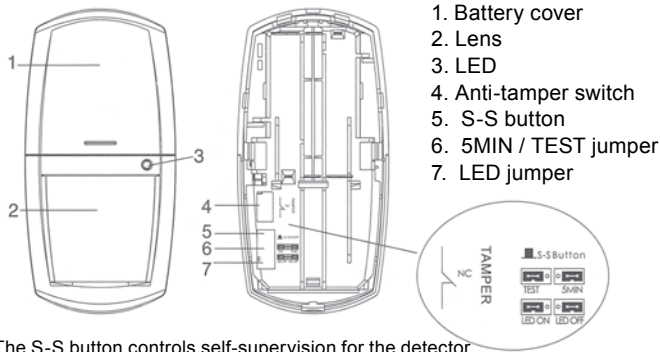# WIRELESS PASSIVE INFRARED DETECTOR

PW-939BF

The PW-939BF wireless infrared detector incorporates a 16-Bit micro controller, a micro radio frequency transmission circuit and fixed encoding technology that ensures no signal interference when using multiple detectors. The detector has very low power consumption, low voltage indication, an anti-tamper alarm and status reporting. The PW-939BF is ideally suited for both commercial and domestic use.

IMPORTANT

1. Do not touch the detector surface as this will affect PIR sensitivity. If necessary, clean the sensor with a soft cloth and a little alcohol when the batteries are removed.
2. Avoid using the detector in an environment with rapid changes in temperature.
3. If the detector is not to be used for an extended period it is recommended that the batteries are removed.

OVERVIEW

1. Battery cover
2. Lens
3. LED
4. Anti-tamper switch
5. S-S button
6. 5MIN / TEST jumper
7. LED jumper

The S-S button controls self-supervision for the detector. When this function is ""ON"", the detector will send the Meridian control panel a signal every hour to report its status.
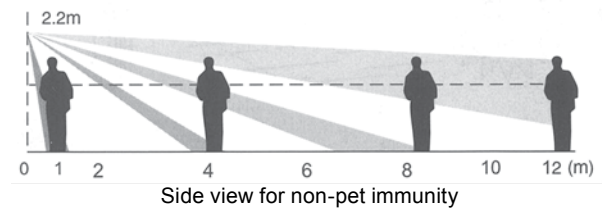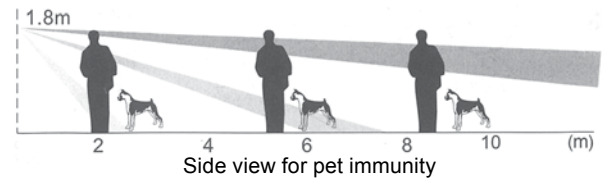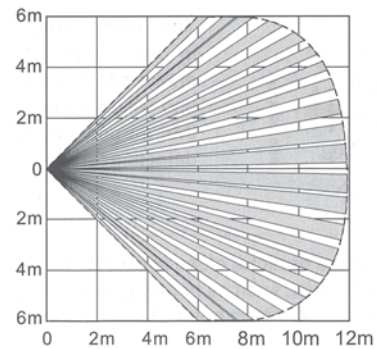
FEATURES

- 16-Bit low power consumption MCU
- Low voltage indication
- Wireless signal transmission
- Low power consumption for long battery life
- Digital temperature compensation
- White light immunity
- Fixed built-in encoding (not rolling code)
- Register with Meridian by input of a unique code identifier
- Sends periodic wireless status report to the control panel

TECHNICAL PARAMETER

Transmitting Frequency	868MHZ
Working Voltage	4.5 VDC (Three AA batteries)
Battery Life	1 year (20 activities per day)
Standby/Working Current	<15mA / <15µA
Low Voltage Alarm	3.3V ± 0.3V
Transmitting Power	≤10dB
Working Temperature	-10°C - +55°C
Detecting Range	12m
Detecting Angle	110°C
Installation Method	Wall Mounted
Installation Height	Optimal Height 2.2m
Pet Immunity	≤35kg
Installation Height	1.8m best for pet immunity, 1.8m-2.2m for non-pet immunity (from the centre of PIR to the floor)
Size	113 x 55 x 38mm

