PRODUCT CATALOG

www.silentwitness.com

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Making your world a more secure place.





securing your world

ABOUT US

Silent Witness Enterprises Ltd. designs and manufactures a full range of video monitoring technology for the global marketplace. Founded in1986 and headquartered in Surrey, BC, Silent Witness is a leading provider of high-performance closed circuit television (CCTV) cameras, digital and analog storage solutions, digital processing technologies, and network-based remote video surveillance worldwide.

A market leader in the school bus industry, Silent Witness has installed over 100,000 school bus systems throughout North America. In the security industry, Silent Witness has established a reputation for itself as a technology leader with a focus on quality, durability, design and innovation.

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Specifications subject to change without notice.

The Silent Witness catalog is published twice a year. For the most recent specifications on all our products please visit our website: www.silentwitness.com

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Silent Witness Enterprises Ltd:

6554-176th Street Surrey, BC V3S 4G5 Canada For the most recent specifications on all our products please visit our website:

www.silentwitness.com

Modular Fixed Domes (Vandal Resistant)



ViFi

MAGNAVIEW™ SERIES

MagnaView is Silent Witness' premium camera line of vandal resistant surveillance solutions. These weather resistant cameras can withstand a blow from a 10 pound sledgehammer. They offer aesthetic appeal without compromising function and are versatile, state-of-the-art surveillance solutions.

MODULAR:

- Choose popular transmission media to be integrated inside the camera — coaxial, UTP or fiber* (*V28R only)
- · Choose from a wide range of cameras including True Day/Night, EXview HAD™ and Wide Dynamic (Available Fall/03)
- Six rugged, high impact & vandal resistant housings to choose from
- · Interchangeable camera gimbal

WIDER, CLEARER VIEW:

- "3D" gimbal allows for maximum lens rotation and placement
- · Compatible with Silent Witness' Quick Change Fixed (2.9 mm to 16.0 mm) and Vari-focal Auto-iris Lenses (4.0 mm to 9.0 mm. 2.8 mm to 6.0 mm or 9.0 to 22.0 mm)

ADAPTABLE:

- · One power connection self configures to either 12 VDC or 24 VAC. AC line lock standard with all cameras in 24 VAC operation
- · Camera assembly is easily installed and removed

POBLIST AND DISCREET:

- Impact resistant, clear polycarbonate dome has an adjustable dome insert to conceal camera components without compromising light sensitivity or picture quality
- Weather sealed
- Low profile design blends with its environment while being visually appealing

1-2-3 INSTALLATION:

- · Captive screws no misplaced hardware
- Mounting template takes the guesswork out of installation
- Patent pending hinge no scratched domes
- 1. Install and wire the housing
- 2. Snap in the camera assembly
- 3. Camera is ready to go to work for you
- 3 Year Warranty

This feature-rich camera comes in a die cast aluminum alloy housing that converts between a flush or surface mount enclosure instantaneously, and installs with or without a 4S deep electrical box.

MAGNAVIEW V28G (GripLessTM)

schools, and commercial and public buildings.

MAGNAVIEW[™] V28P (plus)

The V28G's unique conical, surface mount design has NO ligature points, making it impossible for an individual to grip or hang from the camera. Its machined aluminum cover can withstand a blow from a 10 pound sledgehammer and is ideal for prisons, hospitals, hotels,



MAGNAVIEW[™] V28R (round)

The housing material consists of die cast aluminum alloy, with wall and pendant mounting accessories available (see below).







pg 5





MAGNAVIEW[™] V28C (cornermount)

The MagnaView V28C increases application options — ideal for mounting in tight corners and elevators, it provides a wider field of view and increased aesthetics. Silent Witness offers an optional housing cap for mid-wall installations and is available in a standard white or a polished stainless steel finish.



pg 4

MAGNAVIEW[™] V28F (flush)

The V28F's advanced housing design has NO ligature points making hanging from or holding onto the camera impossible. This tough and robust camera comes with a machined aluminum cover, making it your camera of choice in applications where visual appeal is of prime consideration. It flush mounts to a wall or ceiling, with or without a 4S deep electrical box. It is also ideal for use in prisons, hospitals, hotels, schools, and commercial and public buildings.



With its innovative style and structure, the V28S housing material is made of sand cast aluminum alloy, making it the strongest camera in the product line today.



METAL HOUSINGS

www.silentwitness.com www.silentwitness.com

Modular Fixed Domes (Vandal Resistant)



PRIMAVIEW™ SERIES

PrimaView is Silent Witness' camera line that offers strong, light-weight surveillance solutions. The C12, C14 and V29A are cost-effective, high quality, polycarbonate cameras that provide superior picture quality and outperform many other conventional CCD cameras. Its polycarbonate enclosure can withstand a blow from an 8 pound sledgehammer.



- Choose popular transmission media to be integrated inside the camera — coaxial or UTP
- Choose from a wide range of cameras including True Day/Night, EXview HAD™ and Wide Dynamic (Available Fall/03)
- Three high impact & vandal resistant housings to choose from
- Interchangeable camera gimbal

WIDER, CLEARER VIEW:

- "3D" gimbal allows for maximum lens rotation and placement
- Compatible with Silent Witness'
 Quick Change Fixed (2.9 mm to
 16.0 mm) and Vari-focal Auto-iris
 Lenses (4.0 mm to 9.0 mm, 2.8 mm
 to 6.0 mm or 9.0 to 22.0 mm)*

ADAPTABLE:

- One power connection self configures to either 12 VDC or 24 VAC. AC line lock standard with all cameras in 24 VAC operation
- Camera assembly is easily installed and removed
- Switch between surface or flush mount (C12 & C14 only)

ROBUST AND DISCREET:

- Impact resistant, clear polycarbonate dome has an adjustable dome insert to conceal camera components without compromising light sensitivity or picture quality
- Weather sealed for indoor and outdoor applications
- Unobtrusive this camera will not compromise architectural specifications
- Ideal applications include retail, banking, commercial buildings, hotels and conference centers

1-2-3 INSTALLATION:

- Captive screws no misplaced hardware
- Mounting template takes the guesswork out of installation
- Patent pending hinge no scratched domes
- 1. Install and wire the housing
- 2. Snap in the camera assembly
- 3. Camera is ready to go to work for you

3 Year Warranty

*C12 compatible with Quick Change Fixed Lenses only



advanced surveillance

PRIMAVIEW™ C14

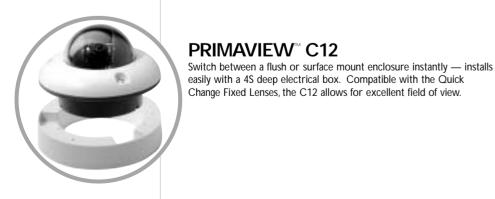
The C14 mounts to a wall or ceiling, with or without a 4S deep electrical box, converting to flush or surface mount instantly. With its large, impact-resistant polycarbonate dome, the C14 is compatible with both the Quick Change Fixed and Vari-focal Auto-iris lenses.



PRIMAVIEW[™] V29A (angledome)

The V29A is the original Silent Witness camera in a sleek wedge-style design. Use the V29A with a narrow view lens (12.0 mm, 16.0 mm) to see horizontal along ceilings and walls. Field of view is superior to flat view surveillance cameras.

POLYCARBONATE HOUSINGS





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MODULAR SYSTEM CHART (MagnaView™) Choose your:

housing	camera	lens
V28R V28RC (Coax) V28RT (UTP) V28RF (Fiber) V28S V28SC (Coax) V28ST (UTP) V28C	NTSC (North American Standard) MGB100 (B/W STD Res.) MGB600 (B/W High Res.) MGC100 (Color STD Res.) MGC600 (Color High Res.) MGE100 (EXview™ STD Res.) MGE600 (EXview™ High Res.) MGD100 (True Day/Night STD Res.) MGD600 (True Day/Night High Res.)	Fixed Lens QL029 (2.9 mm) QL036 (3.6 mm) QL060 (6.0 mm) QL080 (8.0 mm) QL120 (12 mm) QL160 (16 mm) Variety Pack QLVP4 (2.9, 3.6, 6.0, 8.0 mm)
V28CC (Coax) V28CT (UTP	MGW600 (*Wide Dynamic High Res.) *Not available until Fall/03	Vari-focal Auto-iris QLAV1 (4.0-9.0 mm)
V28G V28GC (Coax) V28GT (UTP)	PAL (International Standard)	QLAV2 (2.8-6.0 mm) QLAV3 (9.0-22.0 mm)
V28F V28FC (Coax) V28FT (UTP)	MGB2100 (B/W STD Res.) MGB2600 (B/W High Res.) MGC2100 (Color STD Res.) MGC2600 (Color High Res.)	
V28P V28PC (Coax) V28PT (UTP)	MGE2100 (EXview™ STD Res.) MGE2600 (EXview™ High Res.) MGD2100 (True Day/Night STD Res.) MGD2600 (True Day/Night High Res.) MGW2600 (*Wide Dynamic High Res.)	

MODULAR SYSTEM CHART (PrimaView™)

	Choose your:	
housir	ng camera	lens

\sim	1	1
L	ı	Z

C12C (Coax) C12T (UTP)

C14

C14C (Coax) C14T (UTP)

V29A

V29AC (Coax) V29AT (UTP)

NTSC

(North American Standard)

MGB100 (B/W STD Res.) MGB600 (B/W High Res.) MGC100 (Color STD Res.) MGC600 (Color High Res.) MGE100 (EXview[™] STD Res.) MGE600 (EXview[™] High Res.) MGD100 (True Day/Night STD Res.) MGD600 (True Day/Night High Res.)

MGW600 (*Wide Dynamic High Res.)

*Not available until Fall/03

*Not available until Fall/03

(International Standard)

MGB2100 (B/W STD Res.) MGB2600 (B/W High Res.) MGC2100 (Color STD Res.) MGC2600 (Color High Res.) MGE2100 (EXview[™] STD Res.) MGE2600 (EXview[™] High Res.) MGD2100 (True Day/Night STD Res.) MGD2600 (True Day/Night High Res.) MGW2600 (*Wide Dynamic High Res.)

Fixed Lens QL029 (2.9 mm) QL036 (3.6 mm) QL060 (6.0 mm) QL080 (8.0 mm) QL120 (12 mm) QL160 (16 mm)

Variety Pack

QLVP4 (2.9, 3.6, 6.0, 8.0 mm)

Vari-focal Auto-iris

QLAV1 (4.0-9.0 mm) QLAV2 (2.8-6.0 mm) QLAV3 (9.0-22.0 mm)

CAMERAS

Modular Fixed Domes

(Tamper Resistant)

VALEOVIEW



Silent Witness sets new standards in high quality, modular CCD surveillance. ValeoView™ is Silent Witness' indoor modular camera line that offers superior surveillance. Never before has premium CCD surveillance offered so many flexible options and been so affordable.

MODULAR AND FLEXIBLE:

Tailor to meet your specific requirements.

- . Choose from a wide range of cameras including color, black and white and True Day/Night
- · Standard line lock (optional on color)
- · Six lens options available

WIDE EYED AND WATCHING: •"3D" gimbal provides maximum

- lens rotation and placement
- . True Day/Night option lets you capture perfect color pictures by day and clear black and white images at night
- · No focus shift when switching from day to nighttime scene
- · Compatible with Silent Witness' Quick Change Fixed Lenses (2.9 mm to 16.0 mm)

SLEEK, TAMPER RESISTANT DESIGN:

- . Clear dome has an adjustable dome insert to conceal camera components without compromising picture quality
- · Low-profile design blends with surroundings for use in a wide range of indoor applications
- Tamper resistant dome offers secure installation

QUICK, VERSATILE INSTALLATION:

- · Mounts in minutes to wall or ceiling
- · Converts to flush or surface mount instantly
- · One power connection selfconfigures to either 12 VDC or 24 VAC

1-2-3 STEP INSTALLATION:

- 1. Install and wire the housing.
- 2. Snap in the camera assembly.
- 3. Camera is ready to go to work for you!

3 Year Warranty



MODULAR SYSTEM CHART (ValeoView™) Choose your:

housing	camera	lens
i10C (Coax)	NTSC (North American Standard) IGBL100 (B/W STD Res w/LL.) IGBL600 (B/W High Res w/LL.) IGC100 (Color STD. Res.) IGC600 (Color High Res.) IGCL100 (Color STD. Res. w/LL) IGCL600 (Color High Res. w/LL) IGCL600 (True Day/Night STD. Res. w/LL) IGDL600 (True Day/Night High Res. w/LL)	Fixed Lens QL029 (2.9 mm) QL036 (3.6 mm) QL060 (6.0 mm) QL080 (8.0 mm) QL120 (12 mm) QL160 (16 mm) Variety Pack QLVP4 (2.9, 3.6, 6.0, 8.0 mm)
	PAL (International Standard) IGBL2100 (B/W STD Res. w/LL) IGBL2600 (B/W High Res. w/LL) IGC2100 (Color STD. Res.) IGC2600 (Color High Res.) IGCL2100 (Color STD. Res. w/LL) IGCL2600 (Color High Res. w/LL) IGCL2600 (True Day/Night STD. Res. w/LL) IGDL2100 (True Day/Night High Res. w/LL) LL=Line Lock	

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CAMERAS Fixed Domes (Vandal Resistant)



M12

High quality surveillance & uncompromising value! Discreet and attractive, the M12 is ideal for many applications including small businesses, retail, residential and daycares.

DISCREET AND AFFORDABLE:

- Cost-effective solution using CMOS technology
- So lightweight, the M12 can be installed directly onto a drop ceiling without a backing plate

UNOBTRUSIVE:

 Designed to install anywhere without compromising architectural specifications

INCREDIBLY TOUGH:

 Polycarbonate dome produces outstanding optical quality and is hardcoated for long lasting reliability

PRIMAVIEW™ C16 SEE FARTHER THAN EVER BEFORE

CHOICES TO SUIT ANY REQUIREMENT:

- · Available in one and two camera versions. The two-camera M12 allows you to look two ways at once — perfect for hallways where two separate cameras would normally be required
- Lenses available: NTSC: 2.5 mm, 4.0 mm, 6.0 mm, 12.0 mm

PAL: 3.7 mm, 6.0 mm, 12.0 mm

2 Year Warranty

The C16 is a low profile fixed mount dome for in-ceiling or pendant applica-

tions. With a 5-50 mm vari-focal auto-iris lens you can see farther than ever



SEE MORE CLEARLY OVER A WIDER AREA:

. 5 - 50 mm vari-focal auto-iris lens

before. It's tough, adaptable and affordable.

- . Choose from a wide range of cameras, including True Day/Night
- 360 degree camera position

TOUGH:

- Vandal-resistant, lightweight, polycarbonate dome with adjustable dome insert
- Withstands the impact from an 8 pound sledgehammer

OFFERS INTEGRATED FLEXIBILITY:

· Weather sealed polycarbonate enclosure for indoor and outdoor locations

- · One power connection self-configures to either 12 VDC or 24 VAC — standard AC line
- · Converts to a flush or surface mount instantly
- · Pendant and wall mount option also available
- . UTP or coax
- · Video set up/service connector
- · Optional half tint dome

INSTALL QUICKLY AND EASILY ALMOST ANYWHERE:

- . Mounts to a wall or ceiling
- · Perfect for schools, malls, airports, and freeways

3 Year Warranty



uncompromised surveillance

V25 ARMORDOME

Attractive and rugged, this camera will blend into any interior and is one of the easiest flush mount cameras to install.

SOLID & UNOBTRUSIVE:

- Compact, only 5.5 in. (148 mm) in diameter
- · Heavy-duty steel enclosure secured using color matched tamper-resistant screws for added durability
- Polycarbonate dome can withstand the impact from a 10 pound sledgehammer

VERSATILE FLUSH MOUNT:

· One power connection self-configures to either 12 VDC or 24 VAC. AC line lock standard with all cameras in 24 VAC operation

- . Improved enclosure allows for installation into a deep double gang electrical box
- · Compatible with Silent Witness' Quick Change Fixed Lenses: 2.9 mm to 12.0 mm

INSTALL ANYWHERE:

• The V25 ArmorDome is perfect for hotels, office complexes and casinos — anywhere surveillance must be discreet

3 Year Warranty



Ontional wall and

pg 10 www.silentwitness.com www.silentwitness.com

Micro Imaging Devices

Silent Witness' line of miniature surveillance cameras offer a combination of compact size, sharp video imaging, and compatibility with a variety of integrated surveillance systems. The black and white versions are infrared sensitive. Combine any of the Micro Imaging Devices (MID) with the Puck Infrared Illuminator, and you have great low-cost nighttime surveillance. Silent Witness MID cameras are small and discreet, and consume a minimal amount of power. But best of all, these cameras are highly affordable, which is ideal for discreet surveillance, home security, and integrated monitoring solutions.



MINI-CAM

The Mini-Cam is ideal for discreet surveillance in residential, small business and retail applications.

- . The Mini-Cam measures only 17.5 mm
- · High optical resolution
- Swivel mount bracket included
- Lenses available: NTSC 2.5 mm, 4.0 mm, 6.0 mm, 12.0 mm
 PAL 3.7 mm, 6.0 mm, 12.0 mm



PINHOLE CAMERA

- Dimensions 1 in.(H) x 0.7 in.(L) x 0.7 in.(W) 25 mm x 17 mm x 17 mm
- Color or black and white
- Field of View 68° Horiz.
- Standard included accessories mounting bracket, power supply, RCA to BNC adapter
- ${\:\raisebox{3.5pt}{\text{\circle*{1.5}}}}$ Weight 1.5oz (0.042 kg), including lens & cable



QUAD DOME

The Silent Witness Quad Dome provides 360 degree surveillance at an affordable price. Install the Quad Dome when you have multiple areas to monitor.

- . Install 2 or 4 Silent Witness Mini Cams into the housing
- $\boldsymbol{\cdot}$ Color or black and white
- . 360° surveillance
- · Flush or pendant mount installation
- . Highly affordable

2 Year Warranty



miniature surveillance

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Integrated IR Cameras



SWX45 NIGHT HAWK®

TRUE 24/7 SURVEILLANCE

It's small. It's discreet. It takes great pictures — all the time. Capture superior images day or night.

NOTHING ESCAPES THIS CAMERA:

- See objects 40 feet (12 m) away, even in total darkness (zero lux)
- . 12 near infrared light emitting diodes provide short-range illumination over a wide area

CAPTURE SUPERIOR IMAGES ALL DAY AND ALL NIGHT:

· A built-in, infrared LED illuminator improves low light viewing camera switches from color to black and white as ambient light

COST EFFECTIVE 24/7 OPERATION:

- · Draws less than 180mA power DISCREETYET DURABLE:
- Designed for unobtrusive installations
- Rugged, high impact dome housing
- Fully weather sealed for indoor or outdoor applications

2 Year Warranty



SWX81 NIGHT HAWK NEW SWX82 NIGHT HAWK



SWX81 & SWX82 NIGHT HAWK BULLET STYLE CAMERAS — AFFORDABLE AND FEATURE RICH

These discreet, bullet style cameras are standard with IR illumination. making them perfect for true 24/7 day/night surveillance. Choose from two models: SWX81 with 12 LEDs, or SWX82 with 48 LEDs for larger areas.

CATCH ALL THE ACTION ... 24/7:

- Peak performance always. Infrared LEDs with sensors see in total
- 24/7 operation. Capture perfect color pictures by day and clear black and white images at night
- Auto True Day/Night capabilities. When ambient light drops below a certain point, a mechanical filter within the camera switches from color to black and white and turns on the LEDs
- . No focus shift when switching from day to night time scene

VERSATILE CONFIGURATIONS MAKE SELECTION A SNAP:

- Built-in 4-9 mm vari-focal auto-iris lens (F1.5) for more flexibility
- · One power connection self-configures to 12 VDC or 24 VAC with transient surge protection
- · Standard AC line lock in 24 VAC operation

LOOKS GOOD, PERFORMS BETTER:

· Attractive, polished machined aluminum enclosure comes with protective sunhood

- · Sleek, futuristic bullet styling is visually appealing, yet impact resistant
- Tamper resistant, Discreet, track mount installation uses locking security screws and concealed

INSTALLS AND ADJUSTS EASILY:

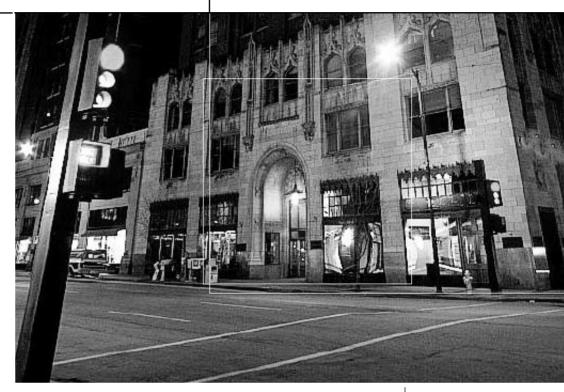
- · Mounts in minutes to wall or ceiling, inside or outside
- · Ball and socket design. Swivel camera, then lock it down with tamper resistant screws
- · Easy access for lens and camera board adjustments

DETERS PERPETRATORS:

The SWX81 & SWX82 are more secure than a body camera.

- . They are difficult to knock out of position
- · Wires are concealed so they can't be cut
- . The cameras can't be disconnected or tampered with

3 Year Warranty



night | vision

V60 NIGHT HAWK*/V60 ARCTIC NIGHT

The V60 Night Hawk sheds new light on surveillance with long lasting quality and an uncompromised picture.

RUGGED CCTV:

- . Install where picture quality can not be compromised due to low light levels
- . Die-cast zinc enclosure
- · Tamper-resistant screws for added security

MULTIPLE OPTIONS:

- Built-in infrared illuminators allow the camera to see in complete darkness up to 40 feet (12 m) depending on lens
- Arctic version operates in temperatures as low as -50°F (-46°C)
- · Lens options: 2.9, 3.6, 6.0, 8.0, 12.0 & 16.0 mm*

SAFE & EFFECTIVE:

- · Infrared illuminators automatically adjust to reduce the risk of eye injury
- 0 Lux imaging makes it the right choice for installation in night clubs, sleep clinics, office complexes, ferry terminals or anywhere requiring night monitoring

COMPACT & EASY TO INSTALL:

- Install in under 15 minutes
- Measures only 2.5" x 2.75" x 4.5" (63 mm x 69 mm x 114 mm)
- *Not compatible with Quick Change Lenses

2 Year Warranty



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Specialty Fixed Cameras



SWX80 NEW

BULLET STYLE CAMERA

The SWX80 pulls out all the stops by offering great functionality at an affordable price. The True Day/Night version of this camera offers superior picture quality around-the-clock, when accompanied with external IR illumination. This discreet, bullet style camera makes it perfect for architecturally sensitive applications.

CATCH ALL THE ACTION:

- Using the True Day/Night camera, you can capture video 24 hours a day. When the ambient light drops below a certain point, a mechanical filter within the camera switches from color to black and white
- Clear flat viewing window for better picture quality

VERSATILE CONFIGURATIONS MAKE SELECTION A SNAP:

- Built-in 4-9 mm vari-focal autoiris lens (F1.5) for more flexibility
- One power connection self-configures to 12 VDC or 24 VAC with transient surge protection
- Standard AC line lock in 24 VAC operation

LOOKS GOOD, PERFORMS BETTER:

- Attractive, polished machined aluminum enclosure comes with protective sunhood
- Sleek, futuristic bullet styling is visually appealing, yet impact resistant
- Tamper resistant. Discreet, track mount installation uses locking security screws and concealed wiring

INSTALLS AND ADJUSTS EASILY:

- Mounts in minutes to wall or ceiling, inside or outside
- Ball and socket design. Swivel camera, then lock it down with tamper resistant screws
- Easy access for lens and camera board adjustments

DETERS PERPETRATORS:

The SWX80 is more secure than a body camera

- It is difficult to knock out of position
- Wires are concealed so they can't be cut
- The camera can't be disconnected or tampered with

3 Year Warranty



securing your world



ExitView combines a high performance CCD camera with a height strip and is one of the most inexpensive solutions to tighten in-store security. ExitView can be mounted on or beside the door frame, and will capture the face of the culprit at eye-level, in full color, as they exit your premises.

FEATURES:

- A discreet, cost-effective solution for loss prevention, shrinkage and robbery
- High performance color CCD camera
- Functional height strip
- Easy to install
- Optional 15° angled adapter to increase field of view
- Available in silver or black to blend with your decor

EASE OF USE:

- This value-priced surveillance solution is plug and play installation is guick and easy
- Ideal for retail applications: gas stations, convenience stores, malls, fast food restaurants, small businesses, banks, cashier areas, and other commercial enterprises
- 2 Year Warranty

SWC20

COMPACT SOLUTION

The perfect solution for a variety of applications—the SWC20 sets a new standard for compact, attractive and reliable security.

VERSATILE & ATTRACTIVE:

- Impact resistant polycarbonate enclosure can be painted to meet design specifications
- Fully weather sealed with user selectable backlight compensation as standard, the SWC20 can be installed virtually anywhere

QUICK & EASY INSTALLATION:

- · Wall or ceiling mount
- Tamper resistant screws for added security
- Install in less than 15 minutes

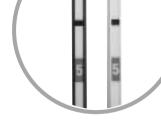
COMPACT SIZE:

 Measures 3.25 in. x 2.75 in. x 3.0 in. (83 mm x 70 mm x 76 mm) Compact & economical, the SWC20 has been installed in homes, office buildings, small businesses, schools, casinos, resorts and as mobile surveillance on school buses

CHOICES:

- Choose from black & white or color, high or regular resolution
- Optional sunhood available for high temperature installations
- Compatible with Silent Witness'
 Quick Change Lenses
 (2.9 mm to 16.0 mm)
- 3 Year Warranty





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V100

BULLET RESISTANT

The design and durability of the V100 Bullet Resistant camera make it the ultimate choice for any application.

TOUGH & RUGGED:

- Withstands the assault from a 12 gauge shotgun or 9 mm handgun
- 1/2" Lexan® window
- · Enclosure is made of machined marine-grade aluminum

ADAPTABLE:

- Stainless steel U-bracket adds extra durability
- · Adjustable camera angle
- Compatible with Silent Witness' Quick Change Lenses (2.9 mm to 16.0 mm)
- Tamper resistant screws

ATTRACTIVE DESIGN:

- Measures 4.25 in. x 6.85 in. x 6.0 in. (108 mm x 174 mm x 152 mm)
- Futuristic design & aluminum enclosure make it suitable for any installation where cameras may be at risk

MULTI-PURPOSE:

- Applications include municipal housing projects, remote areas, train yards, marinas, transit stations and prisons
- 3 Year Warranty



V100S/Z

HIGH SECURITY SURVEILLANCE

This camera is not for the general commercial market. It has been specifically designed and developed for high-end security applications such as the military and petrochemical industries, and especially harsh desert and tropical environ-

TOUGH & RUGGED:

- Designed for environments such as Saudi Arabia
- . 1/4" thick tempered glass window
- · Dust tight enclosure
- · Corrosion-proof
- · Stainless steel sunshield

ΔΠΔΡΤΔΒΙ Ε-

- Stainless steel U-bracket adds extra durability
- · Adjustable camera angle
- . 5-50 mm manual vari-focal auto-iris lens
- Tamper resistant screws

ATTRACTIVE DESIGN:

- Measures 4.25 in. x 6.85 in. x 6.0 in. (108 mm x 174 mm x 152 mm)
- Futuristic design & aluminum enclosure make it suitable for any installation where cameras may be at risk
- 2 Year Warranty



V50 WEDGEVIEW™

The V50 WedgeView will easily blend into décor or design specifications — ideal for casinos, resorts, luxury homes, schools, airports and more.

ATTRACTIVE & FUNCTIONAL:

- · Ceiling or wall mount
- Polycarbonate enclosure can be painted to meet your design specifications
- Low profile camera installs almost anywhere

EASY TO USE/INSTALL:

- High performance video imaging in a discreet, weather-sealed enclosure
- Fully assembled and tested from the factory, installs in less than 15 minutes
- · Camera position is adjustable with manual pan and tilt

 One power connection self-configures to either 12 VDC or 24 VAC. AC line-lock standard with all cameras in 24VAC operation.

ADDED SECURITY:

- Enclosure is made from impactresistant, flame-rated, UV stabilized polycarbonate ABS plastic
- . Wiring can be completely concealed — improve the look and reduce the risk of tampering
- · Weather-tight cable opening for outdoor installations

3 Year Warranty

V60 COMPLETE/DESERT HAWK

The durability and flexibility of the V60 has made it a favorite of installers around the world.

UNCOMPROMISED

SURVEILLANCE:

- Die-cast zinc enclosure
- · Tamper resistant screws for added security

VERSATILE & EASY TO INSTALL:

- . Install in less than 15 minutes
- · Lens options: 2.9, 3.6, 6.0, 8.0, 12 0 & 16 0 mm*

MULTI-PURPOSE:

- . The V60 has been installed in schools, office complexes, hotels, casinos and restaurants - even on school buses and inside railroad locomotives
- *Not compatible with Quick Change Lenses
- 2 Year Warranty

CAMERA BOARDS

FEATURES:

- · Snap-in/plug & play
- High quality
- Top board adjustment
- Standard line lock
- Economical

*WIDE DYNAMIC CAMERA BOARD:

The wide dynamic camera uses Digital Pixel System™ (DPS) technology by Pixim® to provide highquality images. (Available Fall/03)

DPS TECHNOLOGY

The ability to convert the image from analog to digital at the pixel, allows each pixel to act as its own camera, with individual shutter speed and exposure time adjusted for the lighting conditions.

CRISP, CLEAR IMAGES

Say good-bye to image artifacts, blooming and smearing. Capture images with an enhanced dynamic range 100 - 200x greater than typical CCD cameras.

TRUE COLOR RENDERING

Colors are correctly exposed even in low light applications so reds are red, greens are green and

BOARD TYPES:

- . Std. Res or High Res
- . B/W or Color
- . True Day/Night
- EXview HAD™
- · Wide Dynamic*



blues are blue — important when your application requires the most accurate colors.

ON-BOARD DIAGNOSTICS

Easily set-up and customize camera settings with the onscreen display menu. Easy fault finding reduces the guesswork. Quickly find whether it's a bad cable termination or something else.

MODULAR

Compatible with any of the 9 MagnaView™ or PrimaView™ enclosures and 9 Quick Change Lenses — fixed and vari-focal auto-iris.

VIFI™ ENHANCED

Each camera component is optimized to ensure the reliability and quality you expect from Silent

QUICK CHANGE LENSES

Exclusive to Silent Witness, Quick Change Lenses are an easy and economical solution that can be used with almost every Silent Witness camera*.

* V60 series, M12, SWX45 and ExitView cameras are not available with Quick Change Lenses

FIXED LENSES:

- . 2.9 mm (QL029)
- . 3.6 mm (QL036)
- . 6.0 mm (QL060)
- . 8.0 mm (QL080) . 12.0 mm (QL120)
- . 16.0 mm (QL160)

VARI-FOCAL AUTO-IRIS LENSES**:

- 4.0 mm 9.0 mm (QLAV1)
- . 2.8 mm 6.0 mm (QLAV2) . 9.0 mm - 22.0 mm (QLAV3) NEW

QUICK CHANGE LENS PACKS:

- 2.9, 3.6, 6.0, 8.0 mm (QLVP4)
- . 2.9 mm x 10 (QL02910)
- . 3.6 mm x 10 (QL03610) . 6.0 mm x 10 (QL06010)
- . 8.0 mm x 10 (QL08010)
- . 12.0 mm x 10 (QL12010) 1 Year Warranty
- **Only for use with the MagnaView and PrimaView series, excluding the C12







Wide Dynamic





www.silentwitness.com

Camera Accessories



POWER SUPPLIES AND POWER DISTRIBUTION MODULES

Silent Witness' multiple output 24 VAC Power Supplies and AC/DC Power Distribution Modules with individually fused outputs, individual screw terminals, individual camera status LED's, master power switches and master power LED's. Designed with customer needs and feedback in mind, the power supply and power distribution modules from Silent Witness make installation quick and easy. Choose from 4 or 8 outputs and take the guess work out of your installations. Suitable for every application — ease and convenience at the flick of a switch!

