



contacta
Quality • Service • Experience





Hearing Loops

Enhance your customer experience by improving accessibility and transforming the listening experience for those with hearing loss



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Did you know?

Hearing loss is a major public health issue affecting 15% of the world's adult population* and a third of over 65 year olds**. This means a significant number of **your potential customers** have **difficulty interacting with you**.



Why is hearing loss a problem in every day life?

Conversations should be easy and natural. But instead, for those with hearing loss, it becomes a stressful activity which causes fatigue and embarrassment. If your customers cannot hear what your staff are saying, your company becomes difficult to do business with. Many customers with hearing loss even choose to avoid places that are poorly provisioned. **If your business provokes uncomfortable situations for customers, the impact could be severe.**

*WHO estimate for 2011. **WHO Fact Sheet No. 300, March 2015.

Why should you improve your accessibility?

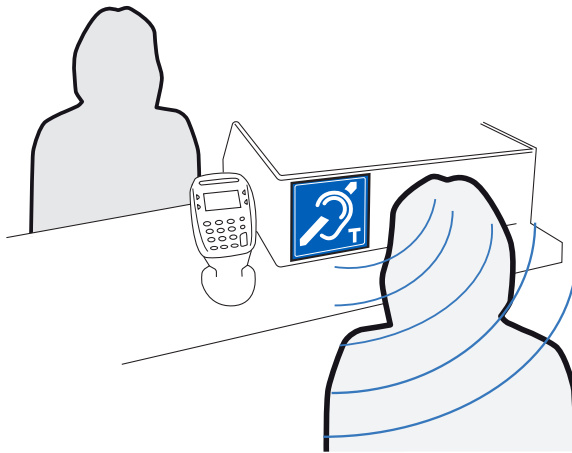
People are beginning to speak up and **demanding a better experience**. In order to keep up with other customer-focused service providers and fully comply with the Equality Act 2010 and the BS8300 standard, **accessibility needs to be your top priority**.

Don't get left behind!

Technology can be put in place which allows you to realise the full potential of every interaction, **leading to happier customers and an enhanced reputation**.

How does a loop transform your customers' experience?

In normal mode, a hearing aid amplifies all sounds, including any background noise. In busy environments this can make it **very tricky for those with hearing loss to distinguish speech or conversation.**



Hearing loop systems overcome this problem.

Speech is picked up through a microphone, converted to magnetic impulses by the driver and transmitted via a loop aerial. This magnetic signal is picked up by the telecoil within hearing aids and converted back to speech. Clever stuff!



1 to 1 Hearing Loops

1 to 1 hearing loops enhance customer service by improving accessibility

Our **1 to 1 hearing loops** are perfect for use at counters or in situations where interaction between two people takes place, allowing your customers to engage with your staff freely.

A hearing instrument in "normal mode" amplifies all sounds, including background noise. This can make it very tricky for those with reduced hearing to distinguish speech or conversation in busy environments. 1 to 1 hearing loop systems overcome this problem.

With a hearing loop, speech is picked up through a microphone, converted to magnetic impulses by the driver and transmitted via a hearing loop aerial. This magnetic signal is picked up by the telecoil within the hearing instrument and converted back to speech, allowing your customers to engage with your staff freely.

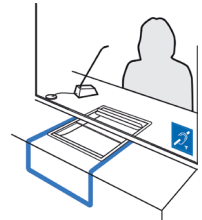
Our above and below counter loops are controlled by our sleek and unique hearing loop driver, offering customers and staff crystal clear sound reproduction and efficient management of power consumption.



Under the Counter Loop System

Our Under the Counter Loop System provides clear communication with hearing instrument wearers, especially where background noise is a problem or clear speech is restricted.

It has a flexible, discreet hearing loop aerial that can be bent to shape, allowing it to be tailored to many different counters.



Applications:

For use in any situation where one to one communication takes place at a counter, booth or desk, for example:

- Banks
- Post Offices
- Supermarkets
- Ticket Kiosks
- Information Centres
- Airports

Features:

- Magnetic field strength distance of approximately 1.2m

What's Included:

- 1 to 1 Hearing Loop Driver (see page 14)
- Halo Microphone w/ Stem (see page 18) **or** Halo Microphone w/ Round Base (see page 18) **or** Mouse Microphone (see page 19) **or** Discreet Microphone (see page 20)
- Counter Hearing Loop Aerial (see page 15)
- Hearing Loop Signs (see page 16)
- PS-55 Power Supply (see page 17)
- Fixings

Physical Data:

Dimensions (boxed)	Height – 85mm (3.35") Width – 320mm (12.60") Depth – 220mm (8.66")
Weight (boxed)	1kg (2.20lbs)

Product Codes:

Under the Counter Loop System with Halo Microphone	IL-K200-20-00
Under the Counter Loop System with Brass Stem Halo Microphone	IL-K200-80-00
Under the Counter Loop System with Mouse Microphone	IL-K200-00-00
Under the Counter Loop System with Discreet Microphone	IL-K200-40-00



Above the Counter Loop System

Our Above the Counter Loop System provides clear communication with hearing instrument wearers, especially where background noise is a problem or clear speech is restricted.



The hearing loop aerial is located within the signage, which is fixed to a counter, desk or glass surface to enable your customers to easily identify the loop and get maximum benefit from it. The unit can be fitted into many positions due to its low profile structure.

Applications:

For use in any situation where one to one communication takes place at a counter, booth or desk, for example:

- Banks
- Post Offices
- Supermarkets
- Ticket Kiosks
- Information Centres
- Airports

Optional Extra:

- Above Counter Loop Desk Stand (see page 14)

Features:

- Magnetic field strength distance of approximately 800mm

What's Included:

- 1 to 1 Hearing Loop Driver (see page 14)
- Halo Microphone w/ Stem (see page 18) **or** Halo Microphone w/ Round Base (see page 18) **or** Mouse Microphone (see page 19) **or** Discreet Microphone (see page 20)
- Supaloop Aerial (see page 15)
- PS-55 Power Supply (see page 17)
- Fixings

Product Codes:

Above the Counter Loop System with Halo Microphone	IL-K300-25-00
Above the Counter Loop System with Brass Stem Halo Microphone	IL-K300-85-00
Above the Counter Loop System with Mouse Microphone	IL-K300-05-00
Above the Counter Loop System with Discreet Microphone	IL-K300-45-00

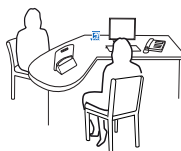
Physical Data:

Dimensions (boxed)	Height – 80mm (3.15") Width – 320mm (12.60") Depth – 220mm (8.66")
Weight (boxed)	798g (1.76lbs)



Portable Loop

The Portable Loop is a versatile solution, providing mobile assistance for your customers where no fixed loop can be placed. It can be moved between locations as required and is used for conversations between two people.



Applications:

For use in any situation where one to one communication takes place, such as at a desk, bedside, or booth.

- Banks
- Offices
- Information Centres
- Hospitals

What's Included:

- Portable Loop
- Portable Loop Power Supply
- Hearing Loop Sign (see page 16)

Features:

The single control unit is constructed in robust ABS plastic and incorporates the microphone, amplifier, hearing loop aerial and rechargeable battery system.

- Magnetic field strength distance of approximately 600mm
- Advanced audio processing features AGC, compression, and noise gate
- Constant-current loop drive
- LED indicator for loop drive and battery status

Accessories

- Small Boundary Microphone (see page 19)
- Portable Loop Shelf (see page 21)

Technical Data:

Internal Battery	NiMH battery pack	Battery life (approximate): 4 hours - constant speech 48 hours - standby mode
PSU	Power supply	18VDC
Microphone	-	Electret capsule
Power and Status	Power and status LED indication	Green/red LED
Protection	-	Self-resetting poly fuses, multiple on chip thermal shut down
External Audio In	Connection	3.5mm mono jack
DC Power	Connection	2.1mm DC jack

Physical Data:

Dimensions (boxed)	Height – 250mm (9.84") Width – 275mm (10.83") Depth – 110mm (4.33")
Weight (boxed)	1.6kg (3.52lbs)
Construction	ABS Plastic
Finish	Matt Black Fine Texture

Product Code:

Portable Loop UK	IL-PL20-2
Portable Loop Europe	IL-PL20-2-EU
Portable Loop Australia	IL-PL20-2-AUS
Portable Loop US & Japan	IL-PL20-2-US

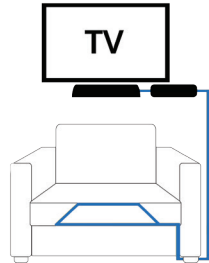


Home Loop Kit

Our Home Loop is a sleek and powerful hearing loop driver that connects to televisions and other audio devices.

It enables hearing instrument wearers to listen wirelessly directly from the source, providing the best possible sound quality. Integrated clear audio processing gives the user outstanding sound quality, enhancing speech and music clarity.

Suitable for home and business use, in small rooms where a television or sound system is present.



