

**Disconnect the mains power before removing the cover.**

**IN1:**

S2&S3: open/closed = Phantom voltage pin 2&3 off/on. (Default=on)  
 S1&S20: open/closed = Microphone level/Line level. (Default=Microphone)

**IN2:**

S9&S12: open/closed = Phantom voltage pin 2&3 off/on. (Default=off)  
 S4&S21: open/closed = Microphone level/Line level. (Default=Line)

**IN3:**

S14&S15: open/closed = Phantom voltage pin 2&3 off/on. (Default=off)  
 S13&S22: open/closed = Microphone level/Line level. (Default=Line)

**AGC:**

S18: open/closed = AGC off/AGC on. (Default=AGC on)

**Priority:**

S8(IN1), S10(IN2) & S11(IN3): closed = The input overrides the other inputs. (Default S8=closed, S10&S11=open)  
 S5(IN1), S6(IN2) & S7(IN3): closed = The input will be overridden by the other inputs. (If the strap is open the input will not be overridden independent of the settings of S8,S10&S11). (Default S7=closed, S5&S6=open)

**IMPORTANT!** Do **NOT** change the settings of S16, S17 & S19!



**WARNING!**  
 Live terminals enclosed!

# PLS-900

Univox Loop Amplifier  
 Installation Guide



Maximum area coverage in free field conditions:

- With 4 parallel multi-loops 1800m<sup>2</sup>
- With a perimeter loop 1:1-1:3 room ratio 700m<sup>2</sup>

Note that metallic interference will impact on the coverage by 30% to total dampening depending on loop wire placement.

PLS-900\_jrGb\_120710.indd Copyright © Bo Edin AB

# Univox® PLS-900 installation guide

## General planning and installation procedures.

### 1. Preparations

- a) If the loop cable is already planned, install according to the drawings. Then read clause 2.
- b) If the loop cable is already planned and installed, read clause 2.
- c) If the loop cable is to be planned and installed "in situ", please read the following hints.

#### Hints for planning the loop cable:

- Use a 2x2.5mm<sup>2</sup> 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 on page 3.
- If the space for the loop cable is limited, a flat copper foil (Part No 861023 or Part No 861025) 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.univox.eu](http://www.univox.eu) for more information.
- Beware of the background noises created by other electrical equipment when planning the loop system.
- Proceed to clause 2.

### 2. Installation.

Mount the amplifier in a 19"-rack. **IMPORTANT!** The amplifier must have free access to normal room temperature. If the amplifier is to be mounted on a wall, the 6 rubber feet attached shall be mounted. The amplifier can be mounted horizontally.

**Connect the loop cable.** Connect the loop cable to terminal **F** on the rear panel. Please look at page 4 for 1- or 2-turn loop connections.

**Connect signal source/s** to the inputs "IN1-3", **K, L and M** on the rear panel. See page 4 for balanced/unbalanced connections. The inputs "IN1-3" can be set to different sensitivities according to table. If you need to set IN1-3 otherwise than default, remove the cover and set the switches S1-20 according to table at page 4. **IMPORTANT!** Disconnect the mains power before removing the cover.

	Sensitivity	Impedance	Priority	
IN1 / Mic	0.5mV-100mV	7.8 kOhm	IN1>IN3	Default setting
IN1 / Line	25mV-4V	-"-		
IN2 / Mic	0.5mV-100mV	-"-		
IN2 / Line	25mV-4V	-"-		Default setting
IN3 / Mic	0.5mV-100mV	-"-		
IN3 / Line	25mV-4V	-"-	IN3<IN1	Default setting

#### Default settings:

- IN1** = Microphone level, at input signal IN1 overrides IN3.
- IN2** = Line level, no priority function.
- IN3** = Line level, IN3 is overridden if input signal is present at IN1.

**Input-AGC.** The AGC-function for inputs IN1-3 can be disabled by setting the switch S18 according to table on page 4.

#### Connect Line Outputs:

Univox® PLS-900 has 2 line outputs; **I** = "LINE OUT" 0dBm without the input AGC activated (linear), and **J** "SLS" 0dBm with the AGC-function activated.

**Connect mains power** to the inlet **E**. The LED **D** on the front panel starts lighting. Univox® PLS-900 has an automatic resettable built-in mains fuse. If it's triggered by any reason, please remove the mains power and let the amplifier cool off. Investigate the possible fault reason before reconnecting the mains power.

### 3. Function check (basic start up check)

**Adjust the input levels** one by one letting the LED **A1-3** on the front panel emitting at the peaks of the program signal source (AGC knee).

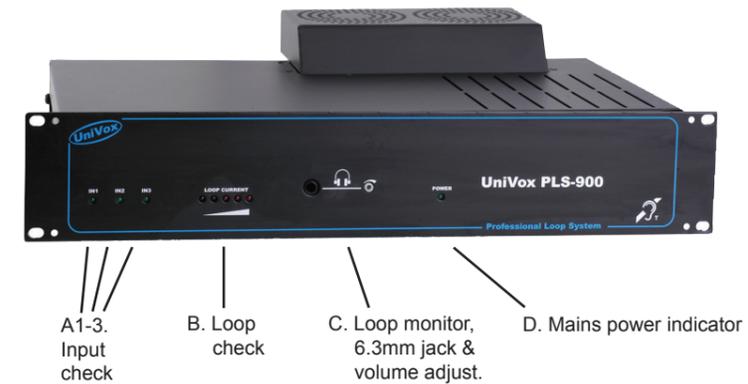
**Increase** the Loop Current trimmer **G** until the first LED **B** on the front panel lits up. Use the loop monitor output **C** for direct listening to the output current (magnetic field). If necessary, adjust TREBLE with the potentiometer **H**.

### 4. Certification – Very important!

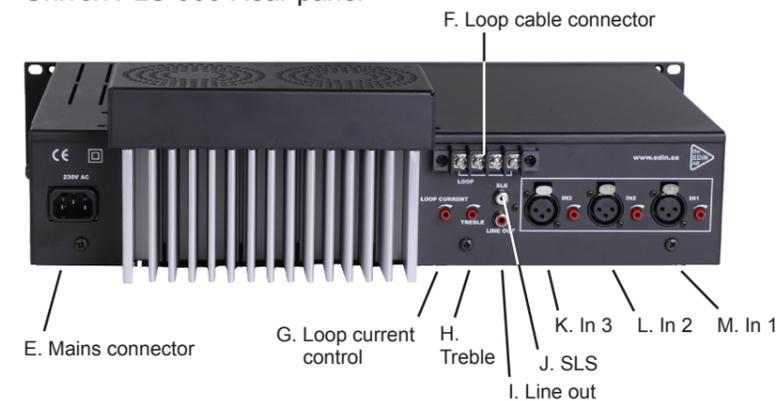
**Adjust the amplifier** following "The Univox Way" for certification according to IEC-60118-4 (BS6383) using a field strength meter, like the Univox FSM 2.0. The FSM follows the standard of Sound Meter with correct integration time and true RMS measurement.

**5. Inform people responsible for the loop system** how to use the system. Recommend a listening device for a daily basic check of the loop system. Univox Listener is a high quality listening device with built-in level check.

Univox PLS-900 Front panel



Univox PLS-900 Rear panel



Recommended minimum loop wire area for Univox® PLS-900 when installed to an existing perimeter loop system

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



Univox® FSM 2.0 Field Strength Meter  
Part No 401040



Univox® Listener Loop testing device  
Part No 401010

Distributor: