



# UniVox® PLS-100 (USA/Canada) Loop amplifier 1800ft<sup>2</sup> (IEC 60118-4:2006)



The UniVox® PLS series of amplifiers has been designed for use in professional applications where high stability and secure operation are imperative. The fully 100% short-circuit proof UniVox® PLS amplifiers with programmable, balanced, XLR-inputs and super rugged output power fulfil these requirements. The dual action AGC and output controlled AGC for constant field strength result in a stable sound with high speech perception even in harsh environment. The built-in monitor output makes it easy to check quality of the sound of the loop.

UniVox® PLS fulfils the IEC Standard 60118-4:2006 for loop amplifiers.

UniVox® PLS-100 covers areas up to 1800ft<sup>2</sup>. The short-circuit proof output with 11A RMS gives a secure and powerful amplifier with a large safety margin.

## Features

- High output current 11A RMS, 60App
- Short-circuit proof
- Automatic resettable fuse
- Two programmable, balanced XLR-inputs
- One phono input
- Extra rugged sockets
- Two line outputs
- Dual action AGC for high speech intelligibility
- High safety thanks to output voltage and current controlled AGC for minimizing feedback problems
- The magnetic field can easily be monitored through an earphone/loudspeaker
- Treble control to compensate high frequency losses due to reinforcement
- Three LED's indicating power on, input level and output loop current
- Well proven high quality loop technology

For additional information, please refer to user guide/installation guide and CE certificate which can be downloaded from "Product databank" at [www.edin.se](http://www.edin.se). If required, spare part list or other technical documents can be ordered through [support@edin.se](mailto:support@edin.se).

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**System Overview**

<b>Power requirements</b>		110-120V AC 50Hz, 3.5-100W, 10A
<b>Area of coverage</b>		1800ft <sup>2</sup> according to IEC 60118-4:2006, 1-turn-loop, free field
<b>Loop output</b>	<i>Max current</i>	60A peak to peak, 1-5ms, 1kHz, short-circuit
	<i>Max voltage</i>	11A RMS, continuously 1kHz, short-circuit
	<i>Output AGC</i>	28,5V peak to peak
		Sets voltage and current for continuous signals like self oscillations or sine waves to -10dB after 0.6-1 second
		Short pulses and normal program signals are not limited
	<i>Frequency response</i>	100-5000 Hz (±3dB)
	<i>Distortion</i>	<1%
	<i>Connection</i>	Screw-terminal at the rear panel
<b>Line outputs</b>	1. "LINE OUT"	0dBm phono (without AGC-function) at the rear panel
	2. "SLS"	0dBm phono (with AGC-function) at the rear panel
<b>Inputs</b>	<i>IN1 and 2</i>	0.5mV-80mV/10kOhm (Mic) alt. 50mV-10V/10kOhm (Line)
		Separate 2-channel AGC, phantom voltage 9-12V
		Balanced XLR sockets at the rear panel
	<i>IN 3</i>	50mV-10V/10kOhm, RCA sockets at the rear panel
<b>Dual action AGC</b>	<i>Working range</i>	>70dB
	<i>Attack time</i>	2-500ms
	<i>Release time</i>	0.5-20dB/s
<b>Controls</b>	<i>Treble control</i>	0 - +9dB, potentiometer at the rear panel
	<i>Volume control</i>	0 - 1800ft <sup>2</sup> , potentiometer at the rear panel
<b>Indications</b>	<i>Mains connection</i>	Blue LED at the front panel
	<i>Input level indicator</i>	Blue LED at the front panel
	<i>Loop current indicator</i>	Blue LED at the front panel
<b>Other information</b>	<i>Dimensions</i>	295x62x188mm (WxHxD)
	<i>Weight</i>	2.7kg
	<i>Colour</i>	Black with blue and white printing
	<i>Part No</i>	214110

**Note** *Dual action AGC* The attack/decay times are dynamically set by program material.

**Loop monitor** The loop current is indicated by a LED at the front panel. Further more, there is a 1/4" socket at the front panel for speaker or head phone monitoring, an important and useful function for the system operator.

**General planning procedures**

- Recommended minimum loop wire size is described in the table. Using a twin loop wire is recommended, this gives a high flexibility for the installer when setting up the system (1-turn loop, 2-turn loop or parallel loop)
- If the space for the loop cable is limited, a flat copper foil can be used as an alternative.
- The field strength can be reduced due to reinforcement ironing etc. If so, the field strength can be doubled (approx. 6dB) if 2 amplifiers are used, one for each separate wire of the twin wire, or use a more powerful amplifier as an alternative. Do not place input cables close to / in parallel with the loop wire.
- Do not place the loop wire close to reinforcement iron etc.
- If the smallest distance in a loop exceeds 33 feet, please consider another loop configuration, for example the "eight"-loop configuration.
- Please be aware of the overspill effect. If the overspill is not acceptable, plan the system for UniVox® SLS – Super Loop System® with minimized overspill. Log on to [www.edin.se](http://www.edin.se) for more information.
- Beware of the background noise created by other electrical equipment when planning the loop system.
- Always perform a final inspection of the loop installation, using UniVox® FSM Field Strength Meter according to the IEC 60118-4:2006 standard.

<b>Accessories</b>	<b>Part No</b>	<b>Description</b>
	289011	Mounting plate 19"
	230450	UniVox® Listener loop receiver
	230453	UniVox® Listener loop receiver with headphones
	401012	UniVox® FSM 2.0 Field Strength Meter, professional measurement instrument

**Recommended minimum loop wire size for UniVox® PLS-100**

Loop area ft <sup>2</sup>	Wire size 1-turn-loop	Wire size 2-turn-loop
800-1800	AWG 12	Not recommended
540-800	AWG 16	2xAWG 16
370-540	AWG 18	2xAWG 18
<370	AWG 20	2xAWG 20