Features:

- Quick setup and simple connection to either a room loop, or a loop pad underneath a sofa or chair
- Optical input (TOSLINK) for clearer sound less prone to interference
- Adaptable to a variety room layouts
- Connects to multiple devices
- Constant current for consistent audio performance
- Separate volume control
- HF compensation

What's Included:

- HLD3 Hearing Loop Driver
- Hearing Loop Pad with Built in-Aerial
- Small Boundary Microphone (see page 19)
- PS-55 Power Supply (see page 17)
- 3.5mm Auxiliary Cable, length of 2.5m
- Optical Cable, length of 1.5m

Product Codes:

Home Loop Kit UK	RL-HLD3
Home Loop Kit Europe	RL-HLD3-EU
Home Loop Kit Australia	RL-HLD3-AUS
Home Loop Kit US & Japan	RL-HLD3-USJ

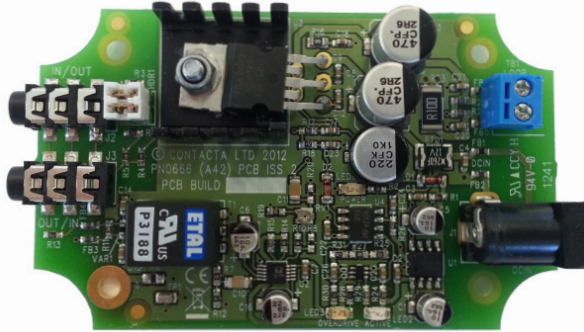
See next page for Physical and Technical Data.

Technical Data:

Inputs	Microphone	3.5mm stereo jack, -40dBV
	Stereo IN	3.5mm stereo jack, -20dBV to +3dBV
	Optical digital	33kHz, 44.1kHz, 48kHz, 88.2kHz, 96kHz PCM Audio
Loop Output	Stereo OUT	3.5mm jack, 0dBV
	Loop drive current	3Arms compliance current at 1kHz sine wave
	Loop drive voltage	3.5Vrms compliance voltage
	Loop connection	2 x 2 way phoenix screw terminal blocks
Audio	Frequency response	100Hz - 5kHz (± 3 dB)
	Distortion	Better than -40dB, inputs at nominal level
Automatic Gain Control	Analogue	Dynamic range: 40dB typical Attack time: 10 milliseconds Release time: 500mS
Controls	Volume/driver	Controls the level of current delivered into the loop
Displays	Other indications	LEDs for power, input and output

Physical Data:

Dimensions	Height – 30mm (1.18") Width – 158mm (6.22") Depth – 111mm (4.37")
Weight (boxed)	1.08kg (2.39lbs)
Construction	1.6mm Mild Steel
Finish	Black Powder Coated



Integrated Hearing Loop Driver

Our Integrated Hearing Loop Driver is designed to be incorporated into third party manufacturers' equipment. It allows an integral solution to machines and equipment requiring an induction loop.

The kit includes an audio input lead that can be used to take an audio feed from a computer and is designed for original equipment manufacturers (OEMs).

Features:

- AGC (Automatic Gain Control) self adjusts to accommodate variations in input level
- Constant-current loop drive
- Audio line input is ohmically isolated
- No adjustments required
- LED status indication: LEDs show drive and loop fault conditions
- Small and compact
- Frequency response compliant with IEC 60118-4 when correctly driven
- Low power consumption
- Can be powered from host system (12-14V DC) or from a power supply

What's Included:

- Integrated Hearing Loop Driver

Physical Data:

Dimensions	Height – 82mm (3.22") Width – 98mm (12.6") Depth – 18mm (12.6")
Weight (boxed)	28g (0.06lbs)
Construction	Standard FR4 PCB material
Finish	Bare PCB

Technical Data:

Loop Drive Compliance	Constant current, bounded by 4Vrms & 2Arms
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Product Code:

Integrated Hearing Loop Driver	IL-A42
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1 to 1 Hearing Loop Driver

Our innovative 1 to 1 Hearing Loop Driver is a special type of audio amplifier designed especially for driving hearing loops.

Features:

- Microprocessor control
- Energy-saving “green” standby mode is achieving a power saving of up to 80% during quiet periods
- Advanced audio processing features AGC, compression, and noise gate
- Constant-current loop drive
- Continuous self-testing
- Isolated audio line input allows the driver to take alternative audio sources (optional)
- Power and LED status indication

What’s Included:

- PS-55 Power Supply (see page 17, sold separately)

Physical Data:

Dimensions	Height – 116mm (4.57") Width – 116.2mm (4.58") Depth – 40mm (1.57")
Weight	120g (0.26lbs)
Construction	ABS Plastic Construction Housing
Finish	Matt Black Fine Texture

Product Code:

1 to 1 Hearing Loop Driver	HLD2
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Technical Data:

Inputs	Input 1 (Microphone)	Screw terminals on 3.8mm 2 pole Phoenix connector Single-ended electret microphone, powered by 5V via 2.2K Ω
	Input 2 (Line) (Optional)	Screw terminals on 3.8mm 2 pole Phoenix connector Transformer isolated, 0dBu into 1K Ω , may have series resistance added for optional 75V or 100V line inputs
	Power	Centre positive power jack, 14V DC 2.14A via 2.1mm from our power supply unit (PS-55)
Loop Output	Loop connection	Screw terminals on 3.8mm 2 pole Phoenix connector
	Loop drive current	2Arms compliance current @ 1kHz sine wave
	Loop drive voltage	4Vrms compliance voltage @ 1kHz sine wave
Audio	Frequency response	100Hz – 5kHz (± 3 dB)
	Distortion	Better than -40dB, inputs at nominal level
Automatic Gain Control	Processor controlled	Dynamic range: 40dB typical Attack time: 10 milliseconds Release time: typically 10 seconds, varies with program content
Indications	Status LEDs	3 colour LEDs indicate power, input and output diagnostic information Connection provided for our LED halo indicator microphone
Self Test	Microprocessor controlled	Unit, including microphone and loop connections is continuously monitored, and internal and external LED indicators are updated
Energy Saving	Sound activated	Unit will enter low energy “sleep” mode when acoustic conditions indicate lack of usage

Counter Hearing Loop Aerial

Our Counter Hearing Loop Aerial is for use with the Under the Counter Loop System (see page 6), which is fixed under desks or counters.

When connected to the 1 to 1 Hearing Loop Driver (see page 14), it transmits a magnetic field enabling the telecoil in the hearing instrument to receive a signal from our hearing loop driver.

It should be positioned within 1.2m of the user's hearing instrument and secured using self-adhesive clips, P-clips or hot glue. It is flexible and can be moulded into the desired shape.



Physical Data:

Dimensions	3.96m (156.00") length cable which can be moulded on site to required size/shape by installers
Weight	100g (0.22lbs)
Construction	Copper Wire with Black Protective Covering
Finish	Black PVC

Product Code:

Counter Hearing Loop Aerial	IL-AE99
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Supaloop Aerial

The Supaloop Aerial is a hearing loop aerial built inside of our blue hearing loop sign.

The aerial transmits a magnetic field when connected to the 1 to 1 Hearing Loop Driver (see page 14), enabling the telecoil in a hearing instrument to receive a signal from drivers.

The aerial should be positioned within 800mm from the user's hearing instrument. It can be fixed in place using double sided tape or cable ties, placed with a stand on a flat surface, or fixed to glass screens.



Physical Data:

Dimensions	Height – 205mm (8.07") Width – 205mm (8.07") Depth – 5.4mm (0.21") Connection Cable Length – 2m (78.74")
Weight	200g (0.44lbs)
Construction	Various
Finish	Various

Compatible With:

- Supaloop Aerial Desk Stand (sold separately, see page 16)

Product Code:

Supaloop Aerial	IL-AE97-00
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Hearing Loop Signs

As hearing loops are often installed out of sight, it is important to make people aware where a hearing loop is available. Signs should be clearly placed wherever there is a hearing loop installed.

Signs are available as either stand-up signs or stickers, available for both portable and fixed loops. Stickers are available with either an adhesive back or an adhesive front.



Physical Data:

Dimensions (Adhesive)	Width – 90mm (3.54") Height – 100mm (3.94") Depth – 0.22mm (0.01")
Dimensions (Stand-Up)	Width – 95mm (3.74") Height – 105mm (4.13") Depth – 50mm (1.96")
Weight	40g (0.08lbs)
Construction	Various
Finish	Reflective Matt PVC Surface

Product Code:

Adhesive Back Fixed Loop Sign	IL-SN01
Adhesive Front Fixed Loop Sign	IL-SN02
Adhesive Back Portable Loop Sign	IL-SN05
Adhesive Front Portable Loop Sign	IL-SN06
Stand-Up Fixed Loop Sign	IL-SN12
Stand-Up Portable Loop Sign	IL-SN10

Supaloop Aerial Desk Stand

This desk stand attaches to the Supaloop Aerial (see page 15).

The aerial fixes to the stand using a double-sided adhesive pad.

