Bedienungsanleitung
Operating Instructions

Active Monitor AM 200

Wir beglückwünschen Sie zum Kauf eines aktiven ELAC Lautsprechers, der unter strengen Qualitäts- und Umweltauflagen hergestellt wurde. Um alle Leistungsmerkmale optimal auszunutzen, lesen Sie bitte die Bedienungsanleitung gründlich durch. Wir raten Ihnen, diese Anleitung für späteres Nachschlagen gut aufzubewahren.
Bitte beachten Sie die separaten Sicherheitshinweise, die der Verpackung Ihres neuen Lautsprechers beigepackt sind. Bitte lesen, beachten und befolgen Sie alle diese Sicherheitshinweise und bewahren Sie diese ebenfalls auf. Beachten Sie alle Warnungen, die auf dem Gerät und in der Bedienungsanleitung aufgeführt sind.

Congratulations on the purchase of your active ELAC speaker that has been designed in accordance with strict quality and environmental requirements. Please read the instruction manual carefully.
We recommend keeping it in a safe place for future reference. Please note the enclosed safety instructions. *Please follow the instructions and keep the safety instructions. Heed all warnings on the appliance and in the manual.*

ELAC The life of sound.

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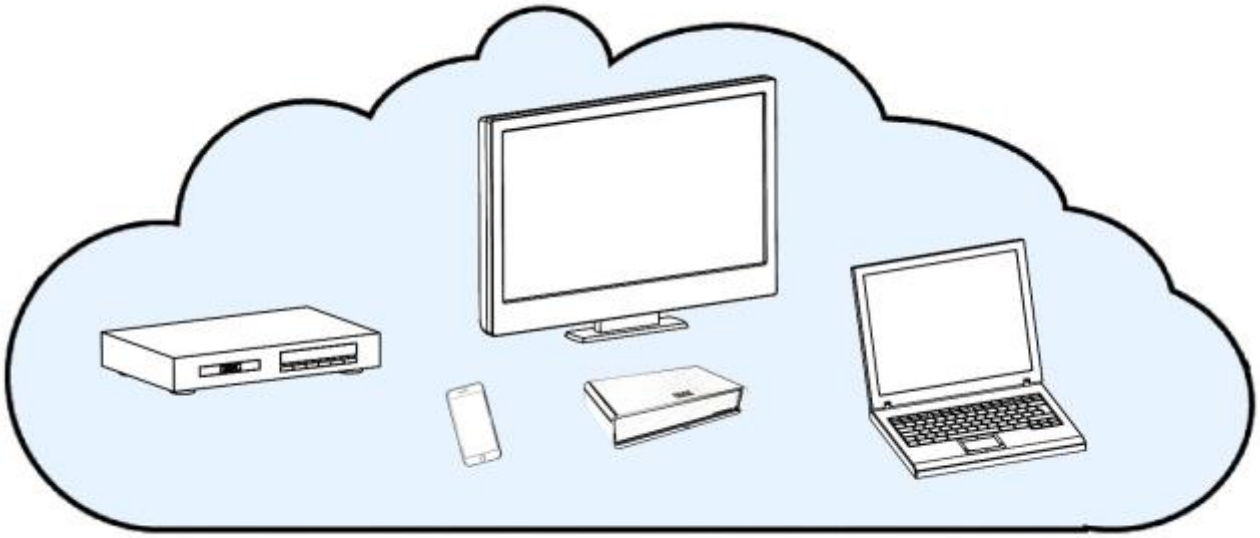
Position	**Pieces**	**Description**
A	*2*	*ELAC powered speaker AM 200*
B	*2*	*Mono RCA cable, digital compliant, appr. 1.5m*
C	*1*	*Stereo adaptor, RCA jack to 3.5mm phone plug*
D	*8*	*Self-adhesive rubberfeet*
E	*2*	*Power cord, appr. 1.8m*
F	*2*	*This manual / safety instructions*

What is so special with ELAC Active Monitor AM 200?
With an ELAC complete active speaker you got a full-fledged product which can universally be connected to many different sources, such as CD player, radio, streaming client or notebook computer. But it is also suitable for the professional or semi-professional use (as recording monitor e.g. on a mixing console). The well-known ELAC JET tweeter is powered by an active speaker.
Because of its compact size, the AM 200 can be used in several situations where high level sound quality is demanded, without the need of an additional power amp.

Connection facilities

ELAC powered speakers are supplied with connections to nearly all kinds of audio sources.
The following sketch shows some options.



Music Server, Mobile Devices, CD-Player ..... etc.

Many audio sources provide outputs designed for headphones.
This output is not only suited for connection to headphones but also for general line level use such as the ELAC powered speaker. A suitable adaptor from phone plug 3.5 mm to RCA jacks is included.

1 *Unbalanced input, RCA jack, (e.g. for connecting a TV, streaming client or similar)*
2 *Balanced input, Combo-jack, XLR and 6.3 mm TRS (e.g. for connecting a professional mixing console or similar)*
3 *Digital input, optical, S/PDIF standard (currently used in most TV sets, CD-Players etc.)*
4 *Digital input and output, S/PDIF standard (currently used in most TV sets, CD-Players etc.)*
5 *Channel selector switch for digital input (right or left channel)*
6 *Gain control switch for choosing one of 3 gain settings*
7 *Selector switch for adapting the sound reproduction to the room (free standing, close to the wall, desktop etc.)*
8 *Fuse drawer (find the reserve fuse inside)*
9 *Mains voltage selector switch for selecting the supply voltage between 230V~ and 115V~*
10 *Mains inlet*
11 *Mains switch*

1.

Unbalanced input: This is the standard input for all common analog sources in the consumer electronics field. Here you can connect the source by means of the RCA cable ("B", see chapter 12) which is part of the accessory kit.

2.

Balanced input: To this input you can connect sources which provide balanced outputs, such as HighEnd CD players or professional mixing consoles. The input provides a combo-jack (XLR jack and 6.3 mm TRS jack).
Signals which are applied to the balanced input are mixed together with signals which are applied to the unbalanced input (1.).

3. and 4.

Digital inputs and parallel output, compliant to S/PDIF standard: These inputs can work with signals according to the S/PDIF standard (optically = TOSLINK and coaxially), which is used by most devices in the consumer electronics field.
The digital data stream contains both stereo signals (left and right). By means of the switch "5" the channel which should be reproduced has to be selected.

5.

Channel selector switch for the digital inputs (3 and 4): If you would like to drive the powered speaker with a digital signal source, you have to select the reproduced audio channel by means of the channel selector switch. In a stereo system you should make sure to select the appropriate channel at each speaker.

6.

Master gain control: By means of this control you can select the amplification factor of the powered speaker out of 3 common studio levels. In a stereo setup you have to make sure that the controls of both AM 200 are adjusted to the same level. Otherwise you will gain an unbalance between the two channels.

7.

Selector switches for several sound adaptations: The AM 200 comes with a 5 position selector switch for adapting the sound to special room conditions or to personal gusto. For examples, please also refer to page 17.
The position "LIN" stands for a linear frequency reproduction without any location equalization. The 2 positions left of "LIN" should be used for a listening distance of appr. 2 m ("MF" = midfield). The position "MF / OW" additionally provides an equalization for a positioning close to a wall.
The 2 positions right of "LIN" should be used for a listening distance of appr. 1 m ("NF" = nearfield). The position "NF / CO" additionally provides an equalization for the positioning on a sideboard or a console ("CO" = console).

8.

Mains fuse: In the lower part of the mains inlet there is a drawer which contains the mains fuse. This drawer is already equipped with a fuse which fits to the mains voltage of your local energy provider. If you would like to connect the speaker to a different mains voltage, the voltage selector switch (9) has to be switched to the appropriate mains voltage and the mains fuse has possibly to be adapted. This has to be carried out by a technician.

9.

Voltage selector switch: By means of this switch the appropriate mains voltage can be selected. The default value is already corresponding to the mains voltage which is provided by your local energy provider and should not be changed.

10.

Mains inlet: In the upper part of the mains inlet the female plug of the power cord ("E") will be plugged-in. The mains plug then should be plugged into an available mains receptacle.

11.

Mains switch: If all necessary connections are done, finally the mains switch can be switched on. A blue LED at the front of the speaker will signalize that the speaker is working properly.
<u>Note:</u> If you want to disconnect the AM 200 all-phase from the mains, you have to pull out the mains plug.

Open installation:
If the speaker is installed in an open environment, one of the 3 following switch positions should be chosen.
For living room typical listening distances, the position "LIN" should be chosen, for nearfield listening conditions (appr. 1 m), "NF" fits best. For an appr. Listening distance of 2 m, midfield ("MF") would be ideal.

Nearfield installation (e.g. on a mixing console):
For this special variant, an additional equalization for positioning the speakers on a boundary surface (e.g. a side board or a mixing console) is added.

Close-to-wall installation (e.g. on a speaker stand or on a wall console):
When placing a speaker close to the wall the sound pressure level especially in the bass range is increasing. This often leads to a smeary or bubbly bass sound. In this case the position "MF / OW" should be chosen which counteracts this effect.

Installation in a rack / on a shelf:
For the installation in an on-wall-rack there are similar rules as for the close-to-wall installation (see above).
On the other hand, for free in the room located racks (partitions) there are similar rules as for the open installation.

Symptom working state	***Possible problems***	***Solution***
No signal	*No mains connection or fuse blown*	*Check fuse, mains plugs and socket.*
	Power switch in OFF position	*Switch to "ON".*
	No input signal	*Check input connections, exchange RCA connector, check source signal (is a different audio component fed by the same source playing correctly?).*
Level is too low (analogue input)	*Source (mobile phone, mp3-player, CD-player) has too low output level*	*Check and increase level adjustment at the source device.*
Level is too low (digital input)	*There is an attenuator at the source side working*	*Increase the volume of the digital output at your source.*
Sound is too quiet or distorted	*Gain of the powered speaker is set to a low level*	*Reduce the level of the source to appr. 50%, switch the gain control switch of the powered speaker to a more sensitive position until a comfortable volume is reproduced within the room.*
Even at low output level of the source, the sound pressure level in the room is too high	*Gain of the powered speaker is set to a high level*	*Reduce the gain of the powered speaker to minimum; increase the output level of the signal source to appr. 50%; now increase the gain of the powered speaker until a comfortable volume is reproduced within the room.*
The right channel can be heard on the left side and vice versa (digital input)	*Channel switch is switched to the wrong positions.*	*Select other channel on both speaker's channel switches.*
Loud hum	*Contact problems with connectors (especially RCA or adapters for extensions)*	*Check all connections; reduce the level at ELAC speaker to min., the outer rings of the RCA plugs may have to be readjusted.*
Soft hum (during pauses)	*Hum of source, ground loop with RCA multi-connections*	*Check of ELAC speaker for inherent hum: disconnect all inputs, switch power ON, normal settings.* *Now, with the ear near the speaker there may be a soft hum, but none at the listening place.*
Soft noise	*Source reproduces noise*	*Check of ELAC speaker for inherent noise: disconnect all inputs, switch power ON, normal settings.* *Now, with the ear near the speaker there may be a soft noise, but nearly none at the listening place.*

Explanatory Note on Specifications 19

On the rear of this manual (respectively attachment) you will find the specifications of your loudspeaker

Specifications include:

- *Dimensions Height x Width x Depth (in mm)*
- *Weight (in kg)*
- *Principle*
- *Driver Units: number and type of drivers*
- *Mains Fuse / Mains Voltage*
- *Max. Power Consumption, Full Output*
- *Crossover Frequency*
- *Frequency Range (in hertz)*
- *Max. amplifier power*
- *S/N (A-weighted)*
- *Inputs*
- *Input sensitivity*
- *Input impedance*

Dimensions *refer to the outer dimensions of the loudspeakers.*

The ***Weight*** *indicates the total weight of the loudspeaker without packaging and without accessories (like mains cable etc.). Due to material tolerances, this value may vary by 10 percent.*

The ***Principle*** *describes the acoustical and electrical concept on which the speaker is based on (e.g. closed box or bass reflex, powered (= with amplifier built-in).*

Drive Units *give information on the number and type of drivers of a loudspeaker.*

The correct ***Mains Voltage****, measured in volts, is necessary for a proper function of your appliance and is provided by your local power authorities. The mains voltage might vary between the given values. The technical data of the* ***Fuse*** *give the current- and voltage values which the fuse should have at the given mains voltages.*

Max. Power consumption, full output *specifies the power, measured in watts, which is drawn out of the mains when the appliance works with maximum output levels.*

The ***Crossover Frequency*** *is defined by the built-in (active) crossover network which adapts the overlay between collocated drivers.*

The ***Reproduction Range*** *of a loudspeaker is defined by the upper and lower cut-off frequencies of the SPL frequency response. At the cut-off frequencies the sound pressure level decreases by 8 dB (factor 2.5) as compared to the midrange. Given a standard domestic room, the effective lower cut-off frequency may deviate from standard values due to room resonances.*

The ***Max. amplifier power*** *of an amplifier is also measured in watts and specifies the power which can be reproduced by the amplifier without any disturbances, like humming, noise or distortions. It is differentiated between the sine power and the pulse power. The sine power describes the power which the amplifier can reproduce for an endless time theoretically, the pulse power is even higher and specifies the power for short term signals which can be handled by the amplifier without distortions.*

The signal to noise ratio ***(S/N (A-weighted))*** *describes the relation between the wanted signal and not wanted signals like noise or humming. Normally it is measured in dB and is weighted with a curve called "A"-curve which describes the sensitivity of the human ear.*

Inputs *lists the available inputs and their connector specifications.*

The ***Input sensitivity*** *is measured in volts normally and lets you know the input voltage which is needed to drive the amplifier to full level.*

The ***Input impedance*** *is the AC resistance, normally measured in kilo-ohms, which represents the load for the driving pre amplifier.*

Your loudspeakers are maintenance-free. Changes in acoustical behaviour decrease over the years so that the human ear will probably change even more than the speaker actually does.

