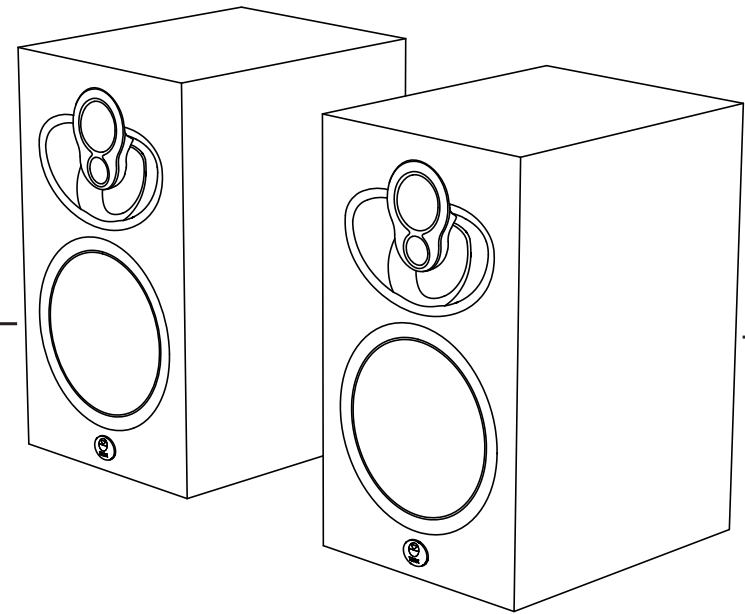




# MAJIK 109

LOUDSPEAKER

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OWNER'S MANUAL



# IMPORTANT SAFETY INSTRUCTIONS

Explanation of symbols used in this manual or on the rear/underside of the apparatus:

This symbol is intended to alert the user to the presence of uninsulated dangerous voltages within the enclosure of sufficient magnitude to cause electric shock.



This symbol is intended to alert the user to the presence of important operation, maintenance and servicing information in the instruction and service manuals.



## **For apparatus connected to the mains electricity supply**

### **CAUTION**

- **To reduce the risk of electric shock do not remove the cover.**
- **No user serviceable parts inside.**
- **Refer servicing to qualified service personnel.**
- **Replace the mains fuse in the plug with one of the same type and rating.**
- **Disconnect supply cord before changing fuse.**

### **WARNING**

**To reduce the risk of fire or electric shock do not expose this apparatus to rain or moisture. Shock hazard - do not open.**

## General Safety Instructions

1. **Read these instructions.**
2. **Keep these instructions.**
3. **Heed all warnings.**
4. **Follow all instructions.**
5. **Do not use the apparatus near water**, for example near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, near a swimming pool etc.
6. **Clean only with dry cloth.**
7. **Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.** Site the apparatus so that its location or position does not interfere with its proper ventilation. For example, the apparatus should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings, or placed in a built in installation such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.
8. **Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.**
9. **Do not defeat the safety purpose of the polarised or grounding type plug.** A polarised plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. **Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and at the point where they exit from the apparatus.**
11. **Only use attachments/accessories specified by the manufacturer.**
12. **Use only with the stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus.**
13. **Unplug this apparatus during lightning storms or when unused for long periods of time.**
14. **Refer all servicing to qualified service personnel.** Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug has been damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. **Wall or ceiling mounting.** Mount the apparatus to a wall or ceiling only as recommended by the manufacturer.
16. **Power sources.** Connect the apparatus to a power supply only of the type described in the operating instructions or marked on the apparatus.
17. **Mains plug.** Use the mains plug to disconnect the apparatus from the mains supply. The mains plug must be accessible at all times. Use the mains switch (if applicable) when the apparatus is not in use.
18. **Power lines.** An outdoor antenna should be located away from power lines.
19. **Outdoor antenna grounding.** If an outdoor antenna is connected to the apparatus, ensure that the antenna system is grounded to provide some protection against voltage surges and static build up. In the USA see article 810 of the National Electrical Code ANSI/NFPA 70 concerning installation requirements.
20. **Telephone line.** Do not connect the apparatus to a telephone line except where specifically instructed to do so.
21. **Objects and liquid entry.** Do not let objects or liquids fall into the apparatus. Do not expose the apparatus to dripping or splashing. Do not place a vessel containing liquid on top of the apparatus.
22. **No naked flame sources, such as lighted candles, should be placed on the apparatus.**
23. **The apparatus has been designed for use in moderate and tropical climates.**

## CE Declaration of Conformity

Linn Products Ltd declare that this product is in conformance with the Low Voltage Directive 73/23/EEC and Electromagnetic Compatibility 89/336/EEC as amended by 92/31/EEC and 93/68/EEC.

The conformity of the designated product with the provisions of Directive number 73/23/EEC (LVD) is proved by full compliance with the following standards:

Standard number	Date of issue	Test type
EN60065	2002	General requirements Marking Hazardous radiation Heating under normal conditions Shock hazards under normal operating conditions Insulation requirements Fault conditions Mechanical strength Parts connected to the mains supply Components Terminal devices External flexible cords Electrical connections and mechanical fixings Protection against electric shock Stability and mechanical hazards Resistance to fire

The conformity of the designated product with the provisions of Directive number 89/336/EEC (EMC) is proved by full compliance with the following standards:

Standard number	Date of issue	Test type
EN55013	2001	Conducted emissions
EN55013	2001	Absorbed emissions
EN55020	2002	Immunity

## FCC notice

**Note:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

## Waste Electrical and Electronic Equipment (WEEE) Directive

### Waste Electrical and Electronic Equipment Directive Directive 2002/96/EC of the European Parliament and of the Council

The symbol (right) is shown on this product. It indicates that the product should not be disposed of with regular household waste, but should be disposed of separately.



Electrical and electronic equipment can contain materials that are hazardous to the environment and human health and therefore should be disposed of at a designated waste facility or returned to your retailer for the appropriate recycling to take place (see [www.linn.co.uk](http://www.linn.co.uk) for further information).

If you wish to dispose of this product and the product still functions, please consider recycling/reusing it by donating it to a charity shop, selling it or part-exchanging it with your retailer.

## Copyright and Acknowledgements

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# INTRODUCTION

Linn's Majik 109 is a full range bookshelf loudspeaker that combines knowledge built-up over thirty five years of loudspeaker design and manufacture. Majik 109 features Linn's patented driver array technology, which is found in our highest performing loudspeakers. This technology delivers complete clarity in high frequency reproduction, and an even dispersion to give great performance wherever you position the loudspeakers in your room. The front ported bass system delivers pitch accurate, musical bass, while a wide range of possible connection configurations provides great flexibility to meet your future requirements.

Majik 109 loudspeakers are the perfect partner for any of the fantastic products in Linn's Majik range. Whether as part of a complete Majik system or as the loudspeakers in your current hi-fi or home theatre system, we're sure the Majik 109s will provide you with many years of exceptional performance.

# INSTALLATION

## Unpacking

The Majik 109 loudspeakers come packaged as a pair; take care when removing them from their packaging to avoid damage to the cabinets. Do not lay the loudspeakers on their face as this will damage the 2K driver array.

### The Majik 109 loudspeakers are supplied with the following:

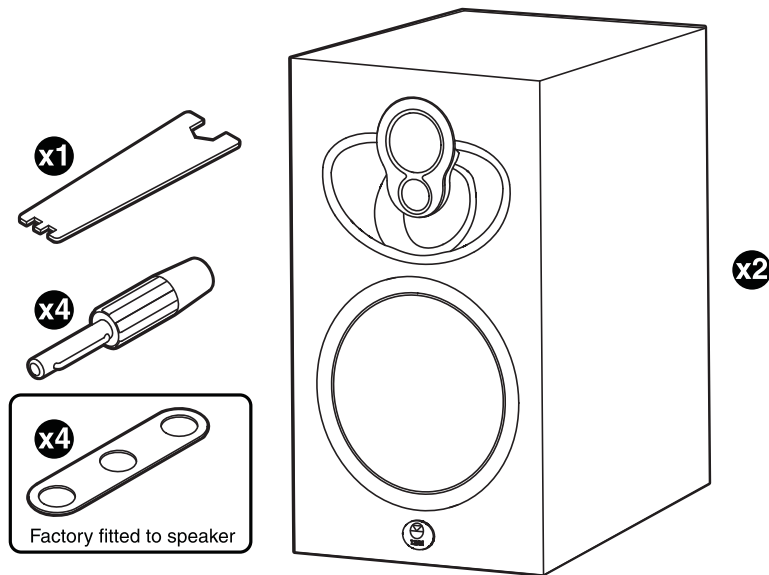
- Four input terminal link strips (factory fitted to each loudspeaker)
- Four 'banana' 4mm plugs
- An input terminal spanner

## Cleaning

Remove dust and fingerprints from the cabinets with a soft, dry, lint-free cloth. Avoid using domestic cleaning products as they may damage the veneer.

## Accessories

A stand for the Majik 109 loudspeaker, allowing you to accurately level your loudspeakers to provide greater stability and improved audio performance, is available from your Linn retailer.



We recommend that you retain the packaging in case you need to transport your loudspeakers at a later date.

## Positioning and levelling

To get the best from your Linn Majik 109 loudspeakers, it is important they are positioned and levelled correctly. The acoustics of a room are dependent on many factors, including volume, shape and furnishings. The information below will assist in helping you find the best position in your room for your loudspeakers and will tell you how to level them correctly.

### Positioning

It pays dividends to experiment with loudspeaker positioning. However, the very nature of the 2K driver array, with the super-tweeter and tweeter in close proximity, ensures uniform dispersion characteristics and the loudspeakers should, therefore, not require any significant degree of toeing-in to improve performance.

As the Majik 109 loudspeakers employ a front firing reflex port, the loudspeakers may be positioned with their backs close to a wall, allowing greater flexibility in placement. However, for optimum performance and musicality, the loudspeakers will benefit from being brought into the listening space - a minimum of 9" (23cm) between wall and the back of the speaker is recommended.

### Levelling

To further optimise playback performance the speaker should be mounted on top of a level surface, ideally an appropriate loudspeaker stand. A properly levelled loudspeaker will always perform more effectively than an unstable one. The loudspeaker cabinet should remain fixed whilst the drive units are allowed to move as precisely determined by the playback signal from the amplifier(s).

## Connecting

### General

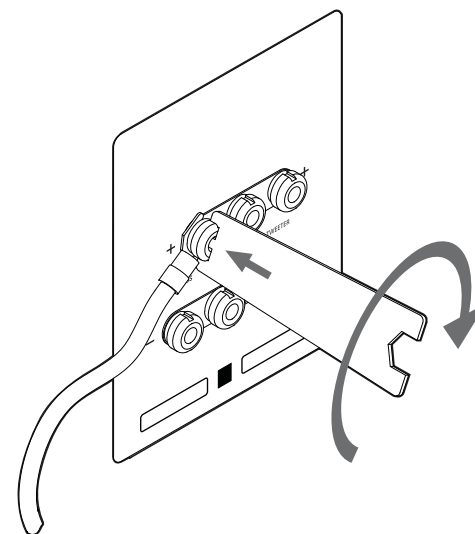
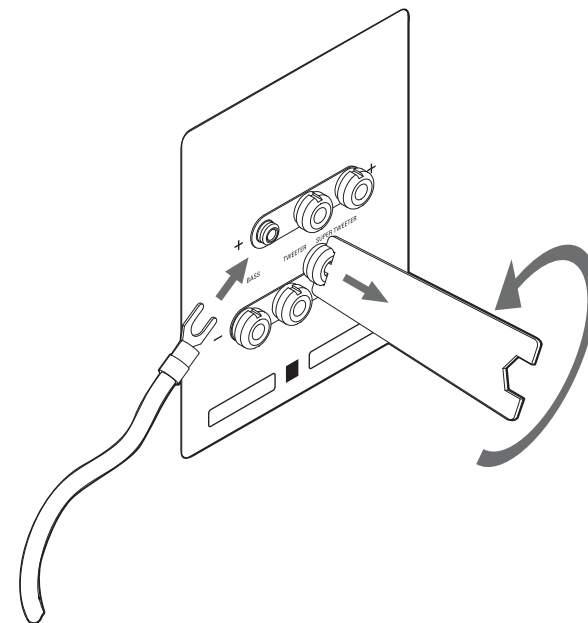
#### IMPORTANT:

Before making any connections, switch off your power amplifier(s).

Ensure the positive (+) or red coloured connectors from your amplifier(s) connect to the positive (+) connectors on your loudspeakers, and that the negative (-) or black coloured connectors from your amplifier(s) connect to the negative (-) connectors on your loudspeakers.

### Terminals

The Majik 109 loudspeakers are fitted with 4mm socket terminals. These terminals can be used as sockets for the connection of 4mm banana plugs or appropriate spade terminated cables. To connect spade-terminated cables, loosen the gold collar with the provided spanner, insert the spade behind the gold collar, and firmly re-tighten the collar to ensure a good electrical connection.



## Configuration options

The Majik 109 loudspeakers offer an array of configuration options, as described below. Connections for each of the methods are shown in the *Wiring and amping configurations* section, page 7.

The options are listed in order of increasing sonic performance. Multi-wiring and multi-amping options offer improvements in sound quality over single-wiring. The greater the separation of the frequency bands in the power amplifiers, crossover and cables, the more precise the quality of the playback performance, with Aktiv operation representing the ultimate configuration (see *Aktiv operation*, across).

### Passive single-wiring:

A single amplifier channel connects to the loudspeaker using a single cable.

### Passive multi-wiring (bi-wire or tri-wire):

A single amplifier channel connects to the loudspeaker using two or three cables.

### Passive multi-amping (bi-amp or tri-amp):

Two or three amplifier channels connect to the loudspeaker.

### Note:

Multi-amping can be combined with multi-wiring, e.g. bi-amping could be employed with bi-wiring.

## Aktiv operation

The term 'Aktiv' refers to the proprietary Linn active crossover and loudspeaker configuration, whereby a loudspeaker's internal passive crossover is replaced with external crossovers.

In a passive system the output from the power amplifier is passed through the crossover inside the loudspeaker. A portion of the signal's energy is dissipated in the crossover circuitry and is therefore lost. Also, the behaviour of the crossover and the drive units will differ depending on the listening volume.

In an Aktiv system one channel of amplification is required for each drive unit in a loudspeaker, and the crossover circuitry is located before the amplifier circuitry. After the audio signal is filtered by the crossovers the amplifier then supplies power to the loudspeaker drive unit in the frequency band required by that particular driver (e.g. midrange frequencies for the midrange driver), allowing each amplifier channel to provide a greater degree of control over the loudspeaker.

So, in Aktiv mode the crossovers provide a more precise means of filtering the signal into the required frequency bands, while allowing the amplifiers to exert more control over the drive units. This results in significantly improved sonic performance compared with passive operation.

### Important note:

Aktiv operation requires a modification to your loudspeakers and your Linn amplifiers, which must be carried out by an authorised Linn retailer.

## Link strip information

### To remove / fit the link strips:

- Using the spanner provided, loosen and remove the gold collars from the input terminals of the loudspeaker.
- Remove the link strips.
- When re-fitting the link strips, ensure that they are correctly located for the appropriate wiring and amping configuration
- Replace the gold collars using the provided spanner; ensure the collars are well tightened to ensure good electrical contact with the link strip.

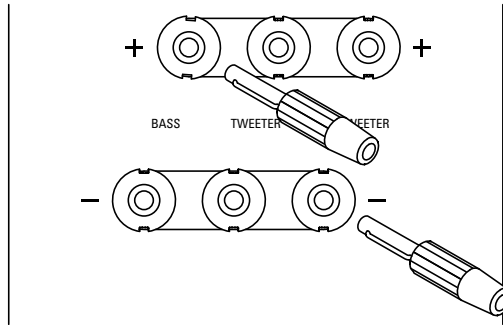
### Important notes on using link strips

- Never use the strips to link positive (+) and negative (-) terminals together.
- When multi-amping, ensure that the link plates do not short-circuit amplifier channels together. Shorting the outputs of separate amplifier channels together can damage the amplifier(s) and the loudspeaker drive units.
- Do not connect more than one strip per terminal.

## Wiring and amping configurations

### Single-wiring

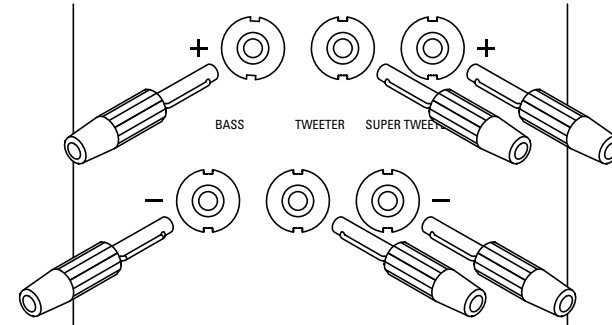
Illustration shows position of link strips if single-wiring (i.e. using a single speaker cable from one power amplifier channel). No link strip adjustments are required.



*For optimum sound quality, connect the cable from the power amplifier to the terminals shown.*

### Tri-wiring or tri-amping

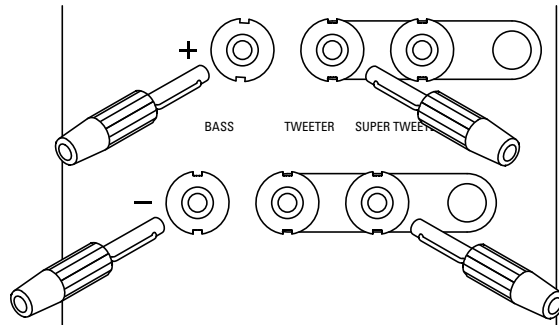
Illustration shows removal of link strips for tri-wiring (i.e. using three speaker cables from one power amplifier channel) or tri-amping (i.e. using three power amplifier channels).



*For optimum sound quality, connect the cables from the power amplifier(s) to the terminals shown.*

### Bi-wiring or bi-amping

Illustration shows position of link strips if bi-wiring (i.e. using two speaker cables from one power amplifier channel) or bi-amping (i.e. using two power amplifier channels).