WIDE-ANGLE LENS DETECTING RANGE

Side view for pet immunity
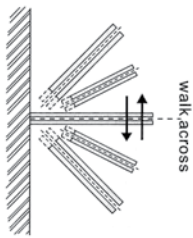

Side view for non-pet immunity

For pet immunity, please ensure PIR installation height is no greater than 1.8m. Refer detecting range in the above drawing.
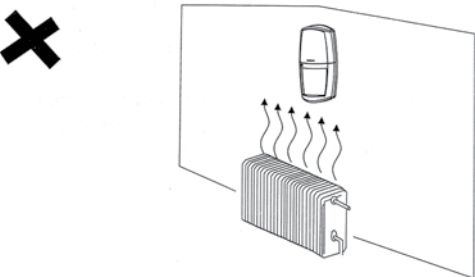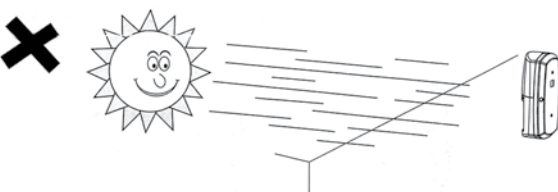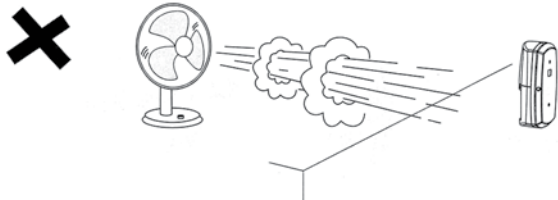
OPERATING INSTRUCTIONS

1. Refer to the Meridian IP alarm installation manual for registering the PW-939BF wireless infrared detector to the alarm panel. The wireless ID number for registering the infrared detector with the alarm can be found inside the cover of the battery compartment.

2. After power-on the LED flashes for 60 seconds, the detector self-tests the battery voltage and sends a signal to the Meridian control panel to report the voltage status.

3. Walking through the detecting area causes the LED to turn on and the detector to send an alarm signal to the Meridian panel.

4. The 5MIN / TEST jumper is used to select test mode. In TEST mode the detector transmits every signal it detects. The jumper is set to 5MIN for normal use. In 5MIN mode, after the detector alarms, it will not send another alarm signal for another 5 minutes, even if it detects a second signal. After 5 minutes, it will send a further signal when it is detected. The factory default is 5MIN mode.

5. The LED jumper is used to control LED indication. In order to save battery life it is suggested the LED jumper is set to OFF after testing and setup (LED OFF}.

6. When the detector is disassembled, the anti-tamper switch will cause the detector to send 3 tamper alarm signals and the LED will flash rapidly. When the detector is re-assembled and the tamper is recovered, a reset signal will be sent.

7. When the battery voltage falls below 3.3V ± 0.3V the LED flashes every 5 seconds. The detector sends a low power signal to the control panel after 10 seconds and then every 1 hour after that. When new batteries are installed the detector self-checks and sends a voltage recovery signal to the alarm panel.

8. If the S-S (self-supervision} function is set on, the detector will send a signal to the control panel every hour to report its working status. This function is set to ON as a factory default. Press the S-S button for an extended period when powering up to cancel this function and save battery life. The LED flashes rapidly 6 times to confirm S-S cancellation success. When S-S is off, press the S-S button for an extended period when re-powering to turn on supervision.

