

Adjustments

IN1-2, MIC1-3

All inputs are controlled by trim potentiometers on front panel. To achieve better dynamic range it is preferable to adjust the input trimmers so that the AGC-LED only occasionally lights up at normal peaks in the program signal.

- If an signal source with high impedance is connected to IN1-2, the internal switch "IN1-2 IMPEDANCE" shall be set in "HIGH" position and a shielded signal cable shall be used. Inputs not connected shall always be set in "0"- position!

OUTPUT

Adjust the potentiometer **OUTPUT LEVEL** and measure the magnetic field strength with a field strength meter. Adjust until recommended field strength is achieved. (According to IEC-118.4, 100 mA/m RMS, 100-5000Hz). A simplified adjustment can be done with help of the Output LED-instrument **OUTPUT AMPS**. See approximate examples in table below.

Loop area	Loop config./wire	Output RMS	Output peaks
< 35 m ²	2-turn/0,38 mm ²	yellow LED	(green LED)
35 m ²	1-turn/0,76 mm ²	yellow LED	green LED
35 m ²	2-turn/0,38 mm ²	yellow LED	(green LED)
50-75 m ²	1-turn/0,76 mm ²	yellow LED	green LED
75-100 m ²	1-turn/1,50 mm ²	green LED	red LED
100-150 m ²	1-turn/3,00 mm ²	green LED	red LED

If needed, adjust the **EQUALIZER** by listening.

EQUALIZER

Adjust the equalizer to obtain good intelligibility when listening via a hearing aid.

- HIGH increment will compensate losses in high frequency area due to e.g. reinforcement in the building construction.
- MID increment will increase the speech intelligibility.

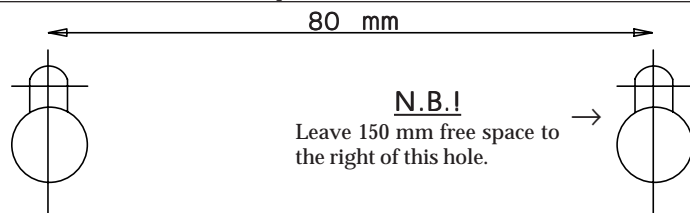
LOW - 50 Hz, ± 9 dB.

MID - 800 Hz, ± 9 dB.

HIGH - 12 kHz, ± 9 dB.

(The frequency response is FLAT, 125-5000 Hz, when EQ trimmers are set in mid position.)

Wall mounting
pattern XL-150M



INSTALLATION INSTRUCTIONS INDUCTION LOOP AMPLIFIER

XL-150M

LIC AUDIO AB

P.O. Box 603

SE-194 26 UPPLANDS VÄSBY

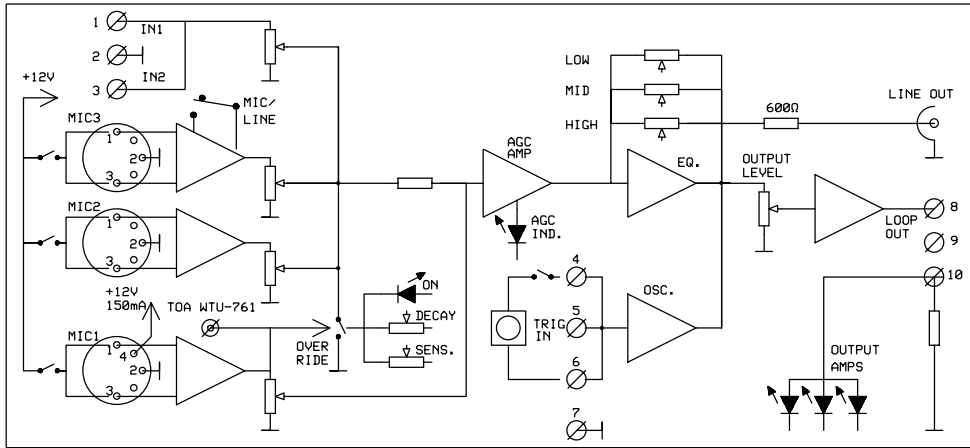
PHN: + 46 8 590 00 450

FAX: + 46 8 590 00 490

Your distributor:

LIC AUDIO 

Block diagram XL-150M



Installation hints

- Before installing an induction loop system the magnetic noise level should be measured. (Shall not exceed -25 dBA rel. 100 mA/m).
- Plan the installation so that signal cable and loop cable are not placed in parallel close to each other.
- Use appropriate cable due to loop area – see recommendations below.
- 230 V AC outlet must be available.
- The amplifier will be warm in use. Please inform the user.

