

# Year 2000 Compliance

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# **IMPORTANT SAFETY INFORMATION**

### Explanation of symbols used in this manual and on the product :



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 maintenance and servicing information in the instruction and service manuals.

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE THE COVER. NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

WARNING: SHOCK HAZARD. DO NOT OPEN. AVIS: RISQUE DE CHOC ELECTRIQUE. NE PAS OUVRIR.

CAUTION: REPLACE FUSE WITH SAME TYPE AND RATING. ATTENTION: UTILISER UN FUSIBLE DE RECHANGE DE MEME TYPE.

CAUTION: DISCONNECT SUPPLY CORD BEFORE CHANGING FUSE.

ATTENTION: DEBRANCHER AVANT DE REMPLACER LE FUSIBLE.

#### WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

#### General Safety Instructions :

1. Read Instructions. Read the safety and operating instructions before operating the appliance.

2. Retain Instructions. Retain the safety and operating instructions for future reference.

3. Heed Warnings. Observe all warnings on the appliance and in the operating instructions.

4. Follow Instructions. Follow all operating and use instructions.

5. Water and Moisture. Do not use the appliance near water, for example near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement or near a swimming pool and the like.

6. Carts and Stands. Use only with a cart or stand that is recommended by the manufacturer.

6a. An appliance and cart combination should be used with care. Quick stops, excessive force and uneven surfaces may cause the appliance and cart combination to overturn.

7. Wall or Ceiling Mounting. Mount to a wall or ceiling only as recommended by the manufacturer.

8. Ventilation. Site the appliance so that its location or position does not interfere with its proper ventilation. For example the appliance 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.

9. Heat. Site the appliance away from heat sources such as radiators, heaters, stoves or other appliances (including amplifiers) that produce heat.

10. Power Sources. Connect the appliance to a power supply only of the type described in the operating instructions or marked on the appliance.

11. Grounding or Polarisation. 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. When the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

12. Power Cord Protection. Route power cords so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, power sockets and at the point where they exit from the appliance.

13. Protective Attachment Plug. As a safety feature the product is equipped with an attachment plug containing overload protection. See the instruction manual about resetting or replacing the plug. Should the plug need replacing ensure that a replacement is used which has the same overload protection as the original.

14. Cleaning The product should be cleaned only as recommended by the manufacturer.

15. Power lines. An outdoor antenna should be located away from power lines.

16. Outdoor Antenna Grounding. If an outdoor antenna is connected to the tuner/receiver 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. 17. Unplug this apparatus during lightning storms or when unused for long periods of time.

18. Objects and liquid entry. Take care not to let objects or liquids fall into the product.

19. Damage requiring Service. The product should be serviced by gualified personnel if :

a. the power cord or plug has been damaged.

b. objects or liquid have fallen into the product.

c. the product has been exposed to rain.

- d. the product does not appear to operate normally or exhibits a marked change in operation.
- e. the product has been dropped or the enclosure damaged.

20. Servicing. Don't attempt to service the product beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

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All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means electronic, mechanical, photocopying, recording or otherwise without the prior written consent of the publisher.

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### WARRANTY AND SERVICE:

This product is warranted under the conditions which apply in the country of purchase.

In addition to any statutory rights the customer may have we 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.

Warning: Refer all enquiries to authorised Linn retailers only. Unauthorised servicing or dismantling of the product invalidates the manufacturer's warranty.

If you are in any doubt please contact your nearest Linn retailer. For information on your nearest Linn retailer contact the factory in Scotland or your national distributor.

Important : Please keep a copy of the sales receipt to establish the purchase date of the product. Please ensure that your equipment is insured by you during any transit or shipment for repair.

#### Designed and manufactured by :

Linn Products Ltd. Floors Road, Waterfoot Glasgow G76 0EP Scotland, U.K. Phone: ++44 (0)141 307 7777 Fax: ++44 (0)141 307 7777 Fax: ++44 (0)141 644 4262 email: helpline@linn.co.uk/linn Internet: http://www.linn.co.uk/linn USIC is very important for people. It stimulates the imagination, helps them relax, can change their mood, and of course provides entertainment and pleasure.

A good hi-fi works well enough to deliver these benefits. It also helps you appreciate music you never thought you would.

At Linn we devote our energy to improving standards of music reproduction, because we know that the better the sound the more you'll enjoy music at home.

The addition of any Linn component will improve the sound quality of your system. Linn has a policy of continuously improving its equipment allowing customers to retro-fit most product upgrades.

**NTRODUCTION** Thank you for choosing our Linn KABER LS500 loudspeakers, which join the family of Linn loudspeakers, and use much of the technology of the KEILIDH and the KELTIK.

The KABERS are the result of extensive development work and reach what we believe to be new standards of performance in loudspeakers at this price level.

Remember, as no loudspeaker is capable of improving the quality of the signal it receives, the KABER should be used with good quality ancillary equipment.



**ENERAL INFORMATION** If you have chosen to install your KABERs yourself, follow the detailed INSTALLATION GUIDE further on in this manual. If you have any problems, please ask your Linn retailer to help. Linn retailers and their staff have been extensively trained to ensure that they have the knowledge and expertise to get the best possible sound from our equipment, so it makes sense for you to call on this skill whenever you need it.

## STANDS

All loudspeakers perform best when rigidly mounted. To achieve this, Linn have designed a base made from an attractive smooth granite composite which is supplied with the KABERs. The base includes stabilising floor spikes that keep the weight of the loudspeakers from compressing your carpet. The spikes penetrate between the weaves of the carpet, which will therefore quickly recover if the speakers are moved. To protect a wooden floor from the spikes you can use the Linn SKEET. Ask your retailer for more details.

<u>CAUTION</u> If you need to move your KABERs, please note that the spikes are sharp so the loudspeakers should be handled with care.

# GRILLES

The KABER grille is unusual in that it has no frame and fits directly onto the front baffle. This avoids the problems of rattling and diffraction which a frame can introduce.

# CONFIGURATION

The Linn KABERs are an extremely versatile loudspeaker, and can be used in a particularly wide range of configurations, each with a distinct performance advantage. This makes it easy for you to develop your system over its lifetime, without having to change any substantial component. The configurations possible are:

- SINGLE-WIRED
- BI-WIRED
- TRI-WIRED
- BI-AMPLIFIED
- TRI-AMPLIFIED
- TRI-AMPLIFIED AKTIV (dealer install only)

KABERs are supplied configured for use in TRI-WIRED mode. The configuration can be altered by removing or inserting linking plates as appropriate on the terminal panel at the rear of the loudspeaker.

# **BI/TRI-WIRING**

The subjective performance of a loudspeaker can be improved by having a separate cable for each crossover/driver section. This reduces inter-modulation effects and is particularly noticeable between extreme bass, where the currents are very large, and treble where the currents are very small. The KABER may be Bi or Tri-wired. In both cases the extra cost of loudspeaker cable is justified by the improved performance.

# **BI/TRI-AMPING**

For further enhanced performance you can go one step beyond Bi/Tri-wiring and use either two amplifiers, one for bass and midrange (in which case these will benefit from Bi-wiring) and the other for treble, or three amplifiers, one for each section.

# ACTIVE/PASSIVE

With a passive loudspeaker, the signal from the amplifier is divided into three frequency bands, (bass, bass/mid and treble) by a passive filter built into the loudspeaker cabinet. This is powered by the signal itself, absorbing some of the amplifier power, and preventing the amplifier from accurately controlling the loudspeaker.

Although the highest quality components are used in Linn loudspeakers, they have to handle extremely high power without overheating, and are less suitable for handling the fine details of music.

An active crossover does not make these compromises. It accurately divides the signal from the preamplifier into three frequency bands, and feeds each to its own power amplifier. The loudspeaker drive units are directly controlled by the power amplifiers. The low power of the active crossover means better filtering, and accurate amplitude and time response correction for the KABER loudspeaker.

Note - Please contact your dealer for more information on upgrading to AKTIV CROSSOVER MODULES.

**<u>NSTALLATION GUIDE</u>** Lift the cabinets from the carton by their sides to avoid damaging the drive units. If you can, keep the packing for possible future transportation.

# **COMPOSITE BASE**

To install the composite base, lay the speakers on their back or on top of a soft surface. Remove the four pozi-pan screws holding the transport base to the loudspeaker, and remove the base itself. Screw the composite base to the loudspeakers, and screw the floor spikes and locknuts into the sockets on the four corners. Leave the locknuts finger tight for the moment. Keep the transport base for possible future transport.