INSTALLATION

1. The detector should be installed near a door or window to ensure an intruder walks across the detecting range.
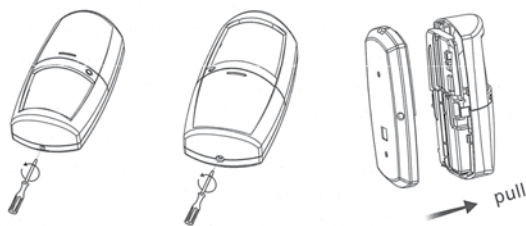
2. Avoid installing the detector in direct sunlight or close to objects that can cause rapid temperature changes, such as heaters, fans, refrigerators and open windows.
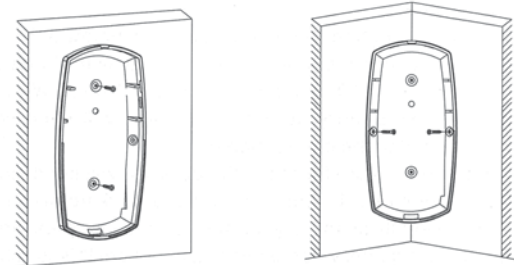
3. Wall mount or use the bracket for easy installation.
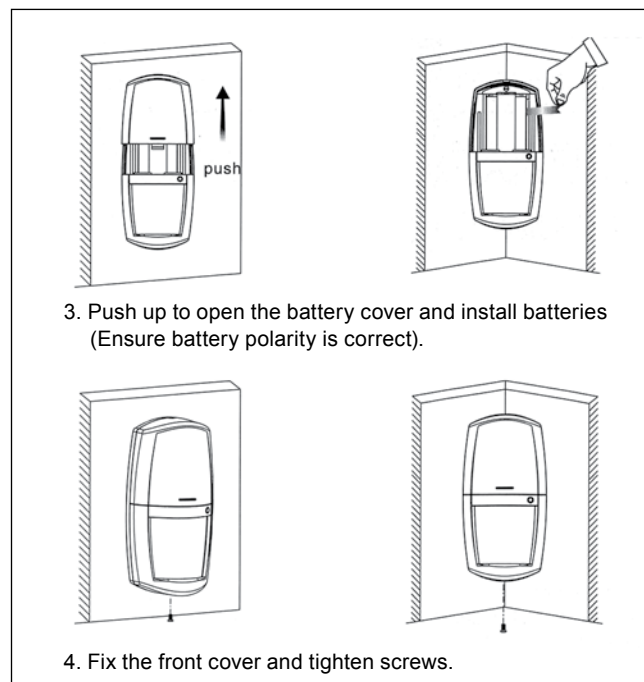
INSTALLATION DIAGRAM
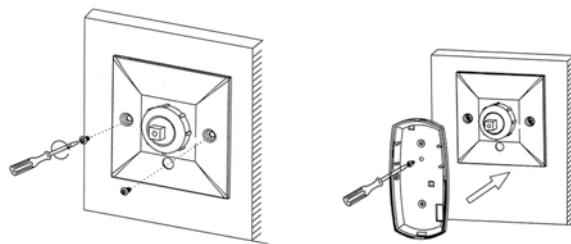
Wall Mounted

1. Unscrew rear cover plate.

Wall Mounted   **Corner Mounted**

2. Fix rear cover

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3. Push up to open the battery cover and install batteries (Ensure battery polarity is correct).
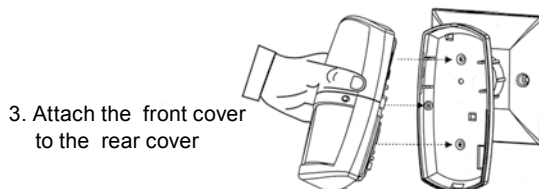
4. Fix the front cover and tighten screws.

Bracket Mounted

1. Choose a suitable PIR location and fix the bracket base with the screws provided.

2. Align the rear cover to the ball socket and tighten screws.

3. Attach the front cover to the rear cover

4. Adjust PIR orientation.