

Univox® PLS-X1

The next generation of loop drivers

Features

- 5 year warranty
- 1U high and ½ width (19" rack) for side by side mounting to save rack space
- Parametric Metal-Loss-Control for various types of metallic influences
- Built-in System diagnostics, to isolate a system malfunction
- Programmable XLR, RCA and screw terminal input connectors
- Dual Action AGC for unsurpassed intelligibility
- Low frequency masking filter for voice enhancement
- 50-100 V input
- Voice alarm system input that overrides all other input signals
- Convection cooled for silent reliable operation
- 10 W output for connecting a speaker to monitor/verify driver activity
- Front panel placed controls for easy installer access
- Recessed controls to prevent tampering
- Rack mounting kit

Applications

Univox PLS-X1 is suitable for meeting and class rooms, TV lounges and other smaller areas.

Space and power efficiency

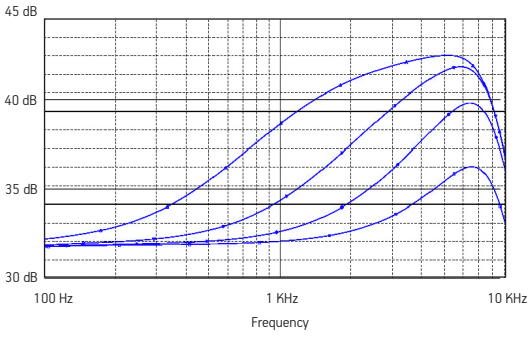
PLS-X series is the most efficient professional loop drivers available. The units are only 1U high and ½ widths, making it possible to mount two drivers in one single 19" rack mount. Univox PLS-X series uses a 90 % efficient electronic transformer. Energy waste in a conventional power supply is comparably 8-9 times higher. Weight is reduced by use of significantly less copper and other metals than conventional loop drivers, leaving a much smaller carbon footprint. PLS-X loop drivers produces an amazingly clear sound which is not possible using conventional toroid transformers as modulation distortion is unavoidable.

The self-diagnostic system

When activated, input connection, AGC, pre and power driver and consistency of loop conductor will be diagnosed. The diagnostics will indicate which systems are operational and which are not. The built-in signal generator, which is part of the self-diagnostic system, can be used to set just the output level if another signal source is not available.

Enhanced metal compensation

Univox PLS-X's are equipped with a unique Parametric MLC (Metal Loss Correction) to fine tune for the effects of metal loss. It allows the installer to further compensate for metal attenuations effects and not just simply by increasing level from one default frequency. *See graph.*



Coverage Area in m^2/ft^2

Loop Design	No Metal Loss Free field, up to 25m/*82ft* loop segment width	Metal Loss 4.5 dB attenuation, max 7m/*22ft* segment width	High Metal Loss 8 dB attenuation, max 4m/*13ft* segment width
Perimeter, 1:1 Aspect Ratio	130 /*1400*	50/*540**	-**
Perimeter, 1:2 Aspect Ratio	170/*1800*	100/*1000**	-**
Figure 8, 1:1 Aspect Ratio	250/*2700*	200/*2100*	140/*1500*

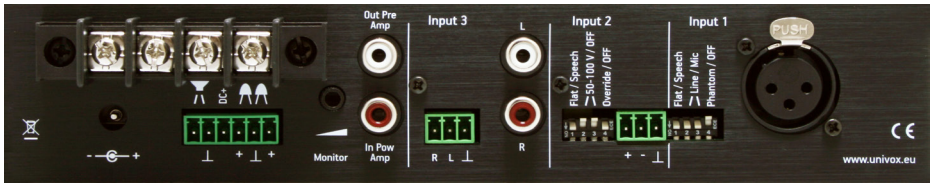
* Coverage area limited by max segment width
** Univox SLS is recommended

Hearing excellence since 1965

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Technical data Univox PLS-X1

Induction Loop Output RMS 125 ms	
Max Drive Voltage	22Vpp/7.8 Vrms
Max Drive Current	4.7 Arms
Power	
Power supply	110-240 VAC primary switched class V electronic power supply
Back panel interface	
Input 1	Balanced XLR
	Programmable Bass Cut Filter@150 Hz - Speech/Flat, Line/Mic, Phantom Power +12 VDC On/Off
	Sensitivity: -50 dBu (2.5 mVrms) to +10 dBu (2.6 Vrms)
Input 2	Balanced Phoenix Screw Terminal Block
	Dip switch programmable: Low Cut Filter@150 Hz - Flat/Speech; line/50-100V 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 and Phoenix Screw Terminal Block
	Sensitivity: -24 dBu (30 mVrms) to +16.2 dBu (5 Vrms)
Out Pre-amplifier	Buffered output to connect multiple drivers
In Power-amplifier	Input for connectiong multiple drivers
Monitor control	Recessed trim potentiometer for 10W speaker and 3.5mm front panel headphone output
Monitor connection	Phoenix Screw Terminal Block
	10W speaker monitor output; 24V power output; Remote LED diagnostic output
Front panel interface	
Input 1-3	4 LED indicators (-18 dB to +12 dB), recessed trim potentiometers
Metal loss control	Switchable frequency knee point (100 Hz, 500 Hz,1 kHz, 2 kHz)
	Adjustable gain slope from 0 to 4 dB/octave
System Diagnosis	Checks Input connection, AGC, Pre and Power driver and Loop conductor with a pulsed 1 kHz signal (built in signal generator)
	On/Off switch to operate system, single LED indication
Loop Current Control	Recessed trim pot; 4 LED output level indicator (0-9dB)
Peak / Clipping	LED indicates if signal is peaking/clipping
Monitor	3.5 mm jack to monitor loop with headset
Power indicator	LED indicates correct power connection
Other Systems and Functions	
Frequency responce	75-6800 Hz
Distortion	< 1%
Dual Action AGC	Dynamic Range: > 50-70 dB (+1.5 dB)
	Attack time: 2-500 ms, Release time: 0.5-20 dB/s
Cooling	Internal cooling element
Physical	
Size	½ width 1U 19" rack mount
	Width 210 mm, Depth 255 mm, Height 44 mm
Mounting options	1U 19" rack mount (brackets included)* or Freestanding
	** Brackets for mounting side-by-side with another PLS-X, needs to be ordered separately.*
Weight	1.5 kg
Weight incl. power supply and box	2.50 kg
Part No	217100



Accessories and tools

Univox Listener



This easy to use loop listener indicates field strength levels of 400 mA/m and 200 mA/m in accordance with IEC 60118-4. It is an essential tool for the facility manager as well as an alternative assistive listening device for the Hard of Hearing.

Univox FSM 2.0



Engineered for simplicity, the Univox FSM 2.0 is a microprocessor controlled field strength meter featuring a simple 5 step programme for commissioning loop systems to the performance standard IEC 60118-4.

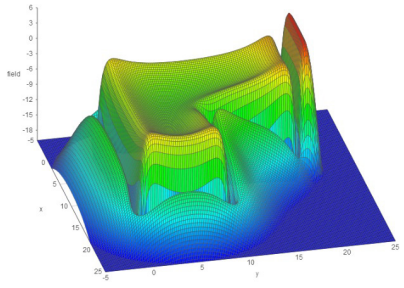
Copper foil



This insulated copper foil is only 0.25 mm thick and is easily concealed under most floor finishes. It is ideal for multi loop and Super loop installations.

Univox Loop Designer

Univox Loop Designer is a tool to aid in the design of Hearing Loop Systems in accordance with the International Induction Loop System performance standard IEC 60118-4.



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The User Guide, Installation Guide and Certificate of Conformity are available on both of our websites for download.

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