



Setup Instructions for Loop Amplifier

UNIVOX 380



2001-12-07
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1. LOOP OUTPUT. Place the amplifier in a suitable position. It must not be covered. Connection loop wires must be twisted. Normally **single turn** loops should be used, but two turns loops give better result especially in smaller areas. Use a **twin cable for trial purpose**. Select according to table below:

Area m ²	Pin No	1-turn	2-turn	Level
100-170	1&2	$\geq 3\text{mm}^2$	----	0 dB
75-100	1&3	$\geq 3\text{mm}^2$	----	-3 dB
50-75	1&4	(1.5mm ²)	$\geq 2 \times 1.5\text{mm}^2$	-6 dB
35-50	1&5	(0.75mm ²)	$2 \times 1.5\text{mm}^2$	-9 dB
≤ 35	1&6	----	$2 \times 1.5\text{mm}^2$	-12 dB

Loop current adjustment is done with 3 dB steps at the connector. Finer adjustment can be made (normally not needed) with the trimmer marked "LOOP ADJ" at the printed circuit board (fig 4, page2).

UNIVOX 380 fulfils the International standards for Loop Systems up to 170m² (squared loop, 1.2 m above the loop level). Reinforced concrete and other metallic objects can reduce covered area strongly. **The installation not is completed until Field Strength is verified according to international regulations (IEC 60118-4). For correct measurement use FSM, field strength meter, together with the standardized artificial speech for correct result. CD & meter are available.**

2. TONE SIGNALING & DOORBELLS :

All connections except Fig 2D generates a signal, rich of harmonics through the loop.

- 2A.** Door signal from existing system, **5-24VAC/DC**. For DC operation connect + to pin 8. The tone signalling output from a **UNILUX 75F** can be connected to this input: connect **75F** pins 13&14 to **380** pins 8 and 9 respectively.
- 2B.** Door and/or telephone bell with current supplied from the **380**. 12V AC max. 1.6A.
- 2C.** Tone signalling by closing contacts, pins 7&8 is strapped.
- 2D.** Voltage outputs, 12V AC, max. 1.6A, no tone signalling via the loop.

3. INPUTS/OUTPUTS:

Potentiometer "In Adj" sets the input sensitivity. It is factory set to 50mV. There is normally no need for adjustments because of the Dual Action AGC-circuitry.

IN1/IN2 = 7mV-10V/330Ohm, standard (uncut resistor). 150kOhm with cut resistor.
IN3 = 7mV-10V/100kOhm. Stereo input. Phantom Voltage matches all Bo Edin microphones. A 50/100 Volts-line needs a separate transformer close to the **UNIVOX 380**.

Auto Mute function (noise gate). If input signal is below AGC-knee level, (AGC-LED is off) the amplifier mutes after 10 seconds. This reduce the risk of magnetic self oscillation when the AGC circuitry slowly increases the gain. Disable this function by removing the jumper **Auto mute** if there is a risk for quiet parts to be muted unnecessarily.

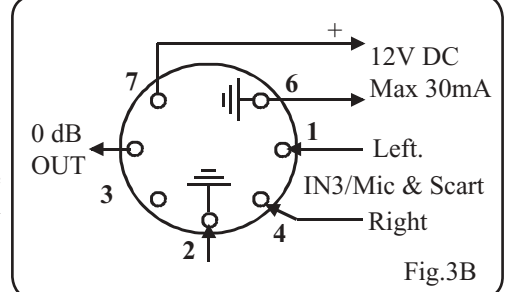
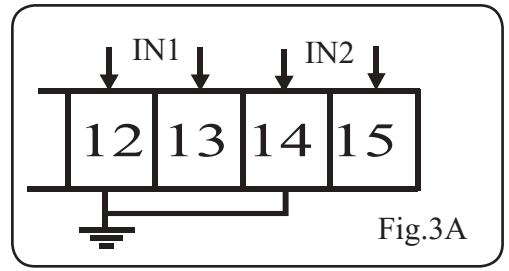
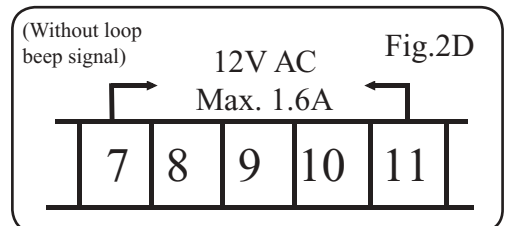
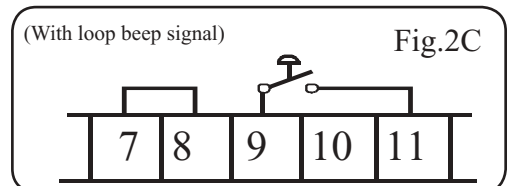
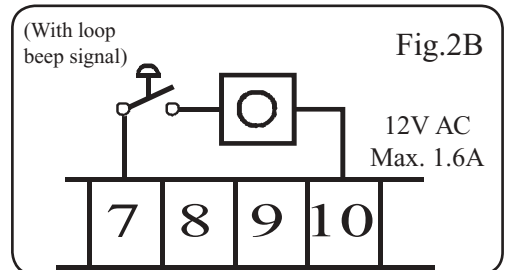
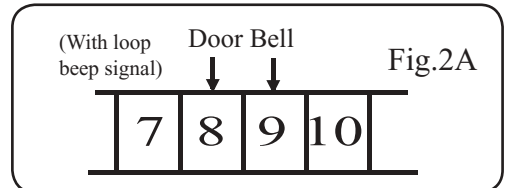
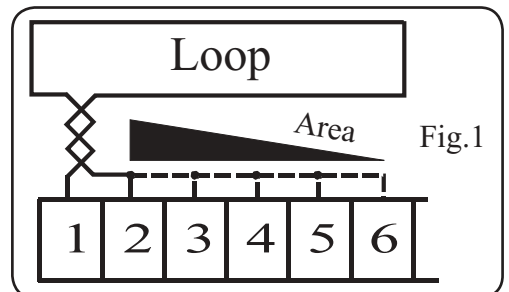
Note: When using high impedance signal (not recommended) into IN1 or IN2, the respective resistors marked **IN1/IN2** on the Printed Circuit Board must be cut. Normally not necessarily