# CONFIGURATION

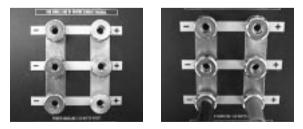
As previously mentioned under GENERAL INFORMATION, KABERs are supplied configured for use in TRI-WIRED mode. (see below)



To convert KABERs to BI-WIRED mode remove the black-ringed (negative) input terminal collars using the key provided. Fit the two way plate supplied over the bottom two sockets and replace the terminal collars. Repeat this operation with the red (positive) terminals. (see below)



To convert KABERs to SINGLE WIRED mode follow the instructions above, but fit the three way plate supplied. (see below)



**IMPORTANT** Do not remove all the collars at once.

It is advisable to get your dealer to make up the necessary leads for you.

### GRILLES

To fit the grille, ensure that the shiny side of the material is to the outside.

Find the knotted part of the grille elastic, and locate it in the slot below the bass driver that separates the top and bottom baffles. Place the knot about a third of the way in from a corner, then pull the grille up evenly over the baffle. Then find the joint in the rubber ring and locate it in the slot below the bottom baffle, again about a third of the way in from a corner. Pull the ring up so that it locates in the slot on top of the top baffle. A plastic ruler can be used to encourage the elastic and the rubber ring into the slot.

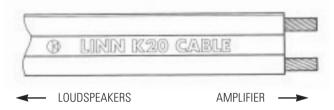


To remove the grille, grip the top right hand corner, pulling it so that the rubber ring and elastic clear the baffle. Then remove the ring and the grille cloth.

### CONNECTION

Connection of the loudspeaker to the amplifier should be made with good quality cable. Linn K600 series cable is ideal for tri-wiring. The leads should be terminated with the connectors supplied. These ensure optimum contact and the use of other connectors could degrade the signal.

All Linn cable is marked with the Linn symbol to indicate directionality. The end marked with the circular Linn symbol should point to the loudspeakers, and the other to the amplifier.



Take care to observe the correct polarity. The red socket is positive and the black is negative. The positive wire is identified by a rib along the side of the cable.

Your Linn retailer can supply you with properly made cables of a suitable length.

## POSITIONING

KABER speakers have been designed to perform best when placed close to a wall. Ideally the rear of the loudspeaker should between 4" and 12" (10 cm and 30 cm) from the wall, and at least 18" (45 cm) from any corner.

The distance between the loudspeaker and your normal listening position should form part of an equilateral triangle. They also benefit from being angled inwards slightly by between 5 and 10 degrees.

These are general guidelines and a little experimentation with position and angle can optimise results for a particular listening room.

**<u>CAUTION</u>** The spikes are sharp and you should take care when moving the speakers.

Once you have determined the final position of your KABERS, check for any rocking movement, adjusting the appropriate spike/s until complete stability is achieved. Tighten all locknuts, taking care not to alter the positioning of the spikes.

# MAINTENANCE

The Linn KABERs normally need no maintenance, other than occasionally polishing the cabinet with a soft, slightly damp cloth. Take care not to touch the drive units behind the grille cloth. If you have to transport your speakers, remove the spikes and use the original packing. Your retailer can provide packing if necessary.

# SPECIFICATIONS

Туре	3-way Infinite baffle loudspeaker
Frequency response	Active: 40Hz-20kHz +/- 2dB Passive: 60Hz-20kHz +/- 3dB
Input Impedence	Active: 8 Ohms per drive unit Passive: 4 Ohms
Efficiency	87dB for 1W at 1m (1kHz)
Amplifier requirements	At least 60W per channel into 4 Ohms
Wiring options	Single-Wiring, Bi-Wiring, Bi-Amplification, Tri-Wiring, Tri-Amplification, Active Tri-Amplification
Drive Units	19mm ceramic-domed treble, 2 x 125mm carbon-loaded bass/midrange
Size	900mm (H) x 192mm (W) x 280mm (D)
Weight	26kg each

# **GUARANTEE AND SERVICE**

This product is guaranteed under the conditions which apply in the country of purchase.

In the UK and other markets, extended warranty is offered to customers who register their purchase with Linn. A Registration Card can be obtained from your retailer and should be stamped by him.

<u>WARNING</u> Refer all enquiries to authorised dealers only. Unauthorised servicing or dismantling of the product invalidates the manufacturer's warranty.

If you are in any doubt, please contact your nearest Linn dealer. For information on your nearest dealer, contact the Linn factory in Scotland or your national distributor.

## **IMPORTANT**

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

LINN PRODUCTS LTD. FLOORS ROAD, WATERFOOT GLASGOW G76 0EP SCOTLAND, U.K. PHONE: ++44 (0)141 307 7777. FAX: ++44 (0)141 644 4262. email: helpline@linn.co.uk Internet: http://www.linn.co.uk/linn NOTES

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