



## Description

The newly developed LAS180 is an Induction Loop Amplifier with professional solution for mounting at Induction Loops. The model can cover a square room with 21 x 21 meters or a rectangular room with 40 x 20 meters. It has three inputs which can all be used for microphones, or input 3 can switched in line-level for mixing desks. Switchable phantom power for the microphone inputs is existing. The LAS180 has been developed to cover areas up to 800 m<sup>2</sup> and it can be connected to professional microphones and line level.

#### Front panel Indicators and Controls

All regulating controls of the LAS180 are adjustable by screw driver to avoid unauthorized misplace. Each input has an own Mixing control in front of the compressor limiter. The compression level (reduced gain) is indicated on a bar graph with 4 LED's (0 to 18 dB), to allow the user to choose the best volume range for the application.

The master control sets up the output maximum current that is indicated on the current bar graph with 5 LED's (2 - 10 A). The model indicates power, loop OK and the protection status (PROTECT/LOOP OK/POWER) of the output level on the front panel. The "Loop OK"-lamp only luminescents, when the sound runs through the loop and truely indicates, that the loop is working. The model is suitable as table version and also for 19"-installations.

## **Rear panel Controls and Connectors**

The three audio inputs of the LAS180 are equipped with standard XLR jacks. The inputs 1 and 2 are microphone level controlled, input 3 is selectable by using the blue push button on the rear side between mic.- and line-level.

Phantom can be activated at all microphone inputs by using the second blue push button on the rear side. An 0 dB-output for cascade connection of the amplifier and INSERT-jack for additional looping-devices are available. The Loop Okoutput is a 12 V-output to drive the INFOindicator, when the loop is working. The loop connections make it possible to connect the amplifier with an up to 2,5 mm -cable (we recommend to use a clamp at the cables´ ends), to close the loop.

## Installation Instructions

#### Planning a Loop System.

Most of the problems with this amplifier occur, when the installation hasn't been correctly thought through, therefore take some time at the beginning to safe a lot of time after.

#### Installing the Loop System.

The installation is very easy, the model should be put in a suitable place, ideally as close as possible to the area which shall be covered. The loop cable (a simple 2,5 mm turn loop cable) connected to a 2-way plug at the amplifier's rear side. Make sure that the microphone(s) are placed near the area where the sound is picked up. The master-control and input control can now be adjusted, so that the gain reduction-LIMITER measures 12 dB at loud speech (microphone). It is a good practice to supply to all installations a loop listening device.

This makes it possible to the responsible person to test the loop periodically and to record the correct working in a logbook. Should a listening device not be available, adjust the master-control in a way that the red OUTPUT-LED only flashes at the maximum value. Don't let the model work with constant red LED!



## **Technical Specifications**

MODEL	LAS180
Compressor / Limiter:	For limiting 20:1 with 10 ms access time
Dynamics:	> 60 dB
Harmonic distortion:	< 0.3 %
Loop impedance	0.1 - 1 Ω
Maximum current:	> 15 A
Root mean square current (at 1 kHz):	> 10 A
Input sensitivity:	- 50 dB MIC. / 0 dB LINE
Front Indicators	Limiter 4 x LED`s, output 5 x LED`s, protect, LOOP-OK, power
Audio inputs / outputs:	MIC.1, 2, Line/Mic.3 balanced XLR, INSERT, 0 dB output
Phantom power:	switchable 12 V
Info LOOP OK (output):	12 V / DC
Protection circuits:	Current-limiting (short circuit), against too high temperature, soft-start
Consumption (max power)	300 VA
Power Requirements	230 VAC - 50/60 Hz
Dimensions (WxHxD)	440 x 44 x 200 mm
Weight – Net	6,5Kg

## Headphones Receiver

# LAS180E

## Description

With the induction loop receiver LAS180E, a loop system can be checked and maintained easily, fast and uncomplicated. The device is especially suitable for responsible staff wherever the induction transmission is installed, or for people who need a high quality "wireless" hearing device without hearing aid. The LAS180E receiver is a very compact, handy and versatile device, it is used as sheer audio receiver for people, whose hearing device has no "T-position", or for supervision resp. control of the field strength and quality of the transmission of the induction loop system.





## **Technical Specifications**

Model	LAS180E
Operating time:	100 hours
Battery	2 x 1.5 V type; AA or rechargeable batteries
Headset	200 Ω, 3,5 mm mini jack- plug
Display / measurement Led	GREEN: 50mW, YELLOW: 100Mw, RED: 400Mw (M/RMS)
Dimensions (WxHxD)	67 x 90 x 25 mm
Material	Plastic
Colour	black
Weight	100 g (without batteries)
Frequency response without CUT-filter:	85 Hz to 6kHz, +/- 0,5dB
Frequency response with CUT-filter:	400 Hz to 6kHz, +/- 3dB
Headset output:	100 mW@200 Ohm
THD:	< 0,5% @ 1 kHz

XTE Electronic reserve the right to make changes to the drawings and specifications at any time and without notice.

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