

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 1800m²
- With a perimeter loop 1:1-1:3 room ratio 700m²

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 2x2.5mm² 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 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).

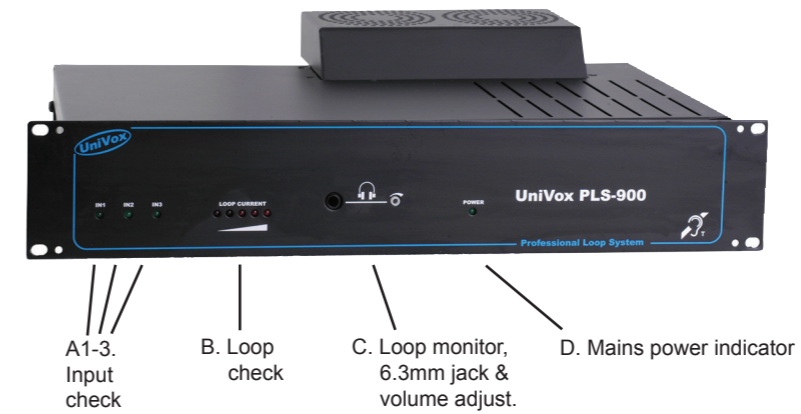
Increase the Loop Current trimmer **G** until the first LED **B** on the front panel lits up. Use the loop monitor output **C** for direct listening to the output current (magnetic field). If necessary, adjust TREBLE with the potentiometer **H**.

4. Certification – Very important!

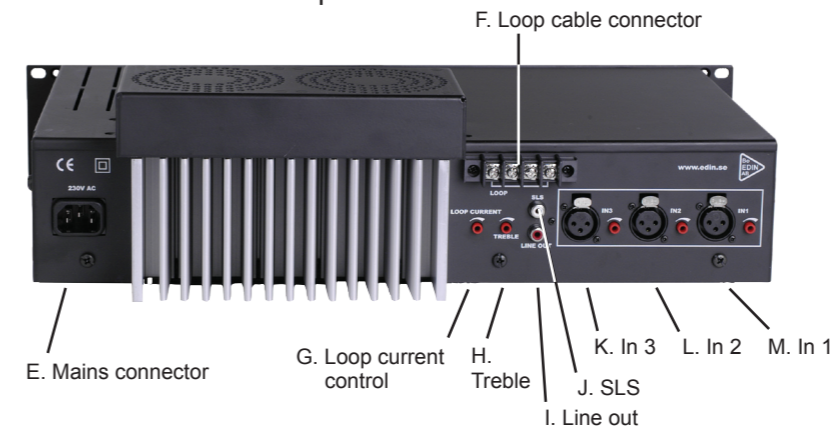
Adjust the amplifier following "The Univox Way" for certification according to IEC-60118-4 (BS6383) using a field strength meter, like the Univox FSM 2.0. The FSM follows the standard of Sound Meter with correct integration time and true RMS measurement.

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



Univox® FSM 2.0 Field Strength Meter
Part No 401040



Univox® Listener Loop testing device
Part No 401010

Distributor: