

TAKEX

The Choice of Professionals Worldwide.



Security
Sensors

Introduction

As an electronic security professional

you have many choices in the selection of equipment and TAKEX is the recognised leader when it comes to sensor technology. TAKEX is known worldwide for unsurpassed quality, reliability, features and over-all value. Our commitment to you, the security professional is uncompromising quality and customer satisfaction.

Quick Reference Beam Guide

Model No. Type	Beam	Range External	Internal	Frequency Selection	Walk Test Tone	Environmental Output	Alignment Tone	Double Modulated	Voltage	Pole Mount Incl.
Reflector Beams										
PR-1B	Reflector	-	1m	-	-	-	-	Yes	10.5 - 22V DC	-
PR-5B	Reflector	-	5m	-	-	-	-	Yes	12 - 24V DC	-
PR-10B	Reflector	-	10m	-	-	-	-	Yes	12 V DC	-
PR-11B	Reflector	11m	15m	-	-	-	-	Yes	12 - 30V DC	-
Microwave Sensors										
MW-50	Microwave	50m	50m	H/L	-	-	-	-	12 - 30V DC	Yes
COM-IN-50HF	Combination	50m	50m	4+ H/L	Yes	Yes	Yes	Yes	10 - 30V DC	Yes
Photoelectric Beams										
PB-20TE	Twin	20m	40m	4	-	-	-	Yes	12 - 30V DC	Yes
PB-30TK	Twin	30m	60m	-	-	-	-	Yes	10 - 30V DC	Yes
PB-40TE	Twin	40m	80m	4	-	-	-	Yes	12 - 30V DC	Yes
PB-50F	Quad	50m	100m	-	-	-	Yes	Yes	12 - 30V DC	Yes
PB-IN-50HF	Quad	50m	100m	4	Yes	Yes	Yes	Yes	12 - 30V DC	Yes
PB-60TE	Twin	60m	120m	4	-	-	-	Yes	12 - 30V DC	Yes
PB-60TK	Twin	60m	120m	-	-	-	-	Yes	10 - 30V DC	Yes
PB-IN-75SW	Quazi-Quad	75m	150m	4	Yes	Yes	Yes	Yes	5 - 30V DC	Yes
PB-100TK	Twin	100m	200m	-	-	-	-	Yes	10 - 30V DC	Yes
PB-100ST	Twin	100m	200m	-	-	-	-	Yes	12 - 30V DC	Yes
PB-100F	Quad	100m	200m	-	-	-	Yes	Yes	12 - 30V DC	Yes
PB-IN-100HF	Quad	100m	200m	4	Yes	Yes	Yes	Yes	12 - 30V DC	Yes
PB-IN-100AT	Quad Plus	100m	200m	4	Yes	Yes	Yes	Yes	12 - 30V DC	Yes
PB-200F	Quad	200m	400m	-	-	-	Yes	Yes	12 - 30V DC	Yes
PB-IN-200HF	Quad	200m	400m	4	Yes	Yes	Yes	Yes	12 - 30V DC	Yes

5 Year warranty for all products

PB-30TK, 60TK & 100TK Standard Twin Beams



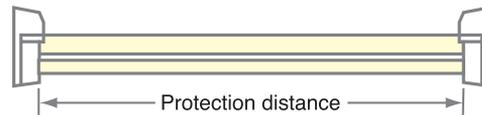
PB-30TK
(Range: Outdoor 30m)
(Range: Indoor 60m)

PB-60TK
(Range: Outdoor 60m)
(Range: Indoor 120m)

PB-100TK
(Range: Outdoor 100m)
(Range: Indoor 200m)

FEATURES

- Twin beam AND gated with Double Modulation
- Frost resistant cover / AGC circuit
- Monitor jack output
- External light protection trouble free to 50,000 lux



Model	Photoelectric Beam Sensor
Detection System	Near Infrared (through type) Twin Beam (single)
Alarm Output	Dry contact relay output: 1c Reset time: Detection time + delay time (approx. 1 - 3 sec.), 30V (AC/DC) 0.5A Max
Supply Voltage	10V to 30V DC (non-polarity)
Current Consumption	60mA to 80mA
Ambient Temperature	-25°C to +60°C
Installation	Outdoor, indoor, Wall/Tower/Pole
Optional	Pole cover, Heater
Size (WxHxD)	73mm x 170mm x 70mm
Weight	Transmitter: 380g Receiver: 400g

PB-20TE, 40TE & 60TE Intelligent Synchro Twin Beams



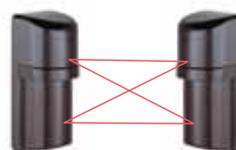
PB-20TE
(Range: Outdoor 20m)
(Range: Indoor 40m)

PB-40TE
(Range: Outdoor 40m)
(Range: Indoor 80m)

PB-60TE
(Range: Outdoor 60m)
(Range: Indoor 120m)

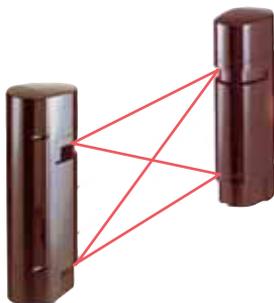
FEATURES

- Intelligent twin beam
- 4 selectable transmission frequencies
- Twin beam AND gated with Double Modulation
- Frost resistant cover / AGC circuit / Monitor jack output
- External light protection trouble free to 50,000 lux



Model	Photoelectric Beam Sensor
Detection System	Near Infrared (through type) Synchro Twin Beam
Alarm Output	Dry contact relay output: 1c Reset time: Detection time + delay time (approx. 1 - 3 sec.), 30V (AC/DC) 0.5A Max
Supply Voltage	12V to 30V DC (non-polarity)
Current Consumption	55mA to 80mA
Ambient Temperature	-25°C to +60°C
Installation	Outdoor, indoor, Wall/Tower/Pole
Optional	Pole cover, Heater
Size (WxHxD)	73mm x 170mm x 70mm
Weight	Transmitter: 380g Receiver: 400g

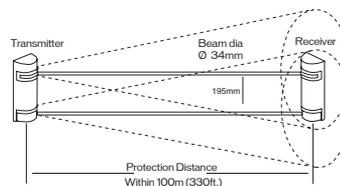
PB-100ST Standard Twin Beam



PB-100ST
(Range: Outdoor 100m)
(Range: Indoor 200m)

FEATURES

- External light protection
- Affordable quality twin beam
- Double Modulation
- Rotary optical alignment system
- Frost resistant cover / Auto-gain lock / Sensitivity attenuation L.E.D.
- External light protection trouble free to 50,000 lux



Model	Photoelectric Beam Sensor
Detection System	Simultaneous breaking 2-beam system
Alarm Output	Dry contact relay output: 1c Reset time: Reset time: Detection time + delay (1 - 3 sec.) 30V(AC/DC) 0.5A Max
Supply Voltage	10V to 30V DC (non-polarity)
Current Consumption	80mA
Ambient Temperature	-25°C to +60°C
Installation	Outdoor, indoor, Wall/Tower/Pole
Optional	Pole cover, Heater, Housing
Size (WxHxD)	104mm x 390mm x 98mm
Weight	Transmitter: 1200g Receiver: 1200g

PB-50F, 100F & 200F Standard Quad Beams



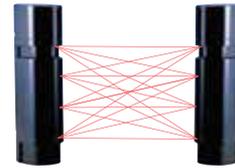
PB-50F
(Range: Outdoor 50m)
(Range: Indoor 100m)

PB-100F
(Range: Outdoor 100m)
(Range: Indoor 200m)

PB-200F
(Range: Outdoor 200m)
(Range: Indoor 400m)

FEATURES

- 4 synchronized high power beams with Double Modulation
- Audible alignment tone
- Frost resistant cover / Auto-gain lock / Monitor jack output
- External light protection trouble free to 50,000 lux



