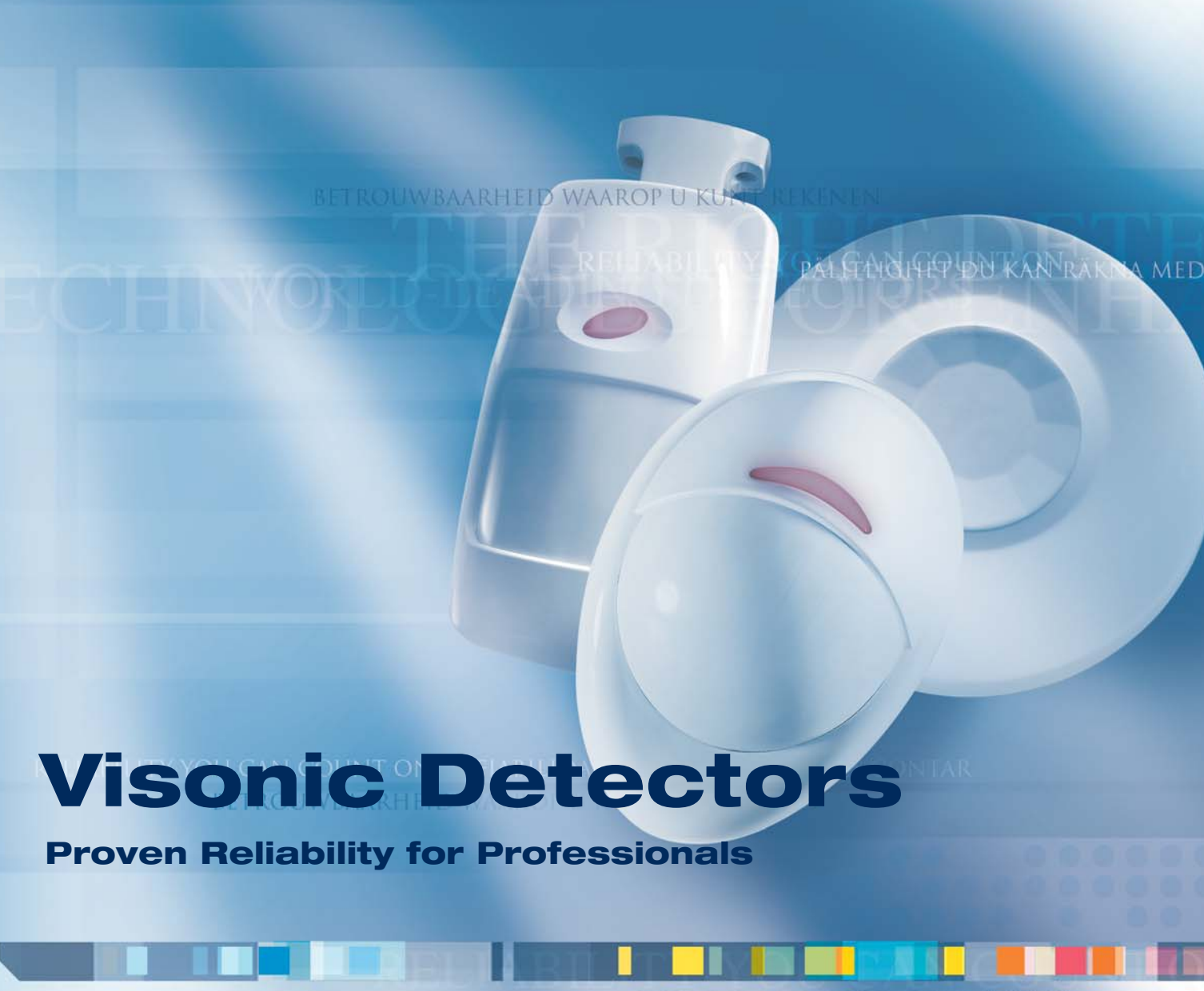


Visonic Detectors

Proven Reliability for Professionals

- Industry-leading digital and optical patented technologies
- Superior detection reliability
- Unsurpassed false alarm immunity
- Wide range of solutions for every application
- Full compliance with international standards

Visonic®

For a secure way of life

Visonic Detectors: The Professional Choice

World-Leading Detectors

Each Visonic detector reflects many years of technological research and innovation, a focus on the needs of installers and end-users, and the company's absolute dedication to quality. By consistently delivering superior performance and reliability, Visonic has remained at the forefront of the intrusion detection market for over 20 years. Visonic detectors are the choice of security professionals in over 70 countries.

The Right Detector for Your Application

Visonic develops, manufactures and distributes an exceptionally wide range of detectors, including pet-tolerant, anti-masking, dual technology, photoelectric and glass-break detectors. Fully compliant with international standards, Visonic detectors are widely used in residential, commercial and industrial applications. Whichever detector you select, the reliability and performance are built in, based on the most advanced digital signal processing and optical technologies.

Reliability You Can Count On

Implementing proven technologies that have been deployed in millions of installations, Visonic detectors are among the most robust and reliable products in the security industry. What makes Visonic solutions so attractive to installers and end-users is an unbeatable combination of best-of-breed catch performance even in harsh environments, coupled with unsurpassed immunity to false alarms. Put a Visonic detector in place, and you can rest assured that it will provide truly dependable performance today, tomorrow and in many years to come.

Innovative Patented Technologies for Enhanced Performance

While Visonic is proud of the many technological breakthroughs it has introduced to the security industry, it constantly strives to enhance the performance of every product. We believe that technological innovation is a key factor for customer satisfaction, and make continuous research and development a key priority. The result of these efforts is an impressive range of unique patented technologies – Top-accuracy True Digital FM processing, Target Specific Imaging™ with 3D cylindrical optics, True Motion Recognition™ with selectable event verification – which have made Visonic detection solutions the choice of professionals around the world.

About the Visonic Group

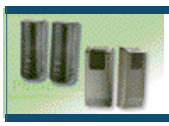
Founded in 1972, the Visonic Group has a history of continuous technological innovation and a leadership position in the global security industry. Visonic offers a wide range of security solutions for residential, commercial, industrial and institutional environments, ranging from detectors and high-performance wireless security systems to access control, asset and personnel positioning solutions.

Table of Contents

Selection Guide

	Product	Type	Typical use	Range
	**NEXT**			
	NEXT PIR	PIR	General purpose	12x12m / 40x40ft
	NEXT QES	PIR (4 elements)	General purpose	12x12m / 40x40ft
	NEXT K9-85	PIR/ Pet	38Kg (85lb)	12x12m / 40x40ft
	NEXT DUO	Dual	General purpose	12x12m / 40x40ft
	NEXT DUO K9-85	Dual / Pet	38Kg (85lb)	12x12m / 40x40ft
	**Discovery**			
	Discovery PIR	PIR	General purpose	15x15m / 50x50ft
	Discovery QUAD	Quad	General purpose	15x15m / 50x50ft
	Discovery K9-80	PIR / Pet	36Kg (80lb)	12x12m / 40x40ft
	Discovery DUO	Dual	General purpose	12x12m / 40x40ft
	Discovery DUO K9-80	Dual / Pet	36Kg (80lb)	12x12m / 40x40ft
	Discovery DUO AM	Dual / AM	Anti-mask	12x12m / 40x40ft
	**Disc**			
	Disc	PIR	Ceiling	10.5m / 35ft diameter
	Duo 240	Dual	Ceiling	10.5m / 35ft diameter
	**Professional**			
	SRN 2000	PIR	General purpose	18x18m / 60x60ft *
	Hunter	PIR / AM	Anti-mask	15x15m / 50x50ft
	Duet	Dual	General purpose	18x18m / 60x60ft *
	Duet AM	Dual / AM	Anti-mask	20x20m / 65x65ft
	CH-1000	PIR	Curtain	13.5m / 45ft
	**Clip**			
	Clip	PIR	General purpose	9x13.5m / 30x45ft
	Clip CH/4N	PIR	Curtain	2,4,6m / 6,13,20ft
	**Spy**			
	Spy 1	PIR	Long range	11m / 35ft
	Spy 2	PIR	General purpose	8x7m / 26x23ft
	Spy 3	PIR	General purpose	8x12m / 26x40ft
	Spy 4	PIR	Curtain	4m / 13ft
	**Energy Management**			
	SRN 2000 ET	PIR	General purpose	18x18m / 60x60ft *
	Disc ET	PIR	Ceiling mount	10m / 30ft diameter
	GL-1	PIR	Outdoor	12x12m / 40x40ft
	**Special Purpose**			
	SRN 2000 C/PC	PIR	Wireless	18x18m / 60x60ft
	PL-1	PIR	Control	12x12m / 40x40ft
	DA-5	PIR	Request to exit	n/a

Glass-break detectors page 15



Photoelectric beam detectors page 16

Some models may be unavailable in certain regions. Please consult with your local Visonic representative.

Application						Technology						
Residential	Light Commercial	Commercial	Light Industrial	Industrial	Outdoor	Digital Signal Processing	TMR	FM	TSI	Harsh Environment Resistance	Catalog #	Page #
●	●					Yes (FM)	■	■	■	Standard	0-1029-0	4
●	●					Yes (FM)	■	■	■	Standard	0-1612-0	4
●	●					Yes (FM)	■	■	■	+	0-1274-0	4
●	●					Yes (FM)	■	■	■	++	0-1832-0	4
●	●					Yes (FM)	■	■	■	+++	0-1845-0	4
	●	●								Standard	0-1250-0	5
	●	●				Yes	■			+++	0-1260-0	5
	●	●							■	+	0-1270-0	5
	●	●				Yes	■		■	++	0-1836-0	5
	●	●				Yes	■		■	+++	0-1843-0	5
	●	●				Yes	■		■	++	0-1838-0	5
●	●									Standard	0-1110-0	6
●	●					Yes	■			++	0-1826-0	6
	●	●	●	●						+	0-1200-0	7
	●	●	●	●		Yes	■			+	0-1220-0	8
	●	●	●	●		Yes				+++	0-1803-0	9
	●	●	●	●		Yes	■		■	+++	0-1812-0	9
	●	●	●							Standard	0-1100-0	10
●	●									Standard	0-1161-0	11
●	●					Yes	■	■		Standard	0-1164-0	11
●	●	●								Standard	0-1151-0	12
●	●	●								Standard	0-1152-0	12
●	●	●								Standard	0-1153-0	12
●	●	●								Standard	0-1154-0	12
●	●	●	●	●						Standard	0-1709-1	13
●	●	●								Standard	0-1707-0	13
●	●	●	●	●	●					Standard	0-1716-1	13
●	●	●	●	●						Standard	0-1502-8	14
●	●	●	●	●	●					Standard	0-1711-1	14
●	●	●	●							Standard	0-1704-0	14

*Additional lenses available

NEXT™ Stylish design coupled with advanced digital detection

With its distinctive elegant design, the NEXT family is the ideal solution for any home, office or small shop environment where aesthetics are prime considerations. NEXT offers a wide range of digital detectors–general purpose PIR, dual-technology, quad element, pet-immune, etc.–all sharing a common housing and modern elegant design.

