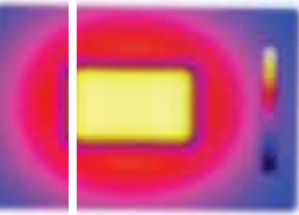


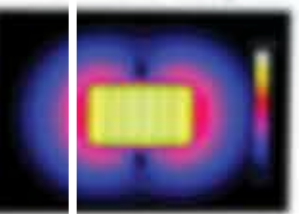
## Principles – Loop Layouts



Perimeter Loop



Cancellation Loop



Low Loss MultiLoop™



Low Spill MultiLoop™

# Hearing loop solutions

Selecting the best solution for your requirement

**AMPETRONIC**®

Listen to the difference

# Hearing loop solutions

A hearing loop, also known as an induction loop or T-Loop, is an assistive listening system that provides access to facilities for those with a hearing impairment. It takes a sound source and transfers it directly to a hearing aid without background noise, interference or acoustic distortion.

Selecting a loop solution, that will adequately meet the needs of a hearing loop user, can be easily determined by asking just a few simple questions:

## What type of hearing solution is required?

An **area coverage solution**, such as a hall, theatre or meeting room, or a **service point solution** (see overleaf), such as a retail counter or reception desk?



## For area coverage:

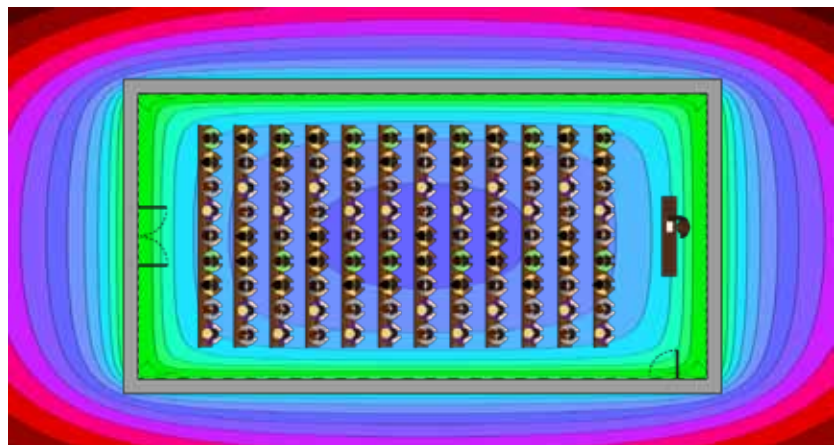
To determine which system would provide a user with the greatest level of access and intelligibility, the following information is needed:

### What are the dimensions of the area to be covered?

The dimensions of an area directly affect the power required to drive a hearing loop effectively and ensure consistent coverage.

### What is the construction of the floor in the area to be covered?

Metal in a floor or ceiling structure, including structural reinforcement or raised access floors and suspended ceiling grids, can cause excessive variation in signal levels across the room, if not corrected with a MultiLoop™ system. See the effects of metal in the illustrations below.



Potential effects of metal construction on signal levels, in a larger room with an incorrectly specified perimeter loop system

*Typically, MultiLoop™ systems are installed across a floor and, as such, will require access to it. If access is not available, due to building restrictions or expensive floor coverings, an Ampetronic Infra-red system may meet your requirements. Please contact us for expert advice on selecting the most appropriate solution.*

### Is the loop to be fitted to a room where there are issues with adjacency or privacy?

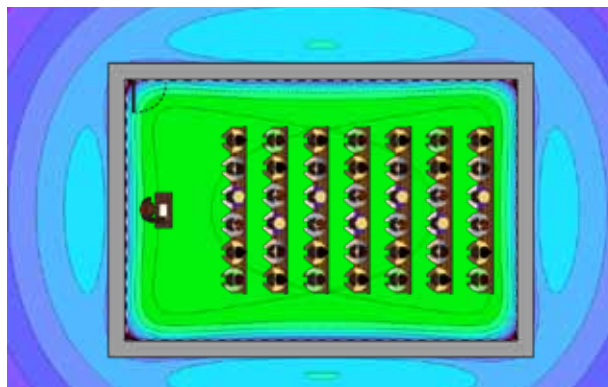
Signal coverage from a perimeter loop will overspill beyond the borders of intended area. This can cause problems for people using hearing loops in adjacent areas or, in areas where privacy is desired.

Ampetronic MultiLoop™ systems minimise the effects of overspill between areas.

