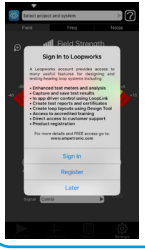
5. Calibrate Receiver

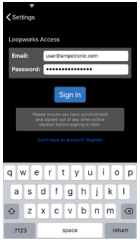
Follow the on-screen instructions to calibrate the receiver against your iOS device's settings.

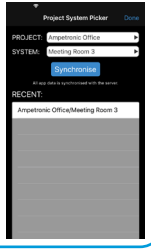
This is an important function to allow accurate meter readings to be taken.

6. Sign in to Loopworks

After successful calibration you will be prompted to sign in when first opening the app. If you have not already created an account you can register within the app at this stage. If you choose not to sign in now, you can sign in via the settings menu at any point. During sign in any existing data will be synchronised to the app, you can check the synchronisation status and manually synchronise at any point from the projects menu.







Learn Connect Design Measure

Loopworks™

Quick-Start Guide & R1 Handbook

UP18301-7

AMPETRONIC

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.

TO PREVENT ELECTRIC SHOCK REFER SERVICING TO QUALIFIED PERSONNEL

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.

Loopworks

4. Connect the Receiver

Start your new App and plug the Receiver into the headphone socket of your iOS device to activate it. You'll need an Apple Lightning adapter to use with the most modern iOS devices. For greater compatibility official Apple products are recommended. 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.

1. Purchase Receiver

You will need an R1 Receiver to perform any measurements in the app. The receiver contains a telecoil and enables your iOS device to accurately measure magnetic fields.

Purchase an R1 Receiver from the Ampetronic website (www.ampetronic.com) or through your local distributor.

2. Sign up for Loopworks™

Create a free account to access the Loopworks online portal, and enable increased functionality on the App. This stage is optional, and you can use the App in simple meter mode; however, you will need an account to access the full range of functions and to be able to save data or record audio.

Create an account from within the app or at loopworks.ampetronic.com

INTRODUCTION

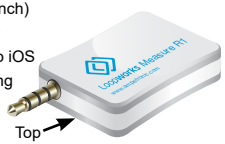
The Loopworks Measure R1 has been designed in conjunction with the Loopworks Measure iOS App as a high quality piece of test equipment for detection and evaluation of the performance of Audio Frequency Induction Loop Systems (AFILS) to the international standard IEC 60118-4.

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.

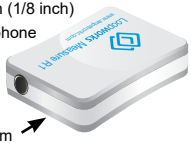
A headphone socket is provided to allow audible monitoring and subjective testing of the system. Details of use are given in the Hearing Loop test and commissioning procedure.

OVERVIEW OF UNIT

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



3.5mm (1/8 inch) Headphone socket

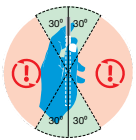


OPERATION OF UNIT

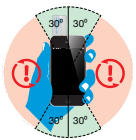
For full instructions on using the meter and app, download the Loopworks Measure User Manual from the R1 product page at www.ampetronic.comm

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

See the full user manual, or the FAQs page within Loopworks for more troubleshooting advice.

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 ±0.25dB 40Hz to 10kHz ±0.5dB 30Hz to 15kHz ±0.3dB Gain stability: Better than ±0.25dB 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.com

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 2014/35/EU

EMC: EN55032:2015 Emission

EN55103-2 : 2009 Immunity

Directive: 2014/30/EU

Safety: EN 60065: 2002+A12:2011

Directive: 2011/65/EU RoHS

FC 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: May 2017,

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

Contact information

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