

# **User Manual**



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### Introduction.

The EAS Tester is a small measuring instrument, capable of measuring the frequency characteristics of the transmitter in an electronic article surveillance system. It is suitable to measure sweeping systems, systems of which the transmitter sweeps around a center frequency.

The EAS Tester provides you with instant information about the systems' centerfrequency, the sweep width and the sweep frequency. All information is displayed at once, on a  $2 \times 16$  character dot matrix display. An (OK) is displayed when a measurement is stable for about one second.

The EAS Tester operates on a 9V block battery, preferrably an alkaline type.

## **Operation.**

To operate the EAS Tester, push the ON button for a moment. The EAS Tester will switch on and stays running for 1 minute. Then it will switch itself off.

Hold the EAS Tester close to the transmitter antenna and wait until (OK) appears on the display. The information on the display is then stable and valid. When it is impossible to get the (OK) indication, move the EAS Tester closer to the antenna. When you are ar close as possible and still are unable to get the (OK) indication, then the measured system has too low output power. This might occur at certain one-antenna systems.

The numbers on the display mean the following:

- F<sub>C</sub>: the center frequency at which the system operates.
- $\Delta$ : the total frequency deviation or sweep width.
- F<sub>S</sub>: the sweep frequency.

Example:

F <sub>C</sub> :	8200k	the center frequency is 8200 kHz or 8.2 MHz
Δ:	1300k	the sweep width is 1300 kHz, thus the system
		sweeps from 7.55 to 8.85 MHz
F <sub>S</sub> :	82.2	the sweep frequency is 82.2 Hz

Whenever you get a center frequency indication that is exactly twice the systems' operation frequency, the systems' end stage is probably overdriven or not properly tuned. Such a system can produce very high level 2nd harmonics, which will be indicated by the EAS Tester.

Warning: When the display indicates (OK), this does <u>not</u> mean that the system is adjusted correctly. It only indicates that the signal is strong enough for the EAS Tester to provide a stable reading.

#### Technical data.

Centerfrequency range:	100 kHz - 15 Mhz
Sweepwidth range:	Center freq. $\pm 2.5$ % to center freq. $\pm 90$ %
Sweep frequency:	10 Hz to 200 Hz
Power consumption:	9V/25mA, from a 9V block battery
	Automatic switch-off after 1 minute.
Dimensions (mm):	120 x 65 x 22

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