Benefits

- Modern stylish design
- Superior fast catch performance
- Exceptionally immune to false alarms
- 3D multiple curtain coverage with no dead zones
- Easy to install with no vertical adjustment necessary
- Sealed Optics – protects from insects and air currents
- Complies with European EN50131-2 and other international standards

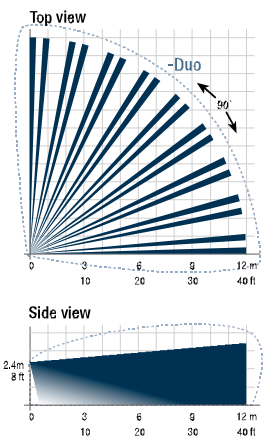
Features

- Digital temperature compensation
- White light and UV protection
- Adjustable range 6m, 9m and 12m (20ft, 30ft and 40ft) setting - DUO Models
- Remote "walk test" mode selection without removing front cover

Model	Type	Harsh Envir. Resistance	Catalog Number
NEXT PIR	PIR	Standard	0-1029-0
NEXT QES	Quad element PIR	Standard	0-1612-0
NEXT K9-85	Pet tolerant PIR*	+	0-1274-0
NEXT DUO	Dual technology	++	0-1832-0
NEXT DUO K9-85	Dual technology / Pet tolerant*	+++	0-1845-0

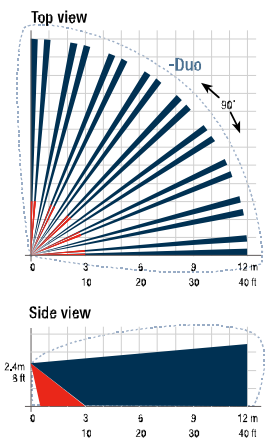
*For animals weighing up to 38 kg (85lb)

NEXT K9-85 / DUO K9-85



Total 36 curtains equivalent to 324 beams

NEXT PIR / QES / DUO



Total 28 curtains equivalent to 250 beams

Applications:

Residential and light commercial

Patented Technologies

(read more on pages 19-24)

- True Digital FM processing for long-term stability and reliability
- True Motion Recognition (TMR™) processing with 1 or 2 selectable "event verification" channels for superior false alarm protection
- 3D cylindrical optics with Target Specific Imaging (TSI™) for true volumetric no "dead" spots detection
- State-of-the-art microwave DRO patented technology utilizing DSP Digital Signal Processing (DUO models)
- Protected under US patents: 5,237,330; 5,693,943; 5,936,524; 6,037,902; 6,211,522; 6,768,294; D445,709 and other international patents and patent applications

Operating Voltage:	9 to 16 VDC
Standby Current Drain:	8mA at 12VDC typical 20mA at 12VDC (DUO models)
Alarm Output:	Solid state relay, up to 100mA, ~30Ω ON resistance
Microwave Freq.(DUO Models):	2.45 GHz standard
RFI Protection:	Greater than 20V/m (up to 1000 MHz)
Adjustable Sensitivity:	1 or 2 motion events
Operating Temperature:	-10°C to 50°C (14°F to 122°F)
Dimensions (H-W-D):	94.5 x 63.5 x 49.0mm (3 11/16 x 2 1/2 x 1 15/16")
Mounting Height:	1.8 to 2.4 m (6 to 8 ft) no adjustment needed
Mounting Accessories:	BR-1, BR-2, BR-3 see page 18

Some models may be unavailable in certain regions. Please consult with your local Visonic representative.

Discovery™ One uniform look for every professional installation

The Discovery family provides professionals with all the detection solutions they require in a uniform, attractive yet robust housing. Discovery is ideal for environments requiring pet immunity, true quad reliability, dual technology or anti-masking solutions. Professionals rely on Discovery to provide the best and most reliable solutions, while ensuring a uniform look throughout the protected property.

Benefits

- Wide range of detection solutions in one uniform professional look
- Exceptionally reliable and immune to false alarms
- 3D multiple curtain coverage with no dead zones
- Sealed Optics – protects from insects and air currents
- Durable and elegant design
- Meets European EN50131-2 and other international standards

Features

- Integral swivel bracket for ceiling and wall mounting
- White light and UV protection
- Microprocessor-controlled temperature compensation
- Adjustable sensitivity for PIR and MW

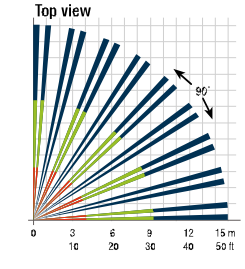
Applications:

Light commercial and commercial

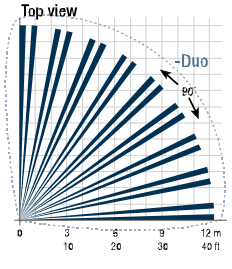
Model	Type	Harsh Envir. Resistance	Catalog Number
DISCOVERY PIR	PIR	Standard	0-1250-0
DISCOVERY QUAD	Quad (twin channel)	+++	0-1260-0
DISCOVERY K9-80	Pet tolerant PIR*	+	0-1270-0
DISCOVERY DUO K9-80	Dual technology / Pet tolerant PIR*	+++	0-1834-0
DISCOVERY DUO	Dual technology	++	0-1836-0
DISCOVERY DUO / AM	Dual technology / Anti-Masking	++	0-1838-0

*For animals weighing up to 36 kg (80lb)

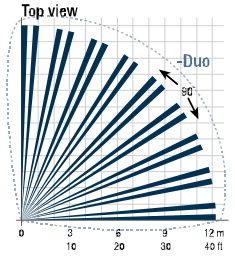
Discovery PIR
Discovery QUAD



Discovery K9-80
Discovery DUO K9-80



Discovery DUO
Discovery DUO / AM



Patented Technologies

(read more on pages 19-24)

- True Motion Recognition (TMR™) processing with 1 or 2 selectable "event verification" channels for superior false alarm protection (QUAD & DUO models)
- 3D cylindrical optics with Target Specific Imaging (TSI™) for true volumetric no "dead" spots detection (K9 & DUO models)
- Advanced anti-masking and self-test "Motion Simulation" to detect malfunction and attempts to defeat the detector (DUO/AM model)
- State-of-the-art microwave DRO patented technology utilizing DSP Digital Signal Processing (DUO models)
- Protected under US patents: 5,237,330; 5,693,943; 5,936,524; 6,037,902; 6,211,522; and other international patents and patent applications

Operating Voltage:	9 to 16 VDC
Standby Current Drain:	10mA at 12VDC 28mA at 12VDC (DUO models)
Alarm Output:	up to 100mA, ~18Ω ON resistance
Microwave Freq.(DUO Models):	2.45 GHz standard 10.525 GHz optional
RFI Protection:	Greater than 30V/m (up to 1000MHz)
Adjustable Sensitivity:	1 or 2 motion events
Operating Temperature:	10°C to 50°C (14°F to 122°F)
Dimensions (H-W-D):	117 x 65 x 47mm (4 5/8 x 2 9/16 x 1 7/8")
Mounting Height:	up to 3.6m (12 ft)
Mounting Accessories:	BR-1, BR-2, BR-3 see page 18

Some models may be unavailable in certain regions. Please consult with your local Visonic representative.

Disc Miniature 360° ceiling mount detectors

The Disc family represents the smallest 360° ceiling-mount detectors available today. Boasting a miniature size of 8.6cm (3 3/8 inches), Disc detectors provide a uniform professional look throughout the installation and blend inconspicuously into any décor. Easily installed on any ceiling, the Disc detectors deliver industry-leading performance sensitivity and long-term reliability.

Benefits

- PIR or dual technology models with one uniform professional look
- Miniature design, 8.6cm (3 3/8 inches) diameter
- Blends seamlessly into any décor
- 360° detection pattern
- Industry-leading reliability and false alarm immunity
- Complies with international standards
- Energy management model available (see page 13)

Features

- Selectable pulse / event counter
- Adjustable sensitivity (Duo 240)

Applications:

Residential and light commercial

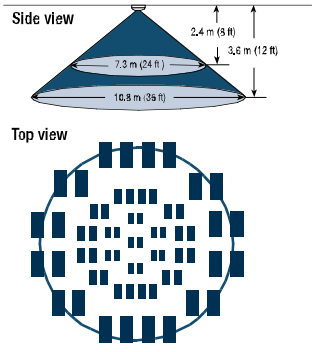
Model	Type	Harsh Envir. Resistance	Catalog Number
Disc	PIR ceiling mount	Standard	0-1110-0
Duo 240	Dual technology ceiling mount	++	0-1826-0

Patented Technologies

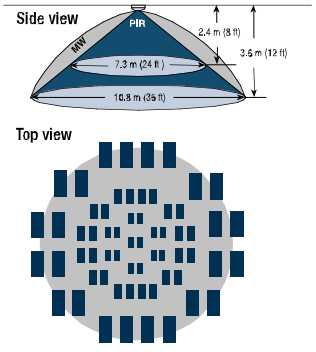
(read more on pages 19-24)

- True Motion Recognition (TMR™) processing with 1 or 2 selectable "event verification" channels for superior false alarm protection (Duo 240)
- State-of-the-art microwave DRO patented technology utilizing Digital Signal Processing (Duo 240)
- Protected under US patents: 5,237,330; 5,693,943; 6,037,902 and other international patents and patent applications

Disc



Duo 240



Operating Voltage:	9 to 16 VDC
Standby Current Drain:	Disc 15mA at 12VDC Duo 240 30mA at 12VDC
Alarm Output:	100mA, ~18Ω ON resistance
Microwave Freq.(DUO Models):	2.45 GHz standard 10.525 GHz optional
RFI Protection:	Greater than 15V/m (up to 1000 MHz)
Adjustable Sensitivity:	1 or 2 motion events
Operating Temperature:	-10°C to 49°C (14°F to 120°F)
Dimensions (diam. x H):	86 x 24mm (3 3/8 x 1 5/16")
Mounting Height:	up to 3.6m (12ft)

Some models may be unavailable in certain regions. Please consult with your local Visonic representative.

SRN 2000 Professional all-in-one universal PIR

Visonic's SRN-2000 is the world's most flexible and reliable PIR detector. Implementing Visonic's noted Super-Red Lens Library™ of 45 easy-to-change lenses, SRN-2000 offers the most outstanding selection of lenses, saving time and money on every installation.

Implementing the most reliable detection and optical technologies backed by 30 years of Visonic expertise, the SRN-2000 is the ideal PIR choice for any commercial and light industrial application. It offers the highest flexibility and performance in all respects: sensitivity, reliability and false alarm immunity.

Benefits

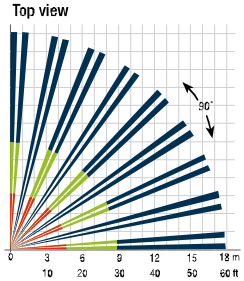
- Industry's best detection accuracy, sensitivity, false alarm immunity, versatility and product reliability
- 45 easy-to-change lenses including: wide-angle, long-range corridor lenses, finger curtain lenses, solid curtain lenses (see page 17)
- Unique combination lenses covering 2-3 rooms or long corridors and special lenses with upward-looking zones for ceilings, stairs, and rooms
- Energy management and battery powered models available (see pages 13-14)

Features

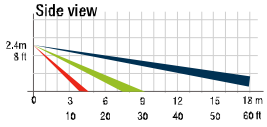
- 30° vertical and horizontal adjustment
- Programmable pulse counter
- Installation height: 0-5m (0-17ft)
- Surface, corner, swivel, or flush mounting

SRN 2000 - Lens 100

Top view



Side view



For optional SRN-2000 lenses refer to the lens library on page 17

Applications:

Commercial and industrial

Operating Voltage:	9 to 16 VDC
Standby Current Drain:	20mA at 12VDC
Alarm Output:	up to 100mA /30 VDC, ~18Ω ON resistance
RFI Protection:	Greater than 20V/m (up to 1000 MHz)
Operating Temperature:	-10°C to 50°C (14°F to 122°F)
Dimensions (H-W-D):	70 x 120 x 48mm (21 1/16 x 41 1/16 x 11 1/16")
Mounting Height:	0 – 5m (0 – 17ft)
Interchangeable Lenses:	For complete SRN 2000 lens library see page 17
Mounting Accessories:	BR-1 ,BR-2, BR-3 see page 18
Catalog Number:	0-1200-0

Hunter™ High security anti-masking PIR detector

Hunter is a high-security passive infrared detector with advanced anti-masking and self-testing capabilities. It incorporates a revolutionary self-test and anti-masking adaptive technology designed to expose efforts to defeat the detector as well as accidental blocking. Any attempt to reduce the sensitivity of the detector–blocking its field of view or spraying its lens–will activate a trouble alarm.

Benefits

- Defeats intentional and unintentional blocking attempts (taping, spraying etc.)
- Digital processing assures excellent coverage and detection sensitivity along with superior immunity to false alarms
- Periodic self-testing by a "Motion Simulator" activates a trouble alarm in case of malfunction
- Sealed optical chamber for protection from insects and air currents

Features

- Digital temperature compensation
- Constant detector operation authentication
- White light and UV protection

Applications:

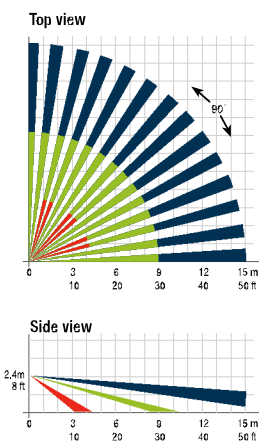
Commercial and industrial

Patented Technologies

(read more on pages 19-24)

- True Motion Recognition (TMR™) processing with 1 or 2 selectable "event verification" channels for superior false alarm protection
- Adaptive anti-masking optical technology
- Protected under US patent: 5,693,943 and other international patents and patent applications

Hunter



Operating Voltage:	9 to 16 VDC
Standby Current Drain:	17mA at 12VDC
Alarm Output:	up to 100mA, ~18Ω ON resistance
RFI Protection:	Greater than 20V/m (up to 1000 MHz)
Adjustable Sensitivity:	1 or 2 motion events
Operating Temperature:	-10°C to 50°C (14°F to 122°F)
Dimensions(H-W-D):	116 x 60 x 45mm (4 9/16 x 2 3/8 x 1 3/4")
Mounting Accessories:	BR-1, BR-2, BR-3 see page 18
Mounting Height:	up to 3.6 m (12 ft)
Catalog Number:	0-1220-0

Some models may be unavailable in certain regions. Please consult with your local Visonic representative.

Duet™ Professional-grade dual-technology digital detectors

The Duet family of professional-grade digital dual-technology detectors offers superior catch performance and false alarm immunity even in the harshest environments.

The Duet-AM further employs anti-masking and self-testing capabilities, and is designed to expose malfunction or attempts to defeat the detector.

Duet detectors are particularly suitable for large commercial and industrial areas.

Benefits

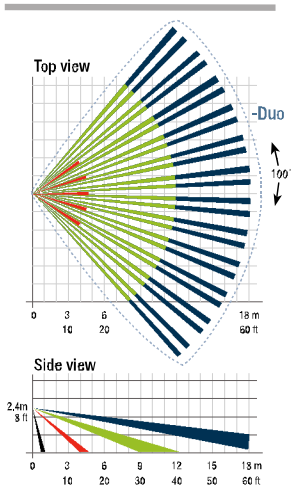
- Superior immunity to false alarms using dual technologies
- Superior fast catch performance
- Highly sensitive large coverage area up to 20m x 20m (67ft x 67ft) with anti-sabotage creep-zone
- Advanced anti-masking and self-testing to detect malfunction and attempts to defeat the detector (Duet-AM)
- Complies with European EN50131-2 and other international standards

Features

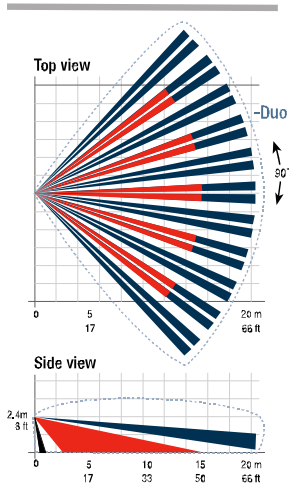
- Dual passive infrared and microwave technologies with optimized digital signal processing for superior detection and long term reliability
- Digital temperature compensation
- White light and UV protection
- Programmable motion event counter
- Optional swivel brackets
- Look down "creep zone"

Model	Type	Harsh Envir. Resistance	Catalog Number
Duet	Dual technology	+++	0-1803-0 0-1805-0 (UL Listed)
Duet-AM	Dual technology / Anti-Masking	+++	0-1812-1 (10.525 Ghz) 0-1812-0 (10.687 Ghz)

Duet - Lens 15D



Duet AM



Applications:

Commercial and industrial

Patented Technologies

(read more on pages 19-24)

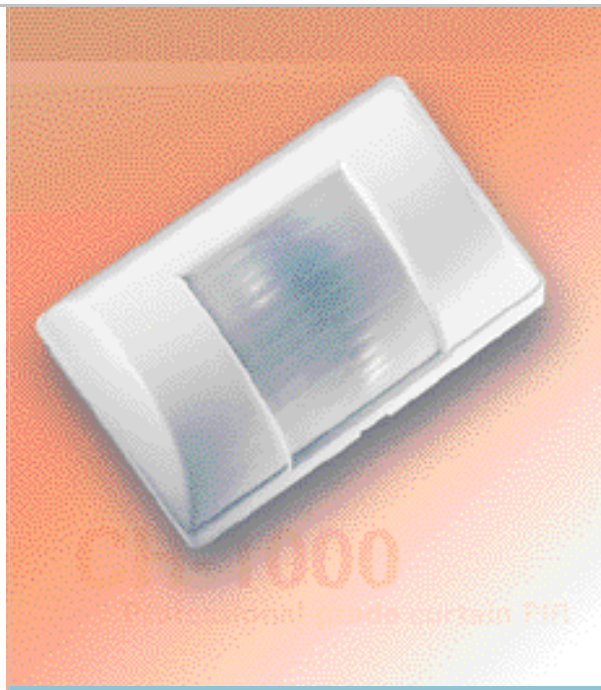
- Advanced anti-masking and self-test "Motion Simulation" to detect malfunction and attempts to defeat the detector
- Ultimate false alarm immunity based on patented True Motion Recognition (TMR™) and Fuzzy Logic algorithms
- 3D cylindrical optics with Target Specific Imaging (TSI™) for true volumetric no "dead" spots detection
- State-of-the-art microwave DRO patented technology utilizing Digital Signal Processing (DSP)
- Protected under US patents: 5,237,330; 5,693,943; 5,936,524; 6,211,522; and other international patents and patent applications

Operating Voltage:	9 to 16 VDC
Standby Current Drain:	21mA at 12VDC
Alarm Output:	100mA, ~30Ω ON resistance
Microwave Freq. (Duo Models):	Duet 10.525 GHz Duet-AM 10.525 or 10.587 GHz
RFI Protection:	Duet >20V/m (up to 1000 MHz) Duet-AM >30V/m (up to 1000 MHz)
Adjustable Sensitivity:	1 or 2 motion events
Operating Temperature:	-10°C to 50°C (14°F to 122°F)
Dimensions (H-W-D):	123 x 76 x 48mm (4 3/16 x 3 x 1 7/8")
Mounting Height:	Duet up to 3.6m (12ft) Duet-AM 2 to 2.6m (6.5 to 8.5ft)
Interchangeable Lenses:	See lens library on page 17
Mounting Accessories:	BR-1, BR-2, BR-3 see page 18

Some models may be unavailable in certain regions. Please consult with your local Visonic representative.

