#### Installation and User Instructions

Enuresis Sensor

#### **Notices**

*Approval:* This product is marked with a CE mark and constitutes a Class 2.7 device. The radio system has been designed to comply with EN50134 series of European Norm standards specific to Social Alarms.

The product exceeds the requirement for Electromagnetic Compatibility (EMC) standard BS EN 50130 part 4; which sets criteria for EMC Immunity for components of fire, intruder and social alarm systems.

- The radio triggers (and receiver) are in accordance with the specific European Social Alarm radio frequency band allocation (from 869.20 to 869.25MHz). They operate at 869.2125 MHz.
- The radio transmitters comply with mandatory radio standards for Short Range Devices (SRD) ETSI EN 300-220: The radio receiver also conforms and exceeds the mandatory class 1 criteria necessary for "Highly reliable SRD...serving human life inherent systems."

#### Transmitter parameters

| The transmitter follows a pre programmed cycle leading to a typical duty cycle class of $1 (<0.1\%)$ :                    | A class 2.7 device                  |
|---|-------------------------------------|
| Effective radiated power 200 micro Watts  | Frequency error $\pm$ 3 kHz maximum |
| Adjacent channel power <100 nano Watts  |                                     |
| Effective range up to 50m (into standard alarm telephone)   | Intended area for use is Europe     |
| Intended environment is group II - indoor in<br>general with intended operating temperature<br>between -10 to +55 Celsius |                                     |

#### **Declaration of Conformity**

We, Tunstall Telecom of Whitley Lodge, Whitley Bridge, Yorkshire, United Kingdom, DN14 0HR Declare that the 869MHz Electrical Usage Sensor conforms with the essential requirements of the RTTE directive 1999/5/EC. Essential radio test suites have been carried out.

Model Number: 41005/21 Applicable standards

| EMC          | EN 55022:1998                      |
|--------------|------------------------------------|
|              | ETSI EN300-683:1997 (Class 1)      |
|              | ETSI EN301-489-1:(2000-08) Class 1 |
| Safety       | EN 60950:2000                      |
| Radio        | ETSI EN 300 220-3:(2000-09)        |
| Social Alarm | EN50130-4.1995 + amendment A1.1998 |

Signed

Technical Director

Date: January 2005

Associated Summary Information (05RTTE002A) The CE mark was first applied in January 2005 Installation and User Instructions

#### Enuresis Sensor

All the reassurance you need



869 MHz Enuresis Sensor (41005/21)

# Installation and User Instructions



### **Functionality**

The 869 MHz Enuresis Sensor is a Telecare Sensor intended for use with the following Tunstall 869 MHz Social Alarm Equipment:

- Lifeline 400, Lifeline 4000+ and Telecare Overlay.

The Enuresis Sensor comprises a Telecare Interface Module (TIM) fitted with Enuresis software (41005/20) and a Moisture Sensing Mat (S2209050).

The intended use of the Enuresis Sensor is to ensure client comfort by signalling an alarm condition (by radio) in the event of the client's bed becoming wet. The Enuresis Sensor is not sold as a Medical Device and therefore should not be used for the diagnosis, prevention, monitoring, treatment of or alleviation of enuresis.

The Enuresis Sensor is powered by 4 AA batteries with a minimum battery life of 2 years with typical usage. The Enuresis Sensor automatically monitors the condition of the batteries and as they approach the end of their life, the Enuresis Sensor will signal (by radio) this event to the Social Alarm equipment every 7 days (until the batteries are replaced or expire completely).

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## **Installation**

- 1. Deploy the Enuresis Sensor by placing the Moisture Sensing Mat underneath a cotton top sheet and on top of any protective sheet. The shiny side of the Moisture Sensing Mat should be uppermost and the centre of the mat should be located at the position where bed wetting is most likely.
- Insert the supplied batteries into the battery compartment in the base of the TIM in accordance with the raised markings in the base of the battery compartment. A single beep will be heard if the batteries are inserted correctly.
- Connect the plug at the end of the Moisture Sensing Mat cable to the socket labelled IP4/Prog on the front panel of the TIM. It is important that the blanking plugs fitted in the other sockets of the TIM are left in place.
- 4. Program the Enuresis Sensor into the Social Alarm Equipment using the procedure detailed below.
- 5. The TIM should be located in a convenient place nearby, ensuring the cable is safely routed. It is important that the TIM is not placed in a position where it may become wet. For optimum radio performance the TIM should be mounted away from metallic surfaces.

## Programming to Social Alarm System

Place your Tunstall Social Alarm in radio trigger programming mode.

'Short' the two metal studs on the Incontinence Sensing Mat together with a metallic object (e.g. a key) as shown in the photograph below until a beep is heard. This signifies the radio transmission has occurred.



The Tunstall Social Alarm will beep, indicating that the sensor has been programmed into it. Leave programming mode in accordance with the Social Alarm User Guide.

Check that the Enuresis Sensor has been correctly programmed into the Tunstall Social Alarm by raising a test call. The test call can be raised by generating a radio

transmission from the Enuresis Sensor in the same manner as described above.

## Installation and User Instructions

#### **User Instructions**

The Enuresis Sensor will signal an alarm event once when a wet bed condition is detected. After a wet bed event has occurred the Enuresis Sensor can be reset by disconnecting the Moisture Sensing Mat from the TIM, cleaning it with detergent and a non-abrasive damp cloth, and then drying it with a suitable non-abrasive absorbent cloth.

Once the Moisture Sensing Mat is dry, reconnect it to the TIM and replace in the dry bed.

It is possible that sweating during the night may cause false triggering of the Enuresis Sensor. If this is the case then a folded cotton sheet or bath towel should be placed above the Moisture Sensing Mat

# Service Information

The TIM contains no user serviceable parts other than the batteries. The batteries should be replaced when indication is received that the Enuresis Sensor is in the low battery condition. Replacement batteries should be of the alkaline type and from a reputable manufacturer e.g. Duracell. The battery replacement procedure is as detailed in Step 1 of the Installation Instructions.

Old batteries should be disposed of in accordance with local regulations.

Should the Moisture Sensing Mat need to be replaced you can order a new mat from Tunstall by quoting Part Number S2209050.