



Pet-Immune – PIR

INSTALLATION INSTRUCTIONS

The Bravo3P is a general purpose PIR detector designed to provide reliable motion detection and enhanced false alarm prevention in environments containing pets. It utilizes Multi-Level Signal Processing*, temperature compensation and a unique pet rejection lens to provide effective detection of human motion and good protection against nuisance alarms associated with single or multiple pets whose total combined weight does not exceed 60lbs (27.3kg). The detector also provides immunity against false alarms caused by RF, static and electrical transients. Exceptional design care and factory testing ensure years of trouble-free performance.

* Protected by one or more of the following patents:
Canada 2099971 US 5444432

Specifications

Operating voltage	9.5VDC-14.5VDC
Supply voltage ripple	3.0V PP @ 12VDC
Standby current	16mA
Current in alarm	20mA
Contact rating	100mA @ 24VDC
Alarm contact resistor in common	10Ω 1/4W
Operating temp.	15°C to 30°C (59°F to 86°F)
Storage temp.	-40°C to 60°C (-104°F to 140°F)
Sensitivity	4°C (7.2°F)@0.6m/s (2ft/s)
Operating humidity	5-95% RH non-cond*.
Storage humidity	up to 99% RH non-cond.
RF immunity	10 V/m plus 80% AM from 80MHz to 1GHz**
Static immunity	8kV contact, 15 kV air
Transient immunity	2.4kV @ 1.2 joules
Walk detection speed	0.5-4/s (0.15-1.22m/s)
Coverage angle	60° minimum/75° maximum
Recommended mounting height	7.5'/2.3m

* UL tests only the 85% RH non-cond.

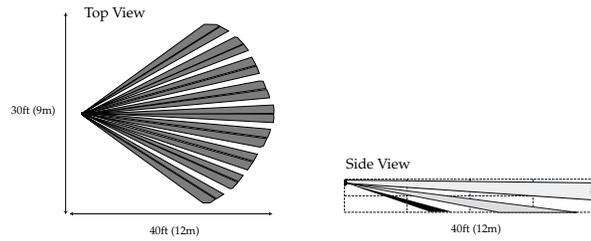
** RF immunity was not tested by UL.

Note: Pet immunity has not been verified by UL.

Model

- BV-300P: Form 'A' alarm contact

Coverage



For optimum detection, the BV-300P should be located so that the expected path of intrusion is between 10ft - 40ft (3m-12m) in front of the detector.

Locating The Detector

When choosing a mounting location for the detector, consider the following to help prevent false alarms:

- Mount the detector flat on a wall or in a corner. Do not angle it downwards.
- The unit must be installed so that the expected path of intrusion is perpendicular to the detection pattern.
- The PCB must be positioned so that the vertical adjustment scale on the board is set to zero. Ensure PCB retaining screw has been tightened.
- Mount the detector at a minimum height of 7.5ft (2.3m).
- Do not aim the detector at a stairway to which a pet has access.
- Do not place furniture or objects higher than 3ft (0.9m), which a pet can jump onto, at a distance of less than 6ft (1.8m) away from the detector.
- Do not aim the detector at reflective surfaces such as a mirrors or windows.
- Do not locate the detector near sources of moisture or high air flow.
- Do not use this detector in a room of extreme high/low temperature.

Mounting

To open the case, use a small flatblade screwdriver: gently push in the tab at the bottom of the case and pull the cover straight out at the bottom. Loosen the PCB screw, and push the board up as far as it will go. Using a small screwdriver, remove the appropriate knockouts for the mounting screws. Remove the left and/or right wiring entrance knockouts located at the top of the backplate. Mount the backplate to the wall using the screws supplied.

Vertical Adjustment

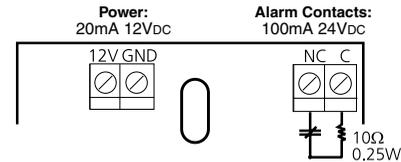
To achieve the performance and pet immunity capabilities of the Bravo3P, the PCB must be positioned so the vertical adjustment scale on the board is set to zero. Ensure the PCB retaining screw is tightened just enough to prevent board movement.

