supply:	
Monochrome	PSI 4.1
Color	PSI 1.2
Desert Hawk (Monochrome/ Color)	PSI 4.1

Operating Temperature

Monochrome	-13°F to 122°F (-25°C to 50°C)	
Color	-4°F to 122°F (-20°C to 50°C)	
Arctic Hawk (Monochrome)	-50°F to 122°F (-46°C to 50°C)	
Arctic Hawk (Color)	-50°F to 122°F (-46°C to 50°C)	
	High RES	Standard RES
Desert Hawk (Monochrome)	-4°F to 140°F (-20°C to 60°C)	-13°F to 140°F (-25°C to 60°C)
Desert Hawk (Color)	-4°F to 140°F (-20°C to 60°C)	-4°F to 140°F (-20°C to 60°C)

Size and Weight

Length x width x height (no brackets):	2.5 in. x 2.75 in. x 4.5 in. (64 mm x 70 mm x 114 mm)
Weight:	2.6 lbs. (1179 g)

Ratings	FCC Part 15B CE
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a. Current consumption depends on camera model.

Cable Guidelines

Maximum Power Supply Cable Length (feet/meters)

Total load	Power supply	Wire gauge			
		24 AWG	22 AWG	18 AWG	16 AWG
Cameras with DC power supplies					
150 mA	12 VDC	50/15	100/30	200/61	300/91
150 mA	15 VDC	300/91	500/152	1000/305	1000/305
250 mA	12 VDC	n/r	50/15	100/30	200/61
250 mA	15 VDC	200/61	300/91	500/152	1000/305
300 mA	12 VDC	n/r	n/r	n/r	100/30
300 mA	15 VDC	200/61	300/91	500/152	1000/305
950 mA	12 VDC	n/r	n/r	n/r	50/15
950 mA	15 VDC	50/15	100/30	300/91	500/152
1150 mA	12 VDC	n/r	n/r	n/r	50/15
1150 mA	15 VDC	50/15	100/30	200/61	400/122

Line-lock cameras with AC or DC power supplies

2.5 W	24 VAC	50/15	100/30	200/61	300/91
2.5 W	15 VDC	200/60	300/90	500/150	1000/305
4.5 W	24 VAC	n/r	50/15	100/30	200/61
4.5 W	15 VDC	200/61	300/91	500/152	1000/305

n/r = not recommended

Maximum Video Cable Length (feet/meters)

Cable type	RG-59	RG-6	RG-11
Wire gauge	23 AWG*	18 AWG*	16 AWG*
Maximum length (feet/meters)	750/229	1500/457	2000/610

* Copper clad steel core, 95% braided shield

Regulatory Compliance

FCC Statement (U.S.A.)

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 undesired operation.

Industry Canada Notice

This digital apparatus meets all requirements of the **Canadian Interference-Causing Equipment Regulations**.

Cet appareil numérique respecte toutes les exigences du **Règlement sur la matériel brouilleur du Canada**.



The CE mark on the product indicates that the system has been tested to, and conforms with, the provisions noted within the 89/336/EEC Electromagnetic Compatibility Directive.

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Imperial conversions are approximate.