AC POWER SUPPLY FEATURES:

- · UL/ULc Listed
- . 24 VAC output
- 9 individual 1/2" and 3/4" conduit knockouts to suit every application
- Power cord supplied
- Optional Lock
- Individually fused outputs
- Individual screw terminals
- · Individual status LEDs
- · Master power switch
- . Master power LED
- . 110 VAC

AC/DC POWER DISTRIBUTION

- . 12 VDC or 24 VAC input
- 2.1 mm barrel connector or screw terminal input
- Individual status LEDs
- Master power switch
- . Master power LED



DENID

PENDANT MOUNT KIT (MAGNAVIEW V28R AND PRIMAVIEW C16)

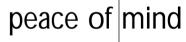
SUPPLIED:

- . Pendant cover
- Rubber gasket (mounted on the cover)
- · Lock washer (x4)
- Base mounting screws (x4)
- · Adapter plate (C16)

NOT SUPPLIED:

- . 3/4" (OD) Pipe
- Teflon Tape





123

WALL MOUNT KIT (MAGNAVIEW V28R AND PRIMAVIEW C16)

SUPPLIED:

- · Pendant arm
- Rubber washer (mounted on the arm)
- Pendant cover
- Rubber gasket (mounted on the cover)

123

- Lock washer (x4)
- Base mounting screws (x4)
- Set screw (mounted on the cover)
- · Adapter plate (C16)



V28R shown

AUDIO (V28R, V28S)

AUDIO OUTPUT:

• 600 ohms Impedance

AUDIO FREQUENCY RESPONSE:

- . 500 Hz to 5 kHz @ -3 dB
- . 200 Hz to 8 kHz @ -12dB

AUDIO SENSITIVITY:

1 V p-p:55 dB SPL (sound pressure level) @ 10 ft.
(3.05 m) speech level audio. Audio bandwidth optimized to eliminate unwanted noise interference.



HALF TINT DOMES

- reduces light sensitivity by 54%
- polycarbonate
- · available in small and large domes
- small: 82.5mm diameter or 3.25" (available only for V29A, V28C, C12, V25) large: 96.5mm diameter or 3.8"



Compatible with the Modular Camera System

Pan/Tilt/Zoom



VORTEX

PTZ DOME

The PTZ's open architecture design protects your investment by allowing the adaptation of future technologies.

FEATURES

- Includes camera, zoom lens, pan/tilt, and receiver all in one package
- 600°/second rotation, fastest in the industry
- 22x optical zoom and 8x digital magnifier deliver the power of 176x zoom
- · Optically clean, shatterproof polycarbonate dome
- On-board diagnostics and non-volatile memory keeps track of all maintenance
- Universal design for easy installation and retrofit in most existing installations
- · Ideal for low light application

1 Year Warranty



QUARTERBACK

SYSTEM LEVEL CONTROLLER

Simplify your installation process with a powerful auto-configuration feature that will allow you to choose from several pre-programmed configuration scenarios. The Quarterback is an ideal companion to the Silent Witness Vortex PTZ camera.

FEATURES

- . Two RS-485 and two RS-232 ports allowing control of 66 devices
- Built-in 4 x 1 video switcher with automatic routing
- Four input ports
- · Variable speed joystick (button (non-joystick) model also available)



pan tilt zoom

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References

CAMERA FEATURES COMPARISON — CHOOSE THE CAMERA THAT SUITS YOU

CAMER	Δ										
	SELECT	C12	C14	V29A	C16	V28R	V28S	V28C	V28G	V28F	V28P
QUICK	•	012	014	VZ/A	010	VZOIC	V203	V200	V200	V 2.01	V201
	Polycarbonate Rolled Steel/ Stainless Steel							_			
	Die Cast Aluminum alloy Chassis					✓		· ·			/
Housing	Sand Cast Aluminum alloy chassis						√				
riousing	Machined Aluminum								√	✓	
	Polished Aluminum with sunhood										
	Machined Marine Grade Aluminum chassis Die-Cast Zinc alloy chassis										
	Surface (Ceiling/ Wall)	V	_	_	✓	_	_		_		_
	Flush (Ceiling/ Wall)	<i>'</i>	<i>'</i>	,	<i>'</i>					√	<i>-</i>
	Pendant	✓	√		√	√					
Mount	Corner							✓			
	Flush double gang electrical box										
	Flush 4x4 Junction electrical box Track (Ceiling/ Wall/ Post)	✓	√							✓	√
	Bracket (Ceiling/ Wall)										-
	Clear Polycarbonate dome (82 mm) / with blackout	Standard		Ctondond				Ctondond			1
	insert 1/2 Tint Polycarbonate dome (82 mm)	Optional		Standard Optional				Standard			-
	Clear Polycarbonate dome (96 mm) / with blackout	Ориона		Optional				Optional			
1	insert		Standard			Standard	Standard		Standard	Standard	Standard
1	1/2 Tint Polycarbonate dome (96 mm) Clear Polycarbonate (86mm) dome with blackout	-	Optional			Optional	Optional		Optional	Optional	Optional
Dome/Window	insert										
1	Clear Polycarbonate dome (191 mm) / with blackout insert				Standard						
	1/2 Tint Polycarbonate dome (191 mm)				Optional						1
1	Clear Tempered Glass window										
1	Clear Lexan® window										
	Clear Acrylic window										
	Standard Res. B/W (EIA/CCIR) High Res. B/W (EIA/ CCIR)	/	✓ ✓	✓	✓	√	✓ ✓	✓ ✓	/	✓	V
	Standard Res. Color (NTSC/PAL)		V	V	V /	V	V	V	V .	· /	V
	High Res. Color (NTSC/PAL)	<i>'</i>	<i>'</i>	<i>'</i>	<i>'</i>	<i>'</i>	<i>'</i>	<i>'</i>	<i>'</i>	<i>'</i>	1
CCD Cameras	Standard Res. Exview™ (NTSC/PAL)	√	√	✓	✓	·	√	√	✓	·	✓
	High Res. Exview™ (NTSC/PAL)	√	√	√	√	√	√	√	√	√	✓
	Standard Res. True Day/Night (NTSC/PAL)	V	√	√	√	√	V	V	√	√	V
	High Res. True Day/Night (NTSC/PAL) Wide Dynamic (NTSC/PAL) (Avail. Fall/03)	V	√	V	√	√	V	V	V	<u> </u>	V
	Wide Dynamic (IVT3C/FAL) (Avail. Faile03)	V	v	V	V	· ·	v	v	V	· ·	- V
IR LEDs											
	2.9, 3.6, 6, 8, 12, 16 mm fixed (*Not Compatible with	✓	√	✓		√	√	√	√	√	√
	Quick Change Lenses)	V	V	ľ		V	ν	ν	V	V	V
	4.3 or 6.0 mm only										
Lenses	Variety Pack (2.9, 3.6, 6.0, 8.0 mm) 4–9mm, 2.8–6mm or 9-22mm vari-focal auto-iris	/	V	V		V	V	✓	V	√	V
	4 - 9mm Vari-focal Auto-iris only		· ·	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		<u> </u>	· ·	· ·	· ·	V	· ·
	5 - 50mm Vari-focal Auto-iris only				/						
	Coax	/	/	√	V	✓	/	/	/	√	/
Video Interfaces	UTP	<u> </u>		<u> </u>	· /				-		
	Fiber Optic					✓					
	12VDC or 24VAC	_/	-/	1	1	1	-/	-/	_/	√	_/
Power	12VDC only	Ľ		<u> </u>							
	12VDC only										
	FCC / CE EMC	/	✓	✓	✓	✓	✓	✓	✓	✓	✓
Certifications											
	UL (*Pending)	*	*	*	*	✓	√	*	*	*	*
	IP Rating (*=meets or exceeds)	IP66 ★	IP66 ★	IP66 ★	IP66 ★	IP66 ★	IP66 ★	IP66 ★	IP66 ★	IP66 ★	IP66 ★
Outdoor/Indoor	Both Indoor & Outdoor	✓	✓	√	✓	✓	✓	✓	✓	✓	✓
Operating	Farenheit (° F)	-13 to 122	-13 to 122	-13 to 122	-13 to 122	-13 to 122	-13 to 122	-13 to 122	-13 to 122	-13 to 122	-13 to 122
Temperature	Celsius (° C)	-25 to 50	-25 to 50	-25 to 50	-25 to 50	-25 to 50	-25 to 50	-25 to 50	-25 to 50	-25 to 50	-25 to 50
	Withstands assaults from a 12 gauge shotgun and 9 mm handgun										
Vandal Resistance	Can withstand a blow from a 10-lb sledgehammer					√	✓	✓	✓	√	√
- anda nesistance	Can withstand a blow from an 8-lb sledgehammer	/	√	V	✓	√	V	V	✓	✓	✓
	High Impact Resistant	<u>/</u>	V	/	V	V	V	V	V	V	V
	Tamper Resistant	- 	· ·	√	· ·	v	✓	· ·	<u> </u>	V	· ·
Microphone Option	Audio Option (*Factory installed w/o vari-focal lens)					*	*				
Warranty	ı	3 years	3 years	3 years	3 years	3 years	3 years	3 years	3 years	3 years	3 years
						•				• • • • • • • • • • • • • • • • • • • •	

	i10	V25	SWX80	SWX81	SWX82	SWX45	V50	V60M/E	V60P/A	V60N	V100
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Optional Standard Optional Option		✓									
Optional Standard Optional Option											
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				_							_
Optional Standard Sta								√	√	√	
Optional Standard Standard V V V V V V V V V V V V V V V V V V V	√					√	✓				
Optional Standard Sta	✓	✓									
Optional Standard Sta											
Optional Standard Sta		√									
Optional Standard Sta											
Optional Standard			✓	✓	✓			./	./	./	./
Standard Sta		Ontional						V	V	V	· ·
Standard Standard											
29-12 mm		Standard				Ctondond					
						Standard					
	./										
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2.9-12 mm											
2.9-12 mm			./	./	./						
29-12 mm only (2LEDs)			V	<i>V</i>	V				_		1/2"
V V V V V V V V V V							√				
V							_				
V V V V V V V V V V V V V V V V V V V		,	./				,		-	✓	
2.9-12 mm only											
2.9-12 mm only											
2.9-12 mm only	,										
2.9-12 mm only			,	V	√	✓					
(PEEDs) (48 LEDs) (PEEDs) (P	V		V	V	V						
(PEEDs) (48 LEDs) (PEEDs) (P				_					1		
2.9-12 mm only									(V60A has	✓	
V		2 0-12 mm		(22200)	(40 22 20)	(22200)					
	✓							*	*		
		only					•			*	•
						✓				*	
	√					√				*	
* * * * * * * * * * * * * *	√					√				*	
War	√		√	✓	√	√				*	
War		✓				-	✓		✓		✓
War		✓				-	✓		✓		✓
# # # # # # # # # # # # # # # # # # #		✓			√	-	✓ ✓		✓		✓
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Indoor only	✓	✓ ✓	√	✓ ✓	✓ ✓	√	✓ ✓ ✓ (not CE	✓		✓	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
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14 to 122 -13 to 122 -	✓ ✓ ✓ ★ IP65	✓ ✓ ✓	✓ ✓ ✓ ×	✓ ✓ ✓ ×	✓ ✓ ✓ ×	✓ ✓ ✓ ✓ ✓	✓ (not CE certified)	<i>V</i>	✓ ✓	✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
-10 to 50 -25 to 50 -25 to 50 -25 to 50 -25 to 40 -20 to 50 -25 to 50	* IP65	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ × 1P66 *	✓ ✓ ✓ × IP66 *	✓ ✓ ✓ × 1P66 *	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	(not CE certified)	√ √ IP66 ★	✓ ✓ IP66 ★	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
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	* IP65 Indoor only	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	* IP66 *	* IP66 *	* IP66 *	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	(not CE certified)	IP66 ★ M: -13 to 122 E: -50 to 122	IP66 ★ P: -13 to 140 A: -50 to 122	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
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(std: V60M) 2 years 2	** ** ** ** ** ** ** ** **	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	* IP66 * -13 to 122	* IP66 * -13 to 122	* IP66 * -13 to 104	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	(not CE certified) IP65 * -13 to 122 -25 to 50	IP66 ★ M:-13 to 122 E:-50 to 122 M:-25 to 50 E:-46 to 50	P: -13 to 140 A: -50 to 122 P: -25 to 60 A: -46 to 50	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
3 NOOSE 3 NOOS	* IP65 Indoor only 14 to 122 -10 to 50	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ ★ IP66 ★ ✓ -13 to 122 -25 to 50	* IP66 * -13 to 122 -25 to 50	* ** ** ** ** ** ** ** ** **	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	(not CE cortified) IP65 * -13 to 122 -25 to 50	IP66 ★ M: -13 to 122 E: -50 to 122 M: -25 to 50 E: -46 to 50	P: -13 to 140 A: -50 to 122 P: -25 to 60 A: -46 to 50	✓ ✓ ✓ -13 to 122 -25 to 50	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
3 years	* IP65 Indoor only 14 to 122 -10 to 50	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ ★ IP66 ★ ✓ -13 to 122 -25 to 50	* IP66 * -13 to 122 -25 to 50	* ** ** ** ** ** ** ** ** **	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	(not CE cortified) IP65 * -13 to 122 -25 to 50	IP66 ★ M: -13 to 122 E: -50 to 122 M: -25 to 50 E: -46 to 50	P: -13 to 140 A: -50 to 122 P: -25 to 60 A: -46 to 50	✓ ✓ ✓ -13 to 122 -25 to 50	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
	* IP65 Indoor only 14 to 122 -10 to 50	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ ★ IP66 ★ ✓ -13 to 122 -25 to 50	* IP66 * -13 to 122 -25 to 50	* ** ** ** ** ** ** ** ** **	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	(not CE cortified) IP65 * -13 to 122 -25 to 50	IP66 * M: -13 to 122 E: -50 to 122 M: -25 to 50 E: -46 to 50	P: -13 to 140 A: -50 to 122 P: -25 to 60 A: -46 to 50	✓ ✓ ✓ -13 to 122 -25 to 50	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
	* IP65 Indoor only 14 to 122 -10 to 50	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	* IP66 * -13 to 122 -25 to 50	* IP66 * -13 to 122 -25 to 50	* IP66 * -13 to 104 -25 to 40	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	(not CE certified) IP65 * -13 to 122 -25 to 50	IP66 ★ M: -13 to 122 E: -50 to 122 M: -25 to 50 E: -46 to 50	P: -13 to 140 A: -50 to 122 P: -25 to 60 A: -46 to 50	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓

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References

LENS CHART

Lens Size (mm)	2.9	3.6	6	8	12	16	Vari-focal Auto-iris 2.8 - Wide 6.0 - Tele	Vari-focal Auto-iris 4.0 - Wide 9.0 - Tele	Vari-focal Auto-iris 9.0 - Wide 22.0 - Tele
Viewing Angle Horizontal	90°	74°	42°	32°	22°	15°	81.2° - Wide 43.6° - Tele	62° - Wide 30° - Tele	29° - Wide 13° - Tele
Viewing Angle Vertical	67°	55°	32°	24°	17°	11°	65.5° - Wide 33.4° - Tele	48.5° - Wide 22.6° - Tele	21.7° - Wide 9.7° - Tele
Relative Aperture	F2.0	F2.0	F2.0	F2.0	F2.0	F2.0	F1.4	F1.4	F1.5

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INFRARED ILLUMINATORS Bulh/IFF



SWX200-FRONT



SWX200-BACK



SWX75



SWX500

LUMAVIEW™ SWX75/SWX200

ILLUMINATING YOUR WORLD

When you require tough, mission critical monitoring in low light or completely dark conditions, LumaView outperforms all other illuminators. LumaView enables IR-sensitive CCTV cameras to produce high quality images under nighttime conditions without imposing intensive, obtrusive visible light illumination.

DISCREET ILLUMINATION:

Choose from 3 types of filters, to suit your specific application:

- Overt illumination produces a distinct red glow that warns of the presence of IR light (715 nm)
- Semi covert illumination produces a faint red glow that can be detected with a trained eye (850 nm)
- Full covert illumination avoids any red glow, making it impossible to detect the presence of IR light (950 nm)

OPTICAL EFFICIENCY:

- Employs IR enhanced output 50 mm diameter reflectors offering maximum output, reliability, and bulb life
- Bulbs available in spot, medium flood and flood beam configurations
- · Large area heat sink causes excess heat to be quickly conducted away from the base of the bulbs, prolonging bulb life — greater than 4000 hours

MODULAR AND VERSATILE:

- Filters are mounted in push-on rubber molds that allow ease of replacement
- . Standard filters are interchangeable between illuminators
- · Ultimate flexibility in beam geometry combine different bulbs and filters (SWX200)
- Weather sealed for indoor or outdoor use
- Advantages of independent filter/bulbs should one fail, then only one needs to be replaced without total loss of illumination

A required external power supply comes with a built-in photocell that detects changes in ambient light level. When conditions grow dark, it switches on, offering longer bulb life.

2 Years Parts & Labor (enclosure and power supply only)

LUMAVIEW™ SWX500 NEW



BREAKING THE COSTLY NIGHT VISION BARRIER

High quality night surveillance no longer means high cost — Silent Witness introduces the SWX500 Infrared (IR) Illuminator. Match the SWX500 with a high performance IR sensitive CCTV camera for exceptionally smooth, even illumination in total darkness. Illuminate distances up to 140 meters with a single SWX500 or 200 meters with dual Illuminators.

SAVE ON OPERATING COSTS:

- . Less expensive to operate than traditional white lights
- Specially designed gold optics and a quartz halogen light source provide optimal range and efficiency, yet radiates light in the infrared spectrum with similar intensity and range
- Average bulb life is 3000 hours

PRECISION OPTICS WORK BRILLIANTLY:

- Superior quality, break-resistant, precision true IR glass filters that offer optimal transmissibility
- Low voltage precision quartz halogen bulb is pre-focused and engineered for longer bulb life

FLEXIBLE OFFERING FOR YOUR UNIQUE APPLICATION:

Ideal for perimeter surveillance, airports, military installations, industrial and manufacturing sites, train stations, ferry terminals, parking lots and garages, playgrounds, and more

SWX500 cont'd

Choose from a wide variety of options:

- . Three filters: overt (730 nm), semi-covert (830 nm), completely covert (940 nm)
- . Three beam patterns: spot (10°), medium flood (30°), wide flood (60°)
- . Two mounting options: dual arm bracket for Pan/Tilt heads or arm mount
- . Required Silent Witness power supply has extra 24 VAC output for companion camera, auto on/off photo cell, alarm output relay. and remote triggering

INSTALL IT FAST AND ENJOY HASSLE FREE OPERATION:

- . Wall or ceiling mount uses tamper-resistant screws and steel
- · Quartz halogen bulb is easy to replace
- . Required power supply has alarm out should a failure occur inside

ROBUST STYLING FOR OUTDOOR USE:

- · Rugged, machined aluminum enclosure provides outstanding heat transfer properties for cooler operation
- . Weather sealed for outdoor use
- . Compression molded front cover with rain hood

THE PUCK

INFRARED ILLUMINATOR

The Puck works with most IR sensitive CCTV cameras to enable the capture of images in complete darkness at a distance of up to 40 feet (12 meters). Measuring less than 4.5 inches in diameter and weighing under one pound, the Puck will inconspicuously install with any IR-sensitive CCTV camera.

DISCREET ILLUMINATION:

- . Measures less than 4.5 in. (114 mm) in diameter
- · Weighs under 1 lb. (0.45 kg) WIDE VIEW:
- · Use alongside most IR sensitive CCTV cameras
- . 360° sweep when ceiling mounted
- ±30° sweep when wall mounted

ADJUSTABLE:

- . Comes configured with 25 wide angle LEDs
- . Choice of wide or combined wide/narrow LED versions
- . 12 VDC and 24 VAC models available

STURDY:

- · Withstands the impact of a 10 pound sledgehammer
- Tamper-resistant screws for added security

2 Year Warranty



VIDEO STORAGE

Digital Recording



DVMS DUPLEX DIGITAL VIDEO MANAGEMENT SYSTEM

Our premium line of digital recorders — DVMS Duplex (DVMS1600 and DVMS800) is a complete, integrated digital video management system designed to replace both a VCR and multiplexer. Expect the convenience of secure remote management and enhanced, highly programmable event reporting features. DVMS Duplex is an ideal recording solution for virtually any application, particularly retail and banking.

COMPLETE, INTEGRATED DIGITAL VIDEO MANAGEMENT SYSTEM:

- Sixteen video input channels (DVMS1600); eight video input channels (DVMS800)
- Up to 60 images per second (50 ips PAL) record speed (DVMS1600); up to 30 images per second (25 ips PAL) record speed (DVMS800)
- QNX real-time operating system and fault-tolerant design allows for quick and reliable recovery in the event of a power loss
- · Secure, high resolution video and audio storage
- True duplex operation allows local video playback without interrupting recording
- Event reporting and multi-zone video motion detection
- Four text insertion ports for POS/ATM text monitoring
- Image authentication process assures picture integrity
- · Covert operation to hide display of selected cameras
- Expand your storage capacity as needed, options include internal and external hard drives, removable drives and CD-RW
- Supports up to 1 terabyte of internal storage

FLEXIBLE REMOTE MANAGEMENT:

- Remote video monitoring and image management via LAN/WAN, DSL or PSTN using Remote Access Software (RAS)
- . Up to 3 simultaneous remote (RAS) users
- Upgrade firmware locally or remotely without interrupting system settings FULL-FEATURED EVENT REPORTING:
- Monitor, access and retrieve evidence instantly using automated search filters — motion, text and alarm
- . Simultaneous multi-screen viewing and spot monitor video output
- · Camera homing upon alarm condition
- Email Alert; automatic alarm notification over TCP/IP networks

2 Year Warranty (1 Year Warranty on Hard Drive)

DVMS SIMPLEX DIGITAL VIDEO MANAGEMENT SYSTEM

Available in 1, 4, 8, and 16 channel models, the DVMS Simplex allows you the most cost effective upgrade to a professional digital recording solution. The DVMS Simplex line incorporates all the functionality of a VCR and multiplexer with remote management tools and full-featured event reporting.

UPGRADE TO DIGITAL RECORDING:

- QNX real-time operating system and fault-tolerant design allows for quick and reliable recovery in the event of a power loss
- · Secure, high resolution video and audio storage
- Programmable, multi-zone video motion detection for up to four cameras
- · Image authentication process assures picture integrity
- · Single-channel audio recording
- . 1 image per second to 15/12.5 ips (NTSC/PAL) record speed
- Connect up to four POS/ATMs to one physical port using text string and camera correlation technique

FLEXIBLE REMOTE MANAGEMENT:

 Remote duplex operation via RAS — view live or recorded video without interrupting local recording



DVMS SIMPLEX cont'd

smart recording

- Remote management via LAN/WAN, DSL or PSTN using Remote Access Software (RAS)
- Change system configuration or update DVMS firmware without a site visit

RESPOND QUICKLY TO CRITICAL EVENTS:

- Monitor, access and retrieve evidence instantly using automated search filters — motion, text and alarm
- Main monitor viewing single or sequence, covert, camera upon newest alarm

APPLICATIONS:

 Ideal for retail, warehouse, or manufacturing businesses, convenience stores and service stations

2 Year Warranty (1 Year Warranty on Hard Drive)

DVMS100

The DVMS100 is a single channel, digital video management system designed as a VCR replacement. We combined the high-resolution digital recording capabilities of the DVMS100 with remote management tools and a host of event reporting features that include motion detection and POS / ATM text monitoring. In addition, the DVMS100 has the ability to interface with today's most popular multiplexers and quads. Combine all of these features with a real-time operating system (RTOS) and you have a reliable, full-featured digital recorder — the DVMS100.

FEATURES:

- Single video input channel
- . Compatible with most popular multiplexers
- Remote management via LAN/WAN, DSL or PSTN
- Up to 60 images per second (ips) NTSC (50 ips PAL) record speed
- Real-time operating system for reliable 24/7 operation
- POS/ATM text insertion
- · Single-channel audio recording
- · Programmable motion detection

2 Year Warranty (1 Year Warranty on Hard Drive)



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MPT400/MPT400N

ATM INTERFACE:

- · Connect up to 4 ATMs to DVMS Duplex or Simplex recorder
- Software detects and configures serial port (MPT400)/Connects to TCP/IP Networks (MPT400N)
- · Flexible ATM text formatting

TL-ONE™ DIGITAL VIDEO RECORDER

LOW COST UPGRADE TO DIGITAL:

- . Low cost migration from VCR to digital technology
- "Drop-in replacement" works with most multiplexer and quad processors
- Camera switcher interface synchronizes the TL-One DVR with a multiplexer

REDUCE THE COST OF OPERATION:

- Eliminate costly tape management images are stored digitally
- Dependable storage system reduces operating costs typical of traditional VCR systems

ADVANCED DIGITAL VIDEO MANAGEMENT:

- Retrieve video clips fast advanced video search tool uses time indexing and event type
- VCR style playback freeze frames, fast forward/reverse, slow forward/reverse without image streaking or tearing

YOU INSTALL THE HARD DRIVE — UP TO 120GB:

- · Hard-drive not included user supplies hard drive
- · Easy hard drive installation/upgrade procedure

HIGH RESOLUTION VIDEO STORAGE AND PLAYBACK:

- · Clear, crisp video every time
- · Choose field or frame recording user configurable
- Set playback speed from 1/32x to 32x
- Select record refresh rates from 1 ips to 60/50 ips (NTSC/PAL)
- · Search by time, last record, full clip list, or alarm list

INTUITIVE, SIMPLE OPERATION:

- Front panel finger-tip controls provide VCR-like operation
- User friendly programming menus and onscreen display
- · Alarm input/output uses simple contact closure

HIGH RELIABILITY:

- Real-time operating system provides reliable, stable operation
- Fault-tolerant design provides quick, reliable recovery from power loss

DESKTOP INSTALLATION OR 19 IN. RACK MOUNT:

· Includes 19 in. rack mount kit

1 Year Warranty

DDR400 NEW DIGITAL DATA RECORDER

Think beyond passenger and driver safety. Silent Witness introduces the all new DDR400! The DDR400 Digital Data Recorder captures sharp, crisp images and clear audio — superior to conventional VCRs. Expect longer recording time with increased picture quality. Be proactive: respond quickly to potential problems. Connect up to four DDR Digital Cameras to monitor all areas of the vehicle.

The DDR400 all-digital video recorder collects more detailed information and transfers data fast and reliably. It also provides great pictures, clear audio, longer recording time on a large capacity hard-drive, and low maintenance in one compact, rugged, digital recorder.

- User-friendly BusView[™] software has an intuitive interface that lets you
 quickly find, print, distribute, and archive video and audio files for future use
- · Say goodbye to daily maintenance and tape libraries
- Records more data
- Future proof DDR400 features and open architecture for future external data gathering: GPS, access control, wireless LAN/WAN access and engine data

DDR400 cont'd

- Images record with vehicle ID, time and date, camera name and eight status inputs — descriptive text can be up to 20 characters in length
- Protect your buses even when they're parked a unique alarm mode starts recording immediately to identify bus vandalism
- Recorder runs on an embedded OS for reliable long term unattended operation
- A small, tamper and impact resistant enclosure houses a built-in switcher
- A patent pending vibration system reduces road vibration

MDR100 MOBILE DIGITAL RECORDER

Silent Witness' MDR100 is an advanced digital recording system that is designed to increase passenger and driver safety for mobile transportation applications. This new generation digital video recorder gives you better pictures, clearer audio, longer recording time, and little or no maintenance in one compact, rugged, digital recorder. Enjoy the ease and convenience of a VCR with the leading-edge features of a digital recorder.

BETTER THAN A VCR:

- Cleaner, sharper picture quality and clearer audio than with conventional technology
- · Long recording time 373 hours with a 20 GB hard drive

SAVE TIME AND MONEY:

- High value, versatile solution without compromising features or durability
- Fast and easy image retrieval, printing, distributing and archiving
- · Removable hard drive
- Easy upgrade drop-in replacement
- · No daily maintenance

ROBUST

- Writes reliably to a hard drive even over the roughest of roads due to its patent pending suspension system
- Vandal-resistant, locking enclosure

KNOW WHERE YOUR BUS WAS:

An optional GPS module records position, direction and speed

DVMS STORAGE OPTIONS

Recording Time							
Fields per	1 Day	2 Days	3 Days	4 Days	7 Days	15 Days	30 Days
Second	24 Hours	48 Hours	72 Hours	96 Hours	168 Hours	360 Hours	720 Hours
1 FPS	1.51	3.02	4.54	6.05	10.58	22.68	45.36
5 FPS	7.56	15.12	22.68	30.24	52.92	113.40	226.80
10 FPS	15.12	30.24	45.36	60.48	105.84	226.80	453.60
20 FPS	30.24	60.48	90.72	120.96	211.68	453.60	907.20
30 FPS	45.36	90.72	136.08	181.44	317.52	680.40	1.36 TB
60 FPS	90.72	181.44	272.16	362.88	635.04	1.36 TB	2.72 TB

Note: Measured in GB unless otherwise noted. Based on 20:1 wavelet compression. Based on NTSC format only. For PAL format multiply the digital capacity by 0.845.





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Analog Recording



TLC2100

TIME LAPSE RECORDER

- Record up to 40 days (960 hours) on one VHS cassette
- 13 record/playback speeds
- Field advance one field at a time, forward/reverse field advanced forward/reverse play, still, fast scan, freeze field
- · Direct drive, low-maintenance mechanism, self-cleaning heads
- · Alarm memory, alarm index search
- 6 events per day 7 days a week timer
- · Programmable timer output
- · Enhanced audio recording up to 24 hours

TLC2100-232

RS-232 REMOTE MANAGEMENT

- · RS-232 port for remote control
- Record up to 40 days (960 hours) on one VHS cassette
- · Reverse play, fast scan, freeze field
- Split time/date display
- · Self-cleaning heads
- · Camera switcher pulse programmable
- · Alarm index search
- · Programmable timer output
- · All other features of the TLC2100 recorder

TLC2100SHD

HIGH DENSITY

- Super VHS performance for high-resolution images;
 400-line resolution in monochrome or color
- . Uses standard VHS tape or S-VHS tape
- · Composite and Y/C video input
- . Latest technology transport mechanism
- . All other features of the TLC2100 recorder

TLC2100SHD-232

SUPER HIGH DENSITY

- RS-232 port for remote control
- Super high density recording three times the normal recording capacity at all speeds
- Super VHS performance for high resolution images;
 400 line resolution in B&W or color
- · Uses standard VHS tape or S-VHS tape
- · Composite and Y/C video input
- · Latest technology transport mechanism
- · All other features of the TLC2100 recorder

TLC2100-S16

HIGH DENSITY

- Integrated 16 input switcher that easily accommodates speed changes and day and night sequencing
- One box solution ideal for Banking applications, automates and simplifies transaction verification
- Integrated ATM text inserter prints text on tape during ATM transactions and syncs time/date to ATM network
- · Automated time/date/transaction search, accurate to the nearest second
- · RS-232 input for remote control

TLC2100SHD-S16

SUPER HIGH DENSITY

- · Greater flexibility
- · Easier installation
- Lower cost than separate component systems by combining a 16-position switcher, transaction verification, an ATM text inserter, time/date/transaction search, RS-232 remote control and multiplexer encoding into a single, integrated package.

TLC2100SHD-TDS

SUPER HIGH DENSITY

- . Individual formatting for time, date, system code and camera title
- Separate ports for text insertion and remote control
- . Time/date and/or transaction search capabilities
- · Super VHS performance for high resolution images
- · Programmable timer output
- · Self-cleaning heads

5232MP

ATM TEXT INSERTER

- · Software detects and configures RS-232 ports
- · Loop-through flexibility (data)
- · Easily readable characters
- Menu-driven on-screen programming
- Two programmable alarm outputs
- . Time/date generator
- . Inserts time/date information onto video
- · Flexible ATM text formatter
- Sync time/date to ATM

VCR ACCESSORIES

MODEL RM18/RM21:

A convenient rack mount kit designed for mounting the TIC2100.
 The RM18 or RM21 is 7" high and fits a standard 19" wide Retma rack

S-VHS T130 CASSETTE:

- · 8% more capacity than other S-VHS tapes
- High quality, professional grade tape, the metal oxide is refined to deliver extremely sharp video images

VCRLB:

 Our VCR Lock Box is a dust-free, tamper-resistant steel cabinet that is large enough to protect your video recorder as well as a quad, switcher or other component. Accommodates both front-loading and top-loading recorders

"Y" CABLE:

An easy to use programmable RS-232 interconnect cable for data insertion of electronic cash register and automatic teller machines to any of the GYYR® multiple protocol models. Note: The "Y" cable is included with the GYYR® Model 5232MP Text Inserter





o Storage

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VIDEO TRANSMISSION

Network/Wireless



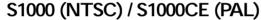
TANGO!™ II

NETWORK VIDEO SERVER FOR TCP/IP NETWORKS

Tango II instantly transforms a CCTV system into a remote management tool able to simultaneously provide video to multiple users at remote locations.

Tango II provides a high-speed network connection for up to four composite video inputs. This compact, self-contained unit requires no unique cabling, no additional hardware and no special software. A standard web browser installed on the user's PC is all that's required to access the Tango II.

