DATASHEET

FPRO Fosmeter Pro

Induction Loop Tester

SigNET's new FPRO Fosmeter Pro induction loop test is designed to simplify the setup of an induction loop system and ensure its compliance with the latest version of BS EN 60118-4 (Magnetic field strength in audio-frequency induction loops for hearing aid purposes).
The Fosmeter Pro is a 400mA magnetic field strength meter and loop listener, complete with circuitry for measuring background noise, frequency response and metal compensation. It includes:-

• A digital LCD display with a user-friendly interface to simplify testing.

• Two 'soft' buttons that dynamically change their functions to suit the menu options being accessed.

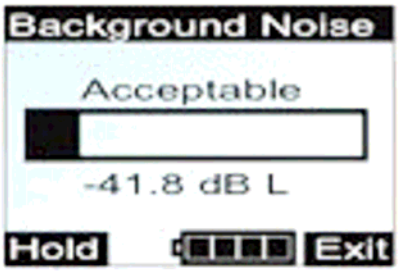
• Battery low indication and an auto-power off function that kicks in after 10 minutes of Fosmeter inactivity.

• A 3.5mm headphone jack socket allowing users to listen to the loop signal using a set of headphones.
The unit is powered from a 9V PP3 battery (provided) and is supplied in a protective canvas carrying case. Is all it takes to ensure your loop installations comply with current British Standards.

About induction loop testingAbout induction loop testing
BS EN 60118-4 (2006) recommends the minimum magnetic field strength of an AFILS system over a "covered area" should be 400mA RMS per metre.
The most efficient way of ensuring this requirement is met is to measure the magnetic field strength of a steady output from the AFILS amplifier.
Unlike music or speech (both of which provide a variable sound output from which it is virtually impossible to obtain an accurate RMS reading), a sine wave has a consistent level and frequency.
When fed into an AFILS system, a sine wave therefore gives a constant magnetic field strength, which can be easily and accurately measured using the Fosmeter Pro.
BS EN 60118-4 also recommends tests are carried out on background noise and frequency response.

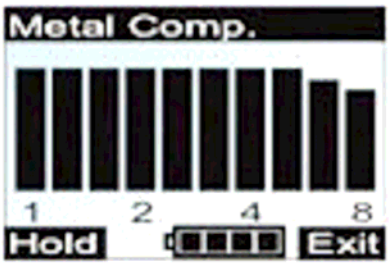
The Fosmeter Pro's test results are typically shown on its LCD as shown left.
A summary of these tests appears below:

Field Strength test: Detects a pulsed 1kHz signal in accordance with BS EN 60118-4, calibrated at 400mA/m = 0dBL.



Background Noise test: Advises if the signal is acceptable, tolerable or too high in accordance with BS EN 60118-4.

Frequency Response test: Detects 100Hz, 1kHz and 5kHz in accordance with BS EN 60118-4. All three frequency readings are displayed on the same screen allowing you tell at a glance if the setup is within the +/- 3dB L required by the standard.



Metal Compensation test: This test goes beyond the scope of BS EN 60118-4 but adheres to the 3rd octave frequency spectrum advised in the standard, measuring 1kHz through 8kHz. For use with amplifiers with metal compensation controls/functions such as C-TEC's PDA200-2, PDA500-2 & PDA1000-2.

Subjective listening test: This test is designed to ensure hearing aid users receive an undistorted and clear signal in the covered area and is performed using a set of headphones (supplied) plugged into the unit's headphone socket.
More detailed information can be found in the Fosmeter Pro's instructions.