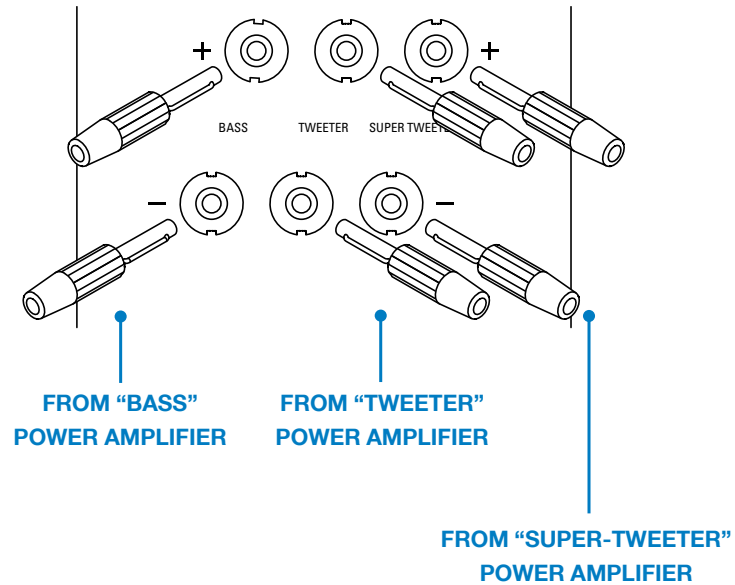


*For optimum sound quality, connect the cables from the power amplifier(s) to the terminals shown.*

### Aktiv configuration

Aktiv operation requires a modification to your Majik 109s and your Linn amplifiers, which must be carried out by an authorised Linn retailer.

In Aktiv mode, please be very careful to connect all speaker cables from the amplifier(s) to the correct sockets on the loudspeaker. Wrong connection could result in damage to your loudspeaker drive units and amplifier(s).



### IMPORTANT NOTES ON AKTIV SYSTEMS

**Do not use your amplifiers with any other loudspeakers –** you may damage the loudspeakers.

**Do not use your loudspeakers with any other amplifiers –** their internal crossovers will be bypassed and the drivers could be severely damaged.

**Do not use the terminal link strips –** they can only be used in a passive system.



# TECHNICAL SPECIFICATIONS

Three-way, bass reflex, bookshelf loudspeaker incorporating the Linn 2K Array and a 5" bass driver.

<b>Cabinet volume</b>	9 litres
<b>Impedance (passive)</b>	4 $\Omega$
<b>Impedance (Aktiv bass/mid)</b>	7 $\Omega$
<b>Impedance (Aktiv tweeter)</b>	7 $\Omega$
<b>Impedance (Aktiv super-tweeter)</b>	7 $\Omega$
<b>Efficiency</b>	88 dB for 1 watt at 1 metre (1 kHz)
<b>Frequency response (passive)</b>	72 Hz - 20 kHz +
<b>Frequency response (Aktiv)</b>	65 Hz - 20 kHz +
<b>Magnetic shielding</b>	No
<b>Crossover options</b>	Fully passive or fully Aktiv
<b>Connection options</b>	Up to three-way multi-wire/amp passive; three-way Aktiv
<b>Overall sizes</b>	327 mm (H) x 192 mm (W) x 256 mm (D) 12 7/8" (H) x 7 1/2" (W) x 10 1/8" (D)
<b>Weight</b>	5.92 kg 13 lbs

# GUARANTEE AND SERVICE

This product is guaranteed under the conditions which apply in the country of purchase and your statutory rights are not limited. In addition to any statutory rights you may have, Linn undertake to replace any parts which have failed due to faulty manufacture. To help us, please ask your Linn retailer about the Linn warranty scheme in operation in your country.

In parts of Europe, the United States of America and some other markets, extended warranty may be available to customers who register their purchase with Linn. You can register your warranty online at [www.linn.co.uk](http://www.linn.co.uk).

## **WARNING**

Unauthorised servicing or dismantling of the product invalidates the manufacturer's warranty. There are no user serviceable parts inside the product and all enquiries relating to product servicing should be referred to authorised retailers only.

## **Technical support and information**

For technical support, product queries and information, please contact either your local retailer or Linn Products directly.

Full details of your local retailer/distributor can be found on the Linn web site: [www.linn.co.uk](http://www.linn.co.uk).

## **Important**

Please keep a copy of the sales receipt to verify the purchase date of the product.

Please ensure that your equipment is insured by you during any transit or shipment for repair.

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