Model	Photoelectric Beam Sensor
Detection System	Near Infrared (through type) Intelligent Quad Beam
Alarm Output	Dry contact relay output: 1c Reset time: Detection time + delay time (approx. 1.5 sec.), 30V (AC/DC) 1A Max
Supply Voltage	12V to 30V DC (non-polarity)
Current Consumption	60mA to 85mA
Ambient Temperature	-25°C to +60°C
Installation	Outdoor, Indoor, Wall/Tower/Pole
Optional	Pole cover, Heater, Housing
Size (WxHxD)	104mm x 390mm x 98mm
Weight	Transmitter: 1200g Receiver: 1300g

PB-IN-50HF, 100HF & 200HF Intelligent Synchro Quad Beams



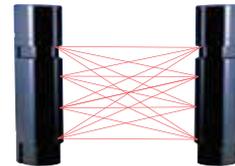
PB-IN-50HF
(Range: Outdoor 50m)
(Range: Indoor 100m)

PB-IN-100HF
(Range: Outdoor 100m)
(Range: Indoor 200m)

PB-IN-200HF
(Range: Outdoor 200m)
(Range: Indoor 400m)

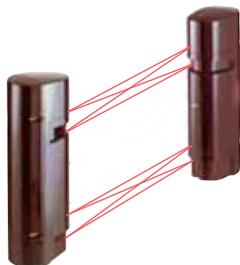
FEATURES

- 4 synchronized high power beams with Double Modulation
- 4 selectable transmission frequencies
- Environmental monitoring circuit / Beam strength selection
- Frost resistant cover / Auto-gain lock / Audible alignment feature
- External light protection trouble free to 50,000 lux



Model	Photoelectric Beam Sensor
Detection System	Near Infrared (through type) Intelligent Quad Beam
Alarm Output	Dry contact relay output: 1c Reset time: Detection time + delay time (approx. 1.5 sec.), 30V (AC/DC) 1A Max
Supply Voltage	12V to 30V DC (non-polarity)
Current Consumption	60mA to 85mA
Ambient Temperature	-25°C to +60°C
Installation	Outdoor, Indoor, Wall/Tower/Pole
Optional	Pole cover, Heater, Housing
Size (WxHxD)	104mm x 390mm x 98mm
Weight	Transmitter: 1200g Receiver: 1300g

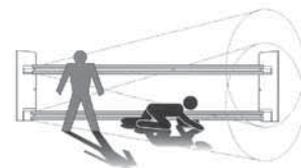
PB-IN-100AT Intelligent Anti-Crawl Beam



PB-IN-100AT
(Range: Outdoor 100m)
(Range: Indoor 200m)

FEATURES

- Anti-Crawl high security photoelectric quad beam
- 4 selectable transmission frequencies
- Environmental monitoring circuit
- External light protection trouble free to 50,000 lux
- Dual response time system
- Frost resistant cover / Auto-gain lock



Model	Photoelectric Beam Sensor
Detection System	Near infrared interruption beam system
Alarm Output	Dry contact relay output: 1c Alarm Output Reset time: 1.5 sec. 30V(AC/DC) 1A Max
Supply Voltage	12V to 30V DC (non-polarity)
Current Consumption	85mA
Ambient Temperature	-35°C to +66°C
Installation	Outdoor, Indoor, Wall/Tower/Pole
Optional	Pole cover, Heater, Housing
Size (WxHxD)	104mm x 390mm x 98mm
Weight	Transmitter: 1200g Receiver: 1300g

PB-IN-75SW Intelligent Low Current Beam



FEATURES

- Low current photoelectric beam for solar applications
- 4 selectable transmission frequencies
- Environmental monitoring circuit / Frost resistant cover / Auto-gain lock
- External light protection trouble free to 50,000 lux

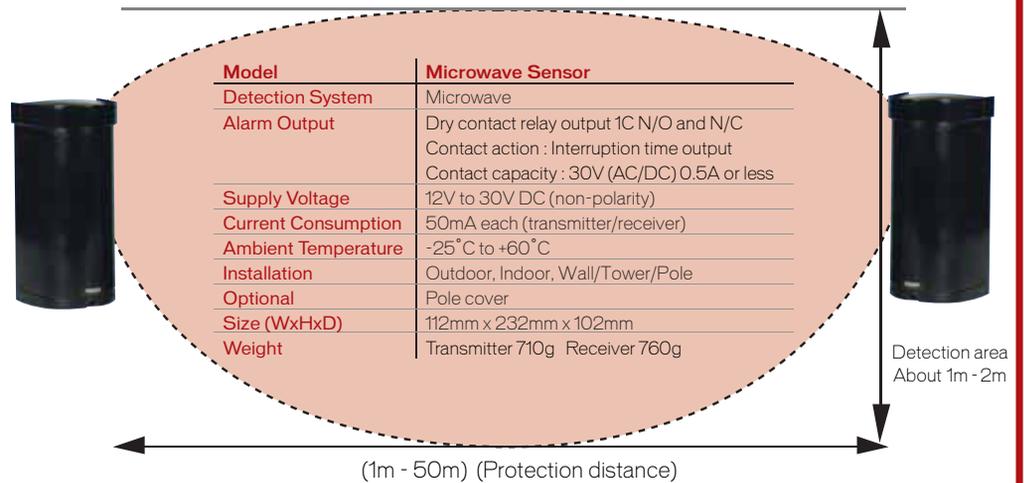
Note: Battery Pack with Solar Panel (BA6SL) optional

Model	Low Current Photoelectric Beam Sensor
Detection System	Near Infrared (through type) Intelligent Beam
Alarm Output	Dry contact relay output: 1c Reset time: Detection time + delay time (approx. 2 sec.), 30V (AC/DC) 1A Max
Supply Voltage	5V to 8V or 10V to 30V DC (with-polarity)
Current Consumption	6mA to 25mA
Ambient Temperature	-25°C to +60°C
Installation	Outdoor, Wall/Pole
Optional	Pole cover, Heater, Housing
Size (WxHxD)	104mm x 390mm x 98mm
Weight	Transmitter: 1200g Receiver: 1300g

MW-50 Point-to-Point Microwave Sensor

FEATURES

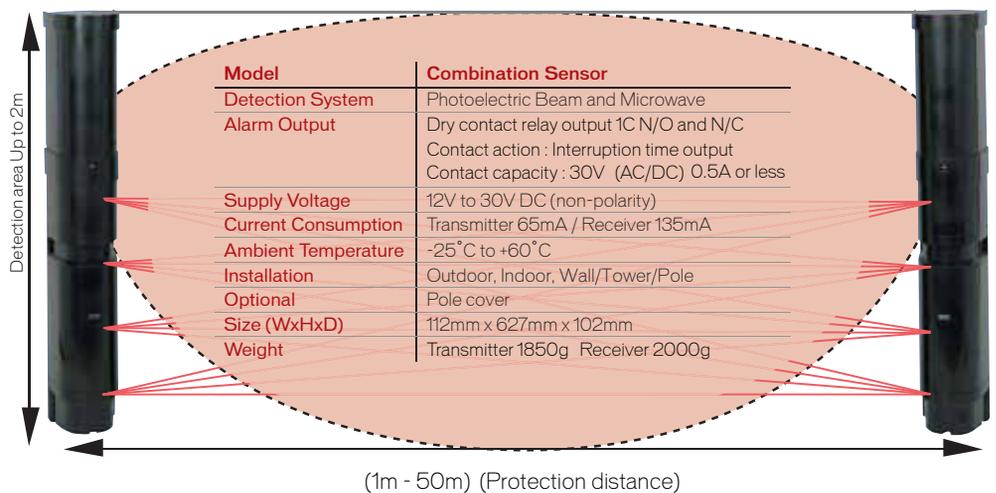
- 50m Point-to-Point "K" Band Microwave sensor
- Adjustable response time
- Performs well in all types of weather
- 2 Microwave frequencies available: High & Low



COM-IN-50HF Combination Microwave & Intelligent Double Modulated Quad Beams

FEATURES

- 50m outdoor combination Intelligent Double Modulated Quad photoelectric beam and Microwave sensor
- Improved catch performance during difficult weather conditions
- Auto Gain Control, Environmental Monitoring Circuit
- 2 Microwave frequencies available: High & Low
- External light protection trouble free to 50,000 lux



Beam Towers

MB Series Enclosures for free standing and wall mount applications

FEATURES

- Conceals & protects photo beams & microwave
- Single sided model
- Provides flexibility in beam mounting height
- Aluminium chassis with durable polycarbonate covers
- Optional heater & thermostat control are available
- Beam towers sold individually



PTH



PTS



MBFB

Part Number	Description
MB100	1m single sided 180° floor mount
MB150	1.5m single sided 180° floor mount
MB200	2m single sided 180° floor mount
MB300	3m single sided 180° floor mount

Optional Heaters, Thermostats, Brackets, Anticlimb Tops available

PT Series Enclosures for free standing and wall mounting applications

FEATURES

- Conceals & protects photo beams & microwave
- Single & two-sided models available
- Provides flexibility in beam mounting height
- Aluminium chassis with durable polycarbonate covers
- Optional heater & thermostat control are available
- Beam towers sold individually



PTH



PTS



PTFB

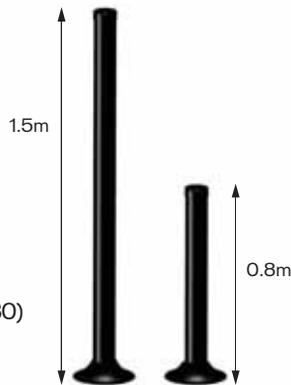
Part Number	Description
PT100	1m double sided 360° floor mount
PT150	1.5m double sided 360° floor mount
PT200	2m double sided 360° floor mount
PT300	3m double sided 360° floor mount
PT100W	1m single sided 180° wall mount
PT150W	1.5m single sided 180° wall mount
PT200W	2m single sided 180° wall mount
PT300W	3m single sided 180° wall mount

Optional Heaters, Thermostats, Brackets, Anticlimb Tops available

Spire

FEATURES

- Discrete protection for smaller beams
- 180° viewing angle for beams
- 360° appearance conceals orientation of beams
- Maximum of 6 beams per tower (Spire 150, 3 beams for Spire 80)
- Aluminium chassis with durable polycarbonate cover
- Tamper switch for top



PTH



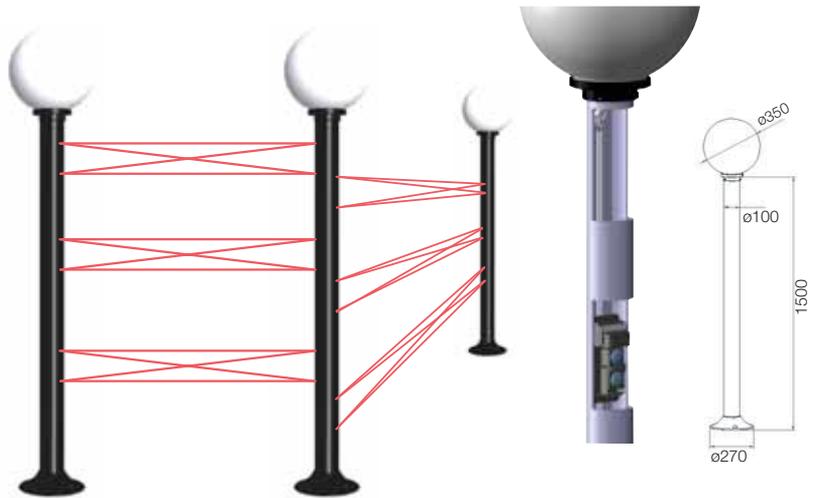
PTS



MAFB

Beam Towers

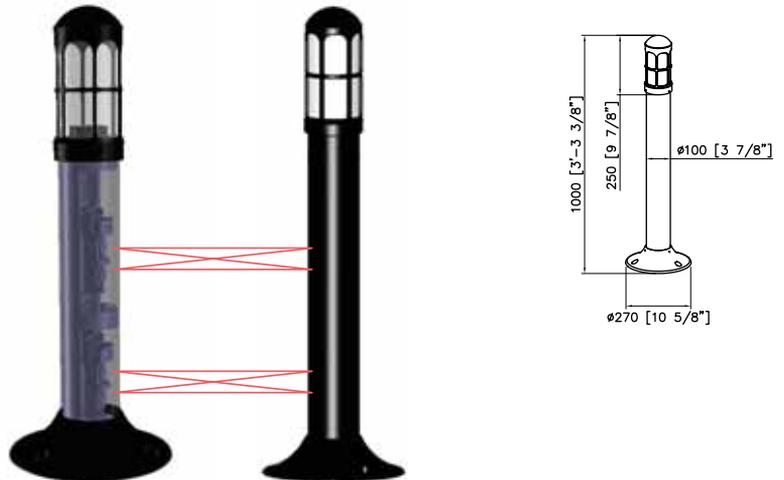
Malta



FEATURES

- The ultimate in discrete perimeter detection
- TAKEX TE & TK series twin beam compatibility
- Functional garden lamp can be high or low voltage
- Aluminium chassis with durable polycarbonate cover
- 180° total angle of view with tamper switch protection
- CAV series lamp towers sold individually and in pairs
- Maximum of 6 beams per tower

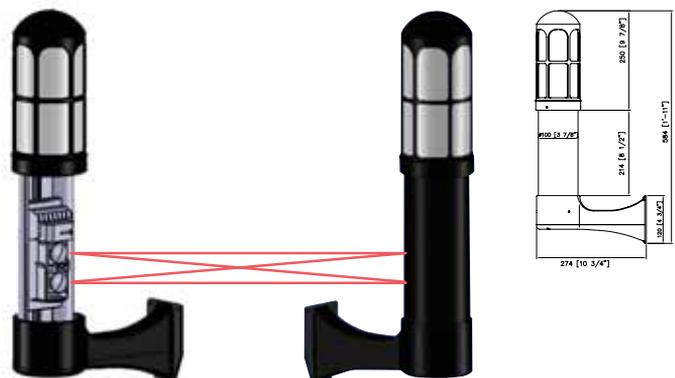
Lamp Tower CAV



FEATURES

- The ultimate in discrete perimeter detection
- TAKEX TE & TK series twin beam compatibility
- Functional garden lamp can be high or low voltage
- Aluminium chassis with durable polycarbonate cover
- 180° total angle of view with tamper switch protection
- CAV series lamp towers sold individually and in pairs
- Maximum of 3 beams per tower

Lamp Tower CAVW



FEATURES

- The ultimate in discrete wall mounted detection
- TAKEX TE & TK series twin beam compatibility
- Functional lamp can be high or low voltage
- Aluminium chassis with durable polycarbonate cover
- 180° total angle of view with tamper switch protection
- Maximum of 1 beam per tower
- **CAWW series lamp towers sold in pairs**

MS-100E Internal & External multi-pattern PIR sensor



FEATURES

- Can be mounted vertically, horizontally or to the ceiling!
- Wide angle & Long range lenses included / Sensor head rotates
- Sensitivity adjustment and Day & Night Mode
- Activate alarm panel, lighting or security camera / Weather proof
- No/NC contact

Wide Angle	Vertical Curtain	Long Range
10m x 15m	20m x 3m	20m x 2m

Model	Passive Infrared Sensor
Detection System	Twin
Alarm Output	Dry contact relay output: N/C or N/O (switchable) Relay time: 2 sec. - 5 min., 30V (AC/DC) 0.5A Max
Supply Voltage	10.5V to 30V DC (non-polarity)
Current Consumption	30mA
Ambient Temperature	-20°C to +50°C
Installation	Wall, Ceiling Pole, Metal Plate (indoor, outdoor)
Optional	Pole cover, Pole attachment, Wall mount bracket, Wall/ceiling attachment, Magnetic sheet
Size (WxHxD)	77mm x 171mm x 70mm
Weight	220g

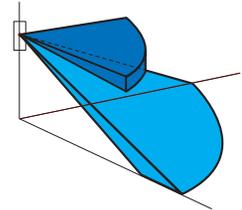
MS-12TE External multi-pattern PIR sensor (Pet tolerant)



FEATURES

- Advanced variable multi-area detection system / Weather proof
- 90° Wide Angle Coverage
- Dual Zone sensor heads minimize false activation

Up to 12m x 12m coverage



Model	Passive Infrared Sensor
Detection System	Dual Zone - With horizontal detection angle: 90° per head (full cover 180°)
Alarm Output	Dry contact relay output: N/C or N/O (switchable) Detection time + off delay (approx. 2 sec + approx 5 min)
Supply Voltage	12V to 30V DC (non-polarity)
Current Consumption	40mA
Ambient Temperature	-20°C to +50°C
Installation	Wall, Ceiling or Pole mount (indoor or outdoor)
Size (WxHxD)	234mm x 80mm x 91mm
Weight	470g

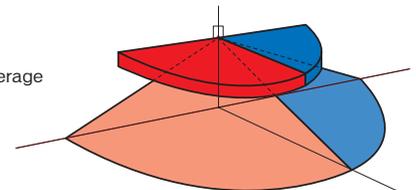
MS-12FE External multi-pattern PIR sensor (Pet tolerant)



FEATURES

- Advanced variable multi-area detection system / Weather proof
- 2 x 90° Wide Angle Coverage / Two independent rotating sensor heads
- Dual Zone sensor heads minimize false activation

Up to 12m x 24m coverage



Model	Passive Infrared Sensor
Detection System	Dual Zone - with horizontal detection angle: 90° per head (full cover 180°)
Alarm Output	Dry contact relay output: N/C or N/O (switchable) Detection time + off delay (approx. 2 sec + approx 5 min)
Supply Voltage	12V to 30V DC (non-polarity)
Current Consumption	40mA
Ambient Temperature	-20°C to +50°C
Installation	Wall, Ceiling or Pole mount (indoor or outdoor)
Size (WxHxD)	234mm x 80mm x 91mm
Weight	470g

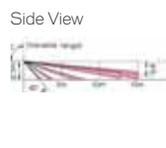
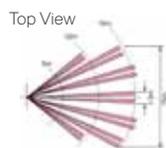
Outdoor Sensors

External PIR's

PA-15WE & PA-30NE



PA-15WE
Wide angle protection
(Coverage: 15m x 15m)



PA-30NE Long range protection
(Coverage: 30m x 3m)



FEATURES

- Attachable to ceiling, wall or to pole
- Easy angle adjustment
- Suitable for external and internal use

Model	Passive Infrared Sensor
Detection System	Twin
Alarm Output	Dry contact relay output: 1c Reset time: approx 2 sec., 30V (AC/DC) 0.5A Max
Supply Voltage	10.5V to 30V DC (non-polarity)
Current Consumption	25mA
Ambient Temperature	-20°C to +50°C
Installation	Wall, Ceiling (indoor, outdoor)
Optional	Pole attachment
Size (Dia x D)	72mm x 211mm
Weight	500g

Outdoor Sensors

Speakers

PV-12 Sensor Speaker



FEATURES

- PIR coverage 12m x 12m
- Genuine speech synthesis device
- Easy recording, own personalised message
- Memory back-up for (20) days without power
- Weather proof
- Volume adjustment

Model	Sensor Speaker (PV-12)
Detection System	Passive infrared
Coverage Area	Wide angle protection (Coverage: 12m x 12m)
Supply Voltage	12V DC
Current Consumption	Standby 20mA / Operation 500mA
Voice Output	2W up to 100dB
Alarm Output	Dry contact relay output: 1C Reset time: approx 8 sec. 30V (AC/DC), 0.5A
Ambient Temperature	-20°C to +50°C
Size (WxHxD)	115mm x 172mm x 289mm
Weight	1000g

AV-100 Voice Speaker

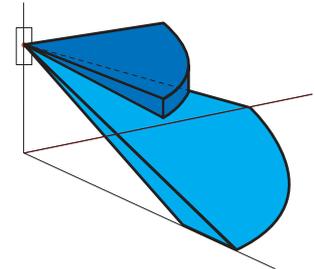


FEATURES

- Genuine speech synthesis device
- Easy recording, own personalised message
- Memory back-up for (20) days without power
- Weather proof
- Designed for use with any detector

Model	Voice Speaker (AV-100)
Detection System	N/A
Coverage Area	N/A
Supply Voltage	12V DC
Current Consumption	Standby 20mA / Operation 500mA
Voice Output	2W up to 100dB
Alarm Output	Dry contact N/O
Ambient Temperature	-20°C to +50°C
Size (WxHxD)	115mm x 172mm x 289mm
Weight	1000g

PVW-12T Message PIR

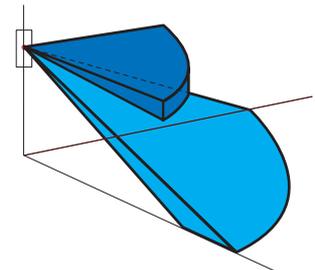


Up to 12m x 12m coverage

FEATURES

- Up to 12m x 12m coverage
- Variable volume up to 80db
- Day/Night switching allows playback of 2 different messages
- Line input & built in mic for recording own messages
- 180° rotating sensor head
- Can be remotely armed/disarmed
- Variable Pulse Count

TX-114R Wireless PIR



Up to 12m x 12m coverage

FEATURES

- Battery Operated Wireless PIR
- Up to 12m x 12m coverage
- Dual Zone Detection Area for minimal false activations
- Rotating Optics
- Compatible with numerous transmitter models

PIR-30WE

Up to 30m x 30m coverage

PIR-50NE

Up to 50m x 3m coverage



FEATURES

- Up to 3.5m mounting height
- Weatherproof AES Resin cases for External & Internal use
- Optical Viewfinder for easy set up
- Internal vertical/horizontal coverage adjustment
- Steel hoods for additional protection against sunlight and wildlife
- Numerous pole/wall mounting options available
- Remote alarm LED enabling/disabling for easy walk testing

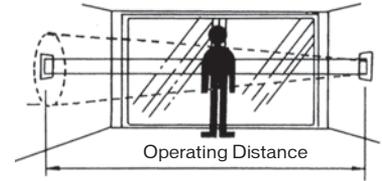
PR-1B (non-reflector based) PR-5B (single reflector) Internal Use



FEATURES

- PR-1B a reflector is not required, "Presence Sensing" Range 1m
- PR-5B uses a single reflector, Range 5m
- Direct reflection system / Sensitivity adjustment
- Silent relay operation / Compact size

Sensor
PR-5B
(Coverage: 5m)
Single beam for indoor short
distance use Reflection type



Model	PR-1B	PR-5B
Detection System	Near Infrared (direct reflection type)	
Alarm Output	Dry contact relay output: 1c Reset time: Detection time + delay (approx. 5 sec) 30V (AC/DC) 0.5A Max	
Supply Voltage	10.5V to 22V DC (non-polarity)	12 - 28VDC
Current Consumption	60mA (@12VDC)	25mA (@12VDC)
Ambient Temperature	-20°C to +50°C	
Installation	Wall, Pillar (indoor)	
Optional	Flush mount plate, L bracket	
Size (WxHxD)	62mm x 106mm x 23.5mm	
Weight	75g	

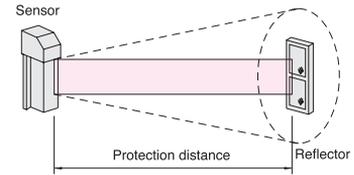
PR-10B Adjustable Angle Internal Use



FEATURES

- Single beam for indoor moderate distances, up to 10m
- Rotating sensor head / Direct reflection system

PR-10B
Surface mount type
(Coverage: 10m)



Model	Photoelectric Beam Sensor
Detection System	Near Infrared (reflection type)
Alarm Output	Dry contact relay output: N/C Reset time: 1 sec Response time: 50 - 100 sec. 30V (AC/DC) 0.5A Max
Supply Voltage	12V
Current Consumption	30mA
Ambient Temperature	-20°C to +50°C
Horizontal Angle Adj.	180°
Installation	Wall, Pillar (indoor)
Size (WxHxD)	62mm x 158mm x 62mm
Weight	220g

PR-11B Adjustable Angle External & Internal use



FEATURES

- Outdoor Single beam reflection type
- Rotating sensor head / Power to one side only
- Detection Range: Outdoor 11m / Indoor 15m

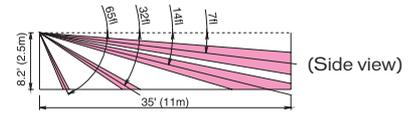
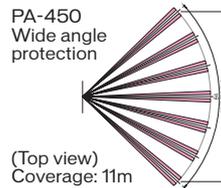
Model	Photoelectric Beam Sensor
Detection System	Near Infrared (reflection type)
Alarm Output	Dry contact relay from N/O - N/C Contact capacity: 30V (AC/DC) 0.5A or less Relay operation: Interruption time (minimum 2 seconds)
Supply Voltage	10.5V to 30V DC (non-polarity)
Current Consumption	55mA or less
Ambient Temperature	-20°C to +60°C
Horizontal Angle Adj.	180°
Installation	Wall, Pillar
Optional	Pole mount kit: BP60A
Size (WxHxD)	Sensor: 73mm x 170mm x 71.5mm Reflector: 93mm x 231mm x 100mm
Weight	Sensor: 430g Reflector: 490g

PA-450 & PA-450PI



FEATURES

- Creep zone
- L.E.D. disable switch
- Low voltage alarm
- 11m x 14.5m pattern
- Selectable N/O or N/C silent relay output
- PA-450PI Pet tolerant version available (Creep zone non-functional)



Model	Passive Infrared Sensor
Detection System	Twin
Alarm Output	Dry contact (semi-conductory relay output) N/O or N/C selectable Reset time: 2 sec, 24V(AC/DC) 0.25A Max
Supply Voltage	9V to 18V DC (non-polarity)
Current Consumption	25mA
Ambient Temperature	-15°C to +55°C
Installation	Wall, Wall corner (indoor)
Optional	Ceiling / Wall mount attachment BCW 401
Size (WxHxD)	70mm x 110mm x 45mm
Weight	120g

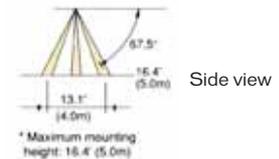
PA-6805E "Spot" Ceiling Mount



FEATURES

- Up to 4m diameter spot coverage
- Pulse count
- Sensitivity adjustment 60%, 80%, 100% & 120%
- Selectable N/O or N/C silent relay output
- Sealed sensor head detaches from sensor base for easier wiring

PA-6805E
Spot protection
(Coverage: ø 4m)



Model	Passive Infrared Sensor
Detection System	Twin
Alarm Output	Dry contact (semi-conductory relay output) N/O or N/C selectable Reset time: 2 sec, 30V(AC/DC) 0.25A Max
Supply Voltage	9V to 18V DC (non-polarity)
Current Consumption	25mA; N/C
Ambient Temperature	-15°C to +55°C
Installation	Ceiling, Wall (indoor)
Optional	BP150A
Size (Dia x D)	120mm x 47mm
Weight	110g

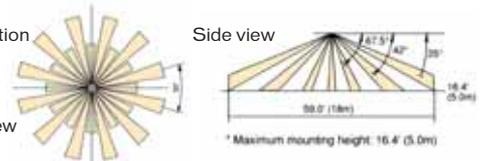
PA-6810E 360 Degree Ceiling Mount



FEATURES

- Up to 18m diameter coverage
- Pulse count
- Sensitivity adjustment 60%, 80%, 100% & 120%
- Selectable N/O or N/C silent relay output
- Sealed sensor head detaches from sensor base for easier wiring

PA-6810E
360° Round protection
(Coverage: ø 18m)



Model	Passive Infrared Sensor
Detection System	Twin
Alarm Output	Dry contact (semi-conductory relay output) N/O or N/C selectable Reset time: 2 sec, 30V(AC/DC) 0.25A Max
Supply Voltage	9V to 18V DC (non-polarity)
Current Consumption	25mA; N/C
Ambient Temperature	-15°C to +55°C
Installation	Ceiling, Wall (indoor)
Optional	BP150A
Size (Dia x D)	120mm x 47mm
Weight	110g

PA-6812E Wide Angle Ceiling Mount



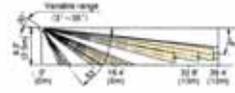
FEATURES

- 12m x 12m wide angle coverage
- Mirror optic with Pulse count
- Sensitivity adjustment 60%, 80%, 100% & 120%
- Selectable N/O or N/C silent relay output
- Sealed sensor head detaches from sensor base for easier wiring

Wide angle protection
(Coverage: 12m x 12m)
Top view



Side view



Model	Passive Infrared Beam Sensor
Detection System	Twin
Alarm Output	Dry contact (semi-conductory relay output) N/O or N/C selectable Reset time: 2 sec, 30V(AC/DC) 0.25A Max
Supply Voltage	9V to 18V DC (non-polarity)
Current Consumption	25mA: N/C
Ambient Temperature	-15°C to +55°C
Installation	Ceiling, Wall (indoor)
Optional	BP150A
Size (Dia x D)	120mm x 47mm
Weight	110g

PA-6820E Vertical Curtain Ceiling Mount



FEATURES

- 20m x 2m narrow curtain coverage
- Mirror optic with Pulse count
- Sensitivity adjustment 60%, 80%, 100% & 120%
- Selectable N/O or N/C silent relay output
- Sealed sensor head detaches from sensor base for easier wiring

PA-6820E
Vertical curtain protection
(Coverage: 20m x 2m)

Top view



Side view



Model	Passive Infrared Beam Sensor
Detection System	Twin
Alarm Output	Dry contact (semi-conductory relay output) N/O or N/C selectable Reset time: 2 sec, 30V(AC/DC) 0.25A Max
Supply Voltage	9V to 18V DC (non-polarity)
Current Consumption	25mA: N/C
Ambient Temperature	-15°C to +55°C
Installation	Ceiling, Wall (indoor)
Optional	BP150A
Size (Dia x D)	120mm x 47mm
Weight	110g

BP-150A "Anti-Masking" Sensor Base Plate



FEATURES

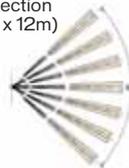
- Base incorporating "anti-masking" sensor
- Independent alarm output
- Works with motion sensors PA-6612, PA-6805, PA-6810, PA-6812, PA-6820 and Flame Sensor FS-2000.

