



UniVox® PLS-900

Loop amplifier 700 m² (according to IEC 60118-4)
for extra power



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 fieldstrength 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 and British Standard requirements for loop amplifiers.

UniVox® PLS-900 covers areas up to 700 m². The electronic design with an extraordinary rugged output current capability gives a secure and powerful amplifier with a large safety margin.

Features

- High output current
- Short-circuit proof
- Automatic resettable fuse
- Three XLR-inputs
- Each input is programmable: sensitivity, phantom voltage, balanced/unbalanced and priority
- Dual action AGC for high speech intelligibility
- High safety thanks to output voltage and current controlled AGC for minimizing feedback problems
- The magnetic field/output current can easily be monitored through an earphone/loudspeaker
- Treble control to compensate high frequency losses due to reinforcement
- LED:s indicating mains power, input level and loop current
- Low pass filter reduces the risk of high frequency interference

Technical specification UniVox® PLS-900

Power requirements		230-240V AC 50Hz, 25-1000W, 10A
Area of coverage		700 m ² according to IEC 60118-4, 1-turn square loop, free field
Loop output	<i>Max current</i>	78App / 0.06Ohm
	<i>Max voltage</i>	25A RMS, 10-300ms, 1kHz
	<i>Output AGC</i>	47Vpp 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>	100-5000Hz (±3dB)
	<i>Distortion</i>	<1%
	<i>Connection</i>	Screw-terminal on the rear panel
Inputs	<i>Input 1-3</i>	XLR-sockets, programmable for the following parameters: 1. Microfon/line sensitivity level 2. Phantom voltage on/off 3. Balanced/unbalanced 4. Priority for all inputs
Line output	1. "Line out" 2. "SLS"	0dBm phono socket on the rear panel. (Without AGC-function) 0dBm phono socket on the rear panel. (With AGC-function)
Dual action AGC	<i>Working range</i>	>70dB
	<i>Attack time</i>	2-500ms
	<i>Release time</i>	0.5-20dB/s
Controls	<i>Treble control</i>	0-+9dB, potentiometer on the rear panel
	<i>Loop adjust</i>	0-700m ² , potentiometer on the rear panel
	<i>Input level</i>	Input 1-3 has separate input level potentiometers on the rear panel
Indications	<i>Mains connection</i>	1 green LED on the front panel
	<i>Input level indicator</i>	3 green LED:s on the front panel
	<i>Loop current indicator</i>	5 red LED:s on the front panel
Other	<i>Dimensions</i>	438x88/125x305mm (BxHxD) 19"-rack standard
	<i>Weight</i>	9.2kg
	<i>Colour</i>	Black with blue and white printing
	<i>Part-no</i>	214900 (UniVox® PLS-900)

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

Loop Monitor The loop current indicates by 5 red LED:s on the front panel. Furthermore, there is a 6.3 mm socket on the front panel for speaker or headphone monitoring, an important and useful function for the system operator

General planning procedures

- Use a 2x2.5mm² twin loop wire, this gives a high flexibility for the installer. If other loop wires are used, the amplifier's efficiency may be affected. Recommended minimum loop wire area is described in the table.
- 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 and such like. If so, the field strength can be doubled (appr. 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 and such like.
- If the smallest distance in a loop exceeds 10 meters, please consider another loop configuration, like the "eight"-loop.
- Please be aware of the overspill effect. If the overspill is not acceptable, plan the system for UniVox® Super Loop System with minimized overspill. Log on to www.edin.se for more information.
- Beware of the background noises created by other electrical equipment when planning the loop system.
- Always perform a final inspection of the loop installation, using FSM Field Strength Meter according to the IEC 60118-4 standard.

Recommended minimum loop wire area for UniVox PLS-900 when installed to an existing loop system

Loop area m ²	Wire area 1-turn-loop	Wire area 2-turn-loop
400-700	>=5 mm ²	Not recommended
150-300	>=4 mm ²	2x2.5 mm ²
70-150	Not recommended	2x2.5 mm ²
20-70	Not recommended	2x2.5 mm ²