CH-1000 Professional-grade curtain PIR

The CH-1000 multi-purpose curtain detector is the ideal solution for protection of small and large display windows, walls, skylights, wide entrances, corridors or even to create invisible barriers. Its exceptionally wide coverage provides a convenient solution for a variety of perimeter protection applications in large commercial and industrial facilities.



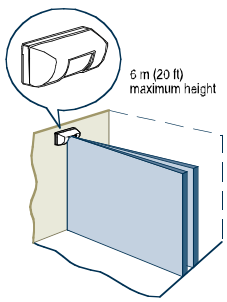
Benefits

- Vertical, horizontal and pet-alley applications
- Wall or ceiling mounting alternatives
- Vertical (13.5m / 45ft) or horizontal (6 x 6m / 20 x 20ft) coverage
- Superior immunity to false alarms
- Durable design

Features

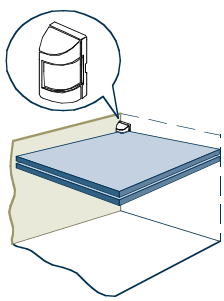
- Selectable pulse counter
- Adjustable curtain position
- Visible light filter

Wall Mounted



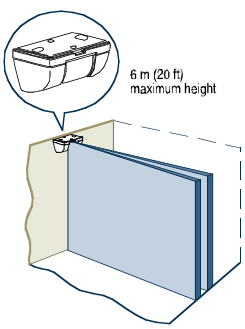
13.5 m (45 ft) maximum distance

Skylight Solid



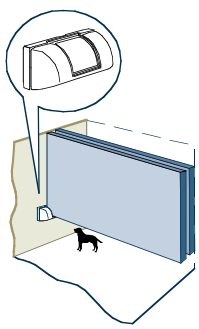
maximum coverage 6 x 6 m (20 X 20 ft)

Ceiling Mounted



13.5 m (45 ft) maximum distance

Pet Alley



13.5 m (45 ft) maximum distance

Applications:

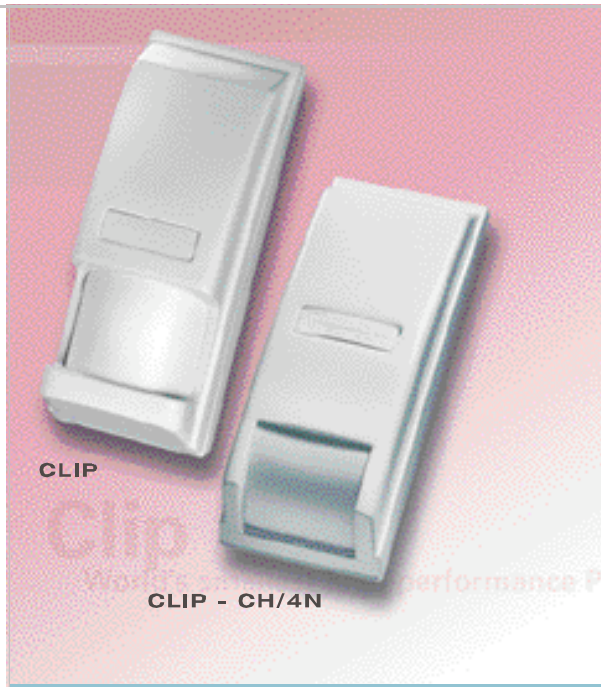
Commercial and light industrial

Operating Voltage:	9 to 16 VDC
Standby Current Drain:	20mA at 12VDC
Alarm Output:	up to 100mA, ~18Ω ON resistance
Operating Temperature:	0°C to 49°C (32°F to 120°F)
Dimensions (H-W-D):	135 x 65 x53mm (4 7/8 x 2 9/16 x 2 1/10")
Mounting Height:	up to 6m (20ft)
Catalog Number:	0-1100-0

Some models may be unavailable in certain regions. Please consult with your local Visonic representative.

Clip™ World's smallest high-performance PIR detectors

The Clip family packs all the performance of a full-size PIR into a tiny, elegant housing. The virtually unnoticeable Clip detectors can protect rooms up to 9m x 13.5m (30 x 45ft). Clip-CH/4N detectors provide adjustable solid-curtain perimeter protection up to 3.6 x 6m (12 x 20ft) for securing doors, windows and corridors as well as for activating CCTV and access control systems.



Benefits

- Miniature unnoticeable design
- Wide angle room and curtain coverage models
- Industry-leading reliability and false alarm immunity
- Adjustable curtain coverage and sensitivity
- Complies with international standards

Features

- Adjustable curtain: 2, 4, 6m (6, 12, 20 ft)
- Solid-state relay for silent operation (Clip-CH/4N)
- Alternate polarity pulse counter (Clip)
- Visible light rejection filter

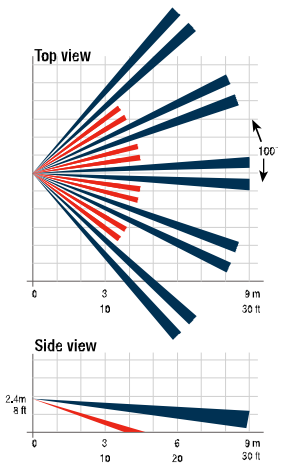
Model	Type	Catalog Number
Clip	Wide Angle PIR	0-1161-0
Clip-CH/4N	Curtain PIR	0-1164-0
CB-1	Corner mount bracket	0-1786-0

Applications:
Residential and light commercial

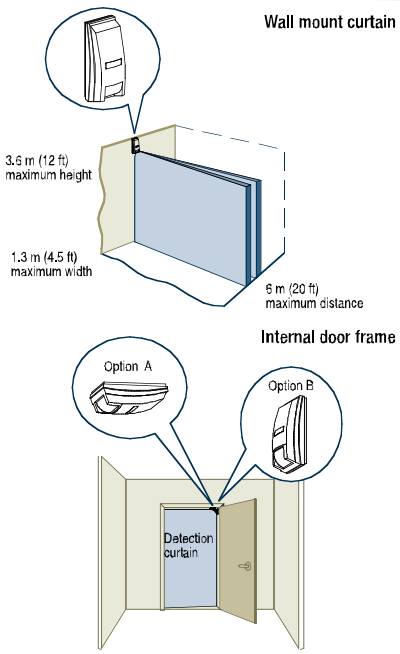
Patented Technologies
(read more on pages 19-24)

- True Motion Recognition (TMR™) processing with digital temperature compensation for superior false alarm protection (Clip-CH/4N)
- Protected under US patents: 5,693,943; 6,768,294 ; Des. 364,827; Des. 383,078 and other international patents and patent applications

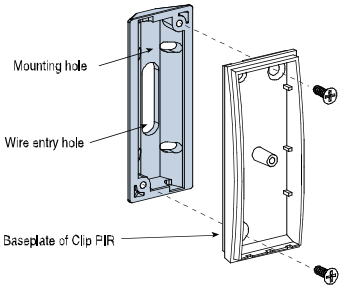
Clip - Wide Angle



Clip - CH/4N Curtain



Operating Voltage:	10 to 16 VDC
Standby Current Drain:	Clip 12.5mA at 12VDC Clip CH/4N 8mA at 12VDC
Alarm Output:	up to 100mA, ~30Ω ON resistance
RFI Protection:	Greater than 20V/m (up to 1000 MHz)
Operating Temperature:	-10°C to 50°C (14°F to 122°F)
Dimensions (H-W-D):	70 x 28 x 25mm (2 3/4 x 1 1/4 x 1")
Mounting Height:	Clip up to 2.4 m (8 ft) Clip-CH/4N up to 3.6m (12 ft)
Mounting Accessories:	**CB-1 Corner mount bracket**



Some models may be unavailable in certain regions. Please consult with your local Visonic representative.

SPY™ Micro-PIR detectors

Visonic Spy detectors offer an unbeatable combination of very high performance together with exceptionally inconspicuous installation. They are conveniently integrated into a wide range of security and control applications, including CCTV and access control systems. These virtually unnoticeable detectors are easily installed by flush-mounting them into a wall or ceiling.