Model	Photo IC
Detection System	Direct reflection system by near infrared
Alarm Output	Subject to the attached sensor unit *NC only for FS-2000E
Supply Voltage	9VDC to 30VDC (Subject to Sensor Head)
Current Consumption	Max 15mA (Base unit only)
Ambient Temperature	-15°C to +55°C
Trouble Alarm Output	N/C, 24V AC/DC
Installation	Indoor ceiling mount
Size (Dia x D)	150mm x 15mm
Weight	120g

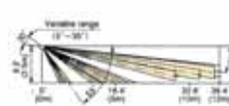
PA-6612E Wide Angle (Pet Tolerant)



Wide angle protection
(Coverage: 12m x 12m)
Top view



Side view



FEATURES

- 12m x 12m coverage
- Two dual pyro elements & twin mirror optical system
- Selectable N/O or N/C silent relay output
- Adjustable sensitivity from 60%, 80%, 100% & 120% / Pulse count

Model	Passive Infrared Sensor
Detection System	Twin x 2
Alarm Output	Dry contact (semi-conductory relay output) N/O or N/C selectable Reset time: 2 sec, 24V(AC/DC) 0.25A Max
Supply Voltage	10.5V to 18V DC (non-polarity)
Current Consumption	25mA
Ambient Temperature	-15°C to +55°C
Installation	Ceiling, Wall (indoor)
Optional	Ceiling / Wall mount attachment BP150A
Size (Dia x D)	120mm x 55mm
Weight	135g

PA-5312E Wide Angle Quad PIR / PA-5325E Long Range Quad PIR

PA-5312E
12m x 12m coverage

PA-5325E
25m x 2m coverage



FEATURES

- High-performance mirror optic with "Slight Motion" detection
- Built-in alarm memory
- Alarm relay output self-test function for high integrity

Model	Passive Infrared Sensor
Detection System	Quad
Alarm Output	Dry contact relay output: N/O or N/C selectable Reset time: approx 2 sec. 30V(AC/DC) 0.25A Max
Supply Voltage	9.5V to 30V DC (non-polarity)
Current Consumption	35mA Max
Ambient Temperature	-10°C to +55°C
Installation	Ceiling
Optional	Flush mount attachment, Level checker
Size (Diameter x D)	147.3mm x 59mm
Weight	250g

PA-8410E / PA-8420E

Coming Soon

PA-8410E
Up to 10m x 20m coverage
High Density 56 twin zone pattern
Variable Pulse Count Selectable



PA-8420E
Up to 20m x 2.3m coverage
High Density 30 twin zone coverage

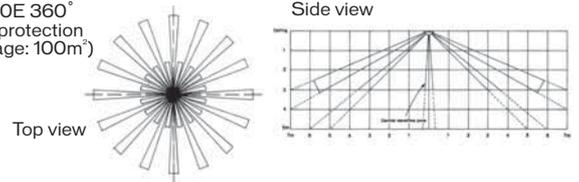
FEATURES

- Installation height 4-8m
- Remote coverage zone adjustment
- Durable AES weatherproof housing for external and harsh internal environments
- Remote alarm LED enabling/disabling for easy walk testing
- Optional wall and pole mount brackets available

PA-7100E



PA-7100E 360°
Round protection
(Coverage: 100m²)



FEATURES

- Up to 100m² diameter coverage
- Digital Quad Sensing / High-performance mirror optic
- Automatic Temperature Compensation

Model	Passive Infrared Sensor
Detection System	Quad (with built-in CPU)
Alarm Output	Dry contact relay output: 1c Reset time: 3 - 5 sec. 30V (AC/DC) 0.1A Max
Supply Voltage	9V to 18V DC (non-polarity)
Current Consumption	15mA
Ambient Temperature	-15°C to +55°C
Installation	Ceiling
Optional	Flush mount attachment BU7000
Size (Dia x D)	144mm x 92mm
Weight	350g

PA-7012E



PA-7012E
Wide angle protection
(Coverage: 12m x 12m)



FEATURES

- 12m x 12m wide angle coverage
- Ceiling Mount
- Digital Quad Sensing / High-performance mirror optic
- Automatic Temperature Compensation

Model	Passive Infrared Sensor
Detection System	Quad (with built-in CPU)
Alarm Output	Dry contact relay output: 1c Reset time: 3 - 5 sec. 30V (AC/DC) 0.1A Max
Supply Voltage	9V to 18V DC (non-polarity)
Current Consumption	15mA
Ambient Temperature	-15°C to +55°C
Installation	Ceiling, Wall (indoor)
Optional	Flush mount attachment BU7000
Size (Dia x D)	144mm x 92mm
Weight	350g

PA-7030E



PA-7030E
Vertical curtain protection
(Coverage: 30m x 2m)



FEATURES

- 30m x 2m narrow pattern
- Ceiling Mount
- Digital Quad Sensing / High-performance mirror optic
- Automatic Temperature Compensation

Model	Passive Infrared Sensor
Detection System	Quad (with built-in CPU)
Alarm Output	Dry contact relay output: 1c Reset time: approx 3 - 5 sec. 30V (AC/DC) 0.1A Max
Supply Voltage	9V to 18V DC (non-polarity)
Current Consumption	15mA
Ambient Temperature	-10°C to +55°C
Installation	Ceiling, Wall (indoor)
Optional	Flush mount attachment BU7000
Size (Dia x D)	144mm x 92mm
Weight	350g

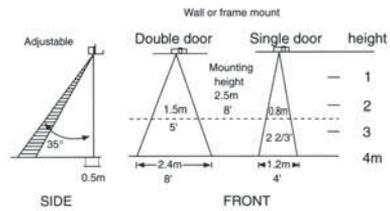
PS-520E Request-to-Exit Sensor



Available in:
Silver & White.

FEATURES

- Wall or ceiling mount
- Single or Double-Door selectable
- Mirror optic / "Fail Safe" or "Fail Secure" selectable / (2) Form "C" relays



Model	Auto Door Sensor
Detection System	Near Infrared Beam Direct Reflection
Max Installation Height	2500mm
External Output	Dry contact relay N/O, 30V DC, 125V AC
Area adjustment Angle	10° to 24° (3.5° x 4 steps)
Power Supply	12/24V DC or 12/24V AC
Current Consumption	40mA or less on DC, 70mA or less on AC
Ambient Temperature	-10°C to +50°C
Size (W x H x D)	160mm x 60mm x 40mm
Weight	170g

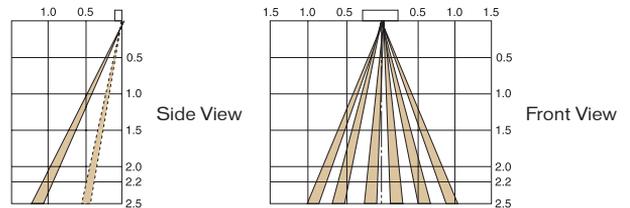
DA-101E Automatic Door Sensor



Available in:
Silver & Black.

FEATURES

- Near infrared beam type
- Ultra-slim 25mm body
- Excellent external light immunity
- Stationary object detection / Selectable frequency



Model	Auto Door Sensor
Detection System	Near Infrared Beam Direct Reflection
Max Installation Height	2500mm
External Output	Dry contact relay N/O, 50V DC, 1.0A or less
Area Adjustment Angle	10° to 24° (3.5° x 4 steps)
Power Supply	12/24V DC or 100V AC 50/60Hz
Current Consumption	80mA or less at 12/24V DC 2VA or less at 100V AC
Ambient Temperature	-10°C to +50°C
Size (W x H x D)	212mm x 64.5mm x 25.3mm
Weight	160g

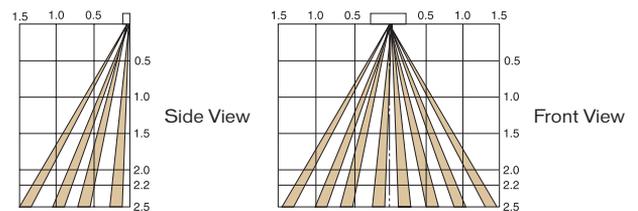
DA-301E Automatic Door Sensor



Available in:
Silver & Black.

FEATURES

- Near infrared beam type
- Super-slim 30mm body
- High-density detection pattern
- Excellent external light immunity
- Stationary object detection / Selectable frequency

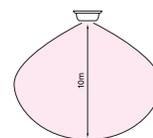


Model	Auto Door Sensor
Detection System	Near Infrared Beam Direct Reflection
Max Installation Height	3000mm
Power Supply	24V DC
Current Consumption	2VA or less
External Output	Dry contact relay N/O
Stationary Detection	2, 5, 20 and infinite selectable by DIP switch
Ambient Temperature	-20°C to +60°C
Size (W x H x D)	212mm x 65mm x 30mm
Weight	230g

Flame Sensors

Internal

FS-1000E, FS-2000E & FS-3000E



Ultraviolet rays detection system

FEATURES

- High sensitivity with a range of 10m
- External output for security panel / Versatile, high-quality

Model	Flame Sensor
Detection System	Ultraviolet rays detection
Detection Distance	7cm lighter flame, 10m ahead
Power Supply	Alkaline battery (LR 6 x 2) or 9V to 30V DC
Current Consumption	50mA
Alarm Output	Open collector (semi-conductor) output N/O 30V DC, 50mA Max Delay time: (approx 10 sec)
Installation	Ceiling, Wall (indoor)
Size (Dia x D)	120mm x 40mm
Weight	200g

Flame Sensors

External

FS-5000E



FEATURES

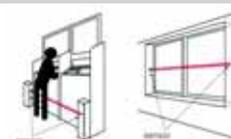
- 8 selectable sensitivity levels
- OMNI directional housing
- Alarm memory function
- Output time set up

Model	Flame Sensor
Detection System	Ultraviolet rays detection
Detection Distance	Up to 10m
Power Supply	DC 10V - 30V (non-polarity)
Current Consumption	35mA
Alarm Output	Dry contact relay Form C 30V DC, 0.5A or less
Installation	Wall/Ceiling/Pole mount (with optional bracket)
Size (Dia x D)	72mm x 211mm
Weight	550g

Speciality Sensors

Miniature Beam

PB-10NS (single head) & PB-10TNS (twin head)



FEATURES

- Sensor effective range 10m
- N/O or N/C selectable output
- PB-10TNS is and / or gated

Model	PB-10S	PB-10TNS
Detection System	Near Infrared TR/RE	
Alarm Output	Dry contact relay output: N/O or N/C (selectable) Contact capacity: 30V (AC/DC) 0.5A or less Interruption time + Delay Time (approx 1 sec)	
Supply Voltage	10V to 30V DC (non-polarity)	
Current Consumption	45mA or less	45mA or less
Ambient Temperature	-25°C to +55°C (w/o condensation or ice)	
Size (WxHxD)	45mm x 110mm x 29mm (control box)	
Weight	95g	

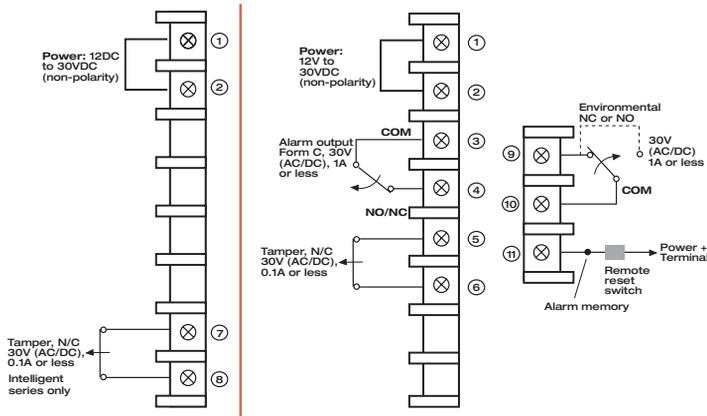
INTELLIGENT QUAD SERIES

PB-IN-50HF, outdoor 50m, indoor 100m
PB-IN-100HF, outdoor 100m, indoor 200m
PB-IN-200HF, outdoor 200m, indoor 400m

Terminal Arrangements

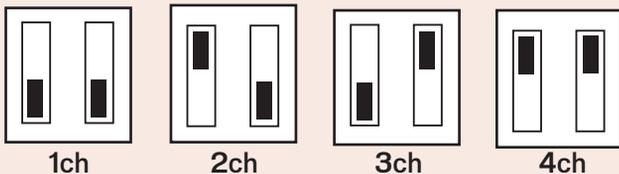
transmitter

receiver

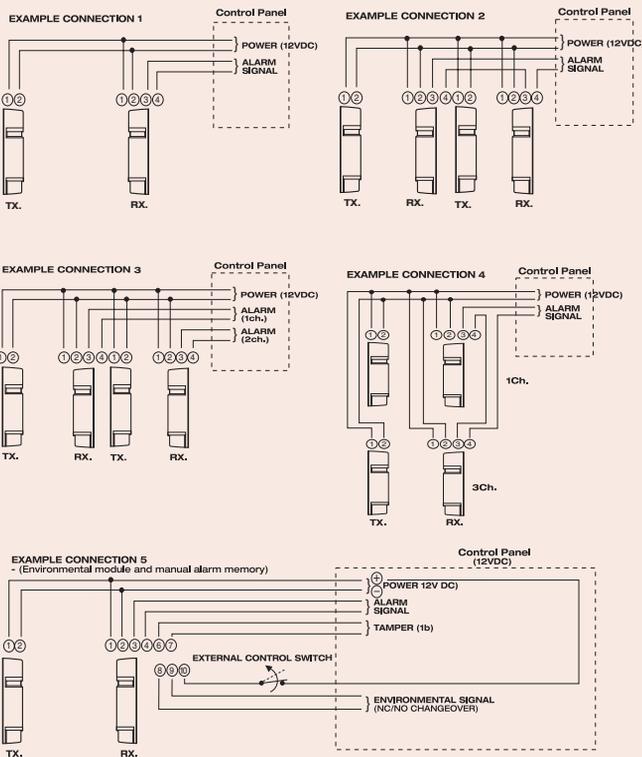


Change-over of Frequencies (Intelligent series only)

Set the following beam channels to avoid crosstalk between units.



Make sure transmitter and receiver are set to the same channel. Paired transmitters/receivers will not set up unless set at the same channel.

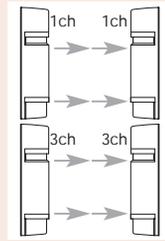


Note: Signal output on receiver can not be used independently for the upper/lower optics, only as a set. Outdoor wiring should be in PVC if below ground or use burial cable. Conduit should be used for above ground wiring.

