



**LINN KLOUT**  
O W N E R S M A N U A L

## **Year 2000 Compliance**

Linn has used all reasonable endeavours to ensure that the software in the products manufactured by it is capable of normal operation before, during and after 1 January 2000 and in respect of past, present and future dates without replacement, alteration or upgrade ("Year 2000 Compliant"). Linn, however, gives no express warranties, representations or undertakings and to the maximum extent permitted hereby excludes any terms, warranties, representations or undertakings implied by law to that effect. Linn cannot give any warranties, representations or undertakings that non Linn software is or will be Year 2000 Compliant or that Linn's software will be Year 2000 Compliant if used in conjunction with non Linn products, systems or software. The Purchaser, Installer, Retailer or Distributor will be solely responsible for ensuring that Linn's software will be Year 2000 Compliant when used in conjunction with such non Linn software, systems or products and for any failure if it is not Year 2000 Compliant in such circumstances. Except to the extent implied by law and which by law cannot be excluded, Linn shall not be liable to any party for any costs, claims, losses (including indirect and consequential losses) or liabilities arising from the failure of Linn's software to be Year 2000 Compliant if used in conjunction with non Linn products, systems or software.

## 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.*

DISCONNECT SUPPLY CORD BEFORE CHANGING FUSE.  
*ATTENTION: DEBRANCHER AVANT DE REMPLACER LE FUSIBLE.*

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.

## **MAINS PLUGS**

This appliance is supplied with a non-rewireable mains plug for the intended country.

Replacement mains leads can be obtained from your Linn retailer.

Should you need to change the plug please dispose of it carefully.

A plug with bared conductors is dangerous if engaged in a live socket.

The Brown wire must be connected to the Live (Line) supply pin.

The Blue wire must be connected to the Neutral supply pin.

The Green/Yellow wire must be connected to the Earth (Ground) supply pin.

Please contact your retailer or a competent electrician if you are in any doubt.

## **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 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 Polarization. Do not defeat the precautions taken to ground or polarize the supply to the appliance.
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. Non-use periods. Unplug the power cord from the outlet if the product will be unused for a long period 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.

## **UK USERS PLEASE READ THIS IMPORTANT SAFETY INFORMATION.**

### **FUSE REPLACEMENT**

This appliance is fitted with a non-rewireable 13 Amp mains plug. The plug contains a 5 Amp fuse.

If the fuse has blown it can be replaced:

- a) pull out the red fuse cover/carrier.
- b) remove and dispose of the blown fuse.
- c) fit a new 5 Amp BS1362 approved fuse into the carrier and push the carrier back into the plug.

Always ensure the fuse cover is fitted. If the fuse cover is missing do not use the plug. Contact your Linn retailer to obtain a replacement fuse cover. Fuses are for fire protection and do not protect against electric shock.

### **MAINS PLUG REPLACEMENT**

Should your mains plug need replacing and you are competent to do this proceed as follows. If you are in doubt contact your Linn retailer or a competent electrician.

- a) Disconnect the plug from the mains supply.
- b) Cut off the plug and dispose of it safely. A plug with bared conductors is dangerous if engaged in a live socket.
- c) Only fit a 13 Amp BS1363A approved plug with a 5 Amp fuse.
- d) The cable wire colours or a letter will be marked at the connection points of most quality plugs.

Attach the wires securely to their respective points. The Brown wire must go to the Live pin, the Blue wire must go to the Neutral pin and the Green/Yellow wire must go to the Earth pin.

- e) Before replacing the plug top ensure that the cable restraint is holding the outer sheath of the cable firmly and that the wires are correctly connected.

**M**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.

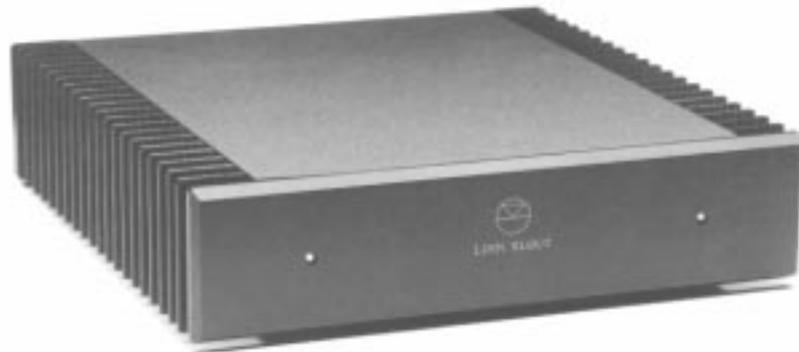


**I****NTRODUCTION** The Linn KLOUT power amplifier has many unique attributes which set new standards in both mechanical and electronic engineering. The KLOUT is designed to partner the Linn KAIRN pre-amplifier, from which it can be operated directly.

The KLOUT is housed in a one-piece, solid extrusion, engineered to maximise strength and heat dissipation. Three pairs of speaker outlets per channel allow easy bi-wiring or tri-wiring. A screened transformer enables the KLOUT to be positioned close to other audio products in your system without interference.