Clean your speakers only with a soft, dry and smooth cloth,
or with a dust brush (never insert the brush into the JET tweeter). Do not use scouring powder, alcohol, benzene, French polish, or other agents. Do not expose your speakers to a relatively high humidity. Temperature variations, humidity and excessive sunlight may damage the speaker and result in optical changes.
In the case of malfunction of your speakers apply to an expert. Your special dealer will be pleased to help you. If a loudspeaker should be destroyed through improper use by a second person the repair requires special know-how in order to provide accurate performance of your speaker.

Warranty
The terms of warranty are regulated individually by the law in the different countries and by the terms of the international ELAC representatives respectively. If you have not bought your appliance in Germany, please check the terms with your retailer. Warranty can be given by any special retailer who has been authorised by ELAC or the respective international representative to distribute ELAC products (EU contract retailers). In the case of warranty, the complete appliance together with the receipt has to be handed over to the retailer.
Many of today's modern furniture are coated with multiple varnishes and plastics which may be treated with chemical agents. Some of these agents might contain substances which cauterize or soften the rubber feet. Therefore, we would like to advise you to place an anti-slip mat underneath the loudspeaker.

Production Control
Every production step is controlled individually. Each part of a loudspeaker (e.g. driver or crossover network) is tested several times, from the purchase until the final assembly. In the final control every loudspeaker is tested acoustically, i.e. skilled ears check the acoustic quality of each frequency range.
Our loudspeakers are examined with respect to polarity (incl. polarity of single drivers), distortion, and the SPL frequency responses. In this the speaker passes a computerised test desk evaluating the appliance independently and releasing it for packaging if the measuring values are within tolerance.
To be able to observe the tolerance limits, variations e.g. in membrane weight, the magnetic field strength, or the values of the electric components must be severely restricted, since inaccuracies of single components may add up in the total system. To achieve maximum production quality, compliance with ELAC quality criteria and guidelines can be regarded as the most important duty.

Loudspeaker Disposal
Please keep the cardboard box and packaging. Since the box and packaging represent the ideal container for the appliance, you should keep them for future transports.

Material-Specific Disposal
If you want to discard the packaging, please do not put it in the household waste, since here it will be mixed up with other residual materials. Please, do not give the material to collecting points for paper or other materials, but take it to the dealer's. The packaging represents an important recoverable material. It consists of EPS (Styrofoam packing parts), PE (bag, foam sheet, and packing parts) as well as cardboard, which should be returned to the material resources cycle for recycling. We have an agreement with your special dealer to take back and dispose of the material in a way that guarantees material-specific disposal. Thus, please, take the packaging back to your dealer for disposal.

Recycling
Support the environmentally-friendly disposal of electronic industry waste.
Old electronic and electrical appliances must not be disposed of in the same manner as regular household waste!
Environmentally-friendly recycling must take place according to each country's regulations.

Dimensions H x W x D () = with heat sink	*292 x 198 x 252 (280) mm*
Weight	*7.5 kg*
Principle	*2-way, fully active, bass reflex*
Woofer	*150 mm aluminum sandwich cone*
Tweeter	*JET 5*
Mains fuse @ mains voltage	*T 500 mA L 250 V @ 220-240 V~* *T 1 A L 250 V @ 110-120 V~*
Max. power consumption @ full load	*180 W*
Crossover frequency	*3000 Hz*
Frequency range	*38 … 50.000 Hz*
Max. amplifier power	*Woofer: 50 W / 4 Ohm* *Tweeter: 20 W / 4 Ohm*
S / N ratio	*> 102 dB (A) rel. to full power*
Inputs	*Digital: 1x S/PDIF (RCA) + 1x TOSLINK* *Analog: 1x balanced (XLR / 6.3 mm TRS), 1x unbal. (RCA)*
Outputs	*Digital: 1x S/PDIF thru (RCA)*
Input sensitivity	*+19 dBu, +4 dBu, -10 dBV*
Input impedance	*6.8 kOhms (RCA) / 6.8 kOhms (XLR / TRS)*

Technische Änderungen und Designänderungen vorbehalten / *Technical data are subject to change.*

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