



# Univox PLS-7 Induction Loop Amplifier Owner's Manual

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## Univox PLS-7 Induction Loop Amplifier



## Features

- Dante PoE input for additional network audio (option)
- High dynamic performance through linearized switching
- High power – 100 Vpp & 20/2×10 Arms

- Parametric metal loss compensation
- Built-in system diagnostics
- Fan-free convection cooling
- Automatic safe mode
- 50-100 V high voltage speaker input
- High slew rate audio IC internally used
- Fast-action AGC with an exceptional constant and stable linear output
- Low-frequency masking filter – voice enhancement
- Voltage peak indicator
- Fault monitor indication LED
- ULD supported for easy project planning
- 5-year warranty

### **High-efficient linearized switching loop amplifier**

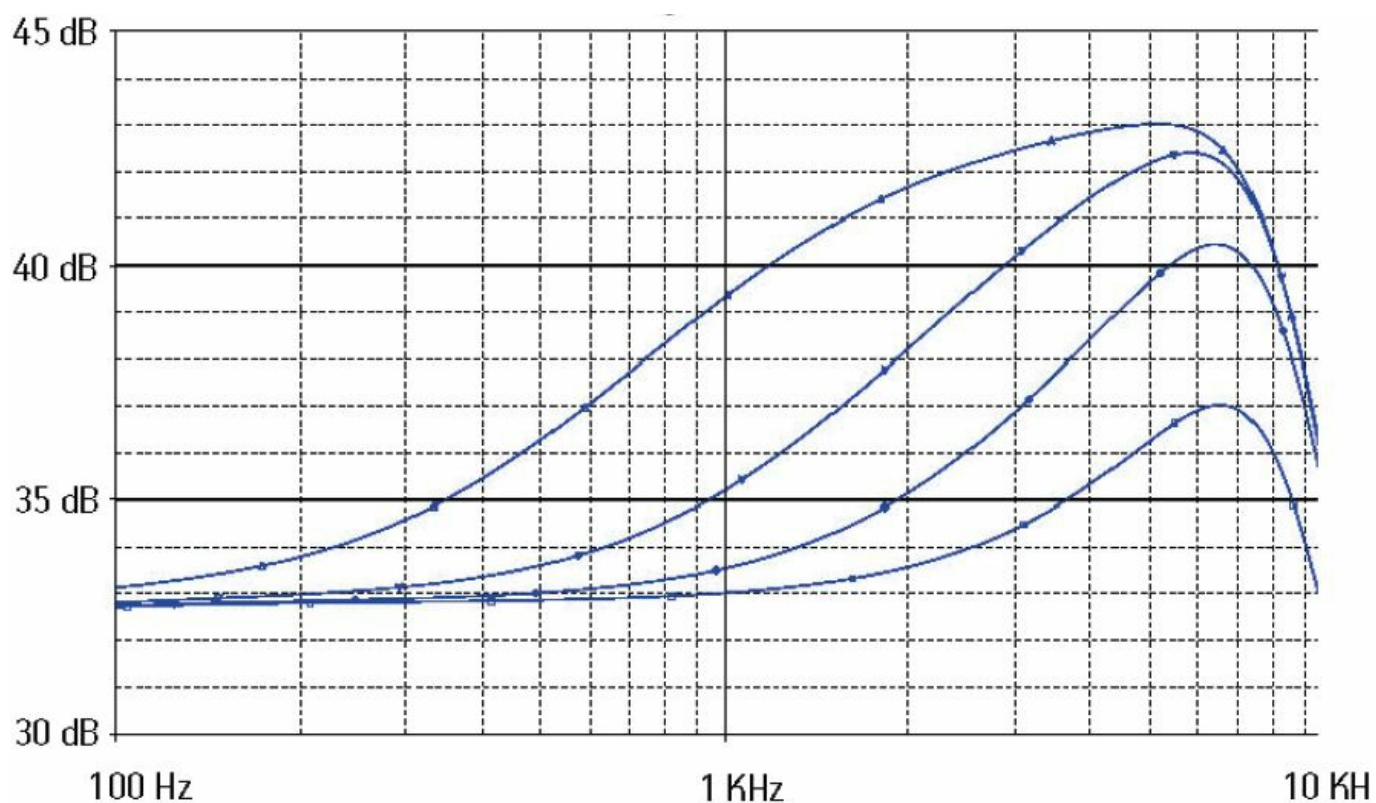
Univox PLS-7 and its phased array sibling SLS-7 are powerful induction loop amplifiers designed for very large-area loop installations. PLS-7 delivers up to 100Vpp/20 Arms while the SLS-7 drives up to 100 Vpp and 10 Arms per channel. With wide dynamic response from complementary balanced outputs, PLS/SLS-7 drivers provide excellent dynamics with top audio quality. Our ground-breaking filter bank eliminates any Class-D associated non-linearity or interference. Due to its Class-D low heat dissipation, the drivers claim no extra ventilation space in your AV rack. Developed on Univox linear switching technology, with electronic transformers and fan-free design, PLS-7 and SLS-7 are two new long-life reliable products from Univox.

### **Intelligent system monitoring**

Apart from the self-diagnostic system, PLS/SLS-7 features continuous monitoring of the input and output logic, warning for any inconsistency within the loop function. A built-in output relay allows for easy connection to a smart mixer or a monitor computer.

### **Enhanced metal loss compensation**

- Univox PLS/SLS linear tech series is equipped with a unique Parametric MLC (Metal Loss Compensation) control, enabling system frequency response correction in environments where the signal strength is strongly influenced by the surrounding metal.



### Coverage

PLS-7	Free Field	Moderate metal loss*	High metal loss**
1:1 ratio	Approx. 600 m2***	Approx. 50 m2***	Not recommended
1:2 ratio	Approx. 1.200 m2 ***	Approx. 100 m2 ***	Not recommended
Figure 8	Approx. 4.200 m2	Approx. 2.300 m2	Approx. 1.000 m2

SLS-7	Free Field	Moderate metal loss*	High metal loss**
Max coverage	Approx. 4.200 m2	Approx. 2.000 m2	Approx. 1.000 m2
Low spill****	Approx. 1.200 m2 ****	Approx. 100 m2 ****	Not recommended

- 4.5 dB attenuation, max 7 m loop segment width
- 8 dB attenuation, max 4 m segment width

- The larger coverage area is limited by the max 6 dB field strength variation stated by IEC 60118-4
- SLS standard loop design (2m wide loop segments with cancellation segments)

## **Technical specifications**

### **Univox PLS-7 Univox SLS-7**

#### **Induction Loop Output RMS 125 ms**

- Max drive voltage 100 Vpp 100 Vpp
- Max drive current 20 Arms 2×10 Arms

#### **Power**

- Power supply 110-240 VAC primary switched class VI electronic power supply
- Power consumption, idle 137 mA 126 mA
- @1.10 Ohm impedance load 80 W 45 W

## **Back panel interface**

### **Input 1**

- Balanced XLR
- Dip switch programmable: Low Cut Filter@150 Hz – Flat/Speech;
- Line/Mic; Phantom Power +12 VDC On/Off
- Sensitivity: -55 dBu (1.5 mVrms) to +10 dBu (2.6 Vrms)
- Dante RJ45 Ethernet input PoE (option)

### **Input 2**

- Balanced Phoenix Screw Terminal Block
- Dip switch programmable: Low Cut Filter@150 Hz – Flat/Speech; Line/50-100 V connection On/Off; Override On/Off
- (Input 3 signals higher than -6 dB above AGC-knee overrides all other input signals)
- Line sensitivity: -15 dBu (50 mVrms) to +20.6 dBu (8.3 Vrms)

### **Input 3**

- Unbalanced RCA or Phoenix Screw Terminal Block
- Sensitivity: -24dBu (30 mVrms) to +16.2dBu (5 Vrms)

## **Monitor control**

- Recessed trim potentiometer for 10 W speaker and 3.5 mm front panel headphone output.
- Phoenix Screw Terminal Block

## Loop error

- Speaker monitor output; 24 V power output; Relay output to the mixer
- Phoenix Screw Terminal Block

## Front panel interface

### Input 1-3

- Recessed trim pots; 4 LED input level indicators (-18 dB to +12 dB)

### Parametric Metal Loss Control

- Recessed trim pot, adjustable gain slope from 0 to 4 dB/octave;
- Switchable frequency knee point (100 Hz, 500 Hz, 1 kHz, 2 kHz)

### System diagnostics

- Checks Input connection, AGC, Pre and Power driver and Loop conductor with a pulsed 1.6kHz signal (built-in signal generator)
- On/Off switch to operate the system, single LED indication
- Loop current control Recessed trim pot; 4 LED output level indicator (0-9 dB)
- Peak indicator LED indicates clipping due to voltage saturation
- Loop fault indicator LED indicates an error in the loop function
- Temp indicator Automatic safe mode activated
- Monitor output 3.5 mm jack to monitor loop with headphones
- The power indicator LED indicates the correct connection to a power supply

## Other Functions

- **Frequency response:** 75-6800 Hz
- **Distortion, power loop driver:** < 0.05 %
- **Distortion, system:** < 0.15 %
- **Dual action AGC:** Dynamic Range: > 50-70 dB (+1.5 dB)
- **Attack time:** 2-500 ms, Release time: 0.5-20 dB/s
- **Cooling:** Fan-free convection cooling
- **IP class:** IP20
- **Size:** 1U/19 " rack mount. Width 430 mm, Depth 146 mm, Height 44 mm (excl. rubber feet)
- **Weight (net):** 2.30 kg 2.31 kg
- **Mounting options:** Rackmount (brackets included), wall mount or freestanding (rubber feet pre-mounted)

## Part No

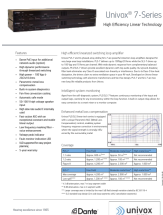
- 217700/217710 (Dante) 227000/227710 (Dante)

For the complete manual and certificate, please refer to [univox.eu](http://univox.eu).

## CONTACT

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## Documents / Resources

	<p><a href="#">Univox PLS-7 Induction Loop Amplifier</a> [pdf] Owner's Manual PLS-7, SLS-7, PLS-7 Induction Loop Amplifier, Induction Loop Amplifier, Loop Amplifier</p>
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## References

- [User Manual](#)