

HLS-2C Active Loop Panel

The Active Loop Panel is a lightweight, compact unit with aesthetic styling designed to complement typical intercoms. It combines all the crucial elements of a functional hearing loop system, requiring only power and an audio input to provide essential access to individuals with hearing loss. It comprises an IP rated case, efficient class D loop driver (amplifier), multi-turn copper loop and the internationally recognised signage that informs the user that the service is available.

It designed to be mounted close to an entry intercom or other device where it can be connected to the audio source via transformer isolated balanced input. Installation is quick and simple, requiring only the removal of the front cover to reveal the fixing points and quick clamp DC power and line level connections – with only adjustments to current, gain and metal loss compensation being required if necessary when commissioned using a Field Strength Meter.

Features

- **Compact and robust design**
- **Compliment intercom panels**
- **Simple integration & installation**
- **Low power consumption**
- **Class D efficiency**
- **DSP for unrivalled intelligibility**
- **Prides a localised magnetic field**
- **Low lifetime cost**
- **Excellent reliability, 5 year warranty & free technical support**
- **Power supply (12-24V DC)**
- **Transformer isolated inputs**
- **Metal loss correction**

Applications include:

- **Door entry intercoms**
- **Help & information points**
- **Emergency refuge points**
- **Information desks & kiosks**



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Wall and post mounted intercoms

The Active Loop Panel is designed to produce optimal audio quality at bent arm's length for the average person – as it is expected that they will be depressing a button to communicate via the intercom.

The unit can be mounted below or at the side of the intercom panel at a height of approximately 1.1-1.2 meters (4 feet). At this height the emitted magnetic field shape will function correctly for both standing adults, children and wheel chair users.

When wall mounting, cabling between the intercom and Active Loop Panel should ideally be routed behind the brickwork to maintain IP rating and finished aesthetics.

Applications



Figure 1:
Door Intercom

Figure 2: Ticket
Vending Machine

HLS-2C Product Information

Power supply and consumption

- 12-24V DC: Typical local DC supply inside equipment where another supply is already present.

Whilst the HLS-2C draws less than 2.9W @ 12V DC with typical signals, you should still check that an existing supply has enough spare capacity.

Standards Compliance

Safety, EMC

The HLS-2C is CE marked to indicate compliance with relevant product safety and EMC standards.

Loop Performance

The HLS-2C will allow an Audio Frequency Induction Loop system that meets the requirements of IEC 60118-4 to be created at the expected height and distance of a single user, if the system is specified, installed and commissioned in an appropriate manner, including observing Ampetronic instructions.

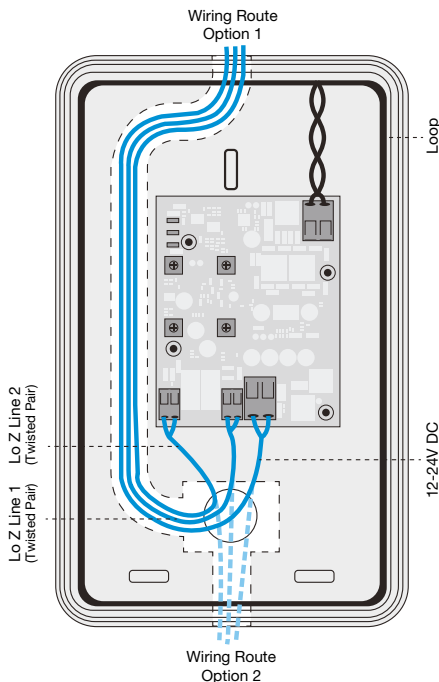
Datasheet & Specifications

All information specified on this datasheet has been compiled in accordance with the IEC 62489-1: 2010+A1:2014 Standard and reflects actual performance in realistic applications.

Installation Guide:

Group connections to input 1/2 with DC power cabling. Keep the loop feed cable separate from other connections.

When mounting the unit leave clearance above and below the board to meet relevant safety Standards. Mount using 4 x M3 machine screws (with spacers if required) or insulated adhesive pad(s) on the reverse side of the board.



INPUTS

Power Supply	Standard format: 12V DC	
	Connector:	Wago 2061 cage clamp for 0.5 - 1.5mm ² solid core or untinned fine stranded wire.
	Nominal voltage:	12V-24V DC
	Voltage range:	8-30V DC
	Fuse:	1.5A PTC
	Power Consumption:	2.88W (240mA) continuous pink noise 9.2W (765mA) continuous sine <0.6W (<50mA) quiescent 0.17W (14mA) quiescent Power Save 14.4W (1200mA) max short term peak LED on PCB
	Indication:	
Input 1 & 2	Connector:	Wago 2060 cage clamp for 0.2 - 0.75mm ² solid core or untinned fine stranded wire
Line Level (Lo Z speaker)	Rated source impedance:	1.8k Ω differential,
	Input isolation:	1500V
	Rated source EMF (sensitivity):	-16dBu for full output
	Overload:	>+22dBu
	SnR:	>90dB
	Adjustment:	Level control, per channel

OUTPUTS

Loop Output	Connector:	Wago 2061 cage clamp for 0.5 - 1.5mm ² solid core or untinned fine stranded wire.
	Compliance voltage:	4.2V _{RMS} (6V _{pk})
	Max output current (sine):	3A _{RMS}
	Rated temperature limited output current (pink):	1.5A _{RMS}
	Rated time for delivery:	1min
	Rated THD:	<1%
	Output Impedance:	>9 Ω
	Current Adjustment:	Full range
	Current Indication:	LED indicates 1A _{RMS}
Loop Impedance	0.3 Ω to 1 Ω , 1.3 reactive at 1.6 kHz	
	Rated Load:	80uH, 0.5R

AUDIO SYSTEM

Freq. Response	100Hz to 5kHz \pm 1.5dB relative to 1kHz at low level, measured as loop current with no metal loss correction.
Compression (AGC)	Time constants optimised for speech Dynamic range: >36dB Control: by adjusting input level/gain Indication: LED on PCB
Metal Loss Correction	0dB to 3dB / octave boost Adjustable

PHYSICAL

Dimensions	Power Option:	12V DC
	Width	138mm
	Length	224mm
	Height	22mm + mounting clearance
Weight	390g	
Environment	IP55, IK08, <90% relative humidity, -30 to 75 $^{\circ}$ C Heat dissipation <3W maximum, normally less	

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