

User Guide

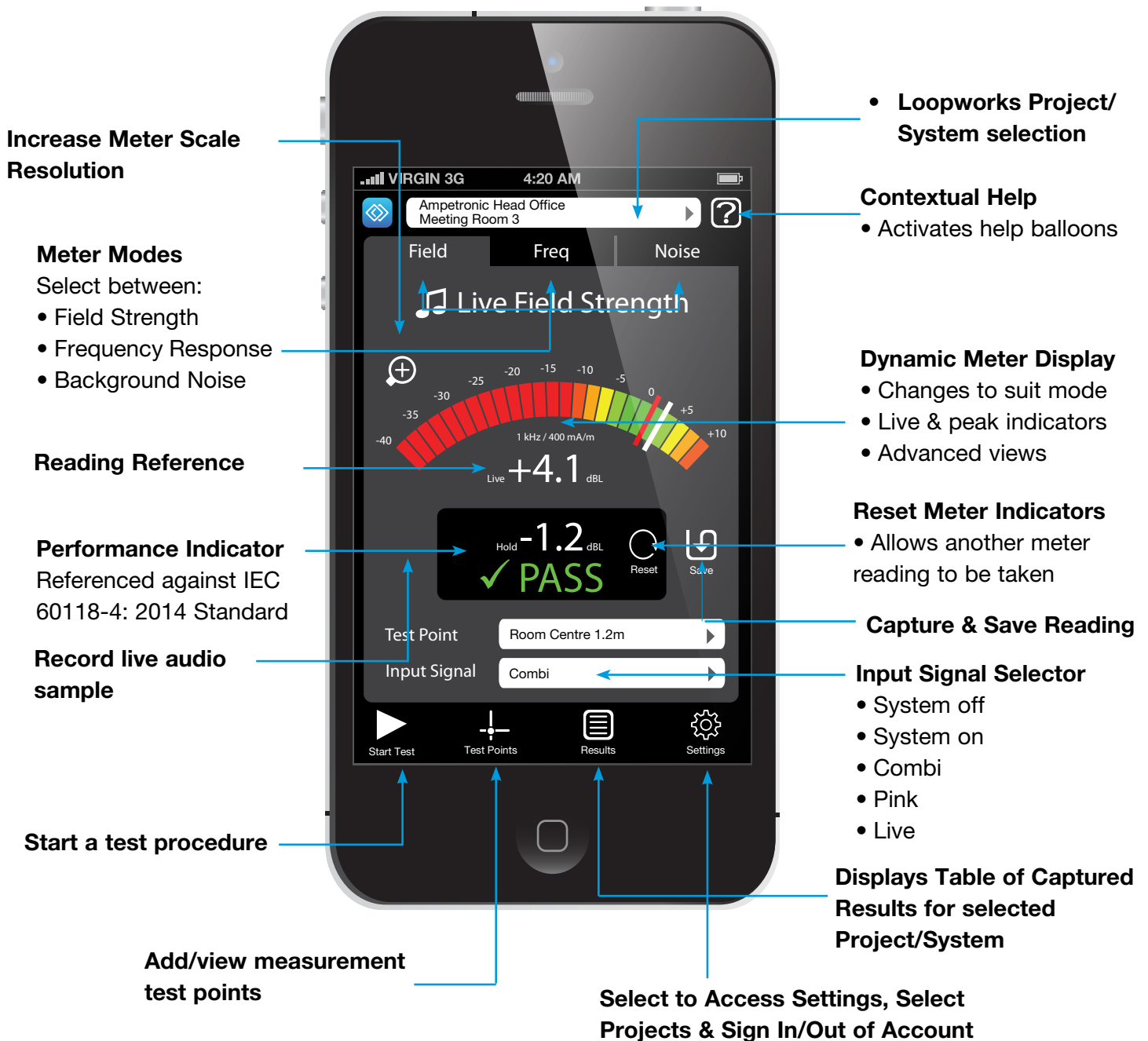
	Page
1. Overview	1
1.1. Measure App	1
1.2. Receiver Hardware	2
1.2. Loopworks Measure Online Environment	3
2. Quick Start Guide	4
3. Icon Library	5
4. Settings	6
5. What & How to Measure	8
4.1. POS & Localised Overspill Systems	8
4.2. Area Coverage Systems	9
6. Meter Mode	10
4.1. Field Strength	11
4.2. Frequency Response	12
4.3. Background Noise	13
7. Getting Started: Setting up a Project in the App	14
8. Test Mode	15
5.1. Commissioning Test	16-19
5.2. Quick Test Check	20-21
5.3. Freestyle Test	22-23
5.4. Site Assessment Test	24-25
9. Test Mode: Editing a Project/System in the Portal	26
10. Trouble Shooting	27
11. Important Safety Information	28

Overview

The Loopworks Measure tools consists of three parts; an iOS App, a Receiver and the Loopworks™ Online Tools. The App can be used in a simple **Meter mode** to replicate the functionality of a traditional Field Strength Meter, or users can take advantage of the **Test mode**, which contains step-by-step Wizards that guide through different procedures.

All locally stored data is synchronised with the Loopworks™ Online Tool when the device connects to a wireless network for examination, certification creation and archiving to capture test results for analysis and certification.

Loopworks™ Measure iOS Application

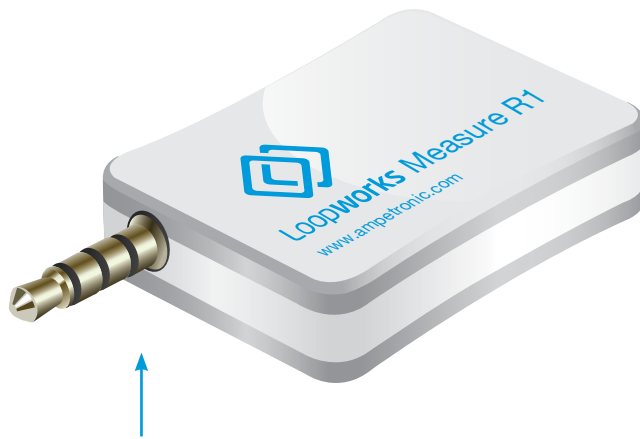


Loopworks™ Measure Receiver

The Loopworks iOS App doesn't work without the Receiver, which can be purchased from the Ampetronic website. The Receiver has a 3.5mm jack that plugs into the corresponding headphone socket on your iOS device.

Users of the App can listen to the signal being monitored by plugging headphones with a standard 3.5mm jack into the bottom of the receiver. NB purchasers of the Receiver get one year's FREE access to the suite of Loopworks Measure Online resources.

WARNING: For important information about avoiding hearing loss, see Important safety information at the back of this User Guide.



3.5mm (1/8 inch) Jack plugs into top or bottom headphone socket on iOS device



Headphones with standard 3.5mm (1/8 inch) jack can be plugged into the Receiver



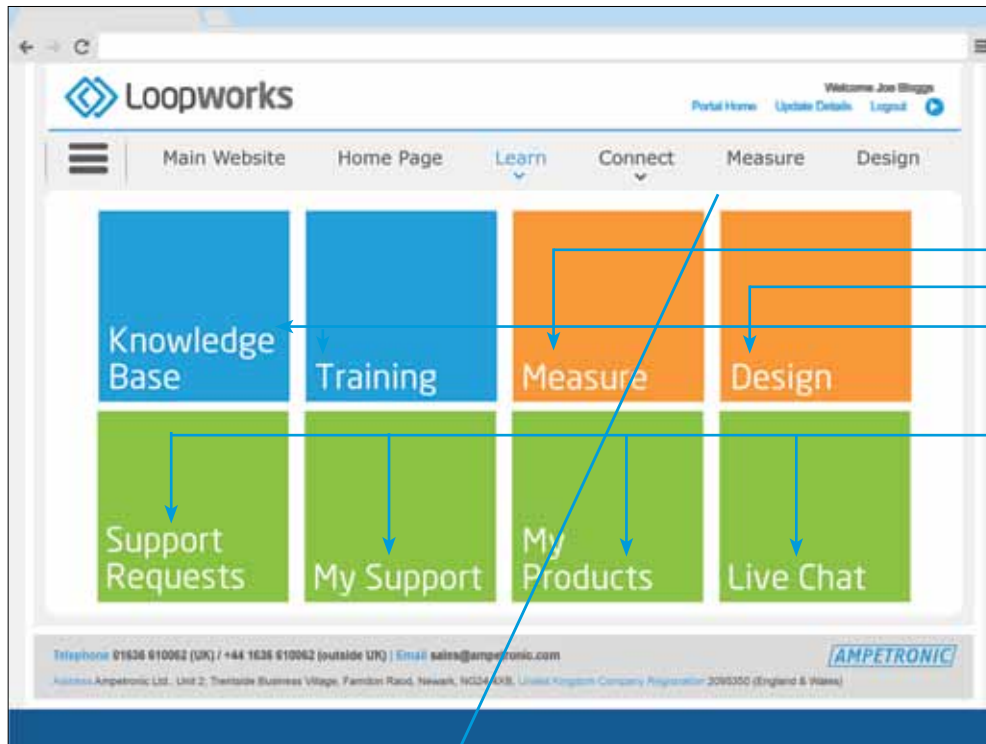
Alignment!

NOTE: When taking a meter reading in any mode it is essential that the device is held vertically at the intended listening height to simulate the position of the telecoil in a hearing aid. Deviation of over 30° from vertical will result in an alignment warning symbol being displayed and data capture function being deactivated.

Loopworks™ Measure Online Environment

When you are signed into your Loopworks account, the App can synchronise your data with the Loopworks online portal, making it possible for you, or a colleague, to analyse the results online and create test and certification reports.

You can also set up systems and test points prior to going to site, playback recorded audio and get live support and analysis from our Ampetronic loop experts, by phone or live chat, when using the signed in, online Loopworks environment. You can also manually “synchronise” in the Project menu (see page 14 for more information on setting up Projects in the App).

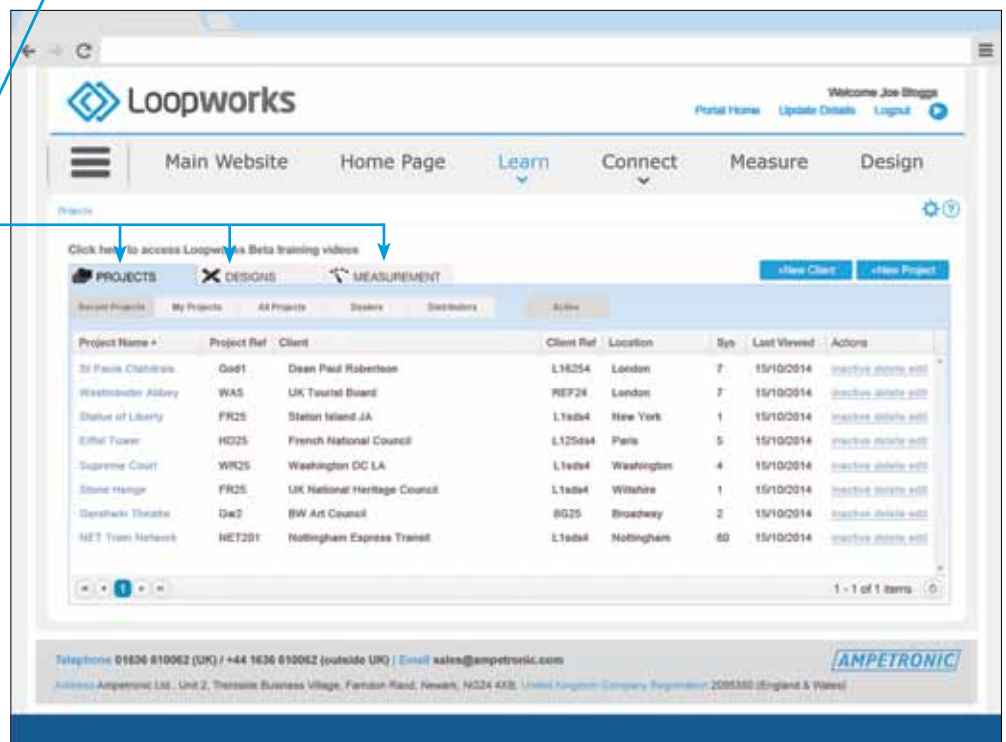


Navigate to resources and tools via the Loopworks portal homepage

- Loopworks Measure
- Loopworks Design
- Loopworks Learn
- Loopworks Connect

Loopworks Measure

- See and share your projects, designs and measurements



Your Quick-Start Guide

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 you 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 accurately measure magnetic 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 of the Receiver.



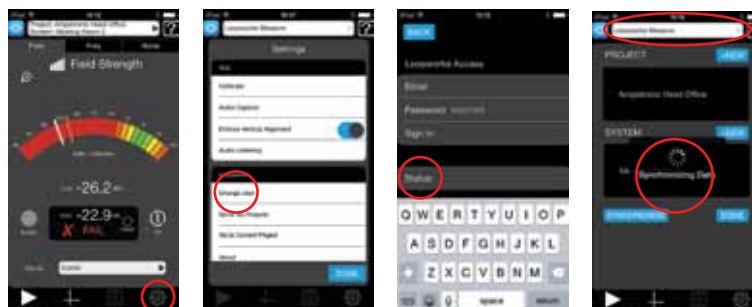
5. Then calibrate the Receiver

























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

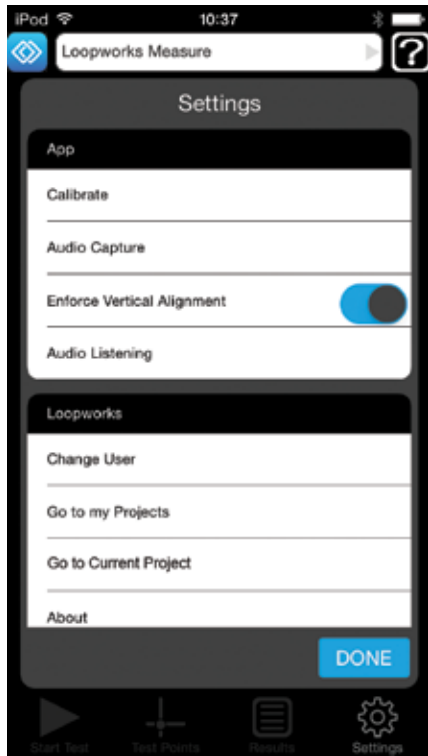
Unless you intend to use the Loopworks™ Measure App as a simple meter (no recording of data or audio and testing guides) you will need to sign in using the account you created at stage 1.

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.



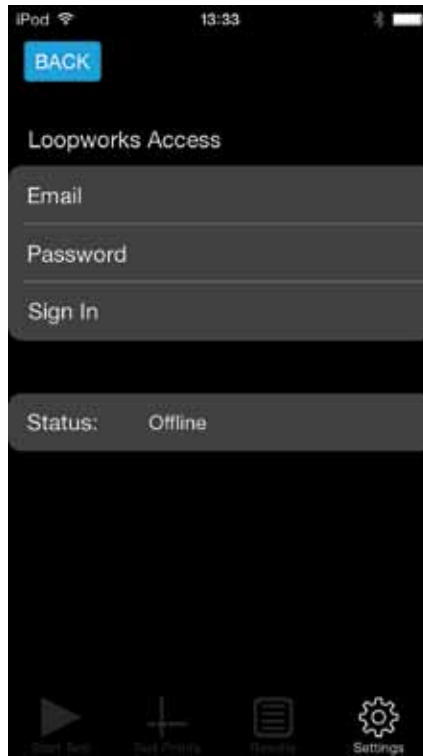
Icon	Meaning	Definition in Measure App
General Menu Items		
	Field Strength Meter	Measure un-weighted magnetic field strength in dBL (Ref: 0dBL = 400mA/m)
	Frequency Response Meter	Measure un-weighted frequency response of the magnetic field in dBL (Ref: 1 kHz)
	Background Noise Meter	Measure A-weighted magnetic field strength of unwanted signals in dBL (Ref: 0dBL = 400mA/m)
	Record	Record a live audio sample of the signal for record or review in the Loopworks web portal. NB this option is only possible when performing a test session.
	Save	Press to save a meter reading by assigning it to an individual test point.
	Reset	Press to erase the history of the peak level indicator.
	Results	Select to show a table of captured data for the selected project/system.
	Start Test	Use the Loopworks Measure App to access step-by-step guides/wizards for system commissioning tests, quick check tests, freestyle tests and site assessments.
	Stop Test	Stop or interrupt a certification test or site assessment; you can restart later.
	Test Points	Set-up and select a test point at a specific room location and height to take meter readings at. NB this option is required to save or record audio.
	Settings	Select to sign in to your Loopworks account, sync data, select/change projects and alter audio/device settings.
	Contextual Help	Toggles the help on and off. Menu items become inactive in the mode instead displaying a descriptive help balloon.
Test Types		
	Background Noise	Icon used to denote readings of unwanted electro-magnetic background noise in the Loopworks™ App, online tools and on certification reports
	Field Strength	Icon used to denote readings of magnetic field strength in the Loopworks™ App, online tools and certification reports.
	Frequency Response	Icon used to denote readings of magnetic field strength in the Loopworks™ App, online tools and certification reports.
	Live Field Strength	Icon used to denote readings of live signal field strength in the Loopworks™ App, online tools and certification reports.
	System Noise	Icon used to denote readings of unwanted noise created by the installed loop system in the Loopworks™ App, online tools and certification reports.
	Overspill	Icon used to denote readings of unwanted magnetic field strength outside the required area in the Loopworks™ App, online tools and certification reports.
	Live Signal Listening Test	Icon used to denote a test where headphones have been used to physically listen to a live signal such as a voice or music using the Loopworks Measure app to replicate a hearing aid.
	Venue Accessibility	Icon used to denote whether a staff have been trained to use the system and that a Hearing Loop sign is visible in the covered area and at each entry point.
Online Portal Menu		
	Projects	Review, edit or create a hearing Loop project in which to take Measurements or specify/design.
	Design	Review, edit or create a hearing Loop system specification and/or design.
	Measurements	Review measurement values for hearing loop systems surveyed using the Loopworks Measure App, or manually enter values for a system surveyed using a traditional Field Strength Meter.
	Reports	Review, edit or create a hearing Loop system technical report or commissioning certificate.

