LISTEN
T E C H N O L O G I E S

Configuration:

C10-1N C-Series Perimeter Loop Drive 10A Networked

C10-1D C-Series Perimeter Loop Drive 10A Dante

Product Overview:

The C10-1 Series hearing loop drivers from Ampetronic mark a substantial development in assistive listening technology. C Series units feature digital signal processing and networking functionality, and enable fast, accurate setup and adjustment via a very simple and easy to use user interface and built-in test tones.

Available in Networked (C10-1N), and Dante (C10-1D) versions.

Engineered to offer the high end performance, consistency and certainty of results associated with top of the range hearing loop drivers, all for the price of a mid-range amplifier. Class 'D' drivers built into the C Series ensures low running and maintenance costs.

Network and Dante versions enable installers, technicians and facilities managers to remotely control the driver and monitor its condition status along with resistance and induction measurements. Fault condition alerts via email or Telnet provide reassurance that an operator will be informed of any issues with performance delivery.

The C10-1 features 10 Amps RMS current loop output, plus ample voltage headroom, making it suitable for a wide range of applications. Installation can be performed with total confidence; unique, multi-stage filtering ensures compatibility with other systems and global EMC regulations.

Highlights:

- Simple digital interface for accurate adjustment
- Network and stand-alone options
- Built-in test tones
- Compatible with Loopworks Measure LoopLink for direct and automated driver control
- Clear indicators and system diagnostics
- Compact 1U rack mount unit with internal power supply
- Optimised for speech frequencies with unmatched intelligibility and capable of high quality musical reproduction
- Industry standard Phoenix connectors
- Data compliant with IEC 62489-1 Standard
- 100V line input

Includes:

One (1) C10-1(X) C Series Perimeter Loop Driver 10A
One (1) Loop Connector
One (1) DC Connector
Two (2) Input Connectors
One (1) 100VAC Line Connector
One (1) Line Out Connector
Two (2) 2mm Steel 1U Rack Mount Brackets
One (1) C Series Quick Start Guide
One (1) Power Cable (region specific)
One (1) Induction Loop Sign
Four (4) Self-adhesive Feet

Product Specification: C-Series Perimeter Loop Driver 10A	
Inputs	
Power	120/230 VAC, 45-65 Hz, 70W
Input 1 & 2	3 way 3.5mm euroblock screw terminal input (supplied) with a balanced microphone and line level operation, selectable via rear panel switch, Switchable 250Hz low cut filter, Priority input option (network models only)
Microphone / Line	Microphone specification; 200 – 600Ω, sensitivity -67dBu, Selectable 24V phantom power on microphone only, Line sensitivity -42dBu, Max line level 17dBu, Max mic level -8dBu
100V Line	2 way 5mm euroblock screw terminal (supplied), 100V sensitivity +7dBu
Dante (optional) - Input 3	RJ45 Ethernet input (100MB/s), AES67 compliant, 2x channels mono summed
Network (optional C5/C7)	RJ45 Ethernet, control and monitoring, Hosted web server, Telnet and SNMP
Outputs	
Loop Output Drive Voltage	33.9 VRMS (48Vpk) at maximum output current per channel
Loop Output/Drive Current	Drive Current: 10ARMS (14Apk) up to 60 seconds continuous 1kHz sine wave, peak >14A per channel Cont. pink noise 4.7ARMS short term peaks >14A per ch.
Loop Connectors	4 way 5mm euroblock screw terminal (supplied) for each output, for twisted pair or star-quad configured feed cables
DC Output	2 way 3.5mm euroblock screw terminal Re-settable, fuse protected 12V 0.1A. Controllable to reflect amplifier status (network models only)
Line Output	3 way 3.5mm euroblock screw terminal (supplied) post AGC balanced output
USB	Firmware updates or power for wireless router (200mA max). Powering external devices may reduce power headroom for the loop, DC output and USB power should not be used simultaneously.
Audio System	
Frequency Response	80Hz to 6.5kHz
Distortion	THD+N <0.3% 1kHz sine at full current
Automatic Gain Control	The AGC is optimised for speech. Dynamic range >36dB
Metal Loss Correction	Corrects system frequency response issues due to metal structures in a building. Gain constant at 1kHz, adjustable gain slope from 0 to 4dB per octave in 0.25dB increments. Custom 2 slope MLC allows different slopes and transition frequency to be set via the menu (network models only). This does not compensate for signal loss from metal structures which can be significant.
Phase Shift	User selectable (network models only) at 0° or 90° between outputs
Additional Functions	
Status	Tri-colour LED: Solid GREEN = normal operation, Flashing GREEN = sleep or standby mode, Flashing RED = error, Flashing AMBER = firmware updating
Physical	
Size	Full width 1U 19″ rack mount. Width 430mm Depth 190mm Height 44mm, Depth inc. knob 190mm (C5/C7) 305mm (C10/C14)
Mounting Options	Freestanding 1U 19″ rack mount (brackets fitted as standard), Wall mounted brackets available separately
Weight	4.2 kg
Environment	IP20 rated; 20 to 90% relative humidity; 0 to 35ºC
Cooling	C5,C7 Passive, C10/C14 variable speed fan, front inlet, rear exhaust

Product Specification: C-Series Perimeter Loop Driver 10A	
Compliance	
Marks and Approvals	FCC, UKCA, CE, MET
	* Specifications subject to change without notice.