



# Univox<sup>®</sup> DLS-70

Loop amplifier

## Installation Guide



DLS-70 Loop amplifier

Part No 211020

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## Introduction

Thank you for having chosen a Univox® DLS-70. We hope that you will be satisfied! Please read this Installation Guide carefully before installation and use of this product.

DLS-70 is a professional loop amplifier for use to enhance speech intelligibility for hearing aid users with the hearing aid in T-position. All Univox® amplifiers have a very high output current capability resulting in powerful and secure products fulfilling existing standards, IEC 60118-4.

## The box contains

Start to check the parts included in the package:

- DLS-70 Loop amplifier
- Power lead
- Installation Guide
- Certificate for induction loop systems

# Overview

## Front



1. Bass
2. Treble
3. Volume/Loop current
4. Loop current indicator
5. Mains power indicator

## Rear

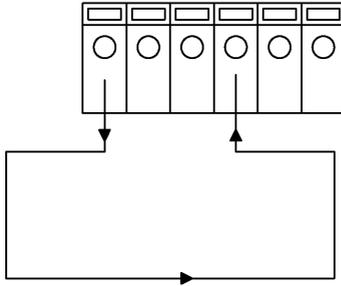


6. Mains power
7. Loop pad connector
8. Loop wire/indication connectors
9. Line
10. Microphone

# DLS-70 connectors

Twine the wire, insert and push the wire to the end of the connector hole. The connector will automatically fasten and secure the wire. To release, press the knob on top of the connector hole with a screwdriver and simultaneously release the wire.

## 1-turn loop

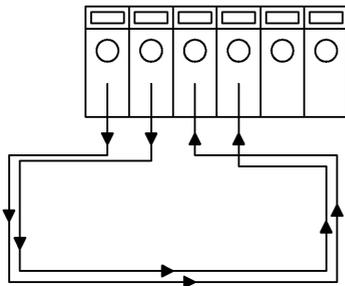


Inputs (9) and (10) 2 pcs

(9) Line, 30 mV-10 V/56 kOhm, without phantom voltage.

(10) Microphone inputs, 4.5 kOhm, with built in phantom power (12 V DC) for electret microphones. These inputs could also be used for line levels up to 10V.

## 2-turn loop

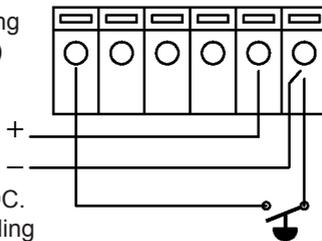


The Loop current control (3) shows that the amplifier, the cabling and the signal source/es are OK. It doesn't show the field strength level in the loop. Use a FSM-meter to check the level, read page 4.

Set the hearing aid switch in position "T" or "MT".

Indication signal (signaling through the loop system)

Voltage input. 5-24 V AC/DC. If DC input, polarise according to figure.



Push button or other signal source that makes a short circuit.

# Installation

1. Place the amplifier at a suitable place. By using the keyholes it can easily be mounted on a wall (use the drillmask, see last page), or just placed on top of a flat surface. The air ventilation holes must not be covered.
2. Connect the loop wire. Please read next page how to connect a 1 or 2-turn loop. **Alt.** A loop pad should be connected to (7).
3. Connect the signal Source/es to the input connector/s.  
Line, Mic 1 and Mic 2, (9) and (10).
4. Connect the mains power to DLS-70. The LED (5) on the front panel shall light. DLS-70 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.

## Function check (basic start up check)

Increase the Loop Current trimmer (3) until the LED (4) on the front panel "lights up".

### Recommended minimum loop wire area for DLS-70

Loop area	Cabel area 1-turn loop	Cabel area 2-turn loop
50-70 m <sup>2</sup>	Not recommended	$\geq 2 \times 1.5 \text{ mm}^2$
0-50 m <sup>2</sup>	$\geq 1 \text{ mm}^2$	$\geq 2 \times 1 \text{ mm}^2$

## Measurment and certificate

Adjust the amplifier following "The Univox Way" for certification according to IEC-60118-4 (BS6383) using a field strength meter, like the FSM. The FSM follow the standard of Sound Meter with correct integration time and true RMS measurement. If necessary, adjust Treble and Bass with the potentiometers (1) and (2).

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 easy to use listening device.

## Security/Warranty

Basic knowledge in audio and video installation techniques is required to achieve existing regulations. The installer/planner is responsible for the installation hereby avoiding any risk or cause of fire.

Please also note that the warranty is not valid for any damage or defects on the product due to incorrect or incautious installation (or usage) or maintenance.

Bo Edin AB is not responsible for interference from radio or TV equipment, or damage caused by the product to any property or liable for the consequences of such damages.

## Maintenance and care

Under normal circumstances the product do not need any special maintenance.

Should the unit become dirty, wipe it with a clean damp cloth. Do not use solvent or strong detergents.

## Trouble shooting

Verify the control LEDs following the instructions in this installation guide. Use Univox Listener to check the sound quality and basic level of the loop.

Should the product not work after having made the tests as described above, please contact the local distributor of the product for further instructions.

## Service

Should the product not work after having made the product test as described above, please contact the local distributor of the product for further instructions. If the product should be sent to Bo Edin AB, please enclose a filled Service Form, see [www.univox.eu](http://www.univox.eu), Support.

## Technical data



For additional information, please refer to product datasheet/brochure and CE certificate which can be downloaded from [www.univox.eu](http://www.univox.eu), Downloads. If required other technical documents can be ordered from your local distributor or from [support@edin.se](mailto:support@edin.se).

## Environment/Correct Disposal



When this product is finished with, please follow existing disposal regulations. Thus if you respect these instructions you ensure human health and environmental protection.

## Measuring devices

Univox® FSM 2.0, Field Strength Meter

Instrument for professional measurement and control of loop systems according to IEC 60118-4.



Univox® Listener

Loop receiver for fast and simple check of the sound quality and basic level control of the loop.

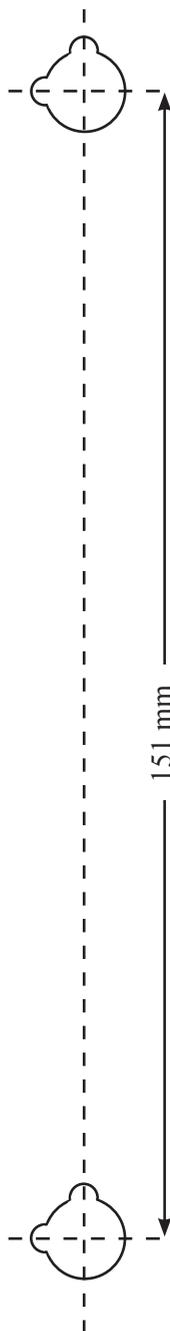


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Distributor

Univox by edin, the world's leading expert and producer of high quality hearing loop systems, created the very first true loop amplifier 1969. Ever since our mission is to serve the hearing community with the highest degree of service and performance with strong focus on Research and Development for new technical solutions.

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