- Supports up to 4 composite video inputs
- · Capable of transmitting high quality images at real-time speeds (up to 30 images a second on a 100 Base TX network)
- Compatible with TCP/IP networks (LAN/WAN, internet)
- Remote camera (PTZ), VCR and multiplexer control
- · User defined pre- and post-alarm video storage
- · Access based on password authorization



WIRELESS SURVEILLANCE

The Silent Witness \$1000 and \$1000CE eliminates the need to run cable when linking video surveillance cameras with monitoring systems. It provides a long range, point-to-point, digital wireless link for video, PTZ data, audio and alarms. Using superior interference rejection techniques, fading and ghosting are virtually eliminated. The digital modulation transmission in the 2.4 GHz band and Direct Sequence Spread Spectrum (DSSS) produce reliable link operation assuring clear, crisp video.



- · A single S1000 digital link connects video transmissions. Pan-Tilt-Zoom control, audio and alarm information
- 128 bit encryption of video for privacy
- · Compact size and light weight make wireless link installation easier than ever
- Bi-directional audio (PTT/PTL) expands installation opportunities

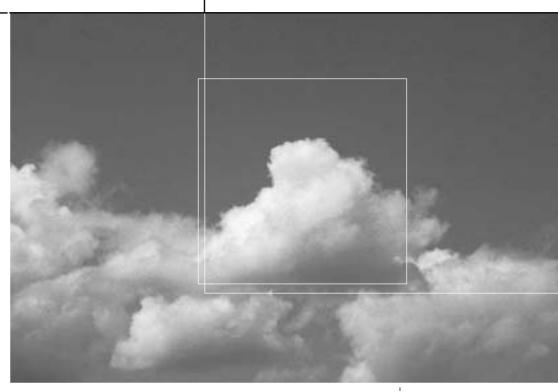
S1000 (NTSC):

· Up to 4 miles line-of-sight with built-in antenna. Greater range with hi-gain antenna

S1000CE (PAL):

- Up to 3km line-of-sight with built-in antenna. Greater range with hi-gain antenna
- . The S1000CE is CE marked and approved for sale in the UK and Europe

The Silent Witness \$1000 and \$1000CE is ideal for fixed ground surveillance: commercial applications like parking lots, corporate campuses, shopping malls, warehouses, power plants, rail yards, airports, ports and harbors, oil rigs, construction sites and public events.



transmitting video







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School Bus

(available only through the Silent Witness Mobile Division)



DIGITAL CHAPERONE™ DDR NEW

Think beyond passenger and driver safety. Silent Witness introduces the all new Digital Chaperone DDR system. Using the latest digital technology, this reliable, intelligent vehicle surveillance system provides:

- A fully integrated digital network system
- · Wider coverage area with four digital cameras
- Reliable, detailed data collection
- Dependable, long term unattended recording
- Time and cost savings
- Open architecture for future external data gathering

Passenger safety and uncertain times demand innovation. We need more information. We want to collect more data. The Digital Chaperone all-digital video recorder collects more detailed information and transfers data fast and reliably. It also provides great pictures, clear audio, longer recording time on a large capacity hard drive, and low maintenance in one compact, rugged, digital recorder.

SEE MORE, CLEARLY:

The DDR400 Digital Data Recorder captures sharp, crisp images and clear audio — superior to conventional VCRs. Expect longer recording time with increased picture quality.

EXPAND YOUR SAFETY NET:

- Be proactive: respond quickly to potential problems. Connect up to four DDR Digital Cameras to monitor all areas of the vehicle. Images are stored on the DDR400 Recorder hard drive
- User-friendly BusView $^{\mbox{\tiny TM}}$ software lets you quickly find, print, distribute, and archive images
- Record more data: images are recorded with vehicle ID, time and date, camera name and eight status inputs. Descriptive text can be up to 20 characters in length
- Protect your buses even when they're parked. A unique alarm mode starts recording immediately to identify bus vandalism

DURABILITY AND RELIABILITY:

Easy-to-install, quality components comprise the Digital Chaperone DDR system

- The DDR400 Recorder runs on an embedded OS for reliable long term unattended operation
- A small, tamper and impact resistant enclosure houses a patent pending system to reduce road vibration

BE READY FOR TECHNOLOGY LEAPS:

The Digital Chaperone DDR system features an open architecture for future external data gathering.

SAVE TIME

- BusView[™] software has an intuitive interface for advanced laptop viewing capability, search and and image retrieval
- Print and distribute images quickly as required
- Archive video and audio files for future use. Say goodbye to daily maintenance and tape libraries

DIGITAL CHAPERONE™ MDR

PROTECTING YOUR MOST VALUABLE ASSETS

Keep your passengers safe in their seats. We give you the tools to immediately respond to potential problems as they happen. Silent Witness introduces the Digital Chaperone MDR system — a reliable, high quality, advanced digital recording technology that lets you:

- · Easily upgrade drop-in VCR replacement
- · Save time and money on maintenance
- · See images in greater detail



safety systems

Digital Chaperone™ MDR cont'd

- . Hear audio clearer than ever before
- Increase student safety and reduce risks to your drivers
- Avoid lost images due to worn out VCR tapes
- Customize your system to meet your individual needs

This new generation digital video recorder gives you better pictures, clearer audio, longer recording time, and little or no maintenance in one compact, rugged, digital recorder. Enjoy the ease and convenience of a VCR with the leading-edge features of a digital recorder.

CLARITY:

Expect cleaner, sharper picture quality and clearer audio than with conventional technology. With the Digital Chaperone, you also get longer recording time with no loss of image quality.

KEEP CHILDREN SAFE:

Provide fast response to potential problems inside and outside the bus. Images are stored on the digital recorder hard drive. Fast, easy retrieval, printing, distributing, and archiving images at your fingertips.

SAVE TIME AND MONEY:

Install it, configure it, then forget it. Let the Digital Chaperone do the rest. No images are lost due to faulty or worn out tapes. Unlike conventional VCRs, there are no tapes to replace or store.

The Digital Chaperone is economical, without compromising features or durability. There is no daily maintenance, no tape libraries to maintain and less time spent searching for an image.

RELIABILITY:

The Digital Chaperone system consists of one or two cameras and an industrial grade digital recorder with a built-in switcher housed in a tamper and impact resistant enclosure.



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Monitori

Digital Chaperone MDR cont'd

KNOW WHERE YOUR BUS WAS:

An optional GPS module records position, direction and speed

VERSATILITY:

Customize the system to suit your individual needs. Start with the MDR100 digital recorder. Then choose from a number of different cameras. For extra surveillance outside the bus, add a second stop arm camera and use the built-in second video input with stop-arm triggering.

SWS410 SYSTEM

The latest in VHS technology from Silent Witness — designed for the school bus market. Economical without compromising features or durability, the SWS410 system is the ideal solution for school bus video monitoring. Depending on need, two cameras can be teamed up with the NEW industrial grade VCR housed in a tamper resistant enclosure. The SWS410 system can provide up to nine hours of recording on a VHS T180 tape.

MAINTENANCE FREE RECORDING:

- Program to stop at the end of tape or rewind to the beginning and continue recording
- · Begins recording with vehicle ignition

HEAR BETTER THAN EVER:

- . Two audio channels for longer buses
- Increased vibration resistance

SAFER STOPS:

 Built-in stop arm switch to record outside the bus when the stop arm has been activated (requires a second camera)

SAVE SPACE ON THE BUS:

Can be mounted either horizontally or vertically

CAMERA FLEXIBILITY:

. Choose from four camera styles to meet your installation requirements

EASY TO PROGRAM:

- · Wireless remote allows for easy on-screen programming
- Front mounted video and audio output jacks

SAVE TIME REPROGRAMMING YOUR VCR:

· Automatic Daylight Saving Time Adjustment

KNOW WHERE YOUR BUS WAS:

· Optional GPS module records position, direction and speed

GPS RECEIVER NEW

WHAT IS GPS?

GPS stands for Global Positioning System. This technology has become increasingly important in transportation management because of its low cost, availability, accuracy and ease of use. GPS systems capture satellite signals and then calculate exact positioning based on triangulation of the signals. For school district transportation directors, this provides some interesting benefits.

KNOW WHERE YOUR BUS WAS:

GPS systems can provide location in the form of latitude and longitude information. This information can be plotted against any map to the exact location of the pick-up and drop-off points for transported students. Coupled with a mobile surveillance system, you have a visual record showing the time, date, and GPS information of when and where students board or depart from the bus.

GPS Receiver cont'd

PLANTHE SAFEST AND MOST EFFECTIVE TRAVEL ROUTE:

From a route management perspective, the Transportation Director can review taped or digital records to see how much time it takes to get from point A to B. GPS information coupled with the recorded time shows exactly how long it takes a bus to get from destination to destination. The GPS information recorded includes bus direction and travel speed of the vehicle. Taking this information and the head count from the video provides Transportation Directors an effective route planning tool.

EASE OF INSTALLATION:

Installers will appreciate the ease of installation for a GPS system. All that is required for the installation is to plug the GPS unit into the power and signal harness and then thread the antenna with a powerful magnet wiring. You get high accuracy speed without tapping into the transmission. The GPS antenna is then fixed to the roof of the bus.

The GPS receiver is compatible with Silent Witness:

- . SWS410 VCR systems
- Digital Chaperone[™] MDR systems
- Digital Chaperone™ DDR systems (available Winter 2003)

STOP ARM SYSTEM

Keeping children in their seats and discipline problems off the bus — the video surveillance systems by Silent Witness are proven to reduce or eliminate risks to your drivers and students — inside and outside the bus. Stop arm violations are a continuous problem for bus drivers. The fact is that students are more likely to suffer serious or fatal injuries as pedestrians after leaving the school bus.

Today's Stop Arm System comes standard with the SWS410 System and Digital Chaperone™ MDR, the SWS310 System can be easily upgraded.

HOW IT WORKS:

The Stop Arm System accepts video signals from two different sources — the camera inside the bus and the stop arm camera. Silent Witness' all weather SWC20 camera is mounted outside the bus, or inside, facing out. When the stop arm is activated, the system directs the video from the stop arm camera to the recording device. The Stop Arm System effectively captures images of cars that pass the school bus illegally. These images are stored on the VCR tape or digital recorder hard drive. They can be easily retrieved and provided to authorities.

The microphone allows the driver to voice record the license plate number of an offender as additional evidence. When the stop arm disengages, the video signal is once again directed to the internal camera.

Recorded video provides solid proof of the incident and can potentially be used as evidence in court. The system is simple but the impact is tremendous. In one school district alone, seven cars were caught on video, within two to three minutes, as they illegally passed an unloading school bus.



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SWC20

COMPACT SOLUTION

The perfect solution for a variety of applications—the SWC20 sets a new standard for compact, attractive and reliable security.

VERSATILE & ATTRACTIVE:

 Fully weather sealed — with user selectable backlight compensation as standard, the SWC20 can be installed virtually anywhere

QUICK & EASY INSTALLATION:

- · Wall or ceiling mount
- Tamper resistant screws for added security
- Installs in less than 15 minutes

COMPACT SIZE:

• Measures 3.25 in. x 2.75 in. x 3.0 in. (83 mm x 70 mm x 76 mm)

CHOICES:

- Choose from black & white or color, high or standard resolution
- Compatible with Silent Witness' Quick Change Lenses (2.9 mm to 16.0 mm)

D29M ANGLEDOME CAMERA

Wedge-style design camera with microphone.

