

5. Calibrate Receiver

Follow the on-screen instructions to calibrate the receiver against your iOS device's settings.

This is an important function to allow accurate meter readings to be taken.

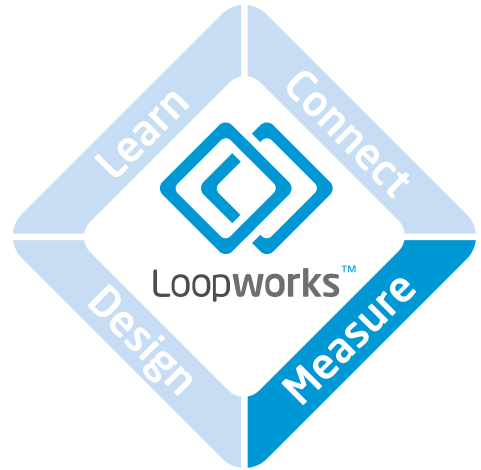
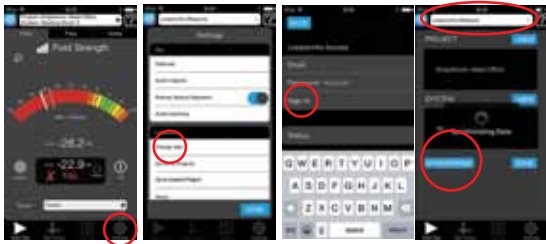


6. Sign in to Loopworks

Unless you intend to use the Loopworks™ Measure App as a simple meter (no recording of data or audio and testing guides) you will need to sign into the account you created at stage 1.

Press the Settings icon and enter the 'Change User' screen to sign in.

Synchronise with your account by entering the Projects Menu at the top of the screen and selecting "synchronise" to save or retrieve data.



Quick-Start Guide & R1 Handbook

1. Sign up for Loopworks™

If you haven't done so already, create an account to access the Loopworks™ online environment.

This stage is optional, and you can use the Measure App + Receiver in simple Meter mode, but will need an account to access the full range of Loopworks functions and to save data or record audio. Create an account at:

<https://loopworks.ampetronic.co>

2. Purchase Receiver

If you haven't done so already, you will need to purchase a Loopworks Measure Receiver.

The Receiver contains a Telecoil and enables your iOS device to measure electromagnetic fields. The Loopworks Measure App will not function without a Receiver.

Order at:

ampetronic.co/products



3. Download the FREE App

If you haven't done so already, you will need to download the FREE Loopworks Measure App from the Apple App Store, using your iOS device.



4. Connect the Receiver

Start your new App and plug the Receiver into the headphone socket of your iOS device to activate it.

Follow the on-screen instructions to allow access to the microphone and enter the label number (digits only) printed on the side off the Receiver.



WARRANTY & CALIBRATION

This product carries a one year parts and labour warranty from date of shipment from Ampetronic. The warranty could be invalidated if the instructions in this handbook are not followed correctly, or if the unit is misused in any way.

The Loopworks Measure R1 is calibrated during manufacturing test, and is valid until one year from the date the equipment leaves Ampetronic. Calibration review is recommended one year from this date, however this period may be extended depending on use and requirements.

DECLARATION OF CONFORMITY

Manufacturer: Ampetronic Ltd. Unit 2, Trentside Business Village
Farndon Road Newark United Kingdom NG24 4XB

Declares that the product:

Description: Field Strength Meter

Type name: R1

Conforms to the following Directive(s) and Norm(s):

Directive 2004/108/EC

EMC: EN55103-1 : 2009 Emission
EN55103-2 : 2009 Immunity

Directive: 2006/95/EC

Safety: EN 60065: 2002+A12:2011

Directive: 2011/65/EU RoHS

CE Part 15: This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation."

Date: June 2015,

J.R. Pieters, Managing Director, Ampetronic Ltd.

Contact information

Website: www.ampetronic.co, Portal: loopworks.ampetronic.co

Technical: support@ampetronic.co, Sales: sales@ampetronic.co

Tel: +44 (0) 1636 610062

R1 Handbook

Handbook Contents

- Safety
- Introduction
- Overview of unit
- Operation of unit
- Troubleshooting
- Technical Specifications
- Warranty & Calibration
- Declaration of Conformity

Box Contents

- 1 x Loopworks Measure R1
- 1 x Pouch
- 1 x Quick-Start Guide & Handbook




This symbol is used to alert the user to important operating or maintenance instructions.



The lightning bolt triangle is used to alert the user to the risk of electric shock.

SAFETY

1. It is important to read these instructions, and to follow them.
2. Keep this instruction manual in an accessible place.
3. Clean only with a dry cloth. Cleaning fluids may affect the hardware.
4. Refer all servicing to qualified personnel. Servicing is required when the apparatus has been damaged in any way, such as a power supply cord or plug is damaged, liquid has been spilled or objects have fallen onto the apparatus, the apparatus has been exposed to any rain or moisture, does not operate normally or has been dropped.
5.  WARNING – To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. The apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.



CAUTION
RISK OF
ELECTRIC SHOCK

**TO PREVENT ELECTRIC SHOCK REFER
SERVICING TO QUALIFIED PERSONNEL**

INTRODUCTION

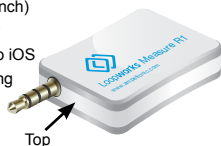
The Loopworks Measure R1 has been designed in conjunction with the Loopworks Measure iOS App as a high quality piece of test equipment for detection and evaluation of the performance of Audio Frequency Induction Loop Systems (AFILS) to the international standard IEC 60118-4.

It is simple to use with all types of installation, from simple service point applications through to low spill area coverage designs. Simply hold the Loopworks Measure R1 in the same position the hearing aid will be in once the system is operational: i.e. hold the unit at head height to take measurements: either seated, or standing depending on the venue.

A headphone socket is provided to allow audible monitoring and subjective testing of the system. Details of use are given in the Hearing Loop test and commissioning procedure.

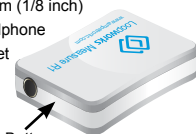
OVERVIEW OF UNIT

3.5mm (1/8 inch)
Jack plug for
connection to iOS
device running
App



Top

3.5mm (1/8 inch)
Headphone
socket

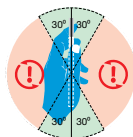


Bottom

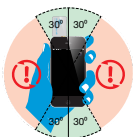
OPERATION OF UNIT

Method of use

1. Download Loopworks Measure App to device
2. Unpack Loopworks Measure R1
3. Connect to the iOS device running the App
4. Insert the headphones into the socket on the top of the unit to monitor received signal. Adjust the volume using the controls on the device running the App.
5. Use as basic meter or sign in to Loopworks Measure to capture test results and generate reports



N.B. For most applications it is the vertical component of the magnetic field that is received by the hearing aid, as a result the Loopworks Measure R1 is designed to be used while held vertically as shown:



TROUBLESHOOTING

No Headphone signal

Check the headphones are plugged in, and the volume control is turned up.

Low magnetic field strength

Check the loop system is running current.

If there is insufficient CURRENT, or excessive metal loss, the application may require a special loop design to achieve acceptable performance, contact Ampetronic for advice.

Background noise

Check all loop systems are switched off and not running any current.

If the interference is still present with the loop system switched off, locate and eliminate the source of the interference before switching the loop system back on. Monitor with headphones whilst switching other electrical systems such as power, lighting etc ON and OFF

SPECIFICATIONS

PARAMETER	VALUE
Magnetic field measurement	Coil orientation: Vertical when unit held upright Reference level: 400mA/m (in field strength mode)
Frequency response	50Hz to 8kHz ± 0.25 dB 40Hz to 10kHz ± 0.5 dB 30Hz to 15kHz ± 0.3 dB Gain stability: Better than ± 0.25 dB over all conditions
Audio Inputs	3.5mm 4-pole jack plug for connection to Apple iOS device 3.5mm 3-pole jack socket for monitoring with stereo headphones
Calibration power	< 100mW
Measurement power	< 1mW
Dimensions	52.0 x 27.5 x 9.5mm
Weight	10g
Operating temp range	-10 to +45°C (Storage -20 to +75°C)

Details of all products and services provided by Ampetronic can be found at our website: www.ampetronic.co