Settings



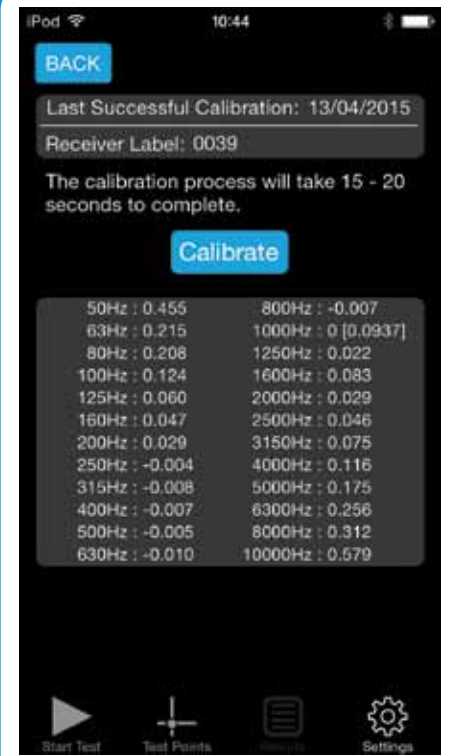
Settings Screen

Sign in/out of accounts, edit projects, check versions and alter your device preferences.



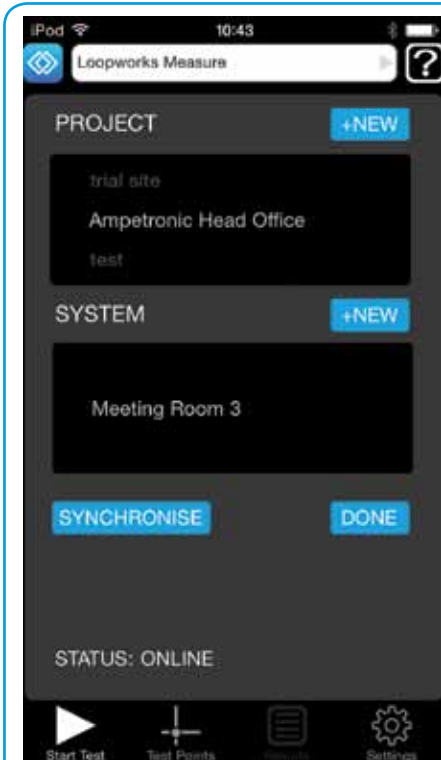
Sign in

Sign in to the Loopworks Measure portal via the App.



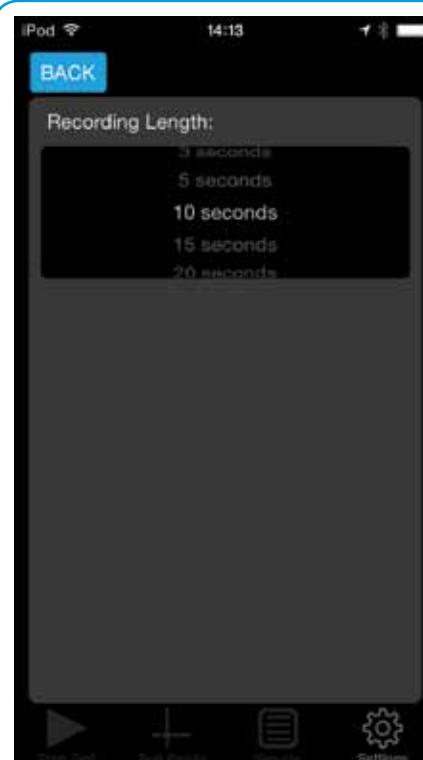
Calibrate Receiver

Check that the Receiver label matches iOS device and calibrate replacements.



Projects

Add new projects or use the tumblers to select/edit existing projects, systems & sessions.



Audio Settings

Increase/decrease audio capture times to affect speed/accuracy of signal capture.

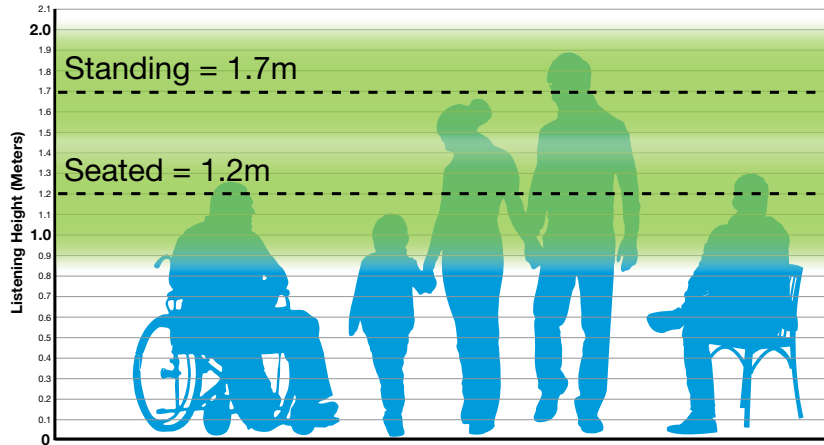


About Measure App

Check App details and ensure that you have the most up to date version available.

What and how to measure

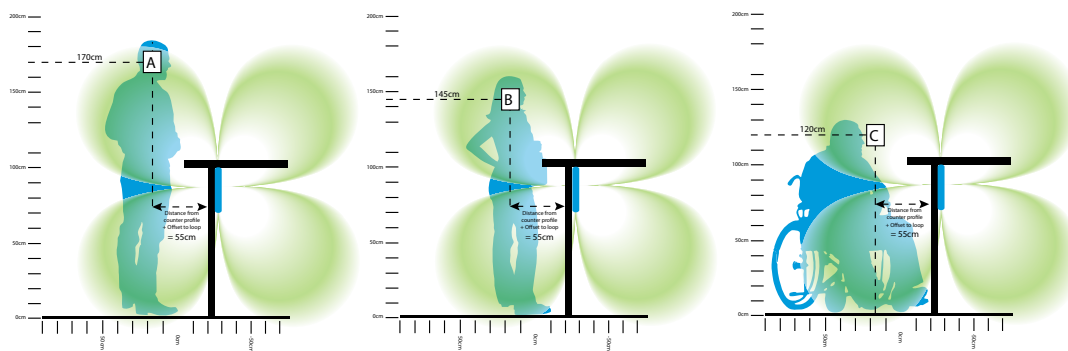
The specification of a hearing loop system can seem complex, requiring detailed knowledge of all the necessary elements of the system, the loop design options available and their limitations, amplifier selection plus adherence to Standards. When starting the specification process, it is essential that the audio being transmitted, and any unwanted noise, are captured at the correct height and in multiple areas throughout the area to be covered. The listening plane is usually assumed to be at a height of 1.2m for a seated person or 1.7m standing.



The listening plane is broadly ear level and is assumed at 1.2m (4ft) seated and 1.7m (5ft 7in) standing

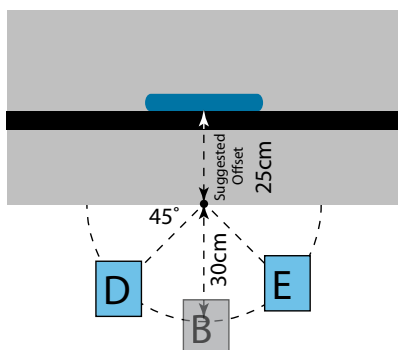
Service Points, POS and Localised Overspill Systems

Induction loops can also be used for one-to-one communications, such as at ticket counters and in small meeting rooms. The height of the listening plane needs to be appropriate to the setting, and localised overspill will also need to be considered in order to maintain a consistent signal and confidentiality. Test at standing and seated heights to ensure the hearing aid receives a strong signal.