Compatible With:

- Supaloop Aerial (sold separately, see page 15)



Physical Data:

Dimensions	Height – 109mm (4.29") Width – 140mm (5.51") Depth – 60mm (2.36")
Weight	400g (0.88lbs)
Construction	Aluminium
Finish	Black Powder Coated

Product Code:

Supaloop Aerial Desk Stand	IL-SD01
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PS-55 Power Supply

The PS-55 Power Supply is a Level VI power supply for use with:

- Under the Counter Loop System (see page 8)
- Above the Counter Loop System (see page 9)
- Home Loop Kit (see page 11)

Complies with UL, RCM, KC, FCC, CE (EMC), and CCC standards.

All power supplies come with a region-specific IEC lead 2 metres in length as standard.

Physical Data:

	PS-55 Power Supply	IEC Lead
Dimensions	Height – 93mm (3.66") Width – 49mm (1.93") Depth – 36mm (1.42") Cable Length – 1.8m (70.87")	Cable Length – 2m (78.7")
Weight	180g (0.39lbs)	90g (0.2lbs)
Construction	ABS Plastic	PVC
Finish	Black	Black

Technical Data:

Input	100-240V – 50-60Hz
Output	14V 2.14A 30W max.

Product Code:

PS-55 Power Supply w/ IEC UK	PS-55-01-UK
PS-55 Power Supply w/ IEC Europe	PS-55-01-EU
PS-55 Power Supply w/ IEC Switzerland	PS-55-01-CH
PS-55 Power Supply w/ IEC US & Japan	PS-55-01-USJ
PS-55 Power Supply w/ IEC Australia	PS-55-01-AUS

Halo Microphone with Stem

Our Halo Microphone with Stem features noise cancelling and a halo light indication at the base of the microphone stem. The halo lights up green when the system is working correctly and red when a fault is detected.

It can be either screwed down or mounted using a standard self-adhesive pad, while the microphone is available in metal or without a halo LED indication.



Physical Data:

Dimensions	Height – 70mm (2.76") Width – 40mm (1.58") Length – 100mm (3.94")
Weight	Plastic Stem – 65g (0.14lbs)
	Metal Stem – 80g (0.18lbs)
Construction	Plastic Stem – ABS Plastic
	Metal Stem – ABS Plastic & Metal
Finish	Plastic Stem – Pin Seal Texture
	Metal Stem – Pin Seal Texture Satin Black

Technical Data:

Directional Response	Cardioid
Frequency Response	70Hz - 14kHz
Sensitivity	-46dBv @ 1kHz
Distortion	Typically less than 1%

Product Codes:

Halo Microphone with Stem	STS-M72
Halo Microphone without LED	STS-M73
Halo Microphone with Metal Stem	STS-M98

Halo Microphone with Round Base

Our Halo Microphone with Round Base is on a round base for easy mounting, and is a compact, unobtrusive solution.

It features noise cancelling and a halo light indication at the base of the microphone stem. The halo lights up green when the system is working correctly and red when a fault is detected.



Physical Data:

Dimensions	Diameter (base) – 41mm (1.61") Height – 340mm (13.38")
Weight	37g (0.08lbs)
Construction	ABS Plastic
Finish	Pin Seal Texture

Technical Data:

Directional Response	Cardioid
Frequency Response	70Hz - 14kHz
Sensitivity	-67dB +/- 3dB @ 1kHz
Impedance	1.6K Ohms +/- 30% @ 1kHz

Product Code:

Halo Microphone with Round Base	STS-M74-01
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Mouse Microphone

Our discreet Mouse Microphone is for installations with limited counter space, designed to attach to tills or computer screens using double sided tape.



Physical Data:

Dimensions	Height – 12mm (0.49") Width – 24mm (0.97") Length – 25mm (1") Connection Cable Length – 2m
Weight	26g (0.57lbs)
Construction	ABS Plastic
Finish	Black Fine Texture

Technical Data:

Directional Response	Omni-Directional
Frequency Response	70Hz - 20kHz
Sensitivity	-46dBv @ 1kHz
Distortion	Typically less than 1%

Product Code:

Mouse Microphone	STS-M70
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Small Boundary Microphone

The Small Boundary Microphone is ideal for use with our Portable Loop (see page 10) to extend microphone capabilities, and with the Home Loop driver (see page 11) to amplify external sounds such as doorbells or phones.



Physical Data:

Dimensions	Height – 40mm (1.57") Width – 40mm (1.57") Depth – 20mm (0.78")
Weight	200g (0.44lbs)
Construction	ABS Plastic
Finish	Black

Technical Data:

Directional Response	Omni-Directional
Frequency Response	20 - 16kHz
Sensitivity	-65dB+/-3dB (0dB=1V/Pa)
Impedance	Low
Termination	3.5mm Jack

Product Code:

Small Boundary Microphone	IL-PL21
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Flexible Gooseneck Microphone

Our Flexible Gooseneck Microphone is a free-standing directional microphone for the staff side, with a 300mm flexible gooseneck shaft and round base.



Physical Data:

Dimensions	Diameter (base) – 70mm (2.75") Height – 340mm (13.38")
Weight	950g (2.09lbs)
Construction	Mild Steel
Finish	RAL 9006 Powder Coated

Technical Data:

Directional Response	Cardioid
Frequency Response	150Hz – 10.5kHz
Sensitivity	49.5dB+ 2dB @ 1kHz (0dB=1V/pa)
Impedance	1.6K Ohms+ 3-% @ 1kHz

Product Code:

Flexible Gooseneck Microphone	STAFFMIC-01-NWB
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Discreet Microphone

Our Discreet Microphone is a compact solution for mounting to tills or computer screens.

It is fitted using an attached bolt and comes with a double-sided connector. It is also available with a right angled bracket for fixing to screens.



Physical Data:

Dimensions	Height – 70mm (2.76") Width – 40mm (1.58") Length – 100mm (3.94")
Weight	65g (0.14lbs)
Construction	ABS Plastic
Finish	Satin Black

Technical Data:

Directional Response	Cardioid
Frequency Response	70Hz - 14kHz
Sensitivity	-67dB +/- 3dB @ 1kHz
Impedance	1.6K Ohms +/- 30% @ 1kHz

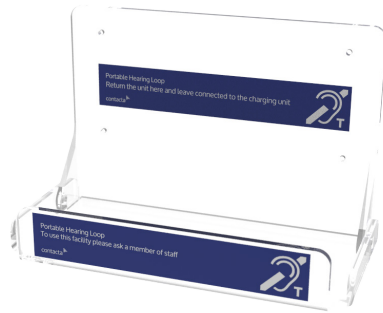
Product Codes:

Discreet Microphone	STS-M74
Discreet Mic. w/ Right-Angled Bracket in Grey	STS-M74-02
Discreet Mic. w/ Right-Angled Bracket in Black	STS-M74-02-B

Portable Loop Shelf

Our Portable Loop Shelf is an ideal storage unit and charging location for the Portable Loop (see page 10). This is achieved by simply routing the power supply through a cut-out in the base of the shelf and connecting it to the Portable Loop.

The shelf is supplied with wall fixings.



Physical Data:

Dimensions	Height – 206mm (8.11") Width – 316mm (12.44") Depth – 152mm (5.98")
Weight	820g (1.81lbs)
Construction	Polycarbonate
Finish	Transparent Clear

Product Code:

Portable Loop Shelf	IL-PL26
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Loop Listener

Our Loop Listener is a compact listening device for interaction with hearing loop systems. It enables people to listen to a hearing loop system as if they were wearing a hearing instrument switched to the "T" position.

Applications:

- Test if a hearing loop system is functioning
- For use by a person with hearing difficulty who either does not wear a hearing device or their hearing device has no "T" function

Features:

- Flat frequency response
- Low cut filter
- More than 100 hours life when used with 2 x AAA batteries (included)
- Includes headphones

Technical Data:

Output power	<0.5% THD @ 1kHz
Distortion	10mW @ 1kHz (16Ω)



Physical Data:

Dimensions (boxed)	Height – 240mm (9.45") Width – 165mm (6.50") Depth – 40mm (1.58")
Weight (with headphones)	550g (1.21lbs)
Construction	ABS Plastic
Finish	Black

Product Code:

Loop Listener	IL-RX20
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Large Area Hearing Loops

Large area loops enhance the customer experience by improving accessibility

Our **large area loops** allow multiple hearing instrument wearers to hear music and speech with complete clarity. Whether in a small meeting room, a classroom, or even a sports stadium, we can install discreet large area hearing loops to your specification.

At Contacta we do things differently. Our talented team design innovative and customer-centric hearing loop drivers, which use the latest Class D and DSP technology to offer superior quality sound reproduction for both speech and music. The technology we put inside these drivers means there is no sound distortion (with a correct installation), guaranteeing the best performance for the end user.

Every room is different. We specify loops in a unique way, taking into account the use, make up and size of each room to ensure that your customers get the best listening experience. Without proper installation, even the best loop driver will not perform to its best so we highly recommend that you get in touch with us and we can recommend the perfect way to install your loop.



V7 Hearing Loop Driver

Our highly efficient and compact V7 is a constant current, perimeter hearing loop driver, suitable for smaller facilities and venues.

It has a Class-D amplifier output stage and an audio subsystem built around an advanced DSP core. Combined with a powerful CPU to ensure peak performance, the V7 uses cutting edge technology proven in the pro audio world to achieve lifelike speech and first-class music reproduction.

Applications:

Suitable for smaller sized facilities such as:

- Meeting rooms
- Classrooms
- Care & nursing rooms
- Waiting rooms

What you will need:

- Length of wire or cable dependant on room size and type (see page 50)
- Audio input such as a microphone (see pages 43-46 for our range) or sound system source

Accessories:

- Single V Series Mounting Bracket (see page 39)
- Dual V Series Mounting Shelf (see page 39)
- Blanking Plate for Dual V Series Mounting Shelf (see page 39)
- 6U Rack Cabinet (see page 38)

Features:

- DSP controlled automatic gain control and high frequency compensation for metal loss
- Class-D amplifier output stage capable of delivering 5Arms @ >7Vrms
- Ultra-efficient power utilisation (up to 90% efficient)
- True constant current output stage
- Simple user interface
- Backlit LCD display
- Sleep mode
- Continuous self-testing
- Integrated protection circuits with temperature, voltage, short circuit and DC detection
- Compact half-width 1U chassis

What's Included:

- V7 Hearing Loop Driver
- PS-55 Power Supply (see page 48)

See next page for Physical Data, Technical Data and Product Codes.

Technical Data:

Power Supply	30W 14Vdc 2.14A via External PSU (PS-55) Class 6 External PSU (100V -240V AC 50Hz-60Hz)	
Inputs	1 X Balanced Line Level (3 Pin Euro-Block) or 1 X Balanced Line Level (XLR) [optimised for -10dBV to 0dBv]	
	1 X Mic Level (12V phantom power via 680Ω) [optimised for levels above -45dBv]	
	1 X DC Input	
Outputs	1 X Loop Output (5.08mm Euro-Block)	
Loop Output Characteristics	Voltage	7.5Vrms (21.21Vpk-pk) @ 5Arms (14.14Apk-pk)*
	Current	5Arms (14.14Apk-pk) up to 300 seconds*
	Loop Connector:	5.08mm Euro-Block
Audio System	Frequency Response	80Hz to 6.5kHz
	Distortion	THD+N <1% (-40dB)
	AGC	Peak Detecting
	HF Comp	7 Optimised Stages
Display & Controls	Display	LED Backlit LCD Display
	Control	Single Rotary Control
Fault Monitoring and Protection	Main Display	Open Circuit Loop (DCR measurement) Loop Ground Fault
	Front Panel LED	Output Voltage Clipping
	Cooling	Internal Heatsinks with Thermal Protection

*Note 1: Z=1.4Ω (133uH +0.685Ω @ 1.6kHz) Note 2: < 1% (-40dB distortion)

Physical Data:

Dimensions	Height – 42mm (1.65") Width – 196mm (7.80") Depth – 132mm (5.20") [150mm (5.90") including XLR and control knob]
Weight	938g (2.06lbs)
Construction	Mild Steel
Finish	Black Powder Coated

Product Code:

V7 Hearing Loop Driver UK	V7-UK
V7 Hearing Loop Driver Europe	V7-EU
V7 Hearing Loop Driver Australia	V7-AUS
V7 Hearing Loop Driver US & Japan	V7-USJ



V12a Hearing Loop Driver

Our highly efficient and compact V12a is a constant current, dual output hearing loop driver, with integral phase shifter for phased array configuration. The V12a is suitable for small and medium sized facilities and venues.

It has Class-D amplifier output stages and an audio subsystem built around an advanced DSP core. Combined with a powerful CPU to ensure peak performance, the V12a uses cutting edge technology proven in the pro audio world to achieve life-like speech and first-class music reproduction.

Applications:

Suitable for small and medium sized facilities such as:

- Meeting rooms
- Classrooms
- Care & nursing rooms
- Waiting rooms
- Lecture halls

What you will need:

- Length of wire or cable dependant on room size and type (see page 50)
- Audio input such as a microphone (see pages 43-46 for our range) or sound system source

Accessories:

- Single V Series Mounting Bracket (see page 39)
- Dual V Series Mounting Shelf (see page 39)
- Blanking Plate for Dual V Series Mounting Shelf (see page 39)
- 6U Rack Cabinet (see page 38)

Features:

- DSP controlled automatic gain control and high frequency compensation for metal loss
- 2 X 90° phase shifted (DSP controlled) Class-D amplifier output stages capable of delivering 5Arms @ >12Vrms
- Ultra-efficient power utilisation (up to 90% efficient)
- True constant current output stage
- Simple user interface
- Backlit LCD display
- Continuous self-testing
- Integrated protection circuits with temperature, voltage, short circuit and DC detection
- Compact half-width 1U chassis

What's Included:

- V12a Hearing Loop Driver
- PS-60 Power Supply (see page 49)

See next page for Physical Data, Technical Data and Product Codes.

Technical Data:

Power Supply	100W 24V 4.17A via External PSU (PS-60) Class 6 External PSU (100V -240V AC 50Hz-60Hz)	
Inputs	1 X Balanced Line Level (3 Pin Euro-Block) or 1 X Balanced Line Level (XLR) [optimised for -10dBV to 0dBv]	
	1 X Mic Level (12V phantom power via 680Ω) [optimised for levels above -45dBv]	
	1 X DC Input	
Outputs	2 X Loop Output (5.08mm Euro-Block)	
Loop Output Characteristics	Voltage	12Vrms (33.94Vpk-pk) @ 5Arms (14.14Apk-pk)*
	Current	5Arms (14.14Apk-pk) up to 300 seconds*
	Loop Connector:	5.08mm Euro-Block
Audio System	Frequency Response	80Hz to 6.5kHz
	Distortion	THD+N <0.3% (-50.5dB) Full current both outputs driven
	AGC	Peak Detecting
	HF Comp	7 Optimised Stages
Display & Controls	Display	LED Backlit LCD Display
	Control	Single Rotary Control
Fault Monitoring and Protection	Main Display	Open Circuit Loop (DCR measurement) Loop Ground Fault
	Front Panel LED	Output Voltage Clipping
	Cooling	Internal Heatsinks with Thermal Protection

*Note 1: Z=2.4Ω (212uH +1.096Ω @ 1.6kHz), Note 2: 1% (-40dB distortion)

Physical Data:

Dimensions	Height – 42mm (1.65") Width – 196mm (7.80") Depth – 132mm (5.20") [150mm (5.90") including XLR and control knob]
Weight	978g (2.15lbs)
Construction	Mild Steel
Finish	Black Powder Coated

Product Code:

V12a Hearing Loop Driver UK	V12A-UK
V12a Hearing Loop Driver Europe	V12A-EU
V12a Hearing Loop Driver Australia	V12A-AUS
V12a Hearing Loop Driver US & Japan	V12A-USJ



V14 Hearing Loop Driver

Our highly efficient and compact V14 is a constant current, single output hearing loop driver, suitable for medium-sized facilities and venues.

It has a Class-D amplifier output stage and an audio subsystem built around an advanced DSP core. Combined with a powerful CPU to ensure peak performance, the V14 uses cutting edge technology proven in the pro audio world to achieve life-like speech and first-class music reproduction.

Applications:

Suitable for medium sized facilities such as:

- Meeting rooms
- Classrooms
- Care & nursing rooms
- Waiting rooms
- Lecture halls

What you will need:

- Length of wire or cable dependant on room size and type (see page 50)
- Audio input such as a microphone (see pages 43-46 for our range) or sound system source

Accessories:

- Single V Series Mounting Bracket (see page 39)
- Dual V Series Mounting Shelf (see page 39)
- Blanking Plate for Dual V Series Mounting Shelf (see page 39)
- 6U Rack Cabinet (see page 38)

Features:

- DSP controlled automatic gain control and high frequency compensation for metal loss
- Class-D amplifier output stage capable of delivering 5Arms @ >14Vrms
- Ultra-efficient power utilisation (up to 90% efficient)
- True constant current output stage
- Simple user interface
- Backlit LCD display
- Sleep mode
- Continuous self-testing
- Integrated protection circuits with temperature, voltage, short circuit and DC detection
- Compact half-width 1U chassis

What's Included:

- V14 Hearing Loop Driver
- PS-60 Power Supply (see page 49)

See next page for Physical Data, Technical Data and Product Codes.

Technical Data:

Power Supply	100W 24Vdc 4.17A via External PSU (PS-60) Class 6 External PSU (100V-240V AC 50Hz-60Hz)	
Inputs	1 X Balanced Line Level (3 Pin Euro-Block) or 1 X Balanced Line Level (XLR) [optimised for -10dBV to 0dBv]	
	1 X Mic Level (12V phantom power via 680Ω) [optimised for levels above -45dBv]	
	1 X DC Input	
Outputs	1 X Loop Output (5.08mm Euro-Block)	
Loop Output Characteristics	Voltage	14Vrms (33.94Vpk-pk) @ 5Arms (14.14Apk-pk)*
	Current	5Arms (14.14Apk-pk) up to 300 seconds*
	Loop Connector:	5.08mm Euro-Block
Audio System	Frequency Response	80Hz to 6.5kHz
	Distortion	THD+N <1% (-40dB)
	AGC	Peak Detecting
	HF Comp	7 Optimised Stages
Display & Controls	Display	LED Backlit LCD Display
	Control	Single Rotary Control
Fault Monitoring and Protection	Main Display	Open Circuit Loop (DCR measurement) Loop Ground Fault
	Front Panel LED	Output Voltage Clipping
	Cooling	Internal Heatsinks with Thermal Protection

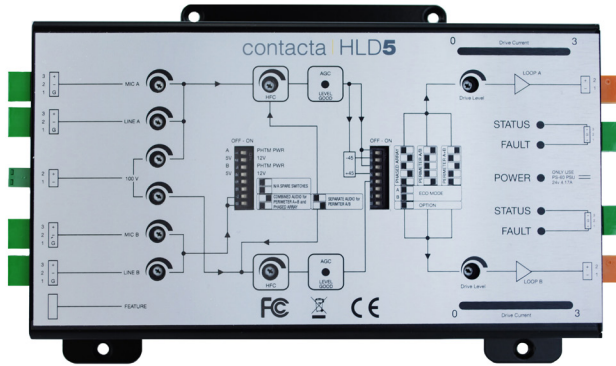
*Note 1: Z=2.8Ω (Z14.7uH +1.27Ω @ 1.6kHz), Note 2: 1% (-40dB) distortion)

Physical Data:

Dimensions	Height – 42mm (1.6") Width – 196mm (7.80") Depth – 132mm (5.20") [150mm (5.90") including XLR and control knob]
Weight	938g (2.06lbs)
Construction	Mild Steel
Finish	Black Powder Coated

Product Code:

V14 Hearing Loop Driver UK	V14-UK
V14 Hearing Loop Driver Europe	V14-EU
V14 Hearing Loop Driver Australia	V14-AUS
V14 Hearing Loop Driver US & Japan	V14-USJ



HLD5 Hearing Loop Driver

Our compact HLD5 is a standalone, flexible dual output hearing loop driver with integral phase shifter for perimeter or phased array configuration, designed for smaller facilities and venues. It features a 100V input line for public announcement feeds.

Applications:

Suitable for smaller sized facilities such as:

- Meeting rooms
- School rooms
- Nursing & care homes
- Reception & waiting areas
- Educational establishments

What you will need:

- Length of wire or cable dependant on room size and type (see page 50)
- Audio input such as a microphone (see pages 43-46 for our range) or sound system source

Features:

- Easily configurable, built-in 90° phase shift
- Efficient power utilisation
- Sleep mode
- High frequency compensation
- Continuous self-testing
- Drive level indication
- Intelligent protection system
- Interface to external communication device
- 100V input line for interface with PA system

What's Included:

- HLD5 Hearing Loop Driver
- PS-60 Power Supply (see page 49)

Technical Data:

Inputs	MIC A: microphone	Balanced or unbalanced (depending on how wired) switch selectable standard phantom power of 12V or 5V DC for electret microphones
	MIC B: microphone	
	Line A: line level	0dBV, adjustable
	Line B: line level	0dBV, adjustable
	100V line	Transformer isolated, adjustable
Loop Output	Loop A connection	2 x 2 way Phoenix screw terminal blocks
	Loop A drive current	3Arms compliance current at 1kHz sine wave
	Loop A drive voltage	7Vrms compliance voltage
	Loop B connection	2 x 2 way Phoenix screw terminal blocks
	Loop B drive current	3Arms compliance current at 1kHz sine wave
	Loop B drive voltage	7Vrms compliance voltage
Status	External LEDs or relays	2 x constant current drive @ 20mA, 22V max
Feature	External monitor & control	Contacta communications processor interface
Audio	Frequency response	100Hz - 5kHz (± 3 dB)
	Distortion	Better than -40dB, inputs at nominal level
Automatic Gain Control	Analogue	Dynamic range: 40dB typical Attack time: 10 milliseconds Release time: 500mS
Controls	Function switching	All functions selectable via 2 sets of DIP switches; one set to select options on input and one set to select options on output
Displays	Output A & B	8 level bar graph with peak hold
	Other indications	LEDs for independent status indications per output

Physical Data:

Dimensions	Height – 99mm (3.9") Width – 200mm (7.8") Depth – 40mm (1.6")
Weight (boxed incl. power supply)	1.5kg (3.3lbs)
Construction	Aluminium
Finish	Black Powder Coated

Product Code:

HLD5 Hearing Loop Driver UK	HLD5-UK
HLD5 Hearing Loop Driver Europe	HLD5-EU
HLD5 Hearing Loop Driver Australia	HLD5-AUS
HLD5 Hearing Loop Driver US & Japan	HLD5-USJ



HLD7 Hearing Loop Driver

Our HLD7 is a modular hearing loop driver designed for medium sized facilities such as meeting rooms, lecture halls, places of worship and small theatres. A single HLD7 is used for perimeter configurations, while two HLD7s linked together provide phased array configurations.

Efficient management of power enables the unit to be extremely compact.

Applications:

Suitable for small/medium sized facilities such as:

- Meeting & conference rooms
- Lecture halls
- Places of worship
- Nursing & care homes
- Reception & waiting areas
- Gyms & sports halls
- Educational establishments

What you will need:

- Length of wire or cable dependant on room size and type (see page 50)
- Audio input such as a microphone (see pages 43-46 for our range)
- Phased Array Link Cable required for phased array configurations (see page 51)

Features:

- Perimeter and 90° phase shifted (DSP controlled) amplifier output stages capable of delivering 6Arms @ 15Vrms
- Flexible configuration
- Efficient power utilisation
- Sleep mode
- High frequency compensation
- Continuous self-testing
- Accurate, lockable controls (front panel mounted)
- Input and drive level indication
- Intelligent protection system
- Flexible audio inputs
- Interface to external communication devices
- Digital Signal Processor

What's Included:

- HLD7 Hearing Loop Driver
- PS-60 Power Supply (see page 49)

See next page for Physical Data, Technical Data and Product Codes.

Technical Data:

Inputs	Input 1 (microphone)	Balanced XLR with switchable phantom power or ¼" TRS jack for electret microphone with 12VDC power via 680Ω load
	Input 2 (line)	Balanced XLR or ¼" TRS jack to ohmically isolated input
Loop Output	Voltage	15Vrms (42.4Vpk-pk) @ 6Arms (16.9Apk-pk)*
	Current	6Arms (16.9Apk-pk) @ 1kHz sine wave*
	Loop Connector	4-pole speakON connector
Expansion	Contacta interconnect	Input or output to or from additional Contacta systems. 90° phase shift selectable
Status	Volt-free relay contacts	SPCO
Feature	External monitor & control	Contacta communications processor interface
Audio	Frequency response	100Hz - 5kHz (±3dB)
	Distortion	Better than -40dB, inputs at nominal level
Automatic Gain Control	Digitally controlled	Uses DSP technology
Controls	Microphone level	Off, then to maximum in 50 1dB increments
	Line level	Off, then to maximum in 50 1dB increments
	Loop current	Off, then to maximum in 63 1dB increments
	High frequency compensation	Flat to 6dB boost in 7 increments
	Function switching	All functions selectable from front panel buttons, held in non-volatile memory
	Security	Controls may be locked against tampering
Displays	Microphone level	8 level bar graph with peak hold, 6dB steps
	Line level	8 level bar graph with peak hold, 6dB steps
	Output drive level	8 level bar graph with peak hold, 0.6A steps
	Other indications	LEDs for all setup and status indications

*Note 1: Z=2.5Ω (221uH + 1.14Ω @ 1.6Khz, Note 2: < 1% (-40dB distortion)

Physical Data:

Dimensions	Height – 44.5mm (1.75") Width – 200mm (7.87") Depth – 260mm (10.24")
Weight (boxed incl. power supply)	2.5kg (5.5lbs)
Construction	Mild Steel
	Aluminium
Finish	Black Powder Coated

Product Code:

HLD7 Hearing Loop Driver UK	HLD7-UK
HLD7 Hearing Loop Driver Europe	HLD7-EU
HLD7 Hearing Loop Driver Australia	HLD7-AUS
HLD7 Hearing Loop Driver US & Japan	HLD7-USJ



HLD9 Hearing Loop Driver

Our HLD9 is a modular hearing loop driver designed for large area applications such as theatres, conference facilities, sports arenas, concert halls and auditoriums. A single HLD9 is used for perimeter configurations, while two HLD9s linked together provide phased array configurations.

As a Class-D driver, it uses power extremely efficiently, meaning that it emits very little heat.

To make the experience of using it as simple as possible, the driver includes sophisticated communications capabilities enabling remote set-up and control of levels as well as system interrogation and performance monitoring.

Applications:

Suitable for larger sized facilities such as:

- Theatres
- Concert halls
- Places of worship
- Sports arenas
- Conference facilities

What you will need:

- Length of wire or cable dependant on room size and type (see page 50)
- Audio input such as a microphone (see pages 43-46 for our range)
- Phased Array Link Cable required for phased array configurations (see page 51)

What's Included:

- HLD9 Hearing Loop Driver

Features:

- Perimeter and 90° phase shifted (DSP controlled) amplifier output stages capable of delivering 10Arms @ 36Vrms
- Flexible configuration
- Efficient power utilisation
- Sleep mode
- High frequency compensation
- Continuous self-testing
- Accurate, lockable controls (front panel mounted)
- Input and drive level indication
- Intelligent protection system
- Flexible audio inputs
- Interface to external communication devices
- Digital Signal Processor

See next page for Physical Data, Technical Data and Product Codes.

Technical Data:

Inputs	Input 1 (microphone)	Balanced XLR with switchable phantom power or ¼" TRS jack for electret microphone with 12VDC power via 680Ω load
	Input 2 (line)	Balanced XLR or ¼" TRS jack to ohmically isolated input
Loop Output	Voltage	36Vrms (101.8Vpk-pk) @ 10Arms (28.2Apk-pk)*
	Current	10Arms (28.2Apk-pk) @ 1kHz sine wave*
	Loop connector	4-pole speak ON connector
Expansion	Contacta interconnect	Input or output to or from additional Contacta systems 90° phase shift selectable
Status	Volt-free relay contacts	SPCO
Feature	External monitor & control	Contacta communications processor interface
Audio	Frequency response	100Hz - 5kHz (±3dB)
	Distortion	Better than -40dB, inputs at nominal level
Automatic Gain Control	Digitally controlled	Uses DSP technology
Controls	Microphone level	Off, then to maximum in 50 1dB increments
	Line level	Off, then to maximum in 50 1dB increments
	Loop current	Off, then to maximum in 63 1dB increments
Displays	Microphone level	8 level bar graph with peak hold, 6dB steps
	Line level	8 level bar graph with peak hold, 6dB steps
	Output drive level	8 level bar graph with peak hold, 0.6A steps
	Other indications	LEDs for all setup and status indications

*Note 1: Z=3.6Ω (318uH + 1.64Ω @ 1.6Khz, Note 2: < 1%(-40dB distortion)

Physical Data:

Dimensions	Height – 63mm (2.48") Width – 200mm (7.87") Depth – 266mm (10.47")
Weight (boxed incl. power supply)	2.5kg (5.5lbs)
Construction	Mild Steel
	Aluminium
Finish	Black Powder Coated

Product Code:

HLD9 Hearing Loop Driver UK	HLD9-UK
HLD9 Hearing Loop Driver Europe	HLD9-EU
HLD9 Hearing Loop Driver Australia	HLD9-AUS
HLD9 Hearing Loop Driver US & Japan	HLD9-ETL-USJ



Portable Large Area Loop

Our Portable Large Area Loop is an all-in-one fully portable hearing loop, ideal as a temporary solution or for use in multiple venues.

It has a built in hearing loop driver, a 2 channel receiver and an auxiliary input. The receiving module is licence-free and generally approved for operation in EU and EFTA countries.

Applications:

Suitable for medium sized facilities such as:

- Meeting and conference rooms
- Lecture halls
- Places of worship

Ideal as a temporary solution for:

- Events
- Rooms where a permanent install is not achievable
- Travelling instructors or public speakers

Features:

- Compact case
- 2 channel receiver
- Efficient power utilisation
- Continuous self-testing
- Accurate, lockable, front panel mounted controls
- Padded pocket to house accessories

What's Included:

- V7 Hearing Loop Driver (see page 24)
- Travel case
- Transmitter and receiver aerials
- Handheld Microphone (see page 43)
- Multi-Frequency Beltpack Microphone (see page 44)
- Loop Listener (see page 43)
- Boundary Microphone (optional, see page 45)

Physical Data:

Dimensions	Height – 254mm (10") Width – 540mm (21.25") Length – 368mm (14.5")
Weight (boxed incl. power supply)	13.5kg (29.76lbs)
Construction	Mild Steel
	ABS Plastic
Finish	Black Powder Coated

Product Codes:

Portable Large Area Loop	PLALS-V
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See next page for Technical Data.

Technical Data:

Power Supply #1	30W 14Vdc 2.14A via External PSU (PS-55) Class 6 External PSU (100V -240V AC 50Hz-60Hz)	
Inputs	1 X Balanced Line Level (3 Pin Euro-Block) or 1 X Balanced Line Level (XLR) [optimised for -10dBV to 0dBv]	
	1 X Mic Level (12V phantom power via 680Ω) [optimised for levels above -45dBv]	
	1 X DC Input	
Outputs	1 X Loop Output (5.08mm Euro-Block)	
Loop Output Characteristics	Voltage	7.5Vrms (21.2Vpk-pk) @ 5Arms (14.14Apk-pk)*
	Current	5Arms (14.14Apk-pk) up to 300 seconds*
	Loop Connector:	5.08mm Euro-Block
Audio System	Frequency Response	80Hz to 6.5kHz
	Distortion	THD+N <1% (-40dB) Full current both outputs driven
	AGC	Peak Detecting
	HF Comp	7 Optimised Stages
Display & Controls	Display	LED Backlit LCD Display
	Control	Single Rotary Control
Fault Monitoring and Protection	Main Display	Open Circuit Loop (DCR measurement) Loop Ground Fault
	Front Panel LED	Output Voltage Clipping
	Cooling	Internal Heatsinks with Thermal Protection
Power Supply #2	12-18Vdc, 500mA	
Carrier Frequencies	863 - 865MHz	
Channels	81 tuneable UHF frequencies	
Signal to Noise Ratio	>105dB	
THD	<0.5% @ 1kHz	
Frequency Response	50Hz - 18kHz ±1 dB	
Image Rejection	>85dB	
Connectors	DC in	
	2 x XLRM	
	6.3mm jack	
	2 x BNC antenna	
Output Impedance	2.2K Ω	
Output Level	400mV (balanced), 200mV (unbalanced)	

*Note 1: Z=1.4Ω (133uH +0.685Ω @ 1.6kHz) Note 2: < 1% (-40dB) distortion)



6U Rack Cabinet

Our 19" equipment rack cabinet features a lockable front, left or right hinged doors and removable side panels for easy maintenance. It can be either wall mounted or sit on a surface.

Applications:

For use with any 19" rack mountable products, such as:

- V7 Hearing Loop Driver (see page 24)
- V12a Hearing Loop Driver (see page 26)
- HLD7 Hearing Loop Driver (see page 32)
- HLD9 Hearing Loop Driver (see page 34)
- Radio microphone receiver

Physical Data:

U Height	6U
Dimensions	Height – 320mm (12.6") Width – 550mm (21.7")
Weight	200g (0.44lbs)
Panel Space	Height – 266.7mm (10.5") Weight – 11.3kg (24.91lbs)
Construction	Steel
Finish	Powder Coated Black RAL 9005

Product Code:

6U Rack Cabinet	IL-AC-RACK-19
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Mounting Brackets & Shelves

Our brackets and shelves are used to mount hearing loop drivers to a 19" rack and would be suitable for mounting with existing equipment.

Physical Data:

		Dimensions	Weight	Construction	Finish
Shelf	V Series Shelf*	1U Depth – 135.8mm (5.34")	760g (1.67lbs)	Mild Steel	Black Powder Coated
	V Series Blanking Plate*	Width – 196mm (7.71") Height – 40mm (1.57") Depth – 15mm (0.59")	81g (0.18lbs)	Mild Steel	Black Powder Coated
Brackets	Single V Series Bracket	1U Depth – 135.8mm (5.34")	540g (1.19lbs)	Mild Steel	Black Powder Coated
	Single HLD7 Rack Bracket	1U Depth – 15mm (0.59")	280g (0.61lbs)	Mild Steel	Black Powder Coated
	Dual HLD7 Rack Bracket	1U Depth – 27mm (1.06")	460g (1.19lbs)		
	Single HLD9 Rack Bracket	2U Depth – 30mm (1.18")	680g (1.01lbs)		
	Dual HLD9 Rack Bracket	2U Depth – 30mm (1.18")	220g (0.48lbs)		

***Note:** The V Series Shelf fits up to two drivers. When only one driver is placed in the shelf, one side is left exposed; a blanking plate is available for a neat finish, covering the gap.

