

## Loopworks Measure R1 Receiver

The R1 Receiver is a high quality audio induction loop receiver with a vertically mounted pick up coil designed to be used in conjunction with the Loopworks Measure App. The Loopworks Measure App and R1 Receiver together become the most accurate, dedicated field strength meter (FSM) currently available.



### Features

- Calibration performed using  $\mu$ P device, which is not operational during measurement
- Frequency response ( $\pm 0.25$  dB 50Hz to 8kHz), app brick wall filter beyond 10kHz
- RMS detection with 125ms (F) integration time constant provided by host device and App
- Power supply dependent on operation mode: either energy harvested host device audio output or derived from host device mic bias
- Assessment of any system to IEC60118-4
- 1 year warranty.

### Applications include

- Simple meter mode when not signed into Loopworks, tests: field strength, frequency response and background noise.

### When signed in to Loopworks

- Synchronises data with Loopworks online database using host device data connection
- Commissioning test: evaluates the complete performance of a system against IEC 60118-4 for certification
- Quick check test: designed as a basic evaluation of a pre-installed system against IEC 60118-4
- Freestyle test: evaluates the functional performance of a system against IEC 60118-4
- Site assessment test: evaluates a site using a simple test loop and capture results to determine the type installation required.

### Accessories

- Soft carry pouch
- User guide/handbook

#### Operational modes

##### Background Noise

- A-Weighted filter
- True RMS detection. 0dB referenced to 400mA/m
- Scale -60 to -0dB
- Audio output can be captured for analysis in signed-in, certify mode or listened to live via the headphone jack in meter mode
- For use with system on or off, sine waves and combi signals.



##### Field Strength

- Broad band measurement 50Hz to 8kHz
- True RMS detection referenced to 400 mA/m
- Scale -40 to +10dB
- Suitable for use with sine wave, pink noise, combi and live signals.



##### Frequency Response

- Third octave bands at 100Hz, 1kHz and 5kHz
- True RMS detection
- Scale resolution to 1dB
- For use with pink and combination signals.



#### Specifications

##### Magnetic field measurement

Coil orientation: Vertical when unit held upright  
Reference level: 400mA/m (In field strength mode)

##### Frequency response

50Hz to 8kHz  $\pm 0.25$ dB  
40Hz to 10kHz  $\pm 0.5$ dB  
30Hz to 15kHz  $\pm 3$ dB  
Gain stability: Better than  $\pm 0.25$ dB over all conditions

##### Audio inputs

3.5mm 4-pole jack plug for connection to Apple device  
3.5mm 3-pole jack socket for monitoring with stereo headphones

**Calibration Power** < 100mW

**Measurement Power** < 1mW

##### Physical

Dimension: 52.0 x 27.5 x 9.5mm  
Weight: 10g  
Operating temp range: -10 to +45°C (Storage: -20 to +75°C)