Input 3 = IN3 on 7-pin DIN-connector on the right hand side. This connector also includes the line output 0dB and a small power supply output. Please see Fig. 3B. The microphone 13B can be used with the TV-loudspeaker if a Scart connector is missing.

Note: No unconnected wire is permitted. The signal wires must be kept as far as possible from the loop cable. Avoid parallel installations at distances of less than 200mm. Crossovers are permitted.

4. STARTING UP: Connect **UNIVOX 380** to the mains outlet ("ON" LED lights up). Please note that the amplifier is constructed to be continuously powered. This actually increases the apparatus lifetime. The stand-by power consumption is very low. The LED marked "AGC" indicates when the input signal is **high** enough. The LED marked "LOOP" indicates when there is **current floating** (sound in the Hearing Instrument at T-position) in the loop.

A corresponding jumper inside the amplifier activates the AGC & LOOP Led. (Fig 4).
Check the frequency response and field strength according to the UNIVOX way to fulfil the BS 6083 & international standard IEC 60118-4.



WARNING!

LIVE TERMINALS ENCLOSED. Always remove the power cord cable before opening the amplifier!



**AutoScart.**

Switches the sound automatically between TV-set and SAT, VCR, digital box, etc. No external power supply needed.

SCART4,

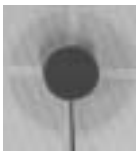
mono, open ends, 5 meter wire.



SCART5, mono, DIN for direct plug-in to UNIVOX 380, 5 meter wire.

Microphone

I3A, with velcro-tape. Attaches at the loudspeaker if Scart cannot be used.

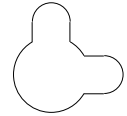
**UniEar,**

makes it easy to check the field strength and sound quality of a loop, using stereo headphones. Indicates field strength peaks for +6 and +12dB according to BS 6083 part 4. Available with build-in small loudspeaker for listening close to the ear.



Field Strength Meter, **FSM**. Instrument for noise, freq.response, fieldstrength of loop amplifier systems according to BS-6084, part 4

Mounting Drill Guide UNIVOX 380



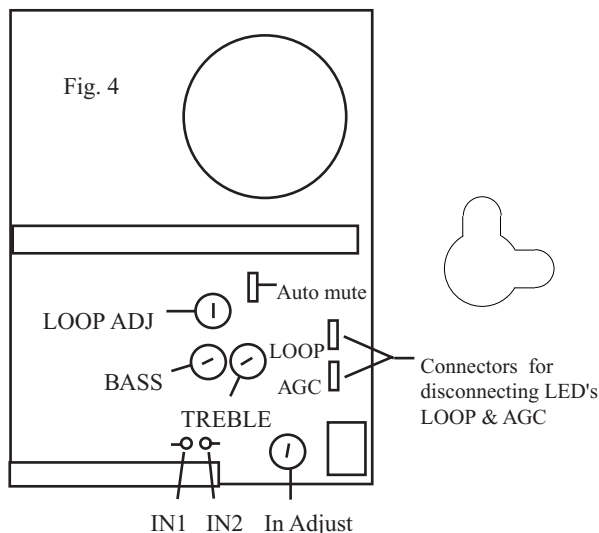
This product fulfil EMC-directive **89/336/EEC** only if:

- The installation is done accordingly to this instruction.
- The product is not by any way modified.
- The *system** is not self-oscillation.
- No disturbances are inserted in any way to the system.

* *With system means all directly or indirectly connected products or wires.*

INSTRUCTION FOR REMOVING THE PCB:

- Disconnect the power cord from the wall outlet.
- Untight the 2 screws at the short sides and lift the cover.
- Remove the two screws holding the heat sink.
- Remove the screw holding the PCB.
- Unplug the transformer connector.

**Produced by:**

Bo Edin AB
Stockby Hantverksby 3
SE-181 75 LIDINGÖ

For questions and information please contact:

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