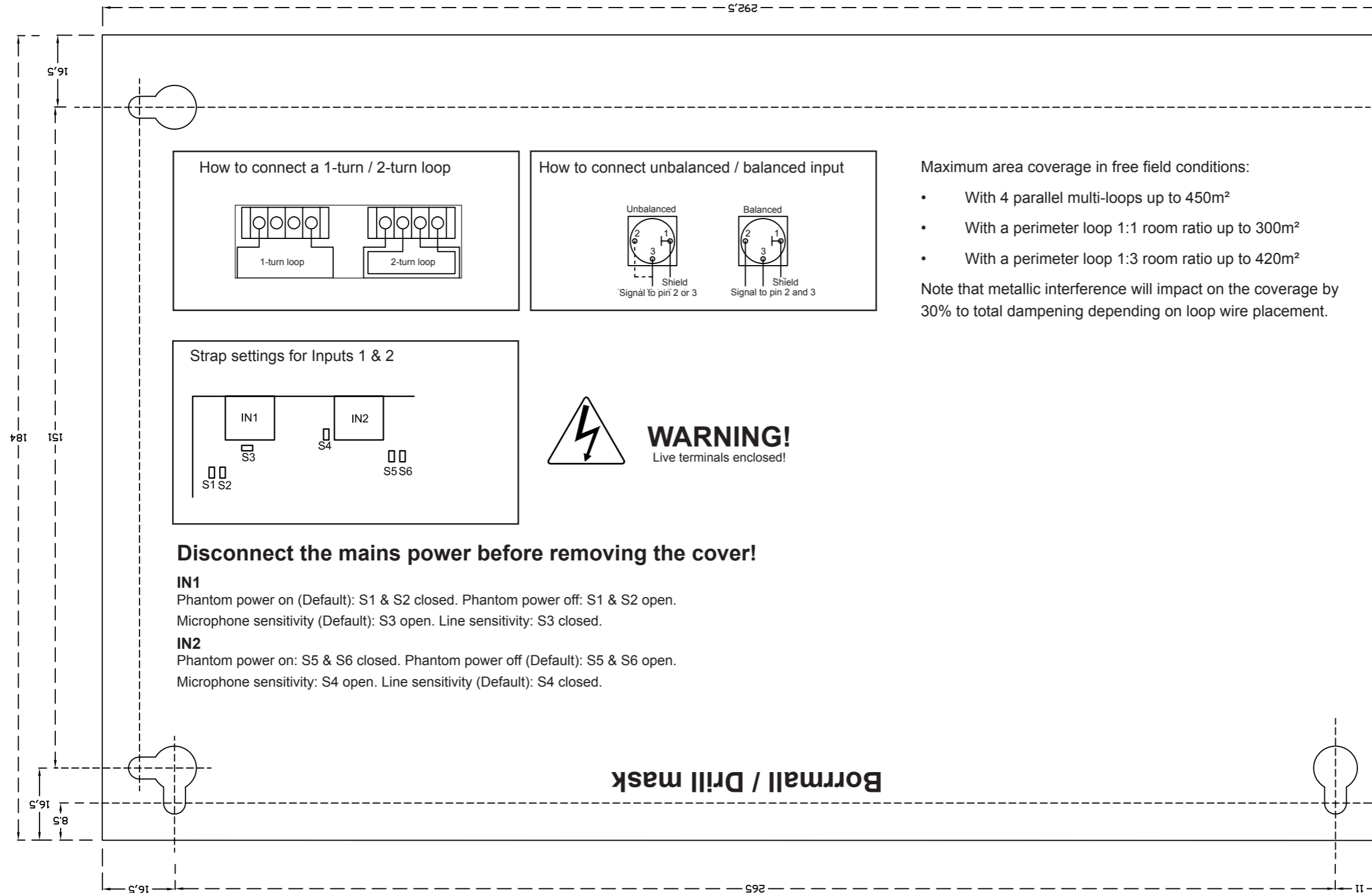


PLS-100

Univox Loop Amplifier Installation Guide



Maximum area coverage in free field conditions:

- With 4 parallel multi-loops up to 450m²
- With a perimeter loop 1:1 room ratio up to 300m²
- With a perimeter loop 1:3 room ratio up to 420m²

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

Univox® PLS-100 Installation Guide

General planning and installation procedures

1. Preparations

- If the loop cable is already planned, install according to the drawings. Then read clause 2.
- If the loop cable is already planned and installed, read clause 2.
- If the loop cable is to be planned and installed "on site", please read the following guidelines.
 - Use a 2x2.5mm² twin loop wire, for high flexibility to 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 at 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 reinforced concrete and other metal structures. 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/parallel to the loop wire.
 - Do not place the loop wire close to and parallel with reinforcement iron or other metal structures. This will reduce the magnetic field strength.
 - If the smallest distance in a loop exceeds 5-10 meters, please consider another loop configuration, for example a figure-eight loop or plan for a SLS System (see next paragraph).
 - Please be aware of the overspill effect. If the overspill is not acceptable, plan for a Univox® Super Loop System with minimized overspill. Log on to www.univox.eu for more information.
 - Beware of the background noise created by other electrical equipment when planning the loop system.
 - Proceed to clause 2.

2. Installation

Mount the amplifier

Mount the amplifier vertically or horizontally. Use the drill mask to mark the positions for the holes. If the amplifier is to be mounted in a 19"-rack, use a separate mounting panel (Part No 289011). The rubber feet should not be removed. The amplifier must have free access to normal room temperature.

Connect the loop cable

Connect the loop cable to terminal F. on the rear panel. Please see page 4 for how to do 1- or 2-turn loop connections.

Connect signal source/s

Connect signal sources to the inputs IN1-3, K., L. and M. on the rear panel. See page 4 for balanced/unbalanced connections. The inputs IN1 and IN2 can be set to different sensitivities according to table (right). If you need to set IN1 or IN2 otherwise than default, remove the cover and set the switches S1-6 according to the instruction at page 4.

	Sensitivity	Impedance	
IN1 / Mic	0.5mV-180mV	10kOhm	Default setting
IN1 / Line	50mV-10V	10kOhm	
IN2 / Mic	0.5mV-180mV	10kOhm	
IN2 / Line	50mV-10V	10kOhm	Default setting
IN3	50mV-10V	10kOhm	

Connect line outputs

Univox® PLS-100 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

Connect mains power to the inlet E. The LED D. on the front panel starts lighting. Univox® PLS-100 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 A. on the front panel light up distinctively at the peaks of the program signal source (AGC knee).

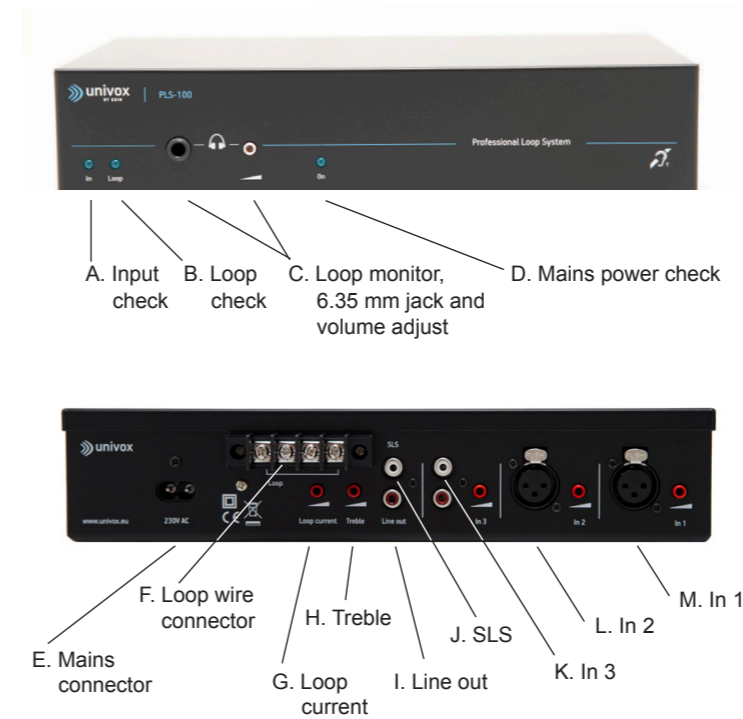
Increase the Loop Current trimmer G. until the LED B. on the front panel lights up. Use the loop monitor output C. for direct listening to the output current (magnetic field). If necessary, adjust TREBLE with the potentiometer H.

4. Certification – Very important!

Adjust the amplifier following "The Univox Way" for certification according to IEC-60118-4 using a field strength meter, like the Univox® FSM 2.0. If you don't have access to the instrument, hire the service! Certificate and measuring guide are included with each amplifier.

5. Information

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. The Univox® Listener is a high quality listening device with built-in level check.



Recommended minimum loop wire area for Univox® PLS-100, when installed to an existing perimeter loop system

Loop area m ²	Wire area, 1-turn-loop	Wire area, 2-turn-loop
>170	5.0mm ²	Not recommended
75-170	3.0mm ²	Not recommended
50-75	1.5mm ²	2x1.5mm ²
35-50	1.0mm ²	2x1.0mm ²
<35	0.75mm ²	2x0.75mm ²



Univox® FSM 2.0
Field Strength Meter
Part No 401040



Univox® Listener
Loop Receiver/Testing Device
Part No 401010

Distributor