HERE'S LOOKING AT YOU:

- "3D" gimbal provides maximum lens rotation
- Unobtrusive, small wedge-style enclosure
- Audio

1-2-3 INSTALLATION:

- · Camera assembly easy to install and remove
- Captive screws mean no misplaced hardware
- 1. Install and wire the housing
- 2. Snap in the camera assembly
- 3. Camera is ready to go to work for you

EASY MAINTENANCE:

- · Rugged, high-impact dome and housing reduce risk of tampering
- . Install, then forget about it

V60 NIGHT HAWK®

The V60 Night Hawk sheds new light on surveillance with long lasting quality and an uncompromised picture.

RUGGED CCTV:

- Install where picture quality cannot be compromised due to low light levels
- · Die-cast zinc enclosure
- Tamper-resistant screws for added security

MULTIPLE OPTIONS:

- Built-in infrared illuminators allow the camera to see in complete darkness up to 40 feet (12 m) depending on lens
- Arctic version operates in temperatures as low as -50°F (-46°C)
- Lens options:2.9, 3.6, 6.0, 8.0, 12.0 & 16.0 mm*

SAFE & EFFECTIVE:

Infrared illuminators automatically adjust to reduce the risk of eye injury

COMPACT & EASY TO INSTALL:

- . Install in under 15 minutes
- Measures only 2.5" x 2.75" x 4.5"
 (63 mm x 69 mm x 114 mm)

*Not compatible with Quick Change Lenses

CAMCORDER SYSTEMS

The Camcorder System features a Panasonic VHS-C camera and a Sony 8mm camera modified for the mobile environment and housed in the secure, corrosion proof V30 enclosure. Maximum recording time is four hours for the Sony on 8 mm tape, while the Panasonic provides four hours of recording time on a VHS-C tape. In addition, the enclosure itself may be used independently as a decoy allowing the camera to be moved from bus to bus. This versatility will allow you to keep your costs down while not compromising safety or security.

V30 ENCLOSURE:

- Includes Visu-System, a unique way of disguising the contents of the enclosure, giving the appearance of a camera at all times
- Made of ABS, a non-corrosive material federally certifiable for use in aircraft compartments and school buses
- · Features an LED light for added deterrence
- Includes wiring harness, hardware and three adjustable mounting brackets
- . Built with safety in mind no sharp corners and electrically isolated $\,$
- 9" high, 7 1/8" wide, and 8 3/4" deep and weighs under 2 pounds!



V30

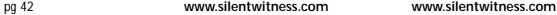


Panasonic



For more information on our mobile products, contact the Silent Witness Mobile Division at 1-800-877-2407.

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MOBILE MONITORING

Taxi







FAREVIEW®

"Taxi and livery drivers are 60 times more likely than other workers to suffer a fatality while on the job. Taxi and livery drivers also suffer the highest rates of non-fatal assault, next only to police and private security guards" (National Institute for Occupational Safety and Health, 1998). We are committed to improving the safety of taxi, livery, limousine, transit and transportation personnel. The FareView Mobile Surveillance System is designed to deter would-be culprits and identify offenders.

DETERRENCE AND IDENTIFICATION:

FareView is the most advanced digital mobile surveillance system for the taxi industry. The moment a fare gets into your vehicle, FareView silently goes to work recording events. The images are time and date stamped along with the Vehicle Identification Number and stored securely in the recorder unit installed elsewhere in the vehicle. In the event of unlawful activity, the images can be accessed using Administrative Software and forwarded to law enforcement agencies for perpetrator identification and as a detailed record of the event. FareView records day and night. Due to the built-in infrared LEDs, FareView functions even in total darkness.

ATTRACTIVE AND COMPACT:

FareView cameras are elegantly styled and ultimately durable. FareView meets the demands of almost any mobile or fixed application by blending advanced digital recording technology with attractive styling.

GREATER IMAGE STORAGE FOR MAXIMUM PEACE OF MIND:

FareView is the only mobile surveillance system that offers you up to 2400 images as a standard product feature. Modular storage upgrades allow for expansion to 9200 image capacity. No other system offers such reliability, image clarity and ease of installation. Images are stored even with a loss of power, and no battery backup is necessary. All images recorded by FareView are maintained in CompactFLASH memory that stores images for years, even after the vehicle power has been switched off.

FULL FEATURE SURVEILLANCE MEANS GREAT VALUE:

FareView digital mobile surveillance technology is geared to suit the demands of cost conscious operators and companies. FareView is a full feature system at a competitive price.

YOU ARE ON CAMERA:

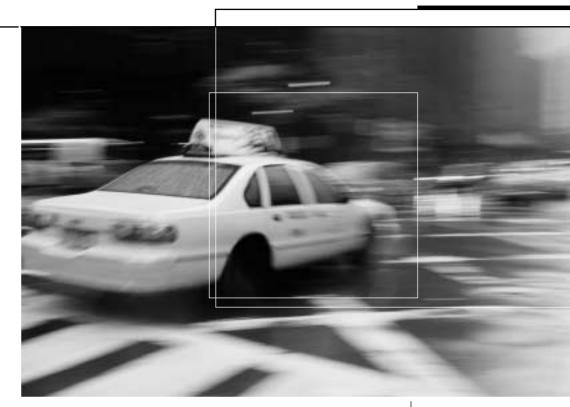
FareView helps to increase safety for mobile operators — like cab drivers, limousine operators, transit, rail and field service personnel — through surveillance and digital recording of events. Warning stickers posted where FareView is in operation will provide deterrence to would-be culprits. Why commit an offense when you know you are on camera? Offenders can be quickly identified through detailed digital images.

CAMERA UNIT:

- Dimensions: 1.26" x 2.05" x 1.50" (32 mm x 52 mm x 38 mm)
- Infrared wide-angle illumination for operation at night
- Lens: 3.7mm Infrared Optimized; Optional 2.9 mm wide angle

CONTROLLER BOARD UNIT:

- · Two-camera inputs
- · Automatic image recording loop
- Driver activated event recording areas: Up to 9 (write protected)
- Secure time & date stamp including vehicle identification and "Chain of Evidence" electronic watermark and recorder unit identification
- Dimensions: 6.73" x 3.78" x 1.02" (171 mm x 96 mm x 26 mm)
- · Removable image storage media for backup and archiving
- Removable image storage 32MB compactFLASH memory, non-volatile.
 Optional 64 & 128 MB
- FLASH life minimum: 180 Million image capture capacity



mobile surveillance

FareView cont'd

- · Compression: JPEG standard
- A/D Supports 256 Grey Level Scale
- Image Resolution: Sensing @ 510 x 492 pixels, Output image @ 362 x 242 pixels (CIF)
- User configurable image timing plans
- Factory and User timing plan presets: Total of 999
- Image recording triggers: 2-Hi/Lo trigger inputs plus 1 driver activated plus background timer
- Power-save mode to minimize battery drain
- Built-in self-test for maximum reliability

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Voltage & Wiring

Contact Us

CABLE GUIDELINES

Power supply cable maximum length (feet/meters) Cameras with AC/DC power supplies

Wire Gauge

Total Load	Power Supply	24 AWG	22 AWG	18 AWG	16 AWG
2.5W	15 VDC	50/15	95/29	200/61	295/90
2.5W	24 VAC	608/185	980/299	2515/767	3930/1198
4.5W	15 VDC	n/r*	55/17	139/42	220/67
4.5W	24 VAC	470/143	760/232	1926/587	3065/934

^{* =} not recommended

Note: Calculations are based on an unregulated linear power supply which would be the worst case. Using a regulated or switching power supply can increase the cable distance. Silent Witness recommends using a CSA Certified/UL listed Class 2 power supply to ensure compliance with electrical safety standards.

Coaxial video cable maximum length (feet/meters)

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

^{** =} Copper clad steel core, 95% braided shield

UTP video cable maximum length (feet/meters)

Silent Witness recommends the following NVT video transceivers (sold separately through NVT Inc.):

- NV-212A (500 ft/152 m 26 Ω)***
- NV-231A/A-M (1000 ft/305 m) 52 ohms Ω)***
- NV-652R, NV-862R or NV-1662R*** (3000 ft/914 m) —163 **Ω**)

Note: We recommend that you measure the wire distance to ensure that the capability of the twisted pair product is not exceeded. You can measure wire resistance with an ohmeter by shorting the two conductors together at the far end, then measuring the loop resistance out and back. Compare against the following table.

MAXIMUM LENGTH

(feet/meters)

AWG (Ω)	250/ 76	500/ 152	1000/ 305	1500/ 457	2000/ 610	3000/ 914
18	3	6	13	19	26	40
20	5	10	20	30	40	59
22	8	17	33	48	66	99
24	13	26	52	78	108	163

Note: Use point-to-point Unshielded Twisted Pair wire only.

VOLTAGE & WIRING

What is a regulated power supply?

A regulated power supply will produce the rated voltage at the output regardless of the load connected to it, provided you do not exceed the power rating of the supply. The voltage will start to drop once the capacity of the power supply has been reached.

How do I identify which wire on the power supply is positive?

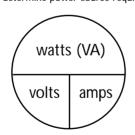
The positive wire is identified with a white stripe. If there is no stripe, there will be a ridge running the length of the positive wire.

How far can the camera be from the power supply?

This depends on the power supply and camera. You can determine the distance by reading through the installation guides delivered with our cameras. You may also download the .pdf files from one of our product pages on the website or you can view the cable guidelines (refer to left).

VOLTAGE CONVERSIONS

Refer to the following information to determine power source requirements.



To determine amps (using watts): watts / volts = amps (e.g 85.5W / 24V = 3.56 amps)

To determine amps (using volt amps) volt amps / volts = amps (e.g. 75VA / 24V = 3.12 amps) (e.g. 75VA / 115V = 0.64 amps)

To determine watts (using amps) volts x amps = watts (e.g. 24V x 3.56 = 85.44 watts)

To determine volt amps (using amps) amps x volts = volt amps (e.g. 3.12amps x 24V = 74.88 VA) (e.g. 0.64amps x 115V = 73.6 VA)

SALES

NORTH AMERICA

Phone: 1-604-574-1526 Toll Free: 1-888-289-2288 Fax: 1-604-574-7736 swsales@silentwitness.com

MOBILE DIVISION

1-800-877-2407

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techsupport@silentwitness.com

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Ph: +44 (0) 208 443 8765

TECHNICAL SUPPORT

Silent Witness provides a 24-hour emergency technical support line. We are here when you need us. Call us with your late night installation questions.

INSIDE SALES

ORDER INQUIRIES, PRICING, PRODUCT INFORMATION

Phone: 1-604-574-1523

Toll Free: 1-800-893-9513 (option 2)

Fax: 1-604-574-1527 swsales@silentwitness.com

TO PLACE AN ORDER

Fax: 1-604-574-1527 orders@silentwitness.com

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98230

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Please forward all cameras to Surrey, BC Canada.

References

^{*** =} Distances have been calculated using 24 AWG Twisted Pair wire