Jumpers

There is one jumper on the detector circuit board. JUMPER J1 will enable/disable the alarm LED. If J1 is OFF, the LED will not operate on alarm. If J1 is ON the LED will operate on alarm.

Wiring

NOTE: This unit is UL Listed and should be connected to a Listed control unit or power supply providing at least 4 hours of standby power.



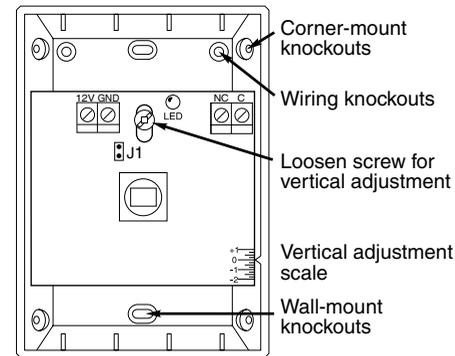
Contacts shown with power applied and no alarm

Walk Testing

IMPORTANT NOTE: Once installed, the unit should be thoroughly tested to verify proper operation. After installation, the unit should be tested annually by the installer. The end user should be instructed on how to perform a weekly walk test.

Place the animal(s) within the coverage area of the detector and then move out of the zone. Encourage the pet(s) to move around normally and ensure they move across the detection pattern of the detector. Verify that no alarm is initiated.

To test for catch performance of humans, create motion in the entire area where coverage is desired by walking perpendicular to the lens pattern. Should the coverage be incomplete, readjust or relocate the detector. Once coverage is as required, the alarm LED may be disabled by setting J1 to OFF.



Limited Warranty

Digital Security Controls Ltd. warrants that for a period of 12 months from the date of purchase, the product shall be free of defects in materials and workmanship under normal use and that in fulfillment of any breach of such warranty, Digital Security Controls Ltd. shall, at its option, repair or replace the defective equipment upon return of the equipment to its repair depot. This warranty applies only to defects in parts and workmanship and not to damage incurred in shipping or handling, or damage due to causes beyond the control of Digital Security Controls Ltd. such as lightning, excessive voltage, mechanical shock, water damage, or damage arising out of abuse, alteration or improper application of the equipment.

The foregoing warranty shall apply only to the original purchaser, and is and shall be in lieu of any and all other warranties, whether expressed or implied and of all other obligations or liabilities on the part of Digital Security Controls Ltd. Digital Security Controls Ltd. neither assumes responsibility for, nor authorizes any other person purporting to act on its behalf to modify or to change this warranty, nor to assume for it any other warranty or liability concerning this product.

In no event shall Digital Security Controls Ltd. be liable for any direct, indirect or consequential damages, loss of anticipated profits, loss of time or any other losses incurred by the buyer in connection with the purchase, installation or operation or failure of this product.

Motion detectors can only detect motion within the designated areas as shown in their respective installation instructions. They cannot discriminate between intruders and intended occupants. Motion detectors do not provide volumetric area protection. They have multiple beams of detection and motion can only be detected in unobstructed areas covered by these beams. They cannot detect motion which occurs behind walls, ceilings, floor, closed doors, glass partitions, glass doors or windows. Any type of tampering whether intentional or unintentional such as masking, painting, or spraying of any material on the lenses, mirrors, windows or any other part of the detection system will impair its proper operation.

Passive infrared motion detectors operate by sensing changes in temperature. However their effectiveness can be reduced when the ambient temperature rises near or above body temperature or if there are intentional or unintentional sources of heat in or near the detection area. Some of these heat sources could be heaters, radiators, stoves, barbecues, fireplaces, sunlight, steam vents, lighting and so on.

Warning: Digital Security Controls Ltd. recommends that the entire system be completely tested on a regular basis. However, despite frequent testing, and due to, but not limited to, criminal tampering or electrical disruption, it is possible for this product to fail to perform as expected.

Important Information: Changes or modifications not expressly approved by Digital Security Controls Ltd. could void the user's authority to operate this equipment.



