

# Rf650

## PROFESSIONAL HIGH IMMUNITY PIR



The *Rf650* surface mount PIR from Texecom offers exceptional catch performance with ultra high false alarm immunity from all sources including lightning, RF and mobile phones. Intruder Confirmation Circuitry (ICC™)† combined with an adjustable adaptive pulse count† analyses the infrared signature to reject unwanted signals. The *Rf650* is the perfect choice for all domestic, commercial and monitored alarm systems.

**Critical advantages of the *Rf650* include:**

- ✓ SURFACE MOUNT TECHNOLOGY (SMD)
- ✓ 200V/m IMMUNITY TO MOBILE PHONES
- ✓ 65V/m RF IMMUNITY
- ✓ SUPERB LIGHTNING REJECTION
- ✓ TEMPERATURE COMPENSATION
- ✓ INTRUDER CONFIRMATION CIRCUITRY (ICC™)
- ✓ REMOTE LED DISABLE
- ✓ ADJUSTABLE ADAPTIVE PULSE COUNT
- ✓ WHITE HIGH GLOSS CASING
- ✓ PATENTED TAMPER-PROOF MOUNTING BRACKETS



† Worldwide patents pending.  
*Rf650* is a trademark of Texecom Ltd.

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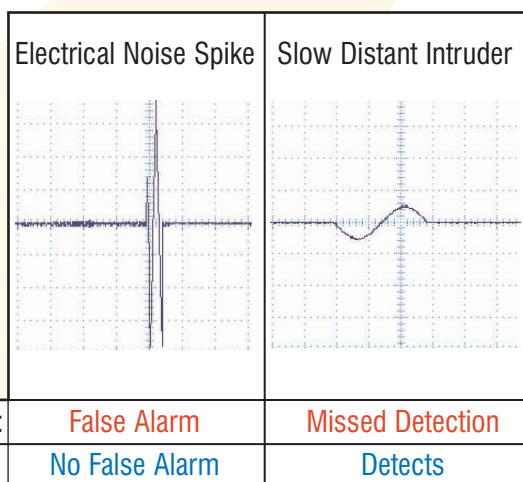
## INTRUDER CONFIRMATION CIRCUITRY

Historically there has always been a trade off between the false alarm immunity of PIRs and their catch performance. Many manufacturers have sacrificed reliable pickup in an attempt to improve false alarm immunity. A standard PIR will monitor the amplitude of the electrical signal and trigger an alarm if this exceeds a predetermined threshold - regardless of whether the signal originated from an intruder or a common false alarm source.

The **Rf650** however, uses Texecom's unique ICC™ (Intruder Confirmation Circuitry†). This actively rejects signals from common false alarm sources, significantly improving pickup from slow moving or distant targets.

† World-wide patents pending.

Note: See how a standard PIR might suffer from false alarms as well as missing distant or slow moving intruders:



## ADDITIONAL FEATURES

The **Rf650** has a host of additional features designed to improve installation, reliability and customer satisfaction. Surface Mount technology with 100% computerised testing of all components on every PCB provides total confidence and reliability.

Careful consideration to every detail of the casing design makes installation fast and simple using any of the five different mounting options. Patented tamper-proof wall and ceiling mount brackets enable precise angle adjustment for maximum flexibility.

The **Rf650** utilises techniques that have been specifically developed by Texecom for maximum immunity to false alarms caused by mobile phones. *Even at field strengths as high as 200V/m the Rf650 remains totally stable.* By specifying the **Rf650** you can be confident of the most reliable detector in its class.

## BEST MANUFACTURER 1999 INTRUDER ALARM MANUFACTURER OF THE YEAR 2000

- 1st For offering the best quality products at the right prices
- 1st For reliability and responsiveness
- 1st For excellence in customer care & service
- 1st For providing a high level of support and servicing including training and help lines

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## SPECIFICATION

### ELECTRICAL

- Voltage** 9-16Vdc.
- Current** 16mA typical at 12Vdc.
- Maximum Ripple** 2Vpp at 12Vdc (50-120Hz sinusoidal).
- Alarm Output** Normally closed (failsafe) voltage free relay contacts. Rated at 24Vdc, 50mA protected by 18Ω series resistor.
- Tamper Output** Normally closed voltage free switch contacts. Rated at 24Vdc, 50mA.
- Alarm Period** 2-3 seconds typical.
- Walk Test LED** Internal link to enable/disable.
- Remote LED Disable** Switched input between 0V and 12Vdc, (16V max).
- Detection Method** Passive Infrared.
- Pyro-electric Detector** Dual element, low noise.

### ENVIRONMENTAL

- Operating Temperature** -10°C (+14°F) to +55°C (+131°F).
- Temperature Compensation** Automatic.
- Temperature Tolerance** No false alarm up to 1.7°C/minute (3°F/minute).
- Maximum Humidity** 95% non-condensing.
- Storage Temperature** -20°C (-4°F) to +60°C (+140°F).
- EMC Environment** Residential/Commercial/Light Industrial and Industrial.

### FALSE ALARM PROTECTION

- Design** ICC (Intruder Confirmation Circuitry)
  - Maximum ground plane
  - Noise reduction circuits
- RF Immunity** No false alarms at 200V/m due to digital telephone disturbances tested to DD ENV 50204:1996, at 900MHz; No false alarms from 80MHz to 1GHz at 65V/m modulated, equivalent to a 1200W uniform transmitter at 3m (10ft). Complies with EN61000-4-3:1997.
- Electrostatic Discharge** No false alarm up to ±4kV. Complies with EN61000-4-2:1995.
- Fast Transient Immunity** No false alarm up to ±4kV. Complies with EN61000-4-4:1995.
- High Energy Transient Immunity** No false alarm up to ±2kV. Complies with EN61000-4-5:1995.
- Conducted RF Susceptibility** No false alarm at 10Vrms. Complies with EN61000-4-6:1996.
- Conducted Emissions** Complies with EN55022 Class B.
- Radiated Emissions** Complies with EN55022 Class B.
- Pulse Count** Adjustable Adaptive Pulse Count. Internal link to select.

### PHYSICAL

- Mounting** Corner, wall or ceiling mount (without mounting bracket). Optional ceiling and wall mount brackets supplied as standard with adjustment range ±30° horizontal, -30° vertical. Mounting height up to 4.1m (13'6").
- Casing** 2.5mm (0.1") wall thickness in flame retardant ABS.
- Dimensions** 90mm x 63mm x 40mm (3.6" x 2.5" x 1.6").
- Packed Weight** 125g (4.5oz) approx.
- Colour** Designer white with super-white lens.

### COVERAGE

- Volumetric (standard)** 12m (40ft) range; 24 facets with look-down creep zones; 104° coverage producing a maximum width of 18.9m (62ft).
- Pet** 12m (40ft) range; 11 facets; 104° coverage producing a maximum width of 18.9m (62ft).
- Curtain** 12m (40ft) range; 11 facets; 6° coverage producing a maximum width of 1.3m (4ft).
- Long Range** 33.5m (110ft) range; 11 facets; 6° with look-down creep zones; 8° coverage producing a maximum width of 1.6m (5ft).

### EUROPEAN STANDARDS

Conforms to European Union (EU) Electro-Magnetic Compatibility (EMC) Directive 89/336/EEC.



Certificate Number: FM 35285

**EASEM**

**BSIA**  
British Security Industry Association



Rf650 EU1