All the reassurance you need Tunstall

869 MHz Electrical Usage Sensor 41005/22

Installation and User Manual

Functionality

The 869 MHz Electrical Usage Sensor is a Telecare Sensor intended for use with Tunstall 869 MHz Social Alarm Equipment. Please refer to the Social Alarm Equipment documentation for compatibility and other Social Alarm Equipment specific information.

The Electrical Usage Sensor is housed in a plastic case with an integral fused 13A plug and fitted with a 13A outlet socket.

The Electrical Usage Sensor can be typically used by the Social Alarm to provide an input to inactivity processing and/or to provide data for MIDAS 2 applications

The Electrical Usage Sensor will generate an 'appliance off' radio signal if power is removed from the connected appliance by either: -

- switching off the appliance at the appliance itself
- switching off at the 13A socket outlet
- unplugging the appliance from the Electrical Usage Sensor
- unplugging the Electrical Usage Sensor/Appliance combination from the 13A socket outlet
- mains failure

Conversely the Electrical Usage Sensor will generate an 'appliance on' radio signal if power is applied to the connected appliance by either: -

- switching on the appliance at the appliance itself
- switching on at the 13A socket outlet
- plugging the 'switched on' appliance from the Electrical Usage Sensor
- plugging the Electrical Usage Sensor/ 'switched on'appliance combination into the 13A socket outlet
- mains reinstatement (after a mains failure)

The Electrical Usage Sensor is intended to operate with resistive electrical loads of between 30W and 3kW. Although the Electrical Usage Sensor will operate with many different types of electrical appliance, correct operation cannot be guaranteed with all types of connected electrical appliance.

The Electrical Usage Sensor is powered by an internal battery with a minimum battery life of 5 years with typical usage. This battery is automatically tested and when found to be low, will be signalled to the Social Alarm equipment by radio

General Installation

The Electrical Usage Sensor should be installed in a clean, dry environment and is for indoor use only.

The Electrical Usage Sensor should be plugged into the 13A-socket outlet with the appliance to be monitored plugged into the Electrical Usage Sensor.

For optimum radio performance the Electrical Usage Sensor should be mounted away from metallic surfaces

Configuration

No configuration of the Electrical Usage Sensor is required

Programming to Social Alarm System

The Electrical Usage Sensor should be programmed into the Social Alarm system in accordance with the standard procedures for the Social Alarm system.

The Electrical Usage Sensor can be made to generate a radio transmission by switching the connected appliance on or off. Either of these transmissions can be used to program the Social Alarm system.

Service Information

The Electrical Usage Sensor contains no user serviceable parts. For safety reasons, no attempt should be made to dismantle the Electrical Usage Sensor

The Electrical Usage Sensor contains a Lithium Thionyl Chloride battery, which has an anticipated minimum life of 5 years (typical usage). This battery is not user-replaceable and when it has expired, the Electrical Usage Sensor should either be disposed of according to local regulations or returned to Tunstall for a new battery to be fitted.

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 ± 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 general with intended operating temperature 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: 41005/22
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: August 2004

Associated Summary Information 04RTTE004A
The CE mark was first applied in August 2004