Univox® SLS-1/3/5

Class D Tech series

State of the art phased array loop drivers

Features

- Fully complementary and balanced system based on multiple class D stages for highest dynamic performance
- Exceptionally high efficiency
- Unique Parametric MLC for comprehensive metal loss compensation
- Built-in System diagnostics to isolate system errors
- Advanced real time protection circuit
- 50-100V input
- Programmable XLR, RCA and screw terminal input connectors
- Crest factor based Dual Action AGC for unsurpassed intelligibility
- High switching frequency 400kHz-1MHz for low interference
- Low frequency masking filter for voice enhancement
- Butterworth 24dB/octave low pass filter for effective noise blocking between equipment
- Priority Voice alarm system input
- Fan free convection cooled for silent reliable operation
- Monitor speaker output
- Front panel controls for easy access
- Recessed controls to prevent tampering
- ULD supported for easy project planning
- Extremely low carbon footprint
- Full width 1U 19" rack mount to save rack space
- 5 year warranty

Power efficiency and supreme audio quality

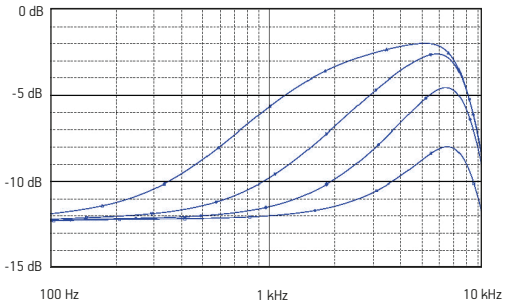
The Univox Super Loop System Class D Tech series is based on groundbreaking, fully complementary, multiple class D stages. The high efficiency design has resulted in a series of loop drivers considerably smaller and lighter than their predecessors, with enhanced output power optimized for modern Super Loop (phased array) system design. The combination of Univox technology, electronic transformers and silent fan free operation delivers unsurpassed loop drivers with high audio quality. The advanced and adaptive real time current, temperature and power protection makes SLS-series virtually indestructible with any load or short-circuit.

The self-diagnostic system

When the self-diagnostic is activated, input connection, AGC, pre-amp and power driver and integrity of the loop conductor, will be accessed. The diagnostics will indicate which systems are operational and which are in need of adjustment. The built-in signal generator, which is part of the self-diagnostic system, can also be used to set the output level.

Enhanced metal loss compensation

Univox SLS Class D Tech series is equipped with a unique Parametric MLC (Metal Loss Compensation) control, enabling fine tuning for different metal loss effects. It allows the installer to further compensate for metal attenuation effects and not just simply by increasing the level from one default starting frequency.



Coverage Area in m^2/ ft^2

Loop	No Metal Loss		Moderate metal Loss		High Metal Loss	
	Max coverage	**Low overspill**	**Max coverage**	**Low overspill**	**Max coverage**	**Low overspill**
SLS-1	600/6500	275/2900***	250/2700*	150/1600***	Not recommended	
SLS-3	1200/*13000*	550/*5900***	500/*5400**	300/*3200***	300/*3200***	200/*2150***
SLS-5	2000/*21500*	700/*7500***	750/*8000**	400/*4300***	400/*4300***	250/*2700***

Recommended max. segment width:

* max 7m/22ft

** max 4m/13ft

*** max 2m/6.7ft

Hearing excellence since 1965

univox BY EDIN

Technical data SLS Class D Tech series

	Univox SLS-1	Univox SLS-3	Univox SLS-5
Induction Loop Output RMS 125ms			
Max Drive Voltage	27Vpp/9.6Vrms	38Vpp/13.5Vrms	50Vpp /17.7Vrms
Max Drive Current, each channel	2 x 4,5Arms	2 x 6Arms	2 x 7.5Arms
Peak current using (EHIMA) speech	2 x 10.6App	2 x 15App	2 x 18App
Phantom power	+18VDC	+18VDC	+24VDC
Power			
Power supply	110-240VAC primary switched class VI electronic power supply;		
Power consumption, idle current	170 mA	170 mA	200 mA
@1.10 Ohm impedance load	20 W	30 W	50 W
Back panel interface			
Input 1	Balanced XLR		
	Dip switch programmable: Low Cut Filter@150Hz - Flat/Speech; Line/Mic; Phantom power On/Off		
	Sensitivity: -55dBu (1.5 mVrms) to +10dBu (2.6Vrms)		
Input 2	Balanced Phoenix Screw Terminal Block		
	Dip switch programmable: Low Cut Filter@150Hz - Flat/Speech; line/50-100V connection On/Off; Override On/Off (Input 3 signals higher than -6dB above AGC-knee overrides all other input signals)		
	Line sensitivity: -23dBu (50mVrms) to +20.6dBu (8.3Vrms)		
Input 3	Unbalanced RCA or Phoenix Screw Terminal Block		
	Sensitivity: -28dBu (30mVrms) to +16.2dBu (5Vrms)		
Monitor control	Recessed trim potentiometer for 10W speaker and 3.5mm front panel headphone output		
Monitor connection	Phoenix Screw Terminal Block		
	Speaker monitor output; 24V power output; Remote computer or LED diagnostic output		
Front panel interface			
Input 1-3	Recessed trim pots; 4 LED input level indicator (-18dB to +12dB)		
Parametric Metal Loss Control	Recessed trim pot, adjustable gain slope from 0 to 4dB/octave; Switchable frequency knee point (100Hz, 500Hz,1kHz, 2kHz)		
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 system, single LED indication		
Loop Current Control	Recessed trim pot; 4 LED output level indicator (0-9dB)		
Peak indicator	LED indicates clipping due to voltage saturation		
Monitor output	3.5mm jack to monitor loop with headphones		
Power indicator	LED indicates correct connection to power supply		
Other Systems and Functions			
Frequency response	75-6800Hz		
Distortion, Power Loop Driver	< 0.05%		
Distortion, system	< 0.15%		
Dual Action AGC	Dynamic Range: > 50-70dB (+1.5dB) Attack time: 2-500ms, Release time: 0.5-20dB/s		
Cooling	Fan free convection cooling (chassis cooling)		
IP class	IP20		
Physical			
Size	1U/19" rack mount		
	Width 430mm, Depth 150mm, Height 44mm (incl. rubber feet)		
Weight (net/gross)	1.9/2.65kg	1.9/3.55kg	
Mounting options	Rack mount (brackets included), wall mount or freestanding (rubber feet pre-mounted)		
Part No	**221000**	**223000**	**225000**

Product is designed to meet the system requirements of IEC60118-4, when correctly designed, installed, commissioned and maintained. Specification data complied according to IEC62489-1.

Accessories and tools

Univox Listener

This easy to use loop listener indicates field strength levels of 0dB and -6dB 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 Basic

Univox® FSM Basic is a calibrated measuring device, enabling assessment of background noise, field strength and frequency response of the system to comply with the requirements of IEC 60118-4.

Copper tape

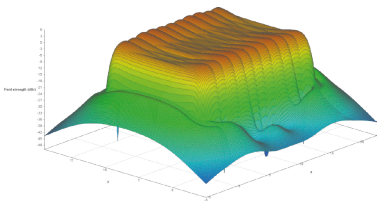
This insulated copper tape is only 0.25 mm thick and is easily concealed under most floor finishes. It is ideal for multi loop and Super loop installations.

Printed warning tape

Univox warning tape to be used for protection and warning of the copper tape cables. The tape is available in two widths – 50mm and 75mm.

Univox Loop Designer

ULD 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.



The User Guide, Installation Guide and Certificate of Conformity are available on univox.eu

Bo Edin AB / Univox | +46 (0)8 767 18 18 | info@edin.se | www.univox.eu