Standing and seated heights will vary

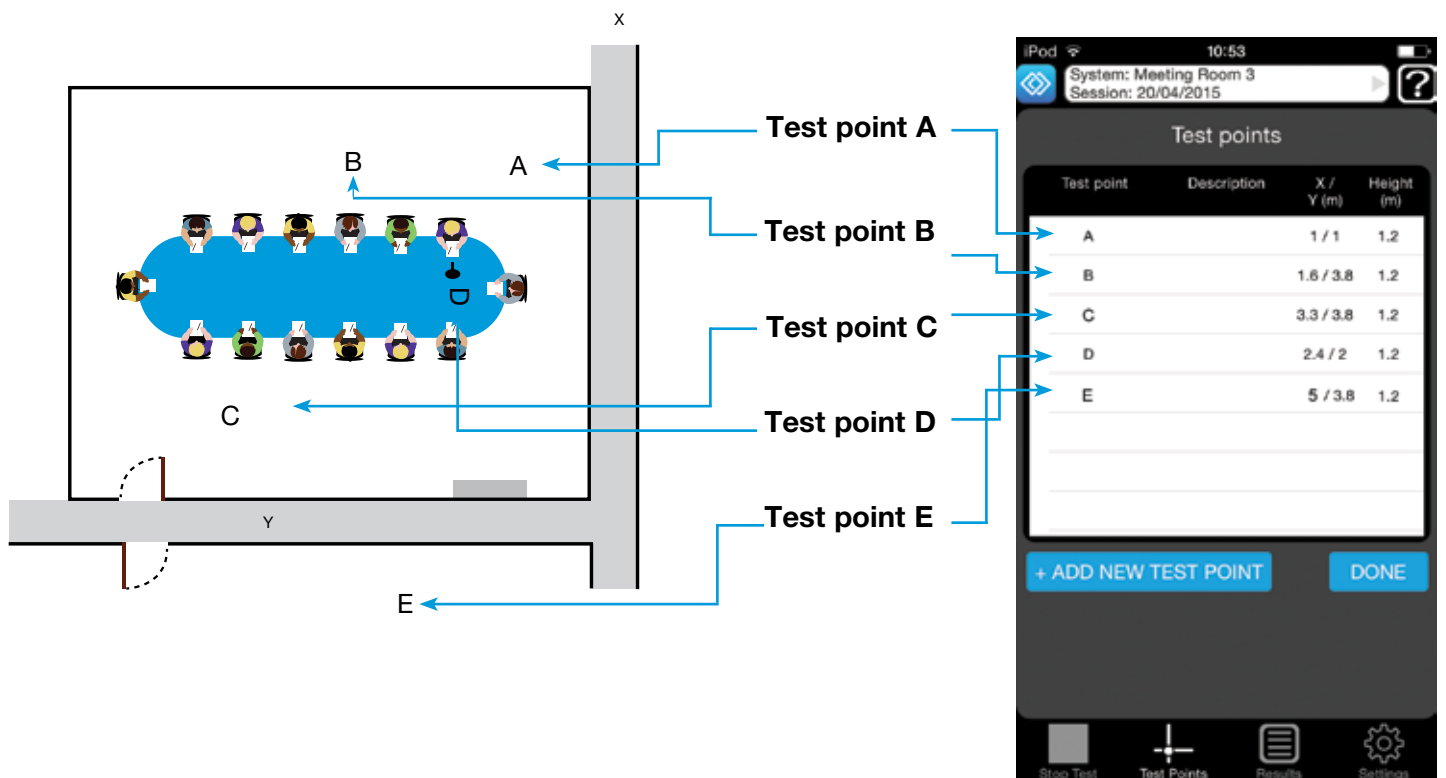
This diagram is a plan view of a service point (from above)



Measure at 45° to the left and right of the front of a counter at test points D and E. Never directly in front at point B

Area Coverage Systems

To ensure even and consistent loop coverage, define test points around the room or area to be looped, at the correct height for the room's main usage and spaced out evenly across the space.

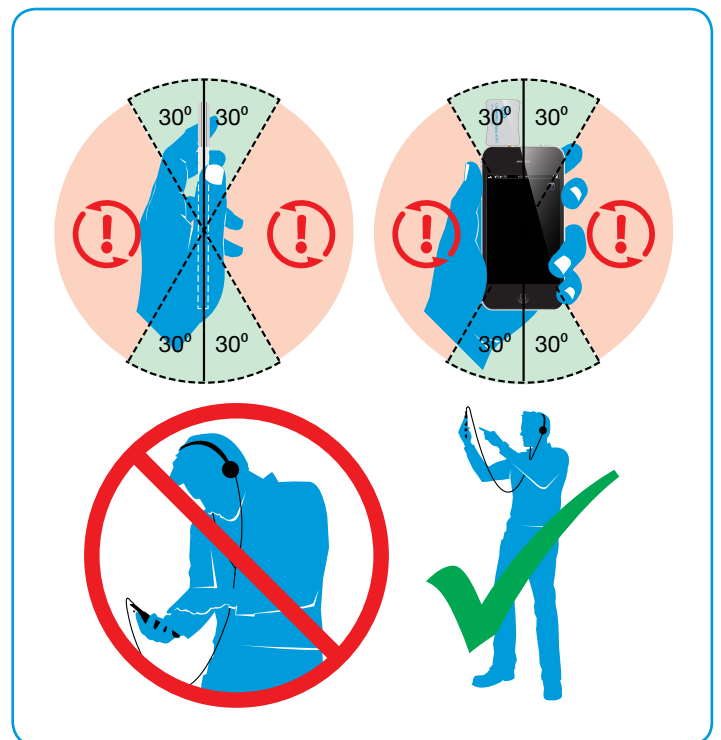


How to Measure

There are many factors to consider before selecting the equipment required for your system. For example, an amplifier/driver should never be specified simply on area coverage as such factors as area aspect ratio, loop design and metal losses and required current must also be calculated. Also consider the intended use of the space being looped before taking your measurements. The requirements for a classroom, boardroom or much larger multipurpose space, will vary considerably.

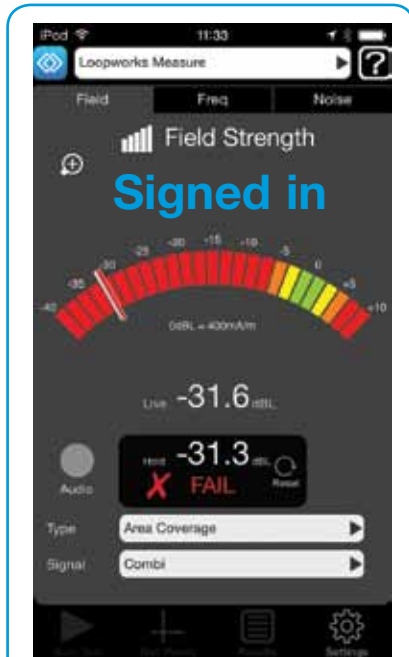
The Loopworks Measure Receiver contains an internal Telecoil (T-Coil), mounted in an axis that replicates the vertical position in a standard hearing aid, when attached to a mobile device. The Receiver must be in the vertical position when you are taking measurements. Deviation of over 30° from vertical will result in an alignment warning symbol being displayed and the data capture function being deactivated.

NB. This feature can be deactivated using the 'Device Alignment' function in the settings menu if using an extension for the receiver.



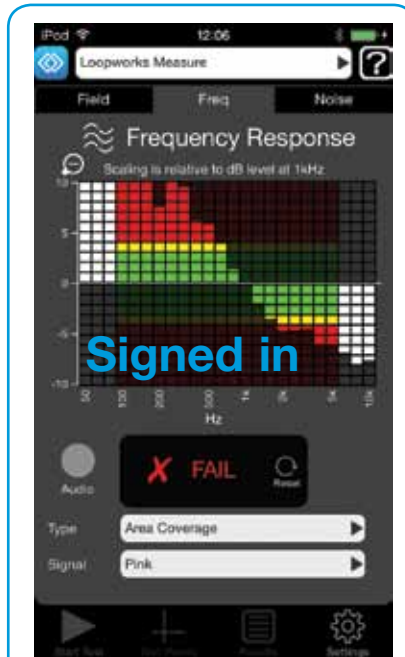
Meter Mode

The Measure App will function in simple **Meter mode** when you are not signed into the Loopworks portal. In **Meter mode**, your iOS device becomes the most accurate, dedicated field strength meter (FSM) currently available. To take advantage of the full range of online tools and functions, create an account at <https://loopworks.ampetronic.co>. To sign-in, press the Settings icon and the account will synchronise.



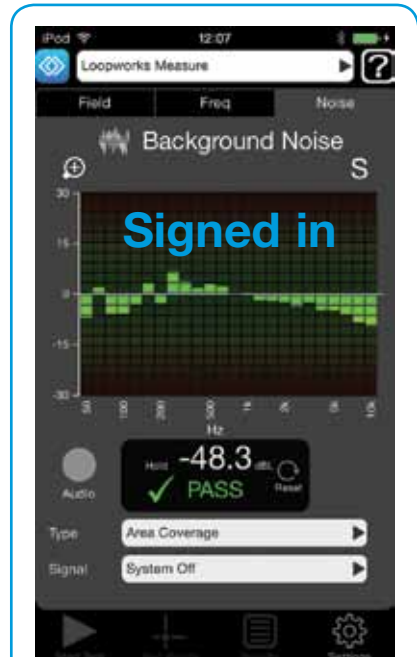
Field Strength

A broad band measurement to measure field strength delivered by the system.



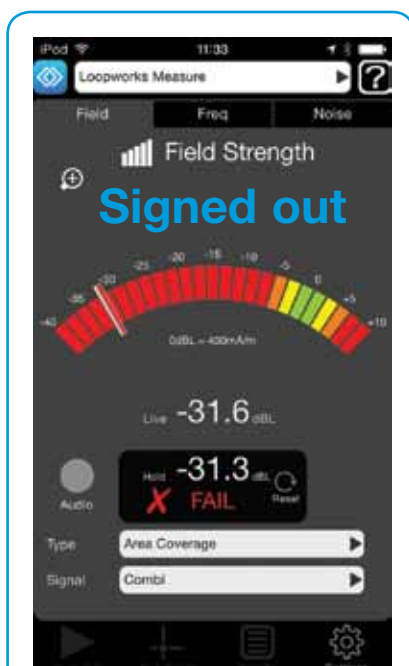
Frequency Response

Third octave filters for measuring performance across required frequency spectrum.