## Perimeter loops



Small room with no metal in floor structure or privacy requirement

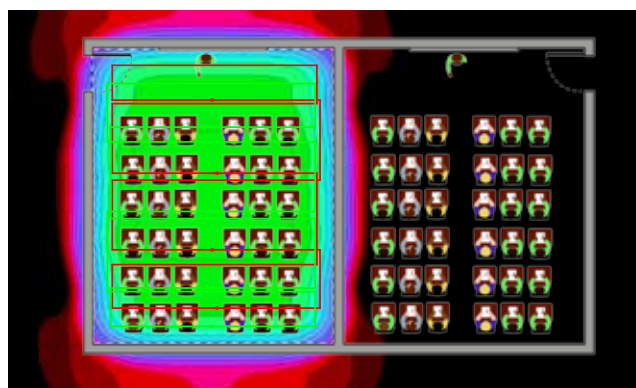


Perimeter loop field illustration, including overspill

## MultiLoops™



Larger room with metal in floor structure and a requirement to prevent overspill.



MultiLoop™ field illustration

## Recommended area coverage solutions:

Room dimensions	Floor construction	Adjacency and privacy	Recommended solution	Recommended loop drivers
Less than 4m across shortest dimension	or floor has no metal in structure	and no requirement	Ampetronic Perimeter loop	D10-1 CLS series ILD series
Greater than 4m across shortest dimension	and floor has metal in structure	and/or risk of overspill	Ampetronic MultiLoop™	D7-2 D10-2 D14-2 MLD series



For more information on developing hearing loop systems please call our experts for assistance on UK: +44 (0) 1636 602160 or outside UK: +44 (0) 1636 602161

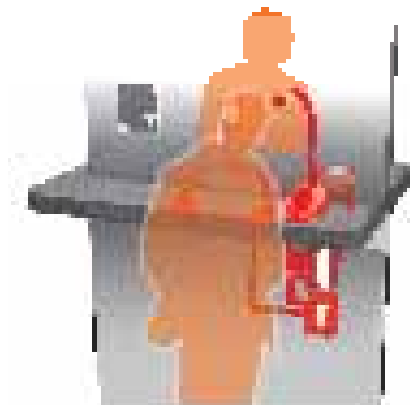
## For service points and intercoms:

Dealing with background noise when faced with a busy reception desk, ticket office or audiovisual interactive display can be a challenge for a person with hearing loss. Distance from a receptionist can also cause frustration.

When combined with a preformed loop and microphone, **Ampetronic™ CLD1** service point amplifiers, provide a person with hearing loss, with clear, intelligible sound, direct to their hearing aid.



Ampetronic™ CLD1 service point amplifier



Ampetronic™ CLD1 and TalkPerfect

A security screen may also be present, which itself can interfere with communications. Intercoms, also known as speech transfer systems often have microphones and speakers at each side of a screen, connected to a duplex amplifier. Such systems can resolve issues of background noise and those caused by a security screen.

**Ampetronic™ TalkPerfect** offers effective communication through physical barriers, supporting privacy and security in a robust and easy to use system.



Ampetronic™ HLS-2C Active Loop Panel

Intercom systems are now commonplace in a wide variety of entry, information, and service points. For those using a hearing aid, communicating with assistance staff can be made easier by discretely linking directly to the intercom or help point, via a loop function on their hearing aid.

### Service point and speech transfer

<b>Service Points</b>	CLD1 CLD1-AC
<b>Speech Transfer System</b>	TalkPerfect
<b>Door intercoms</b>	HLS-2C Active loop panel

For more information on service points, speech transfer systems and intercoms please call our engineers on +44 (0)1636 602162 or email [sales@ampetronic.co](mailto:sales@ampetronic.co)

Pictures for illustration purposes only.

## System design support and training:

Ampetronic™ can provide installation design drawings by collaboration with our experts, or by utilising our design creation software support. Such designs give you a fully working and regulation compliant solution, for any loop installation you may be involved with.

Alternatively, if you would like to design, test, and commission your own loop projects, then contact us to access Loopworks Design cloud based software, the world's most powerful collaboration, design, and measurement suite of software tools.



Ampetronic™ continued professional development (CPD) training services, are designed to provide technical and general awareness for end-users, clients, and consultants. CPD is also available for professional installers and system integrators.

We provide full day, in-house, training courses, covering all aspects of hearing loop systems, aimed at audiovisual professionals, specifiers, and contractors. Free educational CPD seminars are also available, for general awareness and sales team training, which can take place at a venue of your choice, or be viewed as a webinar.

For details of our free one hour 'Equality of access to audio for people with hearing loss' seminar and webinars or of our full day classroom based course 'Practical installer training day', please contact our office.

Training videos and product demonstrations can be viewed online at the Ampetronic™ YouTube Channel <https://www.youtube.com/user/AmpetronicLoops>



Ampetronic™ Loopworks™ complete productivity suite enables cost effective, dependable, and compliant system development, testing, and expedited issue resolution.