©2001 Digital Security Controls Ltd.
Toronto, Canada
1-800-387-3630 • www.dsc.com
Printed in Canada 29005279 R002



Pet-Immune – PIR

INSTALLATION INSTRUCTIONS

The Bravo3P is a general purpose PIR detector designed to provide reliable motion detection and enhanced false alarm prevention in environments containing pets. It utilizes Multi-Level Signal Processing*, temperature compensation and a unique pet rejection lens to provide effective detection of human motion and good protection against nuisance alarms associated with single or multiple pets whose total combined weight does not exceed 60lbs (27.3kg). The detector also provides immunity against false alarms caused by RF, static and electrical transients. Exceptional design care and factory testing ensure years of trouble-free performance.

* Protected by one or more of the following patents:
Canada 2099971 US 5444432

Specifications

Operating voltage	9.5VDC-14.5VDC
Supply voltage ripple	3.0V PP @ 12VDC
Standby current	16mA
Current in alarm	20mA
Contact rating	100mA @ 24VDC
Alarm contact resistor in common	10Ω 1/4W
Operating temp.	15°C to 30°C (59°F to 86°F)
Storage temp.	-40°C to 60°C (-104°F to 140°F)
Sensitivity	4°C (7.2°F)@0.6m/s (2ft/s)
Operating humidity	5-95% RH non-cond*.
Storage humidity	up to 99% RH non-cond.
RF immunity	10 V/m plus 80% AM from 80MHz to 1GHz**
Static immunity	8kV contact, 15 kV air
Transient immunity	2.4kV @ 1.2 joules
Walk detection speed	0.5-4/s (0.15-1.22m/s)
Coverage angle	60° minimum/75° maximum
Recommended mounting height	7.5'/2.3m

* UL tests only the 85% RH non-cond.

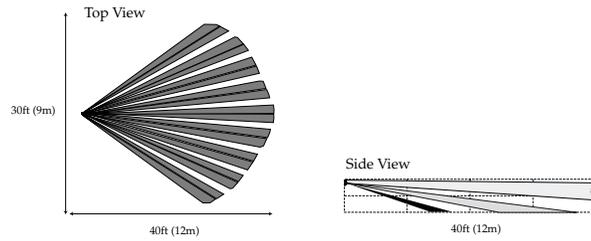
** RF immunity was not tested by UL.

Note: Pet immunity has not been verified by UL.

Model

- BV-300P: Form 'A' alarm contact

Coverage



For optimum detection, the BV-300P should be located so that the expected path of intrusion is between 10ft - 40ft (3m-12m) in front of the detector.

Locating The Detector

When choosing a mounting location for the detector, consider the following to help prevent false alarms:

- Mount the detector flat on a wall or in a corner. Do not angle it downwards.
- The unit must be installed so that the expected path of intrusion is perpendicular to the detection pattern.
- The PCB must be positioned so that the vertical adjustment scale on the board is set to zero. Ensure PCB retaining screw has been tightened.
- Mount the detector at a minimum height of 7.5ft (2.3m).
- Do not aim the detector at a stairway to which a pet has access.
- Do not place furniture or objects higher than 3ft (0.9m), which a pet can jump onto, at a distance of less than 6ft (1.8m) away from the detector.
- Do not aim the detector at reflective surfaces such as a mirrors or windows.
- Do not locate the detector near sources of moisture or high air flow.
- Do not use this detector in a room of extreme high/low temperature.

Mounting

To open the case, use a small flatblade screwdriver: gently push in the tab at the bottom of the case and pull the cover straight out at the bottom. Loosen the PCB screw, and push the board up as far as it will go. Using a small screwdriver, remove the appropriate knockouts for the mounting screws. Remove the left and/or right wiring entrance knockouts located at the top of the backplate. Mount the backplate to the wall using the screws supplied.

Vertical Adjustment

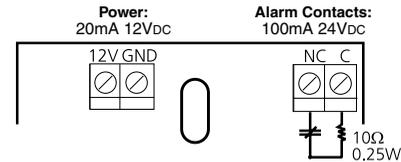
To achieve the performance and pet immunity capabilities of the Bravo3P, the PCB must be positioned so the vertical adjustment scale on the board is set to zero. Ensure the PCB retaining screw is tightened just enough to prevent board movement.

