# **INSTALLATION TESTER IT 44 for PIR-75 & PIR-150**

#### 1. Introduction

The universal Installation Tester IT 44 is used for alignment, setting up and fault finding and is recommended for all installations using PIR sensors from Ernitec. It is strongly recommended that the detection performance of the sensor is verified using the IT 44 Installation Tester. The IT 44 is connected to the sensor's test connector from which it receives power and data without interfering with the sensor's operation.

The IT 44 displays all relevant sensor data on a 4 - line liquid crystal display (LCD) including signal amplitudes with peak-hold and the alarm threshold level. This level is dependent on the amount of disturbance signals including walk tests.

### 2. Connection / Reset

The IT 44 is supplied with a cable of app. 3 m length terminated with a 7 pole circular connector. An adapter cable (app. 1 m) for connection to the sensor's in line connector is supplied with the IT 44.

# 3. Liquid Crystal Display

The display is divided into 4 lines providing the following information: Line 1: Signal and Peak Hold

Quasi - logarithmic bar display in 60 steps shows the signal strength. The peak amplitude of each signal exceeding the internal noise amplitude by a certain value is held for app. 6 seconds.

#### Line 2: Alarm Threshold Level

Displays the alarm threshold level in the same scale as in line 1. If the ATD of the sensor is enabled the alarm threshold level will be increased by disturbance signals and walk tests.

#### Line 3: Alarm Indicator and Counter

Displays "Alarm ON" or "Alarm OFF" and the number of counts since last reset (display of "Count:" and "O" to "99" or «-» if 99 counts have been exceeded). Line 4: Alarm Time

Displays the alarm time for each event with "Time" and e. g. "  $12.3 \,$ s". The alarm time depends on the actual alarm duration plus the setting of the alarm time potentiometer.

### 4. Audible Alarm

The Installation Tester has a high efficiency sounder which allows checking of the installation by a single person. This is engaged by operating the toggle switch on the side of the IT 44.

# 5. Digital Output

The digitised sensor information is available on a RS 232 interface on a test connector at the side of the IT 44 for possible display and/or statistical analysis with a PC. No attempt should be made to use this connector without instructions.

### 6. Application of the IT 44

The IT 44 is a most useful tool for checking the alignment and sensitivity setting of the sensors. It greatly facilitates the optimisation of the sensors to suit a particular site.

The information supplied by the IT 44 display should be used to monitor the detection performance of the sensor and make adjustments if required. Depending on the site animal activity, vegetation moving in the wind and/or other sources of disturbance it is possible that unwanted alarms occur. Monitoring and interpreting the information supplied by the IT 44 will help finding the best solution either by adjusting the alignment and/or sensitivity of the sensor or by removing disturbance sources from within the field of view.



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### **INSTALLATION TESTER IT 44 for PIR-250**

#### 1. Introduction

The universal Installation Tester IT 44 is used for alignment, setting up and fault finding and is recommended for all installations using PIR sensors from Ernitec. It is strongly recommended that the detection performance of the sensor is verified using the IT 44 Installation Tester. The IT 44 is connected to the sensor's Sub-miniature D-type connector from which it receives power and data without interfering with the sensor's operation.

The IT 44 displays all relevant sensor data on a 4 - line liquid crystal display (LCD) including settings, signal amplitudes with peak-hold and the alarm threshold level. This level is dependent on the sensitivity settings of the sensor, the temperature and the amount of disturbance signals including walk tests.

#### 2. Connection / Reset

The IT 44 is supplied with a cable of app. 3 m length terminated with a 7 pole circular connector. An adapter cable (app. 1 m) for connection to the sensor's Sub-miniature D-type connector is supplied with the IT 44.

When connected to the sensor the IT 44 will be powered, start operation and establish communication between the two microprocessors.

# 3. Liquid Crystal Display

The display is divided into 4 lines providing the following information:

#### Line 1: Signal and Peak Hold

Quasi - logarithmic bar display in 60 steps shows the signal strength. The peak amplitude of each signal exceeding the first threshold level is held for app. 6 s. Line 2: Alarm Threshold Level

Displays the second alarm threshold level in the same scale as in line 1 plus indication of the detector currently displayed on lines 1 and 2  $_{\mu}L^{\mu}$  = Long,  $_{\mu}M^{\mu}$  = Medium,  $_{\mu}S^{\mu}$  = Short). The threshold level will be increased by disturbance signals and walk tests.

#### Line 3: Alarm Indicator and Counter

Displays "Alarm ON" or "Alarm OFF" and the number of counts since last reset (display of "Count:" and "O" to "99" or «-» if 99 counts have been exceeded). Line 4: Settings

Displays the following:

- range setting ("max", "80 m", "60 m", "40 m"
- height setting ("Lo" or "Hi)
- external sensitivity («» if selected)
- alarm time ("10 s" for minimum 10 seconds alarm if selected)

# 4. Audible Alarm

The Installation Tester has a high efficiency sounder which allows checking of the installation by a single person. This is engaged by operating the toggle switch on the side of the IT 44.

# 5. Digital Output

The digitised sensor information is available on a RS 232 interface on a test connector at the side of the IT 44 for possible display and/or statistical analysis with a PC. No attempt should be made to use this connector without instructions.

# 6. Application of the IT 44

The IT 44 is a most useful tool for checking the alignment and sensitivity setting of the sensors. It greatly facilitates the optimisation of the sensors to suit a particular site.

The information supplied by the IT 44 display should be used to monitor the detection performance of the sensor and make adjustments if required. Depending on the site animal activity, vegetation moving in the wind and/or other sources of disturbance it is possible that unwanted alarms occur. Monitoring and interpreting the information supplied by the IT 44 will help finding the best solution either by adjusting the alignment and/or sensitivity of the sensor or by removing disturbance sources from within the field of view.