Radio Sensor Site Survey Hand-Held Monitor

Features

- High power output
- High quality external whip antenna
- Encrypted data transmission
- Large LCD display

Specification

Radio Output:		
	Frequency	2.4GHz
	16 channels, automatically selected	
	Direct-sequence spread spectrum	
	Compliance	IEEE 802.15.4-2006
Aerial Characteristics		
	Gain	2.0dBi
	VSWR	<2:1
Data Encryption:		AES 128
Power Output:		+10dBm
Power Supply:		Internal 3.6Vdc NiMH battery
Environmental:		
Operating:		
	Temperature	-10°C to +50°C
	RH	0 to 90%, non-condensing
Storage:		
	Temperature	-10°C to +80°C
	RH	0 to 90%, non-condensing
Country of origin:		UK

Product Codes

RF-HHT	Radio sensor site survey hand-held monitor

Technical Overview

The site survey hand-held monitor is used in conjunction with the Sontay® **RF-PS522** site survey routers, **RF-RXSS** site survey receiver and **RF-TS911** nodes, which form a site survey kit (SSK).

Routers are used to route signals from battery powered nodes and other routers to the receiver module, where the signal strength of a direct path is not sufficient for reliable communications.

Data is transmitted back to the receiver at configurable time intervals, or on a configurable change in measured value. Each sensor retains these configurations if the battery becomes discharged or requires replacement.

The SSK receiver automatically selects which of the 16 transmission channels available gives the best radio network performance, taking into account both signal strength and interference levels from adjacent channels and equipment (such as Wi-Fi etc.)

The SSK hand-held monitor, nodes and routers automatically find the best path back to the receiver, which may be directly to the receiver or via "parent" routers.

The HHM is used to monitor devices on a site survey network, and particularly to check radio link qualities between SSK nodes, SSK routers and the SSK receiver.

Power

The **RF-HHT** uses an internal 3.6Vdc NiMH battery. Observe power connections polarity.

Installation

1. Remove all packaging from the SSK hand-held monitor
2. To switch on the **RF-HHT**, press and hold the OK key for 2 seconds. To switch off, press and hold the OK key for 2 seconds.
3. To help maintain battery life, the **RF-HHT** will automatically switch itself OFF after 2 minutes if left unattended or no keypad key is depressed.

Battery Charging

To charge the battery in the **RF-HHT**, connect the correct charger to the socket located on the bottom of the housing. The status LED visible through the **RF-HHT** keypad will show orange until the battery is fully charged, when the status LED will go out.

Battery Fitting and Replacement

When a battery is replaced, observe the correct polarity. **Fitting the battery incorrectly may result in permanent damage to the sensor**.

NB NiMH batteries are rechargeable, but care must be taken to use **ONLY THE CHARGER SUPPLIED IN THE SSK BY SONTAY**. Replacements or spares should be stored in a clean, cool (not exceeding +30°C), dry and ventilated area.

Disposal of Batteries - Warning! Fire, Explosion and Burn Hazard.

Do not short-circuit, crush, disassemble, heat above 100°C (212°F), incinerate, or expose the battery contents to water. Do not solder directly to the cell.

All batteries must be disposed of in accordance with EC Directive 2006/66/EC, amended by EU Directive 2008/12/EC.