Benefits

- Provides inconspicuous protection for corridors, passageways and storage rooms
- Ideal for CCTV activation, access control and similar systems
- Fast and easy flush-mount installation with 3/4". drill
- Superior immunity to false alarms

Features

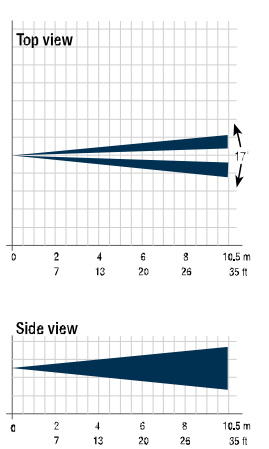
- Four models provide long range, wide angle and curtain coverage
- Ultra-miniature 19mm (3/4") diameter (visible part)
- Flush-mounted in a wall or ceiling or installed from behind a wall
- Snap-fit or adjustable bracket installation options
- Alternate polarity pulse counter

Applications:
Residential and commercial

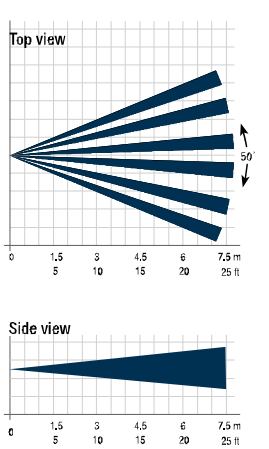
Operating Voltage:	10 to 14 VDC
Standby Current Drain:	12.5mA at 12VDC
Alarm Output:	up to 100mA, ~18Ω ON resistance
RFI Protection:	Greater than 10V/m (up to 1000 MHz)
Operating Temperature:	0°C to 50°C (32°F to 122°F)
Dimensions:	Diameter 19mm (3/4") Length 70mm (2 3/4")

Model	Type	Catalog Number
SPY 1	Long range PIR	0-1151-0
SPY 2	Medium angle PIR	0-1152-0
SPY 3	Wide angle PIR	0-1153-0
SPY 4	Curtain PIR	0-1154-0

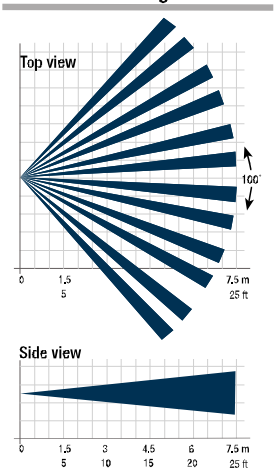
SPY 1- Long range



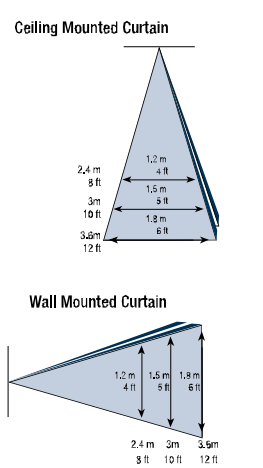
SPY 2 - Medium angle



SPY 3 - Wide angle



SPY 4 - Curtain

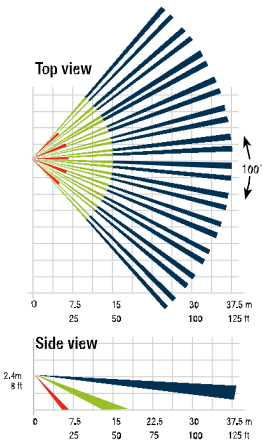


Some models may be unavailable in certain regions. Please consult with your local Visonic representative.

Energy Management PIR Detectors

Automatic control of lighting and air-conditioning systems

Visonic's energy management PIR detectors are designed for automatic control of lighting and air-conditioning systems in residential, commercial and industrial applications. Designed for stand-alone and integrated applications, they offer important features such as extremely high sensitivity, an adjustable "switch-on" timer, and more.

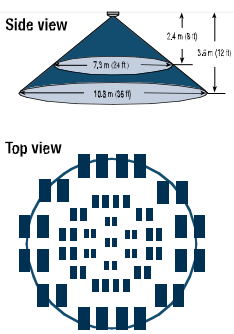


SRN 2000 ET

Professional multi-purpose energy management PIR

- Industry's best detection sensitivity, flexibility and product reliability
- 45 easy-to-change lenses (see page 17)
- Standard coverage pattern of 18m x 18m (60ft x 60ft) adjustable to 35m x 35m (115ft x 115ft)
- Special 3-minute inhibit timer prevents damage to stand-alone air-conditioners
- Surface, corner, flush or swivel bracket mounting
- Power supply: 12 Volt DC / 7mA
- Easily integrated into any kind of energy management system

Catalog number: 0-1709-1

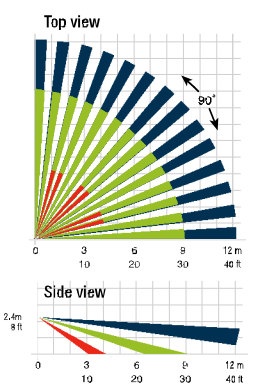


DISC ET

Professional ceiling mount energy management PIR

- Durable miniature design blends seamlessly into any décor
- 360° detection pattern with floor coverage of up to 10.8m (36ft) in diameter
- Exceptionally high sensitivity and reliability
- Power supply: 12 Volt DC or AC / 6mA (24VDC optional)
- Easily integrated into any kind of energy management system

Catalog number: 0-1707-0



GL-1

Professional stand-alone outdoor PIR for light control applications

- Built-in adjustable ambient light sensor disables unit during daytime
- Stand-alone operation with 110-240 VAC power supply
- Multiple lights up to 2kW can be operated by a single unit
- Coverage area: 12 x 12m (40 x 40ft) / 90° with range adjustment control
- Detection pattern adjustment: ±90° horizontally and 30° downward
- Weather resistant

Catalog number: 0-1716-1

Some models may be unavailable in certain regions. Please consult with your local Visonic representative.

Special Purpose PIR Detectors

Automatic control of doors, gates and CCTV

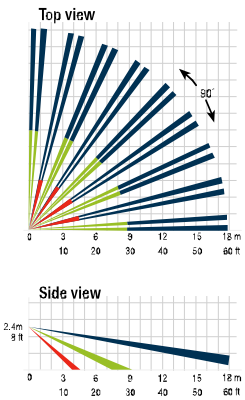
Visonic's special purpose PIR detectors are ideal for access control and automatic door/gate opening applications, indoor and outdoor CCTV camera activation, and various battery operated applications.

SRN 2000 C/PC

Professional PIR for wireless and battery-operated applications

- Easily integrated into wireless and low current battery-operated applications
- Compatible with virtually any commercially available RF transmitter
- Can interface with either NO or NC inputs
- Unique energy saving circuitry extends battery life up to 3 years (in standby)
- 9 Volt battery supply with ultra low current consumption – 0.004 mA
- Easy-to-change lenses (see lens library page 17)
- Optional back box (SRC-203A) provides space for an OEM transmitter and its battery
- Surface, corner or swivel bracket mounting
- Selectable 1,2,3 or 5 pulse counter

Catalog number: 0-1502-8

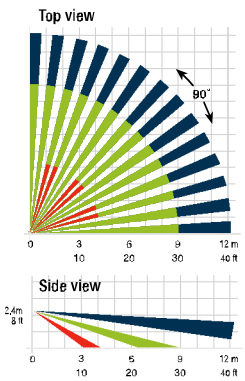


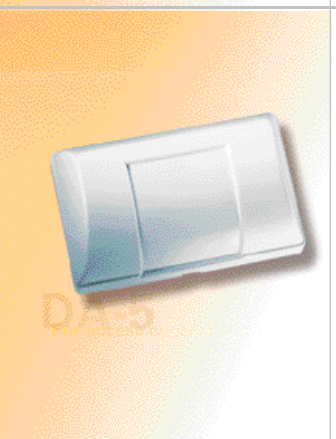
PL-1

Outdoor PIR detector for low voltage control applications

- 9-16 VDC power supply, standby current 7mA at 12VDC
- Designed for control applications (gates, lights, CCTV cameras)
- Built-in photocell enables selecting darkness-only operation
- Adjustable detection range
- Integral swivel bracket, flat or corner mounting
- High RF Immunity
- Weather resistant

Catalog number: 0-1711-1



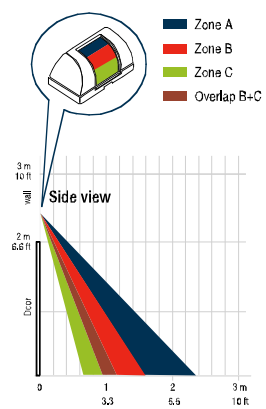


DA-5

PIR detector for access control and automatic door opening systems

- Request-to-exit PIR detector
- 12 / 24 Volt AC/DC power supply, standby current - 7 mA
- User-adjustable relay activation time (1-60 seconds)
- Wall, ceiling, or door frame mounting
- 3 detection zones with 7 beams per zone
- Visible light filter

Catalog number: 0-1704-0



Some models may be unavailable in certain regions. Please consult with your local Visonic representative.

GlassTech™ Revolutionary digital glass-break detectors

GlassTech is the first digital glass-break detector that can reliably distinguish between true alarms (the breaking of framed glass in an outer wall) and false alarms (shattered glass, bottles, plates, etc). This means that users can enjoy full-time protection, during all their day-to-day activities without causing false alarms.

Periodic automatic self-test diagnostic routines that evaluate local acoustical conditions ensure reliable trouble-free operation. In addition, GlassTech AM offers outstanding patented anti-masking capabilities, issuing relayed, visual and audible trouble alarms in case of any impediment to the microphone or circuitry.

Benefits

- Complete adaptability to changing environmental conditions
- Diagnostic self-test for optimal reliability
- Effective sabotage protection can detect if the detector has been blocked or tampered with, or is otherwise malfunctioning – GlassTech AM
- Detection range: up to 10m (30ft) radius at 170°

Features

- Surface or flush mounting on walls and ceilings (GTFK flush mount kit)
- Microprocessor controlled digital signal processing (DSP) based on 18 different sound signatures
- 3-stage statistical analysis and Fuzzy Logic decision-making to identify true or false alarms
- User-selectable alarm memory
- Suitable for room size: 3 x 3m (10 x 10ft) to 15 x 15m (45 x 45ft)

Applications:

Residential, commercial or industrial

Patented Technologies

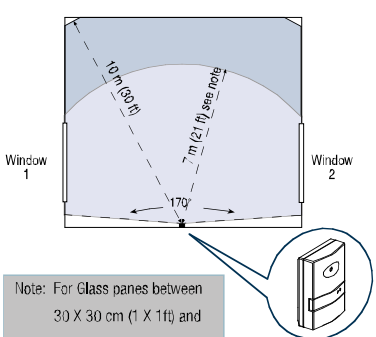
(read more on pages 19-24)

- Breakthrough CAIR™ technology (Computerized Acoustic Image Recognition), applies 18 different sound criteria to precisely distinguish between real and false alarms.
- Protected under US patents ; 5,515,029 ; 5,608,377 and other international patents and patent applications.