Background Noise

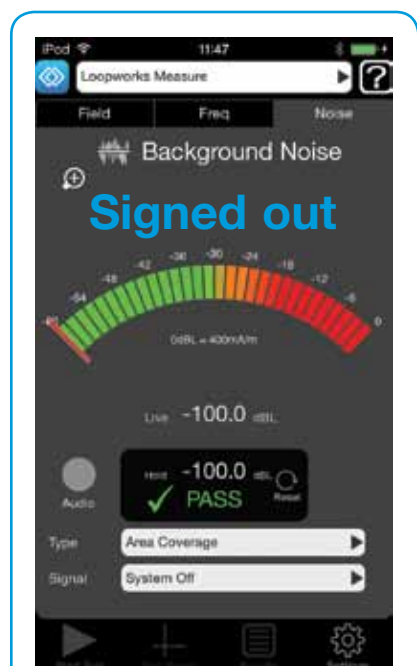
Determine level of background magnetic field present in the intended location for the loop system.



Field Strength



Frequency Response

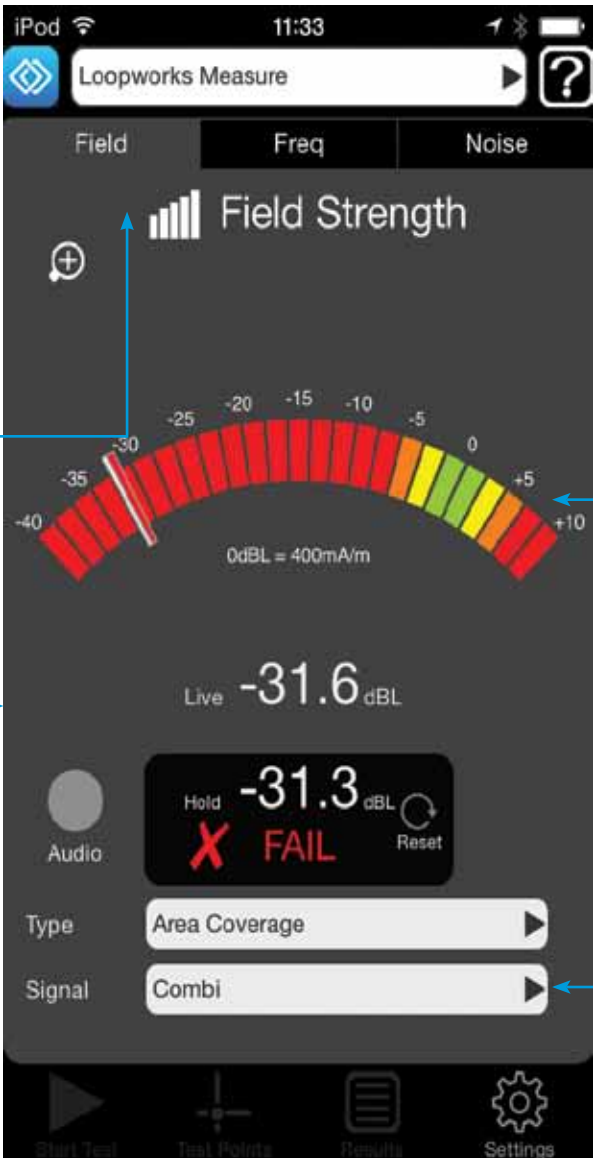


Background Noise

Meter Mode - Field Strength

A broad band measurement to measure field strength delivered by the system. Select to measure un-weighted magnetic field strength.

- Broad band measurement 50Hz to 8kHz
- True RMS detection referenced to 400 mA/m
- Scale -40 to +10dBL or -15 to = 60 dBL by pressing zoom
- Suitable for use with sine wave, pink noise, combination and live signals. Can also reference speech.



Meter Mode:

- Field strength

Dynamic Meter Display:

- Field strength mode

Reading Reference

- -40 to +10dB

Input Signal Selector

- Combi
- Pink
- Sine
- Live
- Reference for speech

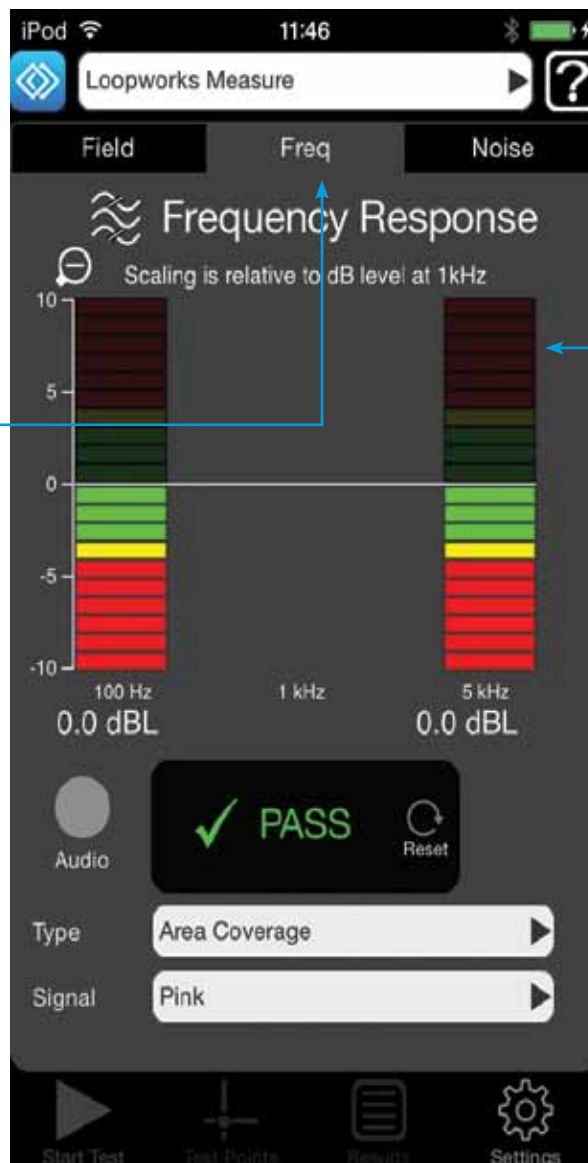
Signed out

Meter Mode - Frequency Response

Third octave filters for measuring performance across the required frequency spectrum. Select to measure un-weighted frequency response of the magnetic field.

- Third octave bands at 100Hz, 1kHz and 5kHz
- True RMS detection
- Scale resolution to 1dB, measurements to 0.1dB
- For use with pink and combination signals.

Meter Mode:
• Frequency response



Dynamic Meter Display
• Simple frequency response display in meter mode when not signed into Loopworks

Input Signal Selector
• Pink
• Combi

Signed out

Meter Mode - Background Noise

To determine the level of the background magnetic field present in the intended location for the loop system. Also used to measure low-level signals to assess overspill outside a loop system. Select to measure A-weighted magnetic field strength of unwanted signals.

- A-Weighted filter
- True RMS detection. 0dB referenced to 400mA/m
- Scale -60 to -0dBL or -45 to -15dBL
- Audio (headphone) output can be captured for analysis in signed-in, certify mode or listened to live via the headphone jack in signed-out, **Meter mode**
- For use with system on or off, sine waves and combination signals.

Meter Mode:

- Background noise

Reading Reference

- -60 to -0dB



Dynamic Meter Display

- Changes to suit mode
- Live & peak indicators
- Advanced views

Alignment warning:

- Device is out of alignment alert

Input Signal Selector

- System off
- System on
- Combi
- Sine

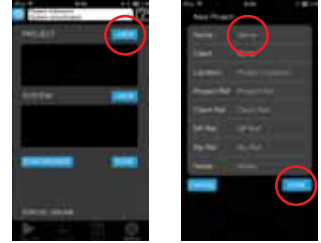
Signed out



Getting Started: Setting up a project in the App

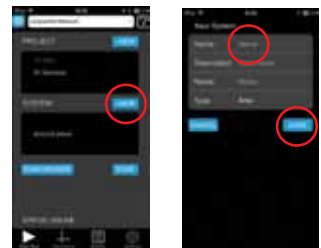
1. Define a Project

In order to start a new session, you will first need to define your project. To do this, select the blue button +NEW opposite PROJECT. You will then be asked to give your project a name and define the detail of the project. Then press DONE.



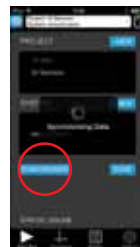
2. Define a System

Once you have defined your project, you will also need to define your system. To do this, select the blue button +NEW opposite SYSTEM. You will then be asked to provide details about your proposed system. Once entered, press DONE.



3. Synchronise with Loopworks™

Once you have defined your project and system, synchronise with Loopworks. Once signed into your Loopworks account you can synchronise your data with the Loopworks online portal. Once signed in, we advise users to stay signed in to access all the step-through guides, even without internet access. The App will automatically synchronise your data with the portal when you reconnect.



