

# 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.

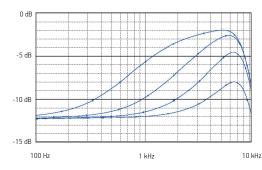
## The self-diagnostic system

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<sup>2</sup>/ ft<sup>2</sup>

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 reco	Not recommended	
SLS-3	1200/13000	550/ <i>5900***</i>	500/ <i>5400</i> *	300/3200***	300/3200**	200/2150**	
SLS-5	2000/21500	700/7500***	750/ <i>8000</i> *	400/4300***	400/4300***	250/2700***	

Recommended max. segment width:

\* max 7m/22ft

\*\* max 4m/13ft

\*\*\* max 2m/6.7ft





Univox SLS-1 Univox SLS-3 Univox SLS-5

Induction Loop Output RMS 125ms

Max Drive Voltage 27Vpp 38Vpp 50Vpp Max Drive Current, each channel 2 x 4,5Arms 2 x 7.5Arms 2 x 6Arms Peak current using (EHIMA) speech 2 x 10.6App 2 x 15App 2 x 18App

Power

Power supply 110-240VAC primary switched class V electronic power supply; Enhanced power connection with 4-pin DIN power connector

Back panel interface

Input 1 Balanced XLR

Dip switch programmable: Low Cut Filter@150Hz - Flat/Speech;

Line/Mic; Phantom Power +12VDC On/Off

Sensitivity: -55dBu (1.5 mVrms) to +10dBu (2.6Vrms)

Balanced Phoenix Screw Terminal Block Input 2

> 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: -15dBu (50mVrms) to +20.6dBu (8.3Vrms)

Input 3 Unbalanced RCA or Phoenix Screw Terminal Block

Sensitivity: -24dBu (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

System Diagnostics

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)

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 3.5mm jack to monitor loop with headphones Monitor output

Power indicator LED indicates correct connection to power supply

Other Systems and Functions

75-6800Hz Frequency response Distortion, Power Loop Driver < 0.05% Distortion, system < N 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** 

1U/19" rack mount Size

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

## 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 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 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.

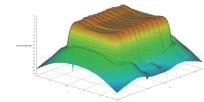


### Printed warning tape

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



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