Model	Type	Catalog Number
GlassTech™	Digital glass-break detector	0-1901-1
GlassTech™ AM	Digital glass-break detector with Anti-Masking	0-1903-0
GFTK	Flush mount installation kit	0-1790-0

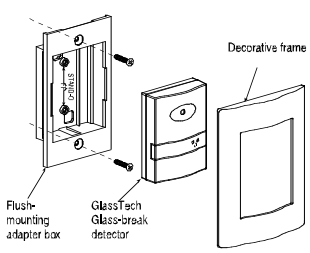
Operating Voltage:	9 to 16 VDC
Standby Current Drain:	20mA at 12VDC
Alarm Output:	up to 100mA, ~18Ω ON resistance
RFI Protection:	Greater than 30V/m (up to 1000 MHz)
Suitable for Room Size:	3 x 3m (10 x 10ft) to15 x 15m (45 x 45ft)
Glass types Detected:	
Plate glass	2.4 up to 6.4mm (3/32 to 1/4")
Tempered glass	3.2 up to 6.4mm (1/8 to 1/4")
Wired glass	3.2 up to 6.4mm (1/8 to 1/4")
Laminated glass	3.2 up to 6.4mm (1/8 to 1/4")
Glass Size:	0.3 x 0.3m (1 x 1ft) to 3 x 3m (10 x 10ft)
Operating Temperature:	-10°C to 50°C (14°F to 122°F)
Dimensions (H-W-D):	68 x 51 x 23mm (2 11/16 x 2 x 7/8")
Mounting:	Min. distance from protected glass 1.2m (4ft.)
Mounting Accessories:	BR-1, BR-3 see page 18 GTFK flush mount kit

Coverage pattern



Note: For Glass panes between 30 X 30 cm (1 X 1ft) and 30 X 60 cm (1 X 2ft), the range is limited to 7m (21ft)

GTFK Kit



Photoelectric Beam Detectors

Advanced performance in outdoor detection

VMX photoelectric beam detectors are rugged, weather-resistant and easy to install single and dual-beam systems. Designed to detect intrusion (through fences, gates, roads, windows, verandas, gardens, walls), they also provide additional security in large commercial and sport facilities, warehouses, factories, parking lots, etc.

Dual-beam design (VMX-150D/300D/450D) provides the verification needed to prevent false alarms caused by accidental intersection of the IR beams (flying birds, insects, falling leaves, etc.). The alarm output is activated only when both beams are disrupted.

Benefits

- Single and dual-beam models
- Rugged all-weather design (IP54)
- Accurate detection based on photoelectric IR technology
- Outstanding reliability and false alarm immunity
- Meets European EN50131-2 and other international standards

Features

- Easy and precise beam alignment thanks to a built-in test point/ view finder
- Tamper protection for transmitter and receiver units
- Accessory kits provided for wall and pole mounting (150D/300D/450D)
- Selectable interruption period (150D/300D/450D)

VMX-150D VMX-300D VMX-450D

VMX-100

Applications:

Outdoor

Operating Voltage:	10 to 24 VDC
Standby Current Drain:	VMX-100 50mA at 12VDC VMX-150D 55mA at 12VDC VMX-300D 60mA at 12VDC VMX-450D 65mA at 12VDC
Alarm Output:	VMX-100 up to 0.5A at 12VDC VMX 150D/300D/450D up to 1A at 12VDC
Operating Temperature:	VMX-100 -20°C to 60°C (-4°F to 140°F) VMX-150D/300D/450D -25°C to 60°C (-13°F to 140°F)
Dimensions (H-W-D):	VMX-100 110 x 50 x 25mm (4.33 x 2 x 1") VMX-150D/300D/450D 167 x 67x 66.5mm (6 3/16 x 2 5/8 x 2 5/8")

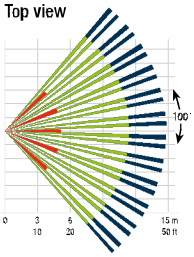
Model	Type	Max. Range Outdoors	Max. Range Indoors	Catalog Number
VMX-100	Outdoor/indoor single-beam detector	8m (25ft)	30m (100ft)	0-9981-0
VMX-150D	Outdoor/indoor dual-beam system	25m (80ft)	50m (165ft)	0-9980-0
VMX-300D	Outdoor/indoor dual-beam system	50m (165ft)	100m (325ft)	0-9980-1
VMX-450D	Outdoor/indoor dual-beam system	75m (250ft)	150m (500ft)	0-9980-2

Some models may be unavailable in certain regions. Please consult with your local Visonic representative.

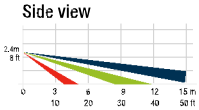
Lens Library

Corner mounting

Top view



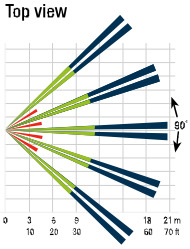
Side view



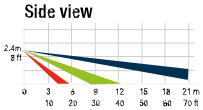
Lens #15

#Beams: 58	Field of view: 100°
Max. Coverage: 15x15m / 50x50ft	
Catalog #: SRN L-0015-0 Duet L-0015-3	

Top view



Side view

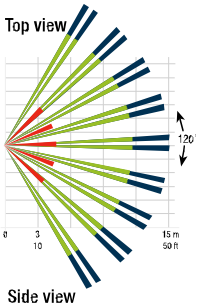


Lens #25

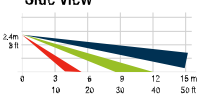
#Beams: 28	Field of view: 90°
Max. Coverage: 21x21m / 70x70ft	
Catalog #: SRN L-0025-0	

Corner mounting ultra-wide angle

Top view



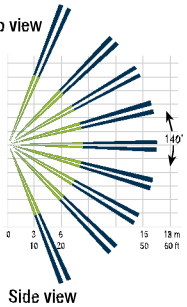
Side view



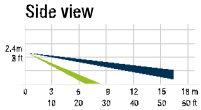
Lens #65

#Beams: 46	Field of view: 120°
Max. Coverage: 15x30m / 50x100ft	
Catalog #: SRN L-0065-0	

Top view



Side view

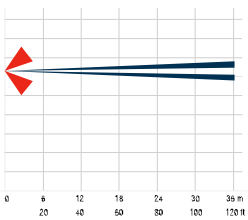


Lens #76

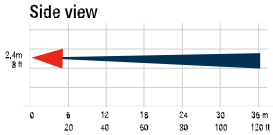
#Beams: 36	Field of view: 140°
Max. Coverage: 17x30m / 55x100ft	
Catalog #: SRN L-0076-0 Duet L-0076-3	

Long range

Top view



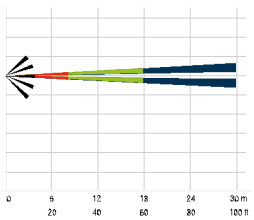
Side view



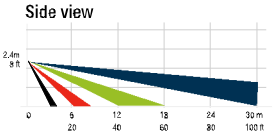
Lens #30

#Beams: 4	Field of view: 6°
Max. Coverage: 3x36m / 10x120ft	
Catalog #: SRN L-0030-0	

Top view



Side view

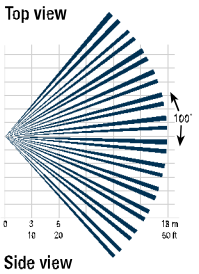


Lens #34

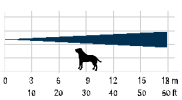
#Beams: 16	Field of view: 90°
Max. Coverage: 3x30m / 10x100 ft	
Catalog #: SRN L-0034-0 Duet L-0034-3	

Pet-alley / High sensitivity

Top view



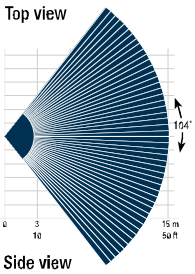
Side view



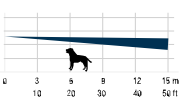
Lens #17

#Beams: 24	Field of view: 100°
Max. Coverage: 18x18m / 60x60ft	
Catalog #: SRN L-0017-0 Duet L-0017-3	

Top view



Side view

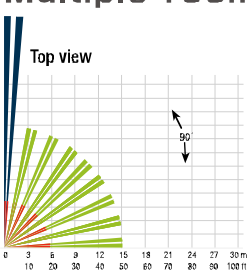


Lens #52

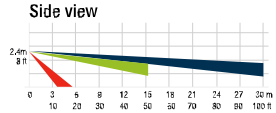
#Beams: 48	Field of view: 104°
Max. Coverage: 15x15m / 50x50ft	
Catalog #: SRN L-0052-0	

Multiple-room and corridor

Top view



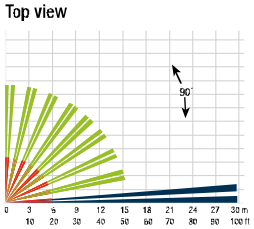
Side view



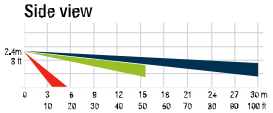
Lens #41

#Beams: 28	Field of view: 90°
Max. Coverage: 15x30m / 50x100ft	
Catalog #: SRN L-0041-0	

Top view



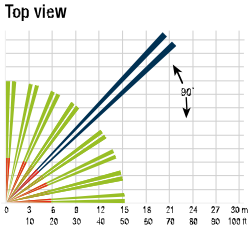
Side view



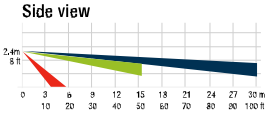
Lens #43

#Beams: 28	Field of view: 90°
Max. Coverage: 15x30m / 50x100ft	
Catalog #: SRN L-0043-0	

Top view



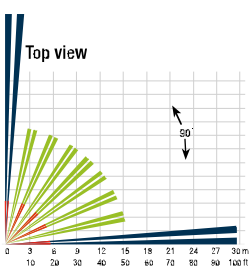
Side view



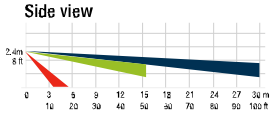
Lens #45

#Beams: 28	Field of view: 90°
Max. Coverage: 21x30m / 70x100ft	
Catalog #: SRN L-0045-0	

Top view



Side view



Lens #47

#Beams: 28	Field of view: 90°
Max. Coverage: 30x30m / 100x100ft	
Catalog #: SRN L-0047-0	

Some models may be unavailable in certain regions. Please consult with your local Visonic representative.