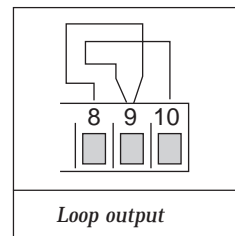
LOOP OUT

The loop wire is connected to terminal **8** and **10**. When 2-turn loop is installed, use terminal **9** as a join up point. See Fig. 1.

Recommended cross-section cable area

< 35 m ²	— 2 x 0,38 mm ² = 0,76 mm ²
35-50m ²	— 2 x 0,38 mm ² = 0,76 mm ²
50-75 m ²	— 2 x 0,38 mm ² = 0,76 mm ²
75-100 m ²	— 2 x 0,75 mm ² = 1,50 mm ²
100-150 m ²	— 2 x 1,50 mm ² = 3,00 mm ²

Fig. 1



REMARK.

- At 2-turn loop configuration, the magnetic field strength will increase, but high frequency response will decrease.
- At larger cross-section area than recommended, the amplification decreases and the coverage area will be smaller.

MIC 1-3

MIC1: 0,5 mV-40 mV / 600 ohm (8 Kohm).

MIC2: 0,5 mV-40 mV / 600 ohm (8 Kohm).

MIC3 [LINE]: 0,5 mV-40 mV / 600 ohm (8 Kohm) [35mV-3,5V / 600 ohm]

- **MIC 1, 2, 3** Inputs for balanced or/and unbalanced connection. See Fig. 2. Phantom power (12 V DC) is available via internal switches **PHA**.
- **MIC 1** Input supplied with an override-function. The sensitivity is controlled by "OVERRIDE SENS". Decay time is adjusted by "DECAY". The LED "ON" indicates that the override function is active.
- By the internal switch "MIC/LINE" the sensitivity can be changed.
- Wireless microphone receiver, TOA WTU-761, can be mounted and connected to **MIC1** input via the internal **J7/TUNER** terminal. See separate installation instructions.

IN1-2

IN1: 35 mV-10 V / 430 ohm / 200 Kohm. Terminal 1-2. See Fig. 3.

Impedance is adjusted with a internal switch "IN1-2 IMPEDANCE".

IN2: 35 mV-10 V / 430 ohm / 200 Kohm. Terminal 3-2. See Fig. 3.

Impedance is adjusted with a internal switch "IN1-2 IMPEDANCE".

- The trimmer "IN1-2" controls both inputs.
- When connecting a Stereo signal it is recommended to use **IN1 & 2** for left and right channel.

LINE OUT

Output, 0,775 V (0dB) / 600 ohm. Phono connector. See Fig. 3.

TRIG IN/OUT (Door bell installation etc.)

Fig. 4A: Trig input 4-24 V AC/DC. Terminal 5 is positive (+) when connecting DC voltage.

Fig. 4B: Tone indication at loop by a short circuit function.

Fig. 4C: Door bell or external telephone bell supplied from XL-150M. 12 volt AC / 1.6 A.

Fig. 4D: Voltage output, 12 V AC / 1.6 A.

All connections (except Fig. 4D) gives a tone indication to the loop.

Fig. 4A

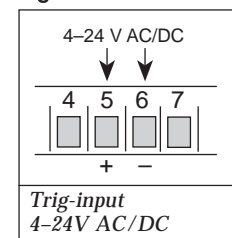


Fig. 4B

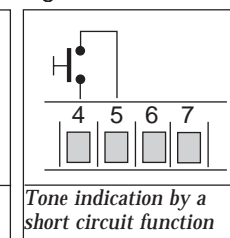


Fig. 4C

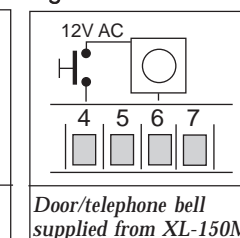


Fig. 4D

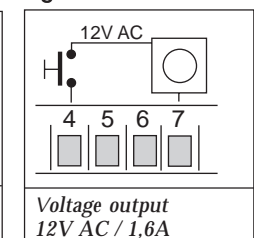


Fig. 2

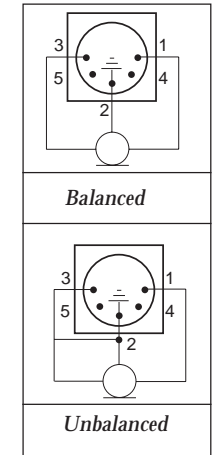


Fig. 3

