

UniVox[®] SLS Super Loop System

Installation guide for: UniVox[®] SLS-700

Other products in the SLS-family: UniVox[®] SLS-100 (170 m²) UniVox[®] SLS-300 (300 m²)

Note:

No installation is completed before it is <u>adjusted</u> according to the international standard <u>IEC 60118-4</u> (BS 6083).

For more details please read the installation guide for PLS-700.

For more technical details and information, contact your authorized dealer:

Bo Edin AB

UniVox[®] SLS-700, Super Loop System

Advantages compared to a conventional Loop System:

- 1. Extremely low overspill.
- 2. Levelled field stregth, even when strong reinforcement is present.
- 3. Reduced direction sensitivity.
- 4. No middle drop caused by reinforced concrete.

System description:

A SLS-system consists of 2 loop amplifiers(one "Master" with an odd serial-number and one "Slave" with an even serial-number), one connection cable and a 90 degrees shift filter which is built-in in the "Master"-amplifier.

Both amplifiers are based on our loop amplifier UniVox[®] PLS-700.

The amplifiers are connected together with the connection cable. Each amplifier is connected to a separate loop configuration. The loop configurations must be carefully calculated to achieve an optimized loop system. Read more about this on page 3.

Placement:

Place the amplifiers close to each other. Read the separate installation guide regarding placement in general.

Connecting the amplifiers:

Input signals **must** be connected to the "Master amplifier" Read the separate installation guide. Don't connect any input signals to the "Slave amplifier".

Connect the "Master" and the "Slave" amplifiers using the connectors marked "SLS" on the back side. Use the supplied connection cable for this purpose.

Connect the "A-loop"-configuration respective the "B-loop"-configuration to the "Master" respective "Slave" amplifier.

Adjustment:

- 1. Start to set all regulators in the "Slave"-amplifier to minimum position.
- 2. Place the field strength meter FSM in position (1), see figure on page 3. Read the "Measurement method for Induction Loop Systems" how to use the FSM Field Strength Meter. Adjust the field strength level using the "Loop current control" on the back of the "Master"-amplifier. Repeat the procedure for the "Slave"-amplifier with the FSM in position (2). Fine tune the amplifiers if necessary.



Basic technical information about UniVox[®] SLS-700, Super Loop System. 2 loop configurations and 2 loop amplifiers with a phase shift filter.

The SLS-system consists of 2 loop configarations according to figure below.

Use 2x2.5mm²-cable. This gives 2 alternatives:

(1) A two-turn loop of 2.5 mm² area, or

(2) A one-turn parallell loop with a total area of 5 mm².

Start with alternative (1). If the measurment values of the IEC-norm is not achived, try alternative (2).

Note:

- 1. The cables in the figure is not jointed in the corners (for visual clarity). In reality the cables shall be installed in parallel lines, starting and ending together in the corners.
- 2. The amplifiers can be connected at any point in the loop system. In this figure they are connected in the lower left corner.
- 3. The relation in sizes between the different sectors can be altered within a tolerance of 5%.

4. For bigger or smaller areas another split in the number of sectors can be chosen (e.g. 1/6, 1/12, 1/16). This must be considered when planning the premises.