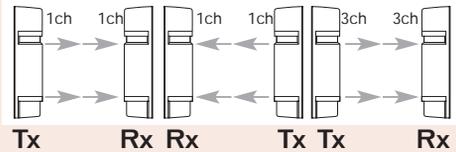
SYNCHRO QUAD BEAM SINGLE CHANNEL

PB-50F, outdoor 50m
PB-100F, outdoor 100m
PB-200F, outdoor 200m

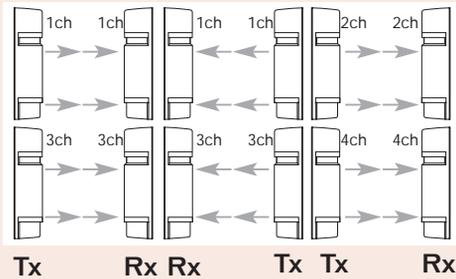
2-stacked protection



Line protection

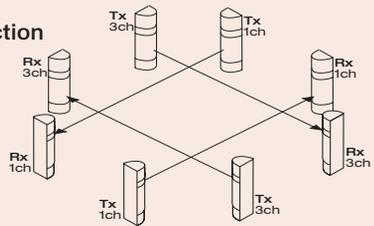


Line and 2-stacked protection



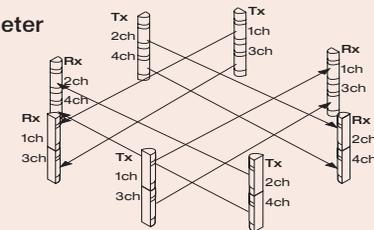
Perimeter protection

The use of a voltmeter for alignment is advised to ensure highest level of stability



2-stacked Perimeter protection

Upper and lower beams should be the same model type in stacked configurations



Wiring Distance between sensor and control panel

Wire Size	PB-IN-50HF		PB-IN-100HF		PB-IN-200HF	
	12 volt	24 volt	12 volt	24 volt	12 volt	24 volt
AWG22 (~ 0.65mm)	120m	1100m	110m	1000m	100m	900m
AWG20 (~ 0.8mm)	210m	1900m	190m	1700m	160m	1500m
AWG18 (~ 1.0mm)	310m	2800m	280m	2500m	250m	2200m
AWG17 (~ 1.1mm)	380m	3400m	340m	3000m	300m	2700m
AWG16 (~ 0.25mm)	500m	4500m	450m	4100m	400m	3600m
AWG15 (~ 1.4mm)	670m	6000m	610m	5500m	530m	4800m
AWG14 (~ 1.6mm)	840m	7600m	760m	6800m	660m	6000m

Note: Maximum wiring distance when two or more sets are connected is the above value divided by the number of sets. The signal line can be wired to a distance of up to approximately 1000m (3000ft) with AWG 22 (~ 0.65mm) telephone wire.

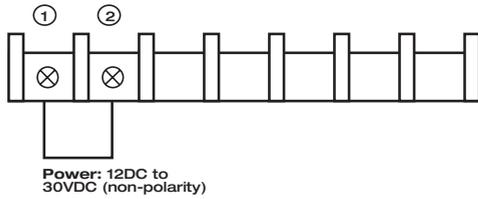
INTELLIGENT TWIN SERIES

PB-20TE, outdoor 20m, indoor 40m

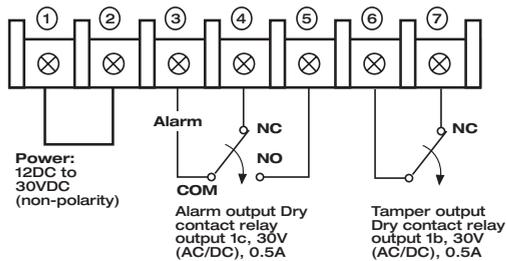
PB-40TE, outdoor 40m, indoor 80m

PB-60TE, outdoor 60m, indoor 120m

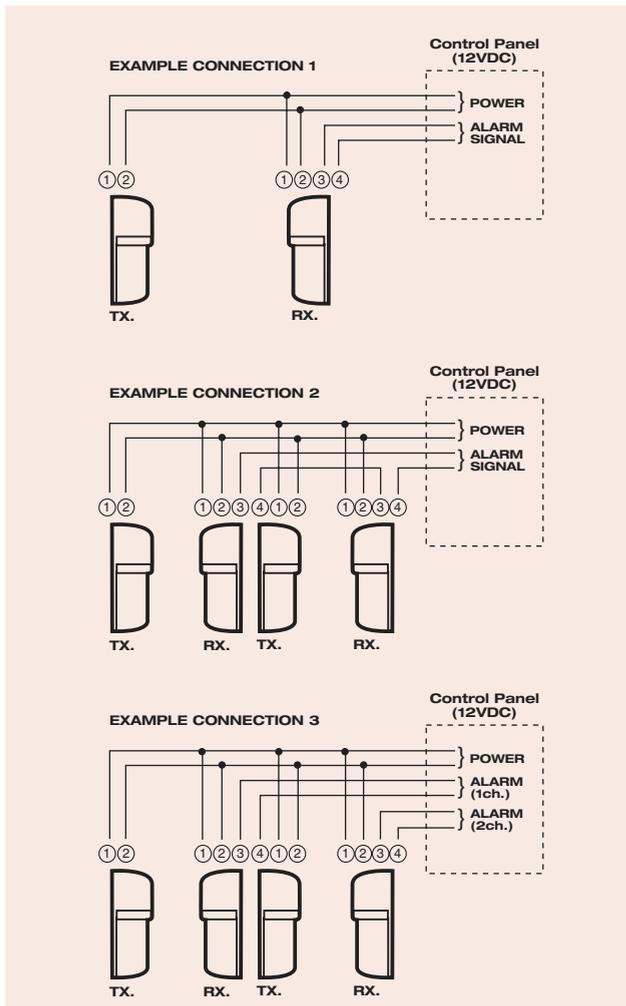
Terminal Arrangement transmitter



Terminal Arrangement receiver



Connection



TWIN BEAM

PB-30TK, outdoor 30m, indoor 60m

PB-60TK, outdoor 60m, indoor 120m

PB-100TK, outdoor 100m, indoor 200m

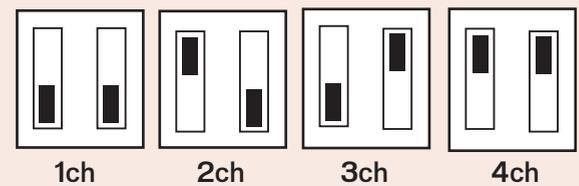
Change-over of Frequencies

Intelligent series only

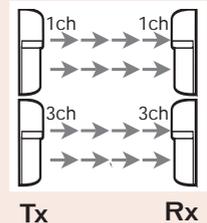
This function is used for the purpose of preventing cross-talk or bypass of beams which may occur in line protection or 2-stacked protection. In these applications, it is advisable to adjust beam alignment with a tester in order to advance the reliability, together with making use of beam frequency changeover function.

When stacked, the beams must be identical models.

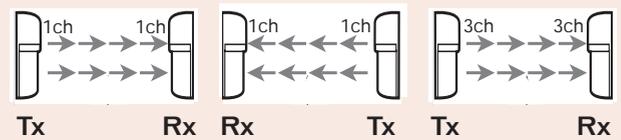
Set beam channel



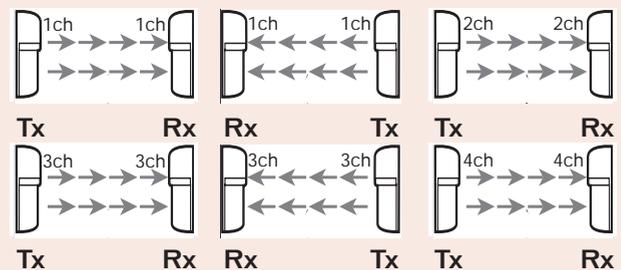
2-stacked protection



Line protection



Line and 2-stacked protection



Wiring Distance

Wire Size	PB-20TE PB-30TK		PB-40TE		PB-60TK PB-100TK PB-60TE	
	12 volt	24 volt	12 volt	24 volt	12 volt	24 volt
AWG22 (~ 0.65mm)	210m	1900m	160m	1400m	150m	1300m
AWG20 (~ 0.8mm)	360m	3200m	260m	2400m	250m	2200m
AWG18 (~ 1.0mm)	540m	4900m	400m	3600m	370m	3300m
AWG17 (~ 1.1mm)	650m	5900m	480m	4300m	450m	4000m

Note: Maximum wiring distance when two or more sets are connected is the value above divided by the number of sets. The signal line can be wired to a distance of up to 1000m (3000ft) with AWG22 (~ 0.65mm) telephone wire.

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