Detector Accessories Mounting brackets

The BR-1, BR-2 and BR-3 are universal swivel mounting brackets which accommodate most of Visonic's PIR and glass break detectors.

- Adjustable vertically 0-30°
- Adjustable horizontally 45° left to 45° right

BR-1
Wall-mount bracket

Catalog number: 0-1781-0

BR-2
Corner mount bracket

Catalog number: 0-1782-0

BR-3
Ceiling mount bracket

Catalog number: 0-1783-0

Some models may be unavailable in certain regions. Please consult with your local Visonic representative.

TSI™ – Target Specific Imaging

Visonic's Target Specific Imaging (TSI™) technology optimizes optical design to create a new generation of intelligent detectors. By precisely manipulating the optical structure of the detector, TSI™ offers an unprecedented capability to detect human motion, and differentiate between humans and animals.

Implementing patented TSI™ concepts, Visonic's precisely designed lenses boost accuracy and optical sensitivity. This results in detector circuitry with lower amplification and better signal to noise performance.
TSI™ is based on three important innovations in optical design:

1. Cylindrical optical segments reduce false alarms. Visonic's patented cylindrical optical segments overcome the shortcomings of Fresnel detection, in which any movement across any of the beams, even a slight movement from a small pet, can cause an alarm. See Figure 1a.

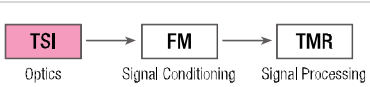
Visonic's unique cylindrical optics improves on Fresnel optics by dividing the space into multiple vertical "curtains" (rather than beams). This makes it possible to distinguish between humans and small animals and significantly reduce false alarms. See Figure 1b.

In addition, curtain segments also offer the capability of covering the area below and immediately next to the detector (look-down detection).

2. Manipulation of lens thickness reduces animal-related false alarms. Visonic has developed a unique patented cylindrical lens geometry with special changing sensitivity. TSI™ takes into consideration that animals are active mainly within the lower part of the detector's field-of-view. See Figure 2.

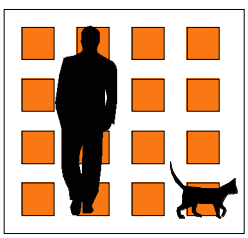
At the lower end, where pets and other animals are typically observed, the cylindrical segment is thicker and therefore less sensitive. Through careful manipulation of lens thickness it is therefore possible to maintain the system's extremely high sensitivity to human intruders, while selectively reducing sensitivity to moving animals.

3. Spherical lens design enhances long-range detection. In detectors incorporating ball-shaped lenses, the cylindrical segments of the lens are spherical, with a triangular contour. Positioning the wide sides of the triangular sectors upwards boosts the optical gain of the upper part, which serves for long-range detection and typically receives smaller signals. This unique capability to compensate for weak long-range signals boosts the reliability and catch performance of Visonic detectors.



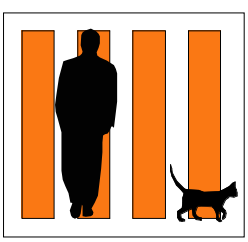
1. "Curtains" vs. Beams

1a. Conventional Fresnel Lens



Beams are equally sensitive to human and animal motion

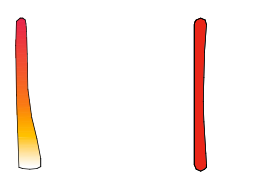
1b. TSI™ Cylindrical Lens



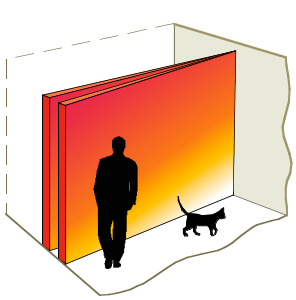
The detector is triggered only by strong signals related to human motion. Weak animal signals do not cause alarms

2. Lens Thickness Manipulation

Lens Geometry



TSI™ Lens Sensitivity



Increased detector sensitivity in the upper portion of the lens and field-of-view results in better catch performance for humans while ignoring pets

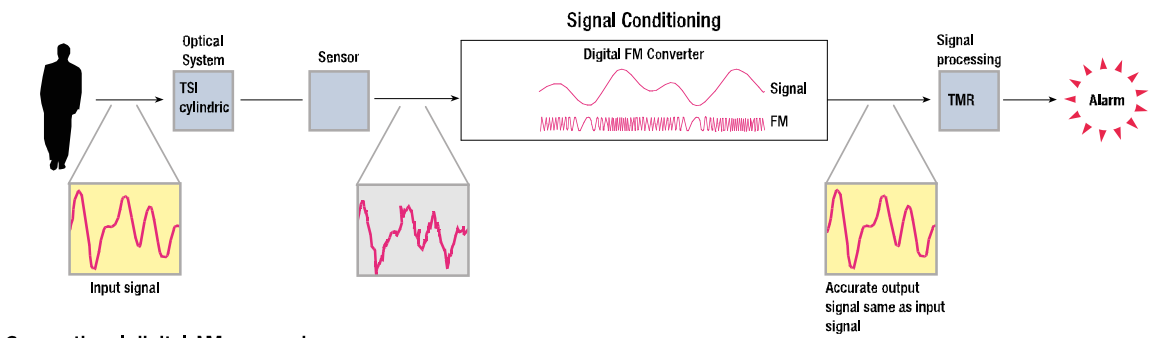
Digital FM (Frequency Modulation) Processing

Visonic's breakthrough digital FM (Frequency Modulation) Processing technology represents a huge step beyond conventional digital AM processing methods. The core advantage is based on a smart mechanism for transforming signals coming from the sensor directly into the frequency domain without amplifying them first – which effectively eliminates the need for conventional amplifiers and digital-to-analog converters (DAC). Since DACs and analog amplifiers add considerable amount of noise and distortion to the signal, Visonic's unique patented digital FM technology vastly improves signal-to-noise performance and achieves exceptional signal accuracy.

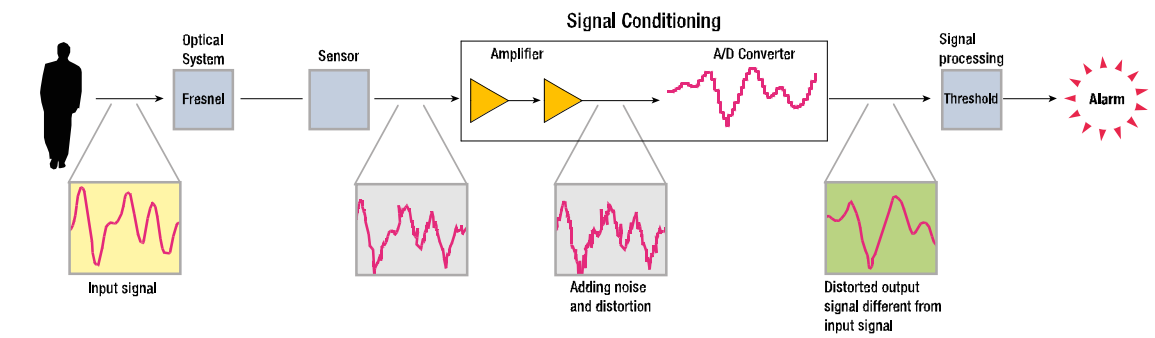
The advantages of frequency modulation (FM) over amplitude modulation (AM) in signal processing and communication systems are powerful and well documented: robustness, accuracy and immunity to noise. The implementation of FM signal processing represents a major step forward in detection technology.

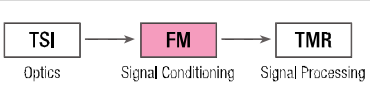
Visonic's patented digital FM Processing technology is a revolutionary step forward in digital detection. It is the basis for exceptionally advanced detection solutions offering highly precise decision-making, and true target detection with virtually no false alarms.

Visonic digital FM processing



Conventional digital AM processing





TMR™ – True Motion Recognition

True Motion Recognition™ is Visonic's unique patented solution to the long-standing challenge of reliably identifying signals generated by a moving person, and distinguishing them from false alarms.

TMR™ is based on an advanced patented algorithm, which incorporates detailed data on the nature of signals generated by human motion. The data was recorded and analyzed in an extensive study involving diverse individuals, scenarios, environments and situations. Parameters analyzed include:

1. The detector's optic design
2. The nature of human motion
3. The sensor's parameters
4. Environmental conditions, particularly temperature

The resulting adaptive algorithm, TMR™, represents a powerful detection tool. Detectors incorporating TMR™ reliably identify signals originating from real human motion, powerfully boosting catch performance while virtually eliminating false alarms.

1. Who is a true intruder ?

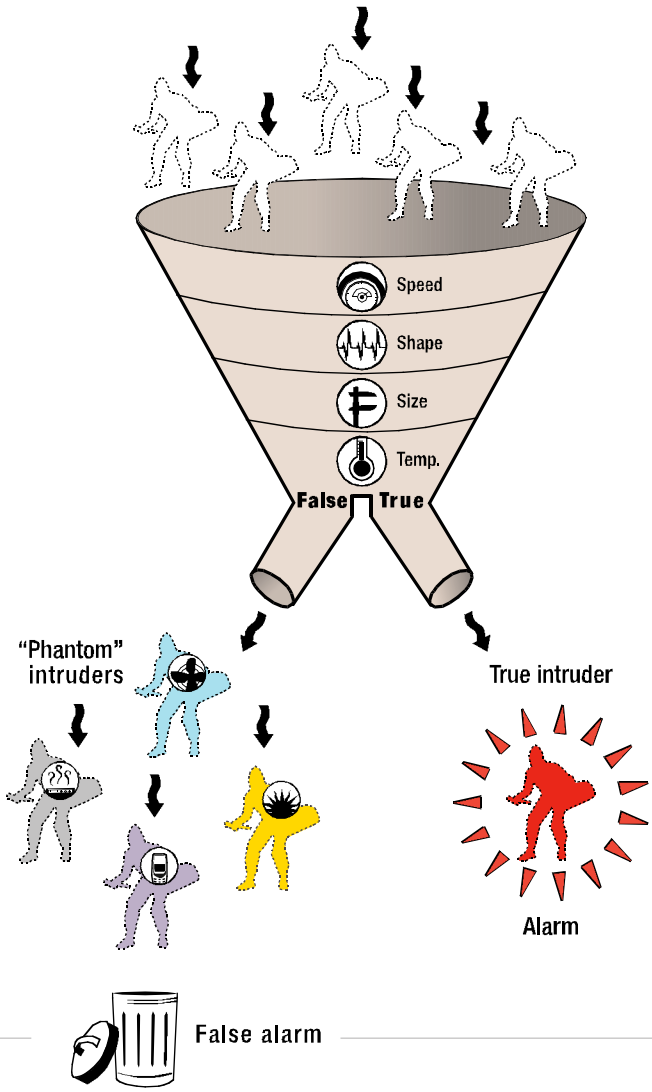
Many false alarm signals may be perceived as alarms. It is difficult to separate a true alarm signal from a false alarm signal with traditional processing means.

2. TMR Processing

By processing signal features such as speed, size and shape, combined with environment conditions, TMR™ distinguishes between false and true alarms.

3. Identification

False alarms are identified and ignored.



TSI → FM → TMR

Optics — Signal Conditioning — Signal Processing

Active IR Anti-Masking (X-Masking™)

Visonic's X-Masking™ active IR anti-masking technology is ideal for high-security environments requiring uncompromised detection functionality. It provides immediate alarm in case detection capability is impaired – be it accidentally or by intentional masking attempts.

Unintentional blocking results from carelessness, such as stacking boxes too close to the detector. Intentional masking attempts involve spraying the lens or placing opaque-to-IR materials in front of the sensors or on the lens.

Visonic's X-Masking™ technology is based on an active IR transmitter and receiver. The active system consists of a Gallium Arsenide LED, which transmits IR signals outward in all directions in the vicinity of the detector, including over the external side of the detector's lens. These signals reflect off the surrounding area and back into the IR photo detector receiver, which is placed behind the detector lens.

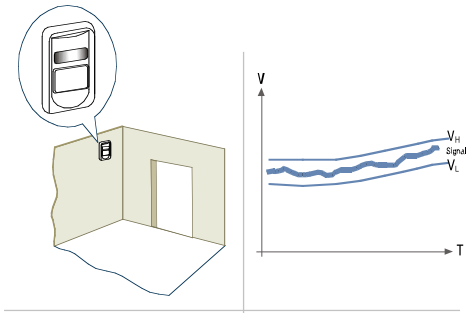
Upon installation, the IR photo detector automatically learns the level of reflected IR signals of its surroundings, and sets adaptive reference values (lower V_L and upper V_H thresholds). From this point onward, any attempt to mask the detector will create signals deviating from these thresholds – resulting in a trouble alert.

Furthermore, a special adaptive circuit deflects changes in the close environment and constantly monitors the surroundings of the detector in order to adjust the V_L and V_H threshold levels accordingly. This maintains the detector's high sensitivity to masking attempts, while eliminating false alarms throughout the lifetime of the detector.

Visonic's exceptionally sensitive X-Masking™ technology reliably responds to virtually any accidental blocking, as well as lens spraying and other sophisticated masking attempts occurring in its proximity.

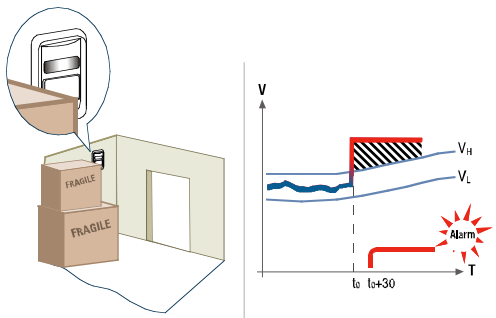
1. Normal state

The alarm signal between the adaptive thresholds



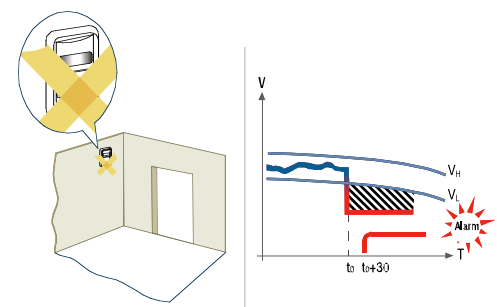
2. Boxes blocking the detector

Reflection of the IR signal increases and exceeds the higher threshold



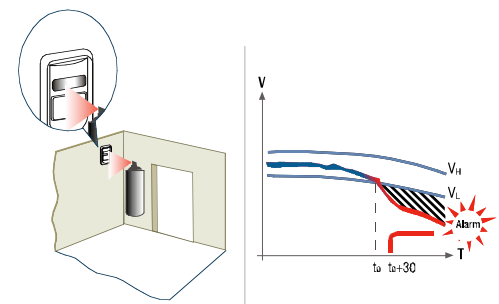
3. Tape or other materials mask the lens itself

The reflected IR signal decreases below the lower threshold



4. Spray gradually builds on the lens

The reflected IR signal is gradually reduced until it is detected in the lower threshold



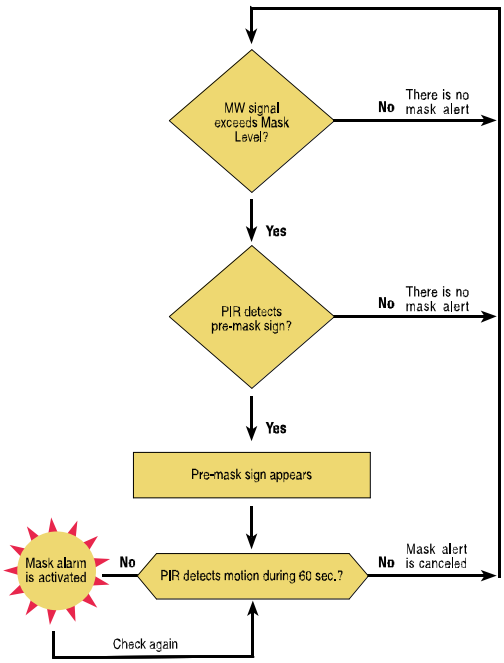
Dual-Technology Anti-Masking

Dual-Technology Anti-Masking enables the microwave channel in a Visonic dual-tech AM detector to double up as a masking detector.

At regular intervals, the microwave channel's sensitivity is momentarily reduced, so its detection capabilities are focused on the area close to the detector. During this short period, any signals detected at close range are likely to represent masking attempts.

To reliably confirm suspected masking attempts, data from the microwave and PIR channels is compared. A masking event is confirmed only after the microwave channel registers motion signals for 60 seconds, with no simultaneous PIR signal detection. At this point, the trouble output is activated and a LED indicator flashes.

Dual-Technology Anti-Masking has an integrated capability to clear masking alarms. As soon as significant PIR operation is detected, the detector assumes that the masking status is no longer valid, and the masking alarm is cleared.



CAIR™ - Computerized Acoustic Image Recognition

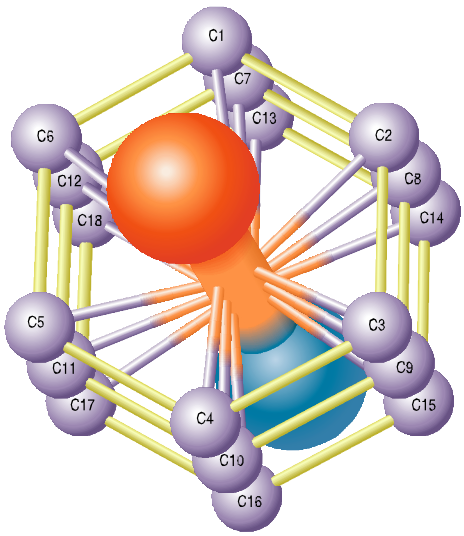
Visonic's CAIR™ technology has the unique ability to differentiate between a window break-in event and false alarms caused by everyday glass-break events. The key to this functionality lies in a very sophisticated signal processing below and beyond the frequencies of audio signals.

CAIR™ technology is based on a set of patented algorithms that rapidly evaluate audio signals, which have been digitized using computerized (DSP) processing. A three-stage statistical and decision-making process applies 18 different sound criteria to precisely distinguish between real glass-break intrusion events and false alarms. Powerful and precise criteria were developed by recording, documenting and mathematically analyzing hundreds of sound patterns, using special computers and dedicated software. Visonic's study covered tempered, plate, wired and laminated glass, various sizes and thicknesses of glass, and diverse room reverberations and acoustic environments.

Detectors incorporating CAIR™ technology offer an unparalleled capability to distinguish between true intrusion events (a window or glass door being broken) and everyday household events (a broken mirror, glasses shattering in the sink, etc.) – offering homeowners powerful high-sensitivity detection while minimizing false alarms.

Cair Technology

Software-controlled digital processing (DSP), combined with a 3-stage statistical analysis and decision-making process, applies 18 different sound criteria to precisely distinguish between real and false alarms



- Digital Signal Processing (DSP)
- Sound Criteria (C1 Through C18)
- Statistical Analysis and Decision-Making
- False Alarm
- Alarm

RELIABILITY YOU CAN COUNT ON

sleepwalkers

Head Office (Israel)	Tel (+972-3) 645 6789	Fax (+972-3) 645 6788
Visonic Inc. (U.S.A.)	Tel (+860) 243 0833	Fax (+860) 242 8094
Visonic Ltd. (U.K.)	Tel (+44-870) 730 0800	Fax (+44-870) 730 0801
Visonic Iberica (Spain)	Tel (+34-91) 659 3120	Fax (+34-91) 663 8468
Visonic GmbH (Germany)	Tel (+49) 211 600 6960	Fax (+49) 211 600 69619
Visonic Deson Ltd. (Hong Kong)	Tel (+852) 2157 7147	Fax (+852) 3184 3421
Visonic Ltd. (Nordic)	Tel (+47) 6758 0843	Fax (+47) 6758 0814
Visonic Sp.zo.o. (Poland & Central Eu.)	Tel (+48-22) 6393436	Fax (+48-22) 8334860

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