Jumpers

There is one jumper on the detector circuit board. JUMPER J1 will enable/disable the alarm LED. If J1 is OFF, the LED will not operate on alarm. If J1 is ON the LED will operate on alarm.

Wiring

NOTE: This unit is UL Listed and should be connected to a Listed control unit or power supply providing at least 4 hours of standby power.



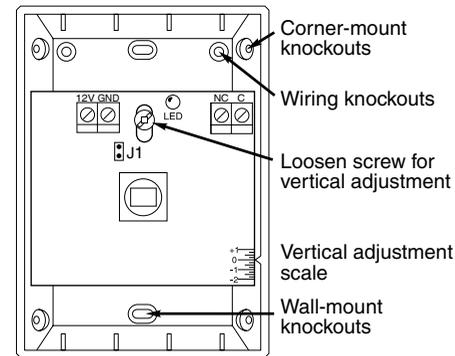
Contacts shown with power applied and no alarm

Walk Testing

IMPORTANT NOTE: Once installed, the unit should be thoroughly tested to verify proper operation. After installation, the unit should be tested annually by the installer. The end user should be instructed on how to perform a weekly walk test.

Place the animal(s) within the coverage area of the detector and then move out of the zone. Encourage the pet(s) to move around normally and ensure they move across the detection pattern of the detector. Verify that no alarm is initiated.

To test for catch performance of humans, create motion in the entire area where coverage is desired by walking perpendicular to the lens pattern. Should the coverage be incomplete, readjust or relocate the detector. Once coverage is as required, the alarm LED may be disabled by setting J1 to OFF.



Limited Warranty

Digital Security Controls Ltd. warrants that for a period of 12 months from the date of purchase, the product shall be free of defects in materials and workmanship under normal use and that in fulfillment of any breach of such warranty, Digital Security Controls Ltd. shall, at its option, repair or replace the defective equipment upon return of the equipment to its repair depot. This warranty applies only to defects in parts and workmanship and not to damage incurred in shipping or handling, or damage due to causes beyond the control of Digital Security Controls Ltd. such as lightning, excessive voltage, mechanical shock, water damage, or damage arising out of abuse, alteration or improper application of the equipment.

The foregoing warranty shall apply only to the original purchaser, and is and shall be in lieu of any and all other warranties, whether expressed or implied and of all other obligations or liabilities on the part of Digital Security Controls Ltd. Digital Security Controls Ltd. neither assumes responsibility for, nor authorizes any other person purporting to act on its behalf to modify or to change this warranty, nor to assume for it any other warranty or liability concerning this product.

In no event shall Digital Security Controls Ltd. be liable for any direct, indirect or consequential damages, loss of anticipated profits, loss of time or any other losses incurred by the buyer in connection with the purchase, installation or operation or failure of this product.

Motion detectors can only detect motion within the designated areas as shown in their respective installation instructions. They cannot discriminate between intruders and intended occupants. Motion detectors do not provide volumetric area protection. They have multiple beams of detection and motion can only be detected in unobstructed areas covered by these beams. They cannot detect motion which occurs behind walls, ceilings, floor, closed doors, glass partitions, glass doors or windows. Any type of tampering whether intentional or unintentional such as masking, painting, or spraying of any material on the lenses, mirrors, windows or any other part of the detection system will impair its proper operation.

Passive infrared motion detectors operate by sensing changes in temperature. However their effectiveness can be reduced when the ambient temperature rises near or above body temperature or if there are intentional or unintentional sources of heat in or near the detection area. Some of these heat sources could be heaters, radiators, stoves, barbecues, fireplaces, sunlight, steam vents, lighting and so on.

Warning: Digital Security Controls Ltd. recommends that the entire system be completely tested on a regular basis. However, despite frequent testing, and due to, but not limited to, criminal tampering or electrical disruption, it is possible for this product to fail to perform as expected.

Important Information: Changes or modifications not expressly approved by Digital Security Controls Ltd. could void the user's authority to operate this equipment.



©2001 Digital Security Controls Ltd.
Toronto, Canada
1-800-387-3630 • www.dsc.com
Printed in Canada 29005279 R002