

Q 2012 Field Strength Meter



Overview

This Field strength meter is absolutely essential for all installers setting up and commissioning hearing induction loop amplifier systems. It is ideally used in conjunction with the Redback® Q 2014 1kHz tone generator allowing an installer to test the signal generated in the actual 'loop' of the system. The resultant signal is 'induced' into the pickup of the Q 2012 tester and the strength of the signal is displayed on the LED display.

It is also ideal for measuring any electrical noise that may be present within the loop precinct, which should be done prior to the loop installation. The signal strength and quality can also be monitored via headphones, which can be plugged directly into the Q 2012.

The meter has an internal Li-Ion battery which is recharged via a 5V Dc source such as a USB connection.

Key Features

- ✓ Australian made
- ✓ 12 months manufacturer warranty with local product support
- ✓ Compact and Portable
- ✓ Handheld battery powered
- ✓ 1KHz tone generator
- ✓ Test hearing loop induction sound systems
- ✓ Two output levels are provided
- ✓ Includes a 9V battery

Field Strength Testing Information

The field Strength is tested to Australian Standard AS60118.4 (2007), using a 1kHz sinusoidal input, with a variation of +/- 3dB.

In practical terms, the recommended field strength should be 100m Amps/metre with a long term average >60 seconds i.e. -12dB ref 400mA/m (rms). This is the "Field Strength Average" which is shown as the -12dB point on the LED scale on the front of the Q 2012. This is the average reading which needs to be achieved in the listening area.

The recommended field strength maximum should be 400mAmps/metre for 0.125secs. This becomes the 0dB reference.

The "Field Strength Maximum" is shown as the 0dB point on the LED scale on the front of the Q 2012. The field strength in the listening area should not exceed this 0dB level.

When testing the Field Strength, we recommend connecting the Redback® Q 2014 Audio Generator which has a 1kHz sinusoidal output, to the input of the loop amplifier (as shown in figure 1). The output level of the amplifier is then adjusted to achieve the "Field Strength Average" as measured by the Redback® Q 2012 Field Strength meter.