Loopworks™ offers:

- instant access to your project information
- a library of the most credible loop information
- reliable, expert support, whenever and wherever you need it.

Loopworks™ productivity suite allows you to:

**Learn** from the latest information, developments and support from the worlds' most credible information sources.

**Connect** instantly to detailed project information, in the office or the field, minimising planning and administration delays. You can also connect to our dependable, expert support when and where you need it, reducing expensive interruptions in project development and implementation.

**Measure** the performance of systems against relevant standards with Measure app and desktop support. Measure enables easy on-site information retrieval, system testing, and issue resolution.

**Design** loops using our powerful design and support online cloud based software tool for expedited, credible and compliant system development.

# Ampetronic hearing loop drivers, accessories, receivers and measurement systems

## Ampetronic hearing loop drivers

For perimeter loops - single channel:



D10-1



CLS series



ILD series

For Multiloops™- dual channel:



D7-2



D10-2



D14-2



MLD series

For service points and speech transfer:



CLD1



TalkPerfect

HLS-2C  
Active Loop  
Panel



## Installation accessories

Ampetronic™ can provide you with accessories needed to successfully install and commission a hearing loop system. Our range includes:

- direct burial cable
- flat copper tape
- printed warning tape
- hearing loop signs
- PVC extrusion for copper tape
- crimps and crimp tool for copper tape
- wall mounts
- rack mount equipment
- counter loop accessories



Ampetronic manufactures a range of market leading cables and copper tape for creating loop systems.

## Loop receivers

### ILR3 and ILR3+ Audio hearing loop receiver

Our ILR3 is a high quality audio hearing loop receiver which allows the user to listen to an audio frequency hearing loop system, using a standard pair of stereo headphones. The ILR3+ is designed to make it simpler for anyone to regularly check that a loop system is working, and has a field strength at a correct level to benefit users.



ILR3+ Audio hearing loop receiver

## Testing and measurement systems

### Loopworks™ Measure iOS app

Loopworks™ Measure combines an iOS phone or tablet app which utilises a self-calibrating receiver. When used together, Measure app and the R1 become the most accurate, dedicated field strength meter (FSM) currently available. This combination used to record field strength statistics, can help to ensure requirements of IEC 60118-4 have been met.

Loopworks™ Measure app uploads data collated via sync to Loopworks™ digital suite, allowing all results to be digitally stored in the cloud, online storage simplifies management of rooms across multiple buildings and sites.



Loopworks™ Measure iOS app

### Loopworks™ Measure receiver field strength meter (R1)

By simply plugging into the headphone jack of your mobile device, our R1 Receiver is a high quality field strength meter and audio hearing loop receiver. R1s are designed to be used in conjunction with our Loopworks™ Measure iOS app. Contact us on [sales@ampetronic.co](mailto:sales@ampetronic.co) or buy one directly from our website at [www.ampetronic.co/products](http://www.ampetronic.co/products).



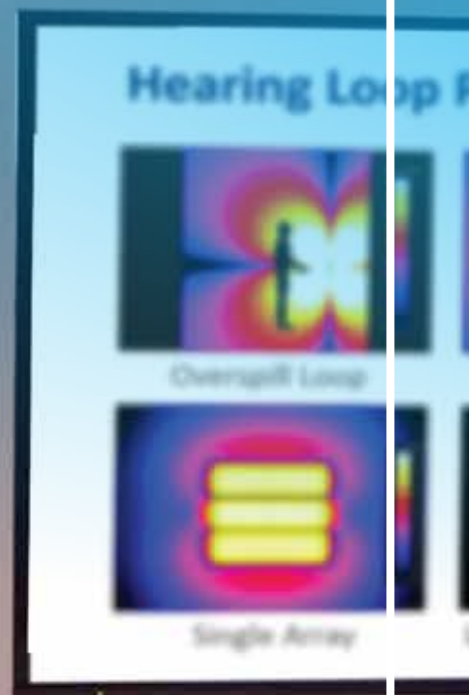
Loopworks™ R1 receiver

### Ampetronic's field strength meter (FSM)

Ampetronic's FSM device is a cost effective and simple solution for measuring, setting up, and commissioning hearing loop systems, to meet requirements of IEC60118-4. There are three calibrated operational modes for assessing background noise, field strength, and frequency response. Ampetronic's FSM also doubles as a loop listener.



Field strength meter (FSM)



## Providing a genuine benefit.

To find out what we can bring to your assistive listening project, talk it through with our expert team on  
UK: +44 (0) 1636 602160  
or outside UK: +44 (0) 1636 602161,  
or email us at [sales@ampetronic.co](mailto:sales@ampetronic.co)

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