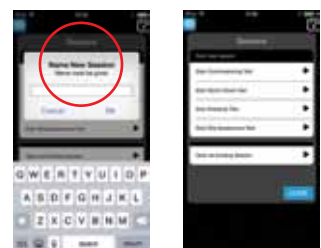
4. Define Test Points

Once you have synchronised your defined project and system with Loopworks, it's time to define your test points. Return to main meter screen and select test points. **See p9 of this user guide for more detail about defining test points.**



5. Start your Test Session

You're now ready to start your session, which you'll be prompted to name. You can choose from: Commissioning, Quick Check, Freestyle or Site Assessment tests or open an existing session. **All these steps are described in more detail in pages 15-25 of this user guide.**



Test Mode

Once signed in to your Loopworks account, you can synchronise your data with the Loopworks online portal by using the Project menu, making it possible for you, or a colleague, to record and analyse results. In Test mode, you will also have access to step-through guides that walk users through the processes of collecting site data, performing system checks, commissioning systems to Standard and creating test and certification reports.

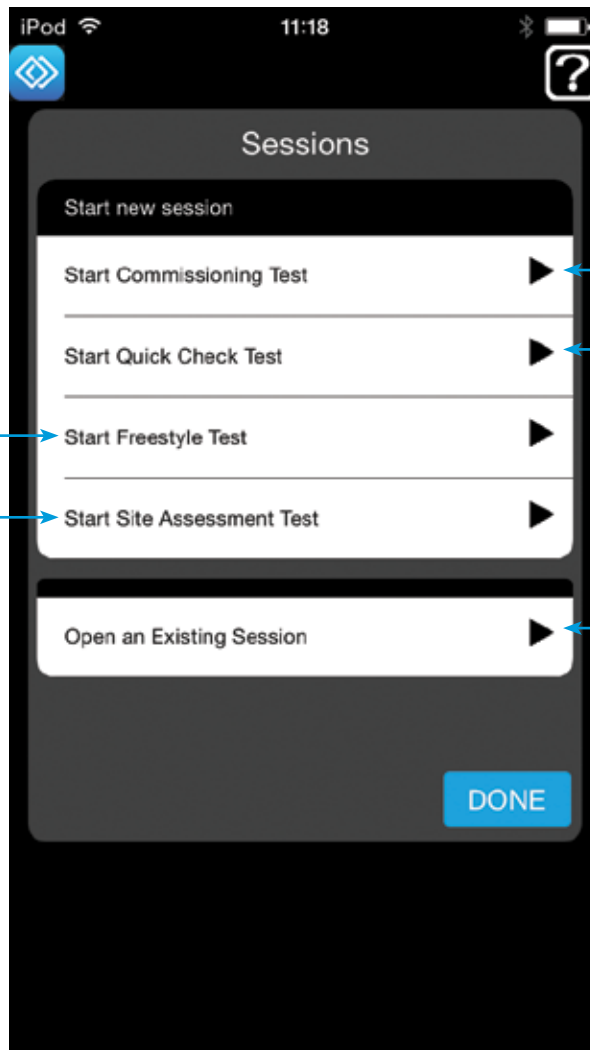
Once signed in, we advise users to stay signed in to access all the step-through guides by selecting synchronise in the Project menu, even without internet access. You should synchronise your data with the portal when you reconnect. **See page 14 for more guidance on syncing in the Project menu.**

Start freestyle test:

- Select to evaluate the functional performance of a system against IEC 60118-4

Start site assessment test:

- Select to evaluate a site using a simple test loop



Start new commissioning test:

- Select to evaluate the complete performance of a system against IEC 60118-4 for certification

Start quick check test:
Select to perform a basic evaluation of a system against IEC 60118-4

Open and review an existing session

Test Mode - Commissioning Test

Select Start a New Commissioning Test to evaluate the complete performance of a system against IEC 60118-4 for certification. Users can also create test and certification reports, including the full commissioning test report, in the online tools.

NOTE: Make sure you follow the guidance regarding loop height and setting up test points on **pages 8 & 9**. You will be required to take measurement at each defined test point when measure except for overspill.

Steps 1-3



Background Noise

Test with system OFF.



Field Strength

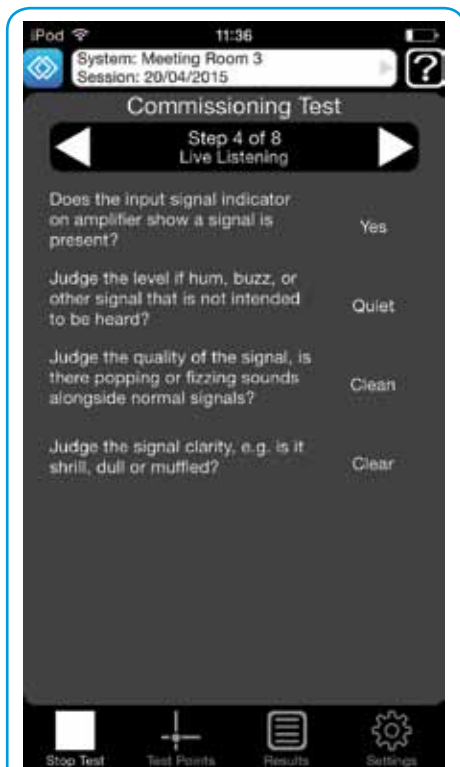
Test with a COMBI signal.



Frequency Response

Test with PINK noise.

Steps 4-8



Live Listening

Use headphones to test signal presence, quality and clarity with live signal.



Field Strength test with Live Signal



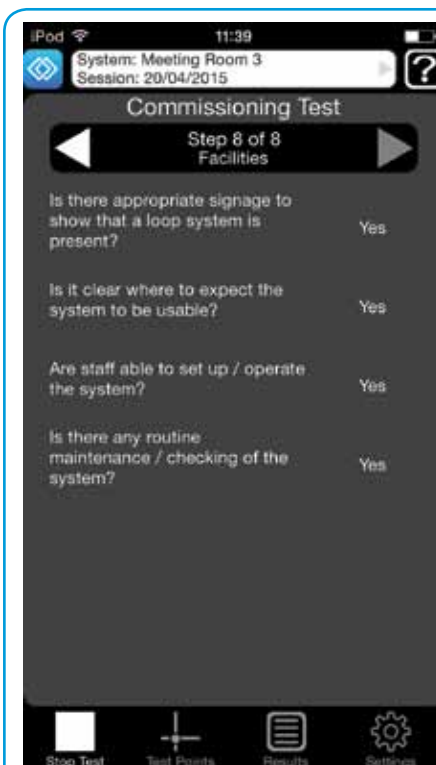
System Noise test

Test with system ON.



Overspill

Test room overspill with COMBI signal.



Facilities

Check for appropriate signage, trained staff and appropriate system maintenance.

Test Mode - Commissioning Test results in the Loopworks

Once users have created and signed in to their Loopworks account, the App will synchronise any collected data with the Loopworks online portal, making it possible for users to view, analyse and share their results online. Users can also create test and certification reports, including the full commissioning test report shown below.

SESSION SUMMARY

Session date: 20/04/2015
 Session name: Meeting Room 3
 Session type: Commissioning Test
 Survey Engineer: john.smith@organisation.com

Session notes: Commissioning Test

Status: Completed Rescheduling Cancel View & Download

SESSION RESULTS

Verdict: Meeting Room 04/2015 ✓

Test Point	Background Noise	Field Strength	Frequency Response	Live Signal	Overspill	System Noise	Action
A	✓	✓	✓	✓	-	✓	18/04/2015
B	✓	✓	✓	✓	-	✓	18/04/2015
C	✓	✓	✓	✓	-	✓	18/04/2015
D	✓	✓	✓	✓	-	✓	18/04/2015
E	-	-	-	-	✓	✓	18/04/2015
Test Verdict	✓	✓	✓	✓	✓	✓	

Field Strength Variation

Does the system deliver field strength inside the 'Area of Use' within +/- 5dB to 0dB? Yes

Does the system achieve +/- 0dB, at one point at least? Yes

Test Verdict ✓

Live Listening

Does the signal signal indicator on amplifier show a signal is present? Yes

Judge the level of hum, buzz, or other signal that is not intended to be heard? Quiet

Judge the quality of the signal, is there popping or buzzing sounds alongside normal signals? Clear

Judge the signal clarity, e.g. is it shrill, dull or muffled? Clear

Test Verdict ✓

Venue Accessibility

Is there appropriate signage to show that a loop system is present? Yes

Is it clear where to expect the system to be usable? Yes

Are staff able to set up / operate the system? Yes

Is there any routine maintenance / checking of the system? Yes

Test Verdict ✓

Test Equipment: Measurements performed via FSM App

Test Equipment: Measurements performed via FSM App

Manage and print your reports

Test types

Test point data

Edit or manage your test points

Facilities data

Test Mode - Commissioning Test Reporting in the Loopworks portal

Users can also save and print a pdf version of the full commissioning test report, complete with their own company's logo. The commissioning test report is very comprehensive; the illustration shows the page 1 summary that is available.

Upload your company's logo

Download a pdf of your report

Loopworks | Williams, John (Smith) | Log Out | Search

Learn - Connect - Measure - Design

Project: 2015-04-15-001 | Add Logo Graphic | Download PDF

LISTEN TECHNOLOGIES

Hearing Loop Commissioning Test Certificate

AMPETRONIC

Installation details		Testing details	
Customer:	Project: Ampetronic home	Company: Ampetronic Ltd	Test Equipment:
System: meeting rm 3	System Type: Area	Tested by: john.smith@ampetronic.com	Date: 20/04/15
Installation details: small first floor			

Overall System Verdict

Does the system deliver against the requirements of IEC60118-4:2014

PASS

Item	Test Name	Question	Result	Comments
1	Background Noise	Are levels of interference or noise acceptably low?	✓	Comments
2	Field Strength	Are acceptable field levels achieved throughout the area?	✓	Comments
3	Frequency Response	Does the system achieve acceptable frequency response throughout the area?	✓	Comments
4	Live Signal Listening Test	Does the input signal indicator on amplifier show a signal is present?	✓	Comments
		Judge the level if hum, buzz, or other signal that is not intended to be heard?	✓	Comments
		Judge the quality of the signal, is there popping or fizzing sounds alongside normal signals?	✓	Comments
5	Live Signal Final Check	Judge the signal clarity, e.g. is it shrill, dull or muffled?	✓	Comments
		Does the system achieve acceptable field strength with real signals?	✓	Comments
6	System Noise	Does the system achieve acceptably low noise levels with the inputs muted?	✓	Comments
7	Overspill	Are the overspill levels acceptable?	✓	Comments
8	Venue Accessibility	Is there appropriate signage to show that a loop system is present?	✓	Comments
		Is it clear where to expect the system to be usable?	✓	Comments
		Are staff able to set up / operate the system?	✓	Comments
		Is there any routine maintenance / checking of the system?	✓	Comments

Comments:

Declaration that the system has been tested against the requirements of IEC60118-4:2014

Sign: _____ Date: _____

Copyright © Ampetronic Ltd 2015

Test Mode - Quick Check Test

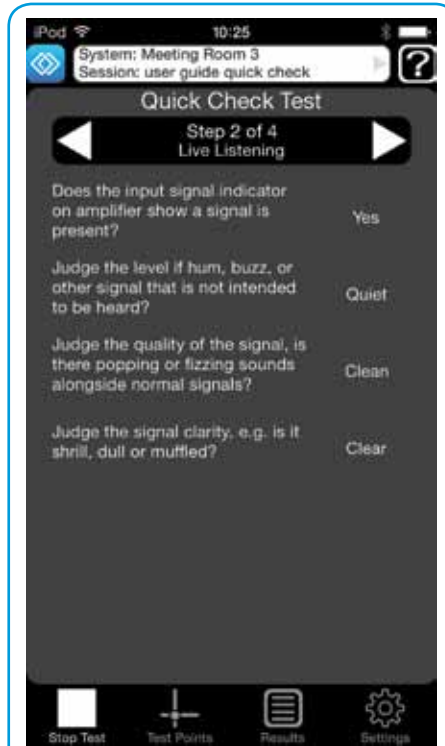
Quick Check Test is designed for environments where quite simple, but perhaps multiple, hearing loop systems are pre-installed and a basic evaluation of the system against IEC 60118-4 is required. A good example of this type of scenario would be in a supermarket, where multiple counter loops are required.

Steps 1-4



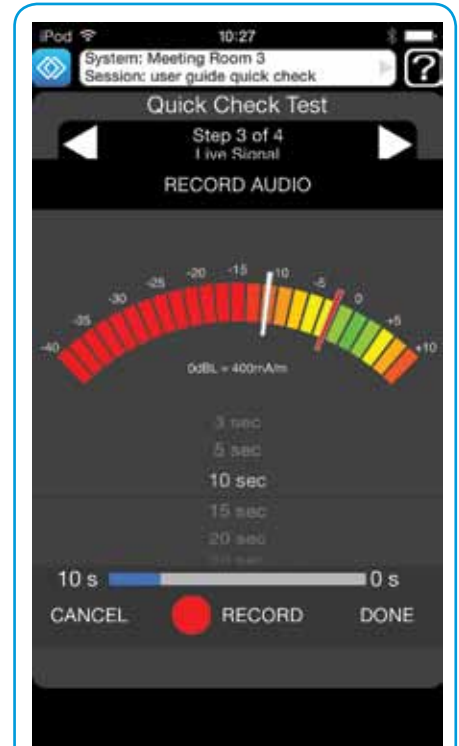
Background Noise

Test with system OFF.



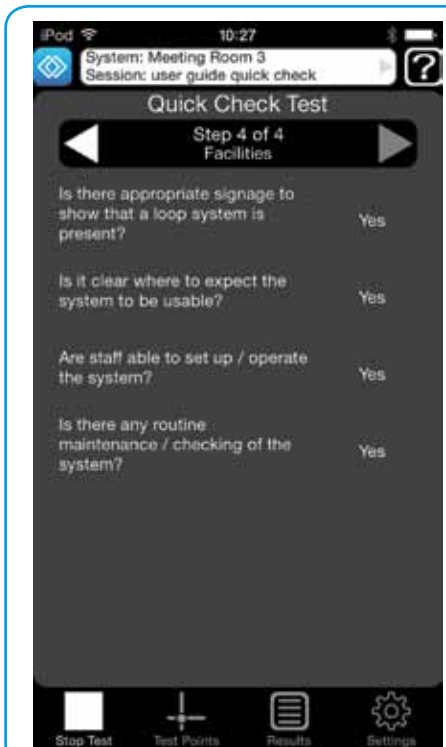
Live Listening

Test signal presence, quality and clarity with live signal.



Live Signal

Test and record live signal.



Venue Accessibility

Check for appropriate signage, trained staff and appropriate system maintenance.

NOTE: Make sure you follow the guidance regarding loop height and setting up test points on **pages 8 & 9**.

Test Mode - Quick Check Test Results in the Loopworks portal

Quick Check Test evaluates pre-installed systems against Standard. Users can compile, manage and print their system reports complete with their own company's logo via the online environment.

SESSION SUMMARY

Session date: 20/04/2015
 Session name: Meeting Room 3
 Session type: Quick Check Test
 Survey Engineer: j.smith@orgcreation.com

Session Notes: Quick Check Test

Status: 1 Done, 1 Pending, 1 Failed

SESSION RESULTS

Verdict: Meeting Room 04/2015 ✓

Test Point	Background Noise	Live Signal	Action
A	✓	✓	Review
B	✓	✓	Review
C	✓	✓	Review
D	✓	✓	Review
E	✓	-	Review
Test Verdict	✓	✓	

Live Listening

Comments	Verdict
Does the input signal indicator on amplifier show a signal is present?	Yes
Judge the level of hum, buzz, or other signal that is not intended to be heard?	Quiet
Judge the quality of the signal, is there popping or buzzing sounds alongside normal signals?	Clear
Judge the signal clarity, e.g. is it short, dull or muffled?	Clear
Test Verdict	✓

Venue Accessibility

Comments	Verdict
Is there appropriate signage to show that a loop system is present?	Yes
Is it clear where to expect the system to be usable?	Yes
Are staff able to set up / operate the system?	Yes
Is there any routine maintenance / checking of the system?	Yes
Test Verdict	✓

Test Equipment: Measurements performed via FSM App

Manage and print your reports

Test types

Test point data

Venue Accessibility data

Edit or manage your test points

Test Mode - Freestyle Test

Select Freestyle Test to evaluate the functional performance of a system against IEC 60118-4 by capturing results (not for certification). The Freestyle Test mode can be used to set up amplifiers and do site tests pre-installation, in preparation for commissioning.

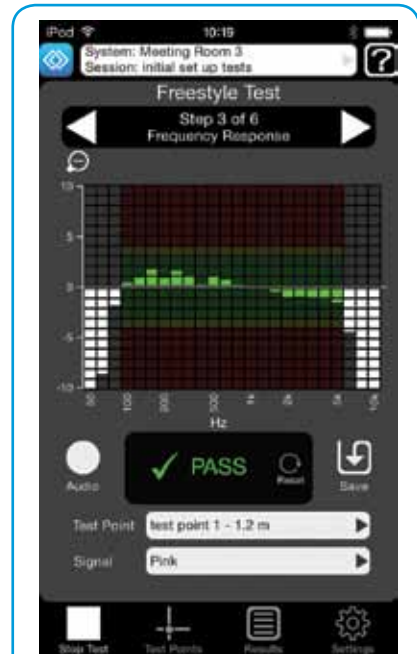
Steps 1-6



Background Noise
Test with system OFF.



Field Strength
Test with a COMBI signal.



Frequency Response
Test with PINK noise.



Live Signal
Test and record live signal.



System Noise test
Test with system ON.



Overspill
Test room overspill with COMBI signal.

NOTE: Make sure you follow the guidance regarding loop height and setting up test points on **pages 8 & 9**

Test Mode - Freestyle Test Results in the Loopworks Portal

Freestyle Test evaluates the functional performance of a system against Standards. Users can compile, manage and print their system reports complete with their own company's logo via the online environment.

SESSION SUMMARY

Session date	29/04/2015
Session name	Initial set up tests
Session type	Freestyle
Survey Engineer	johnsmith@organisation.com

SESSION RESULTS

Verdict: Meeting Room 04/2015 ✓

Test Point	Background Noise	Field Strength	Frequency Response	Live Signal	Overspill	System Noise	Action
A	✓	✓	✓	✓	-	✓	edit
B	✓	✓	✓	✓	-	✓	edit
C	✓	✓	✓	✓	-	✓	edit
D	✓	✓	✓	✓	-	✓	edit
E	-	-	-	-	✓	✓	edit
Test Verdict	✓	✓	✓	✓	✓	✓	

Test Equipment: Measurements performed via FSM App

Manage and print your reports

Test types

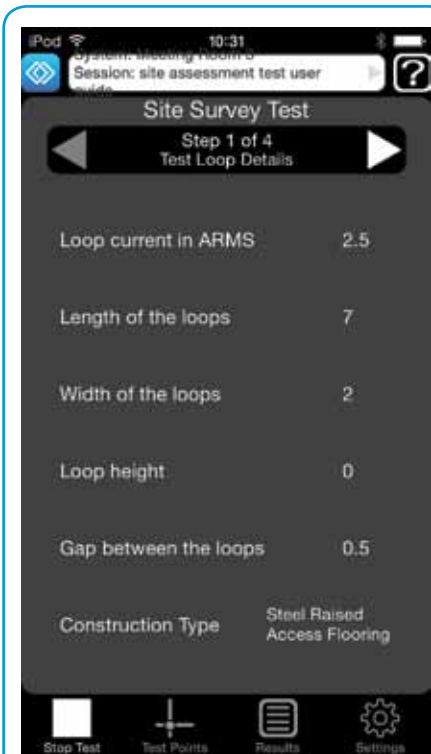
Test point data

Edit or manage your test points

Test Mode - Site Assessment Test

Select Site Assessment Test to evaluate a site using a simple test loop and capture results to determine the type installation required.

Steps 1-4



Test Loop Details

ARMS, length, width, height, gaps and construction.



Field Strength

Test with a COMBI signal.



Frequency Response

Test with PINK noise.



Background Noise

Test with system OFF.

NOTE: Make sure you follow the guidance regarding loop height and setting up test points on **pages 8 & 9**.

Test Mode - Site Assessment Test Results in the Loopworks Portal

Site Assessment Test evaluates a site using a simple test loop in order to understand the type of system needs to be installed. Users can compile, manage and print their system reports complete with their own company's logo via the online environment.

SESSION SUMMARY

Prepare draft report Print Report

Session data: 29/04/2015
Session name: site assessment test user guide
Session type: Site Assessment
Survey Engineer: johnsmith@organisation.com

Session Notes: Site assessment

Status: 1. Open 2. Reviewing 3. Closed Test & Close

SESSION RESULTS

Select tick / cross icon to reveal test result details

Test Point	Background Noise	Field Strength	Frequency Response	Action
A	✓	✓	✓	18/04/15
B	✓	✓	✓	18/04/15
C	✓	✓	✓	18/04/15
D	✓	✓	✓	18/04/15
E	-	-	-	18/04/15

Manage Test Points

Test loop data

Value	Comments
Loop current in ARMS	2.00
Length of the loops	7.00
Width of the loops	2.00
Loop height	0.00
Gap between the loops	0.50
Construction Type	Steel Raised Access Flooring

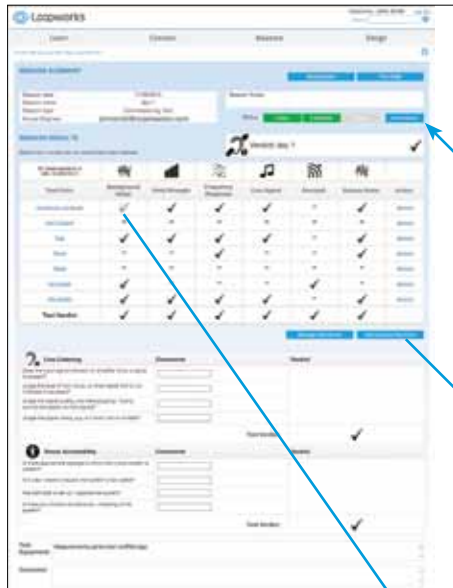
Test Equipment: Measurements performed via FSM App

Annotations:

- Manage and print your reports (points to 'Prepare draft report' and 'Print Report')
- Test types (points to the 'SESSION RESULTS' table)
- Test point data (points to the 'Test Point' column)
- Edit or manage your test points (points to 'Manage Test Points')



Test Mode: Editing a Project or System in the Portal



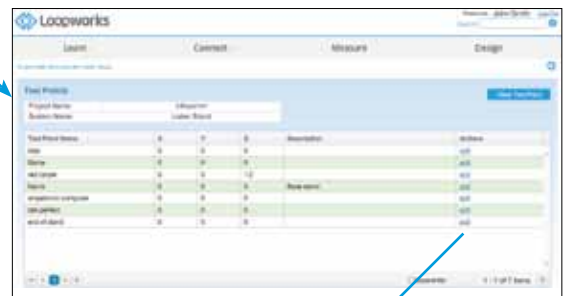
1. Create or edit a Project or System

You can create and edit projects and systems in the Loopworks Measure portal as well as in the App. This facility gives users the option to create and edit systems pre site visit, on site and post site visit.

Users can also open and review projects in the portal; once sessions are in review, users will lose the option to make any more measurements in the session via the App.

2. Managing Test Points

You can manage all of your test points directly via the Loopworks Measure Portal. This is particularly useful if you have defined test points ahead of a site visit and wish to make edits.



3. Add or Edit Test Points

Each test point is captured in the Loopworks Measure Portal; by clicking on individual test points, a dialogue box appears that gives users the option to add or edit test point measurements.



4. Edit Test Points Data

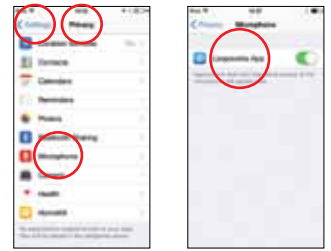
You can add test point comments and descriptions and edit data for your test points by clicking directly into the test point results. You can also choose to include or exclude a test point from your final results; although by selecting this option, you will lose the option to make any more measurements in the session via the App.



Troubleshooting

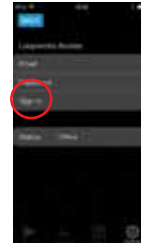
1. Receiver does not calibrate

- You may not have accepted the option to allow Loopworks permission to use the microphone input found in **Settings > Privacy > Microphone > Loopworks Measure**



2. I can't capture meter reading

- Have you signed in?
- Ensure you're using the App in the correct alignment
- Assign a test point/create a test point when signed in.

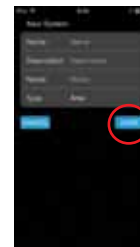
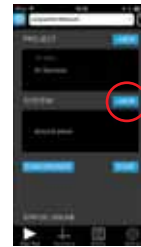


Alignment!



3. How do I start a test?

- Make sure you are signed in to your Loopworks account
- Ensure that you have selected/defined a project and system prior to starting a test
- Ensure you have defined a Test Point (or Test Points) to save the data against.



4. I'm stuck in a Session! How do I get out?

- Press the **Stop Test icon**
- If it not selectable, then use the **forward arrow** to move on to a stage when the test can be stopped/paused.



5. I can't sign in, what do I need to do?

- Make sure you have signed up for a Loopworks account at <https://loopworks.ampetronic.co> and that you have received the email confirming that it has been set up. Ensure you have access to a wireless network when signing into Loopworks.

6. The App won't synchronise with my Loopworks account, what do I need to do?

- You need to have access to a wireless network when signing into Loopworks. If the App is taking a long time to synchronise, then you may be in an area with poor Wi-Fi signal. If you are signed in, you can use the App to store data locally and synchronise later
- If the App is taking a long time or failing to synchronise, then you may be using a network with firewall settings that is preventing the connection. If you are signed in, you can use the App to store data locally and synchronise later.

7. How do I make the Record Audio button selectable?

- You need to have designated a test point and be in **Test mode** to record audio against.

Important Safety Information

Misuse Disclaimers

WARNING: Failure to follow these safety instructions could result in fire, electric shock, injury, or damage to iPhone, iPad or other property. Read all the safety information below before using device.

Handle iOS device with care. It is made of metal, glass, and plastic and has sensitive electronic components inside. iPhone or iPad can be damaged if dropped, burned, punctured, or crushed, or if it comes in contact with liquid. Don't use a damaged device, such as one with a cracked screen, as it may cause injury. If you're concerned about scratching, consider using a case or cover.

Repairing

Don't open iPhone or iPad and don't attempt to repair device or Receiver yourself. Disassembling device may damage it or may cause injury to you. If device or Receiver is damaged, malfunctions, or comes in contact with liquid, contact Apple or an Apple Authorised Service Provider, or, in the case of damage to the Receiver, Ampetronic.

Battery

Don't attempt to replace the device battery yourself—you may damage the battery, which could cause overheating and injury. The lithium-ion battery in device should be replaced only by Apple or an Apple Authorised Service Provider, and must be recycled or disposed of separately from household waste. Don't incinerate the battery. For information about battery recycling and replacement, go to apple.com/batteries/replacement-and-recycling.

Distraction

Using iPhone or iPad in some circumstances may distract you and might cause a dangerous situation (for example, avoid using headphones to record audio when on a busy construction site). Observe rules that prohibit or restrict the use of mobile devices or headphones.

Do not use these services while performing activities that require your full attention. Always comply with posted signs and the laws and regulations in the areas where you are using device and always use common sense.