Product Codes:

Single V Series Mounting Bracket	MBR-V1
V Series Mounting Shelf	MBR-V2
V Series Blanking Plate	MBR-VBLANK
Single HLD7 Mounting Bracket	MBR1
Dual HLD7 Mounting Bracket	MBR2
Single HLD9 Mounting Bracket	MBR1-9
Dual HLD9 Mounting Bracket	MBR2-9



Remote Monitoring Module

The Remote Monitoring Module is an accessory for HLD7 and HLD9 hearing loop drivers. The device is designed to provide remote visual monitoring and control of the following:

- Up to two HLD7 or HLD9 units in standalone configuration, or,
- One pair of HLD7s or HLD9s in phased array configurations.

When a user is on-site, the Remote Monitoring Module can adjust both drive levels and loop output levels via an embedded web service. This can be done from both desktop and mobile devices on site without the need to return to the driver(s) location, reducing installation time.

The module connects to the hearing loop driver’s self-monitoring system and will send an email alert if a fault arises.

Applications

This system monitors a number of events that can activate the automatic alarm, including:

- Hearing loop aerial disconnect
- Power failure
- Communication failure
- Overtemperature

What’s Included:

- Remote Monitoring Module
- HLD Connection Cable (x2)
- Network Cable
- Power Supply (Micro USB)

Physical Data:

Dimensions	Height – 40mm (1.57") Width – 116mm (4.6") Depth – 114mm (4.5")
Weight (boxed)	460g (1.01lbs)
Construction	ABS Plastic
Finish	Matt Black Fine Texture

Technical Data:

Inputs	DC Power	Micro USB
	Network Comms	RJ45 Connector
	HLD Comms	RJ11 Connector
Display	Power/Network	LED Indicators
	HLD Comms	

Product Code:

Remote Monitoring Module	RMM1
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Test Signal Generator

Our Test Signal Generator is a compact hand held engineer’s tool for large area loop installations. When combined with a Field Strength Meter (see page 42) it allows measurement of hearing loop systems using multiple frequencies to verify the loop meets BS EN 60118-4 standards.

Features:

Easily switches between the following frequencies:

- 100Hz
- 500Hz
- 1kHz
- 1.6kHz
- 4kHz
- 5kHz
- Pink noise
- White noise

Physical Data:

Dimensions	Height – 117.48mm (4.63") Width – 72.39mm (2.85") Depth – 25.4mm (1")
Cable Length	300mm (11.81")
Weight	244g (0.54lbs)
Construction	ABS Plastic Housing
Finish	Standard FR4 B

Technical Data:

Signal Level	-10dBv
Sine Wave Quality	< 0.2% THD
Pink Noise Band	20Hz - 20KHz
White Noise Band	20Hz - 20KHz
Connector	XLR male/3 pin phoenix connector
Power	2 x AA batteries
Automatic Power-Off	1 hour auto power-off

Product Code:

Signal Generator	TSG1
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Field Strength Meter

Our Field Strength Meter is used both during installation and during maintenance checks to guarantee our loops provide the best listening experience for the user.

Applications:

- Assists in verifying that a hearing loop system has been installed and certified to IEC 60118-4 standards

Features:

- Accurate and easy to read
- Simple button operation
- Flat spectrum output
- Headphone output
- Based on the IEC 60118-4 specification

Technical Data:

Measurement Range	-54dB to +9dB (0.0126 to 14.176 mG)
Resolution	0.1dB
Calibration	Calibrated at 1,000Hz (sine) to read 0dB at 5.03 mG
Flat Response	±1dB from 50Hz to 10,000Hz
Display	16x2 LCD Character Display
Input	1/8" stereo headphone jack
Power	9v Alkaline battery, 5.8-14v

Physical Data:

Dimensions	Height – 139.7mm (5.5") Width – 91.4mm (3.6") Depth – 27.9mm (1.1")
Weight	250g (0.55lbs)
Construction	ABS Plastic
Finish	Black

Product Code:

Field Strength Meter	IL-CONTACTA-FSM
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Loop Listener

Our Loop Listener is a compact listening device for interaction with hearing loop systems. It enables people to listen to a hearing loop system as if they were wearing a hearing instrument switched to the "T" position.

Our loop listener comes with headphones.

Features:

- Flat frequency response
- Low cut filter
- More than 100 hours life when used with 2 x AAA batteries (included)

Technical Data:

Output Power	<0.5% THD @ 1kHz
Distortion	10mW @ 1kHz (16Ω)



Physical Data:

Dimensions (boxed)	Height – 240mm (9.45") Width – 165mm (6.50") Depth – 40mm (1.58")
Weight (with headphones)	550g (1.21lbs)
Construction	ABS Plastic
Finish	Black

Product Code:

Loop Listener	IL-RX20
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Handheld Microphone

Our handheld microphone has an integrated multi-frequency transmitter and UHF technology.

Features:

- Up to 60 metre range
- Pilot tone
- High quality dynamic capsule
- Backlit LCD display
- Powered by 2 x AA batteries (not included)



Physical Data:

Dimensions	Height – 265mm (10.43") Diameter – 49mm (1.92")
Weight	330g (0.72lbs)
Construction	Various
Finish	Grey

Technical Data:

Carrier Frequency Range	863.1 - 864.9MHz
S/N Ratio	>105dB
Power Supply	2 x AA batteries

Product Code:

Handheld Microphone	IL-AC-WM-HT-00
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Multi-Frequency Beltpack Microphone

This multi-frequency microphone transmitter comes with a tie clip for ease of use.

Features:

- Up to 60 metre range
- Pilot tone
- Backlit LCD display
- Powered by 2 x AA batteries (not included)



Physical Data:

Dimensions	Height – 205mm (8.07") Width – 68mm (2.67") Depth – 25mm (0.98")
Weight	76g (0.16lbs)
Construction	Various
Finish	Grey

Technical Data:

Carrier Frequency Range	863.1 - 864.9MHz
S/N Ratio	>105dB
Connector	Threaded 3.5mm mono jack
Power Supply	2 x AA batteries

Product Code:

Multi-Frequency Beltpack Microphone	IL-AC-WM-LT-00
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Hanging Cardioid Microphone

This semi-rigid gooseneck cardioid condenser microphone has a short flexible shaft and knuckle joint, designed for ceiling mounting.

Features:

- Response optimised for consistent sound quality
- Engineered in high quality brass
- Semi-rigid gooseneck shaft with knuckle joint
- Available in satin black or white



Technical Data:

Type	Condenser (back electret)
Frequency Response	50Hz - 18kHz
Sensitivity	-40dB +/- 3dB at 1kHz (0dB = 1 V/Pa)
Impedance	200Ω
S/N Ratio	64dB (A)
Maximum Sound Pressure Level	125dB 1% THD
Power Requirements	9 - 48Vs phantom power
Termination	Male 3 Pin XLR

Physical Data:

Dimensions	Length – 215mm (8.5") Width – 12mm (0.5")
Weight	235g (0.51lbs)
Construction	Brass
Finish	Satin Black
	Satin White

Product Code:

Hanging Cardioid Microphone in White	MC-90-01-W
Hanging Cardioid Microphone in Black	MC-90-01-B

Hanging Mini Shotgun Microphone

This suspended mini shotgun microphone with hyper cardioid capsule is ideal for mounting on the ceiling. It has a fully flexible gooseneck shaft with knuckle joint.

It has a narrow pick up for sound, creating focused clear speech in meeting rooms and lecterns.



Technical Data:

Type	Condenser (back electret)
Polar Pattern	Hyper cardioid
Frequency Response	50Hz - 18kHz
Sensitivity	-47dB +/- 3dB at 1kHz (0dB = 1 V/Pa)
Impedance	200Ω
S/N Ratio	64dB (A)
Maximum Sound Pressure Level	125dB 1% THD
Power Requirements	9 - 48Vs phantom power
Termination	Male 3 Pin XLR

Physical Data:

Dimensions	Length – 300mm (11.8") Width – 12mm (0.5")
Weight	260g (0.57lbs)
Construction	Brass
Finish	Satin Black
	Satin White

Product Codes:

Hanging Mini Shotgun Microphone in White	MC-91-01-W
Hanging Mini Shotgun Microphone in Black	MC-91-01-B

Boundary Microphone

The boundary microphone is a small, surface mounted electret condenser microphone designed for mounting on conference tables, stage floors, and lecterns. Its wide frequency range and wide area coverage makes it suited to picking up speech in quiet environments.



Features:

- Flat frequency response across the vocal range for uncoloured sound
- Sleek, low-profile design
- In-line preamp reduces visible size of microphone
- 3-pole mini XLR connection with 6 metre cable

Physical Data:

Dimensions	Height – 90mm (3.54") Width – 90mm (3.54") Depth – 16mm (0.63")
Weight	200g (0.44lbs)
Finish	White
	Black

Technical Data:

Polar Pattern	Semi-Supercardioid
Frequency Response	30 - 20,000Hz
Impedance	250Ω
Power Requirements	DC 17-48V, phantom power

Product Codes:

Boundary Microphone in White	STS-M90-W
Boundary Microphone in Black	STS-M90-B



2 Channel Multi-Frequency Receiver

Our receiver is a dual channel PLL tuneable UHF wireless system and is designed to work with microphones such as the Handheld Microphone and Multi-Frequency Beltpack Microphone (see pages 43 and 44). Use with our 6 Channel Mixer (see page 47) for adjustment.

