

LINN KEILIDH
OWNERS MANUAL

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 qualified 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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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.

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MUSIC 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.

INTRODUCTION Thank you for choosing our Linn KEILIDH LS300 loudspeakers, which join the family of Linn loudspeakers, and use much of the technology of the KABER and the KELTIK. Ceilidh (pronounced Kay-Lee) is the traditional Gaelic word for a social gathering, and has become synonymous with music, song and dance - hopefully with a 'wee dram' thrown in for good measure! With that spirit in mind, we designed the KEILIDH to deliver an outstanding level of performance and value.

As you may have noticed from the weight of the KEILIDHs, they are most solidly built. The wood veneered cabinet is braced over its entire height and contains both fibre sound absorbent and Linn KU-STONE composite surface wave absorbent. The KEILIDH is a two-way loudspeaker, with two mid/bass drivers symmetrically placed about the tweeter to give a very stable sound source. The crossover is built using high quality components and wiring is minimised by the input sockets being soldered directly to the crossover. The ceramic dome tweeter is the same unit we use on the KABER and KELTIK loudspeakers and gives astonishingly clean and sweet transients. The bass drivers have good, low distortion power handling and are configured in parallel which, partnered with the efficient tweeter, give an especially pleasurable loudspeaker. One you really can have a ceilidh with.



GENERAL INFORMATION If you have chosen to install your KEILIDHs 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 two bases for the KEILIDHs which include stabilising floor spikes. These spikes also 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 loudspeakers are moved. To protect a wooden floor from the spikes you can use the LINN SKEET. Ask your retailer for more details.

The standard base is integral to the cabinet and gives the best performance possible in a minimum of floor space. A base made from an attractive smooth granite composite is available as an upgrade, which uses a little more floor space, and delivers improved performance as it holds the speaker more rigidly.

CAUTION If you need to move your KEILIDHs, please note that the spikes are sharp so the loudspeakers should be handled with care.

GRILLES

The KEILIDH 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.

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 about a third of the way in from a corner. Pull the grille up evenly over the baffle. Then find the joint in the rubber ring and locate it in the slot below the third baffle, about a third of the way in from the bottom corner and fit the ring. A plastic ruler can be used to encourage the material 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.

TREBLE ADJUSTMENT

The room in which you use your KEILIDHs will have a significant effect on the perceived sound of your system. In particular, a room with a lot of hard surfaces and few soft furnishings can sound "bright". To compensate for such an environment, or for source equipment that may be similarly "bright", an adjustment can be made to the KEILIDH to reduce the amount of treble slightly. Your Linn retailer will carry out this modification if required.

MAINTENANCE

The Linn KEILIDHs 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.

CONFIGURATION

The Linn KEILIDHs 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
- BI-AMPLIFIED
- BI-AMPLIFIED AKTIV (dealer install only)
- TRI-AMPLIFIED AKTIV (dealer install only)

In the SINGLE-WIRED configuration, a single amplifier drives each loudspeaker through a single loudspeaker cable. This configuration is often used but it can be easily improved upon at relatively little cost by BI-WIRING the loudspeakers.

BI-WIRING improves the performance of a loudspeaker. A single amplifier is still used, but this drives each loudspeaker through two loudspeaker cables, one for the bass/midrange section, and one for the treble section. By separating the cables to these sections, interaction between the bass and treble currents is reduced. The extra cost of an additional pair of loudspeaker cables is more than justified by the improvement in sound quality gained. The KEILIDHs are designed to be wired in this mode when a single amplifier is used.

In the BI-AMPLIFIED configuration, two amplifiers are used to drive the speakers, such that the bass/midrange and treble sections of each loudspeaker are individually powered by a dedicated amplifier section. Each amplifier

then carries only bass or treble current, this further reduces interaction and loading of the amplifiers.

The BI-AMPLIFIED and TRI-AMPLIFIED AKTIV configurations deliver the ultimate performance potential of your KEILIDH loudspeakers. A KEILIDH AKTIV crossover is used to divide the signal from the preamplifier into two frequency bands, and feed each to its own power amplifier. The loudspeaker drive units are directly controlled by the power amplifiers. By processing the music signal at low power the KEILIDH AKTIV crossover allows better filtering and more accurate amplitude and time response correction for the loudspeaker than is possible with a passive crossover. If you use the Linn power amplifiers, the AKTIV circuitry can be added inside the power amplifiers, giving substantial sound performance advantages. It also saves in cost, wiring complexity and space.

I NTSTALLATION GUIDE 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.

INTEGRAL BASE

If you are using the KEILIDHS with the standard base, you will need to install the spikes. Lay the loudspeakers on their backs on a soft surface. Screw the floor spikes through the washers into the stand base. Screw the locknuts onto the spikes, and leave everything finger tight for the moment.

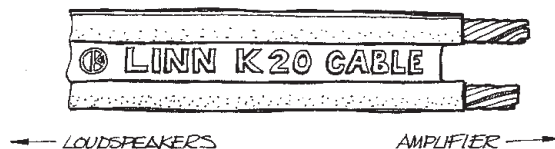
COMPOSITE BASE

To install the composite base, again lay the speakers on their back or top on a soft surface. Remove the spikes (if fitted), locknuts and washers from the integral base. Then remove the four socket-headed screws holding the integral 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. Note that the spikes can be adjusted from above using a flat blade screw driver. Leave the locknuts finger tight for the moment.



CONNECTION

Connection of the loudspeaker to the amplifier should be made with good quality cable. Linn K400 series cable is ideal for bi-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.

CONFIGURATION

KEILIDHs are supplied configured for use in BI-WIRED mode. The configuration can be altered by removing or inserting linking plates and blanking plugs as appropriate on the terminal panel at the rear of the loudspeaker. To install or remove a linking plate, use the tool provided to remove the correct two terminal collars, install or remove the two-way linking plate, and replace the terminal collars. Refer to the pictures overleaf for the correct arrangement of linking plates for the passive configurations. The AKTIV configurations are complex and are therefore always installed by a Linn retailer.



IMPORTANT Don't remove all the collars at once. Note that the lowest pair of sockets is only used in AKTIV mode. Don't connect to them at any other time.

SINGLE WIRING Install a linking plate between the top two negative sockets, and between the top two positive sockets. Leave the bottom two sockets unused.



BI-WIRING Remove both linking plates. Leave the bottom two sockets unused.



BI-AMPING The exact method of wiring your system in this configuration depends on the pre-amplifier and amplifiers you are using. Please contact your retailer for full information.

POSITIONING

Place the speakers so that each speaker is the same distance away from your normal listening position. The distance between the speakers should be no more than the distance from the listening position to either loudspeaker.

KEILIDH speakers have been designed to perform best when placed close to a wall. Ideally the rear of the loudspeaker should be between 4" and 12" (10 cm and 30 cm) from the wall, and at least 18" (45 cm) from any corner. Like all loudspeakers, they are influenced by the wall behind them. Generally speaking, moving the KEILIDHs closer to the back wall will increase the bass output, but too close will make the bass monotonic and sluggish.

They will usually benefit from being angled inwards slightly by between 5 and 10 degrees. This breaks the standing wave between the cabinet and the wall, and gives a clearer, more tuneful, midrange.

Wherever the KEILIDHs are positioned, they will work best when stable and secure on the floor. Adjust the spikes and lock them firmly so that the speakers cannot rock. The spikes and locknuts on the integral stands need to be adjusted from underneath; adjustment on the composite stand can be effected from above.

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

SPECIFICATIONS

Type	2 way loudspeaker with crossover at 2.8kHz
Frequency response	50Hz - 20kHz +/-2dB, 1m on axis.
Input impedance	4 Ohms nominal
Amplifier requirements	At least 60W per channel into 4 Ohms. For example, Linn LK140.
Features	Internal adjustment of treble level.
Wiring options	Single-wiring, Bi-Wiring, Bi-amplification, Active Bi-Amplification, Active Tri-Amplification.
Size	825mm (H) x 200mm (W) x 275mm (D)
Weight	18kg 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.

WARNING 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

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

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NOTES