The receiver has a range of 60 metres, and is provided with either two Multi-Frequency Beltpack Microphones (see page 44) or two Handheld Microphones (see page 43).

Features:

- PLL tuneable with 81 UHF frequencies
- Pilot tone & mute circuit for stable signal
- Rack-mounting accessories included
- Supplied with mains adaptor and 4 x AA batteries
- Licence free operation in UK and Europe

Technical Data:

Power Supply	12-18Vdc, 500mA
Carrier Frequencies	863 - 865MHz
Channels	81 tuneable UHF frequencies
Signal to Noise Ratio	>105dB
THD	<0.5% @ 1kHz
Frequency Response	50Hz - 18kHz ±1 dB
Image Rejection	>85dB
Connectors	DC in
	2 x XLRM
	6.3mm jack
	2 x BNC antenna
Output Impedance	2.2K Ω
Output Level	400mV (balanced), 200mV (unbalanced)

Physical Data:

Dimensions	Height – 409mm (16.1") Width – 190mm (7.48") Depth – 44mm (1.73")
Weight	3.81kg (4.62lbs)
Construction	Various
Finish	Grey

Product Code:

MF Receiver (x2 Handheld Mic)	IL-AC-WM-2C-HH
MF Receiver (x2 Tie Clip Mic)	IL-AC-WM-2C-LT
MF Receiver (x2 Handheld Mic) Europe	IL-AC-WM-HH-EU
MF Receiver (x2 Tie Clip Mic) Europe	IL-AC-WM-LT-EU



6 Channel Mixer

An audio mixer is a device that combines two or more separate signals. This dual output mixer has multiple inputs and can split signals when used with a number of our hearing loop drivers. It is ideal for use with the 2 Channel Multi-Frequency Receiver (see page 46) and any of our microphones.

Features:

- 6 stereo line inputs, 6 balanced mono microphone inputs, switchable
- Adjustable automatic talk-over (-12dB), switchable for channel 1 or channels 1+2
- Balance control for each stereo input channel
- 3-way equalizer
- 12V phantom power can be switched on additionally
- LED VU meter, peak LED
- Master output and record output
- Output can be switched stereo/mono
- Adjustable headphone output
- 482mm (19") rack installation, 1 RS

Technical Data:

Line Input, Stereo	100mV/10 kΩ
Microphone Input	1mV/6.6 kΩ
Master Output, Stereo	1 V/600Ω
Record Output, Stereo	310 mV/600Ω
Headphones, Stereo	>8Ω
Frequency Range	20 - 20,000Hz
THD	0.1%
S/N Ratio	62dB, unweighted
Equalizer, Bass	±12dB/50Hz
Equalizer, Midrange	±12dB/1kHz
Equalizer, Treble	±12dB/10kHz
Power Supply	230 V-./50Hz/12VA
Admiss. Ambient Temp.	0-40 °C
Line Input, Stereo	6 x RCA L/R
Microphone Input	6 x XLR, bal.
Master Output, Stereo	1 x RCA L/R, 1 x XLR L/R, bal.
Record Output, Stereo	1 x RCA L/R
Headphones	1 x 6.3mm jack

Physical Data:

Dimensions	Height – 47mm (1.85") Width – 482mm (18.98") Depth – 208mm (8.19")
Weight	2.8 kg (6.17lbs)
Finish	Black

Product Code:

6 Channel Mixer	IL-AC-MMX-00
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PS-55 Power Supply

The PS-55 Power Supply is a Level VI power supply for use with:

- V7 Hearing Loop Driver (see page 26)

Complies with UL, RCM, KC, FCC, CE (EMC), and CCC standards.

All power supplies come with a region-specific IEC lead 2 metres in length as standard.

Physical Data:

	PS-55 Power Supply	IEC Lead
Dimensions	Height – 93mm (3.66") Width – 49mm (1.93") Depth – 36mm (1.42") Cable Length – 1.8m (70.87")	Cable Length – 2m (78.7")
Weight	180g (0.39lbs)	90g (0.2lbs)
Construction	ABS Plastic	PVC
Finish	Black	Black

Technical Data:

Input	100-240V – 50-60Hz
Output	14V 2.14A 30W max.

Product Code:

PS-55 Power Supply w/ IEC UK	PS-55-01-UK
PS-55 Power Supply w/ IEC Europe	PS-55-01-EU
PS-55 Power Supply w/ IEC Switzerland	PS-55-01-CH
PS-55 Power Supply w/ IEC US & Japan	PS-55-01-USJ
PS-55 Power Supply w/ IEC Australia	PS-55-01-AUS



PS-60 Power Supply

The PS-60 Power Supply is a Level VI power supply for use with:

- V12a Hearing Loop Driver (see page 28)
- HLD5 Hearing Loop Driver (see page 30)
- HLD7 Hearing Loop Driver (see page 32)

Complies with UL, CE (EMC), and RCM standards.

All power supplies come with a region-specific IEC lead 2 metres in length as standard.

Physical Data:

	PS-60 Power Supply	IEC Lead
Dimensions	Height – 155mm (6.10") Width – 57mm (2.24") Depth – 34mm (1.33") Cable Length – 1.8m (70.87")	Cable Length – 2m (78.7")
Weight	223g (0.34lbs)	90g (0.2lbs)
Construction	ABS Plastic	PVC
Finish	Black	Black

Technical Data:

Input	100-240V – 50-60Hz
Output	24V 4.17A 100W max.

Product Code:

PS-60 Power Supply w/ IEC UK	PS-60-02-UK
PS-60 Power Supply w/ IEC Europe	PS-60-02-EU
PS-60 Power Supply w/ IEC Switzerland	PS-60-02-CH
PS-60 Power Supply w/ IEC US & Japan	PS-60-02-USJ
PS-60 Power Supply w/ IEC Australia	PS-60-02-AUS

Flat Copper Tape

Our flat copper tape is placed under flooring when installing large area loops. It is available in reels of 100m.



Conductor

Composition	Copper 99.5% (minimum)
Density	8.9g/cm ³
Melting Point	1083°C
Electrical Conductivity	58m/ohm mm ² at 20°C (100%IACS)
Electrical Resistance	0.01741 ohm mm ² /m at 20°C
Hardness	50/60 HV
Copper Section	RL-TAPE-10 – 0.5mm ² RL-TAPE-12.5 – 1.25mm ² RL-TAPE-25 – 2.5mm ²

Insulation Film

Density	1.36g/cm ³
Tensile Strength	200N/mm ²
Elongation	60%
Melting Point	160°C
Breakdown Voltage	7KV

Physical Data

Dimensions	Width – 0.5mm
Weight	2.62kg (5.77lbs)

Product Code:

10mm Copper Tape	RL-TAPE-10
12.5mm Copper Tape	RL-TAPE-12.5
25mm Copper Tape	RL-TAPE-25

Tri-Rated White PVC Cable

Our tri-rated white PVC cable is a high temperature, flame retardant electrical cable to be placed under flooring when installing large area loops. It is available in reels of 100m.



Physical Data:

Dimensions	Width – 2mm
Weight	1.11kg (256lbs)
Construction	PVC
Finish	White

Product Code:

BI 0.5mm sq Tri-Rated White PVC Cable	CABLE-0.5TRI-WH
BI 1.0mm sq Tri-Rated White PVC Cable	CABLE-1.0TRI-WH
BI 1.5mm sq Tri-Rated White PVC Cable	CABLE-1.5TRI-WH
BI 2.5mm sq Tri-Rated White PVC Cable	CABLE-2.5TRI-WH

Phased Array Link Cable

The phased array link cable connects two HLD7 or HLD9 drivers (see pages 32 - 35) in a phased array loop configuration.



Physical Data:

Dimensions	Length – 50.9cm (20.03") Width – 2.7cm (1.10)
Weight	19g (0.04lbs)
Construction	PVC
Finish	Black

Product Code:

Phased Array Link Cable	CABLE-RJ45-0.5m
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Tape Options

Our tape options are for use during the installation of a large area loop.

Gaffa tape is available to secure cabling during large area loop installation.

After installation is complete, "Do Not Cut" tape should be laid over loop cabling to warn against damage to the system.



Product Code:

50mm Blue Gaffa Tape	RL-TAPE-DS-50-B
50mm Red Gaffa Tape	RL-TAPE-DS-50-R
50mm Yellow Gaffa Tape	RL-TAPE-DS-50-Y
"Do Not Cut" Tape	TAPE-WARNING

Physical Data:

Dimensions	Length – 50m Width – Gaffa Tape: 4.8mm (1.88") – "Do Not Cut": 49mm (1.92")
Weight	352g (0.71lbs)



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