The KLOUT circuitry uses the latest surface mount technology for cooler, more reliable operation. The vertically mounted circuit boards transfer the heat from the power stages directly to the case. Sophisticated circuitry protects the KLOUT against overload, and allows it to be used safely into the most complex loudspeaker loads.

As with all components in the hi-fi chain, the quality of your system source - turntable, tuner or CD player - is vital in ensuring that you get the best possible results from the KLOUT power amplifier.



**INSTALLATION** Unpack the KLOUT and retain the packing for future transportation.

**CAUTION** Take care when handling the KLOUT. It weighs 11kg and should be lifted carefully to avoid damage to yourself and the product. Do not stack a KLOUT with other products which will obstruct the airflow, or which cannot support the weight.

**WARNING** Never attempt any home maintenance. Large capacitors, containing **LETHAL** voltages, remain charged for a considerable time after the KLOUT is switched off and disconnected from the mains. Any servicing should be carried out by an authorised dealer.

### CONTENTS

KLOUT Power Amplifier  
Owner's Manual  
Mains Lead  
Spare Fuse

**WARNING** Use the earthed moulded mains lead supplied. Never use an unearthed plug or adaptor.

**WARNING**  
**THIS APPLIANCE MUST BE EARTHED**  
**IMPORTANT**

The wires in the mains lead are coloured in accordance with the following code:

Green-and-yellow:	Earth
Blue:	Neutral
Brown:	Live

As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured green-and-yellow must be connected to the terminal in the plug, which is marked with the letter E, or the earth symbol, or coloured green or green-and-yellow.

The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.

The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

**VENTILATION** Every power amplifier requires ventilation. Position the KLOUT in such a way as to allow free movement of air around the heatsinks. Up to five KLOUTs can be stacked on top of each other without risk of overheating. We do not recommend stacking the KLOUT on any other product. The KLOUT will automatically shut down if it gets too hot. If this happens, provide more ventilation.

### INPUT CONNECTIONS

The KLOUT has one pair of RCA phono sockets per channel labelled **LINE INPUT** and **LINE OUTPUT**. These phono sockets provide connection to the pre-amplifier and enable the signal to be chained from one KLOUT to another in multi-amplifier applications.

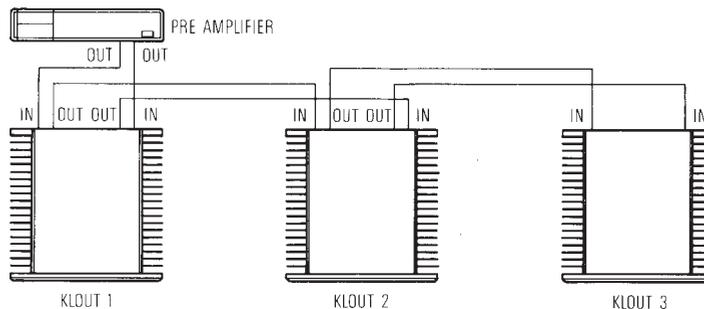
**WARNING** The pre-amplifier and the power amplifier must be switched off before connecting or disconnecting any of the plugs on the rear panel.

Ensure that the left **LINE OUTPUT** of the pre-amplifier is connected to the left **LINE INPUT** on the KLOUT, and likewise for the right channel connection.

In a single KLOUT system the signal from one of the three KAIRN line outputs should be connected to the KLOUT **LINE INPUT** sockets. The KLOUT **LINE OUTPUT** sockets remain unused.

In multi-amplifier installations, we recommend that each KLOUT is connected individually to one of the three KAIRN line outputs. However, in installations where minimal cabling is required, it may be desirable to use the **LINE INPUT** and **LINE OUTPUT** sockets on the KLOUT to link the power amplifiers.

The signal from the pre-amplifier is routed to the **LINE INPUT** sockets of the first KLOUT. The signal is then chained to the second KLOUT by connecting an RCA phono interconnect cable from the **LINE OUTPUT** sockets of the first KLOUT to the **LINE INPUT** sockets of the second KLOUT. This connection procedure is repeated for each KLOUT in the chain.

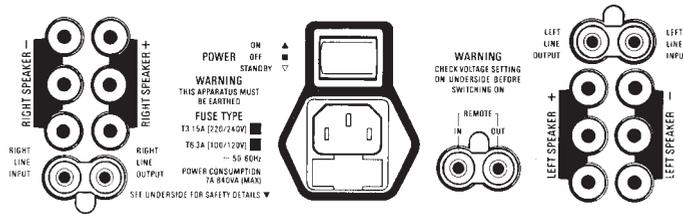


**CAUTION** When passively bi-amping or tri-amping loudspeakers remove any connecting links that are at the speaker input terminals. Failure to do this will short the amplifier outputs together and may damage the power amplifier.

## OUTPUT CONNECTIONS

Connection of the KLOUT to the loudspeakers should be made with a good quality cable. We recommend the use of Linn K series speaker cable and Linn KNEKT speaker plugs.

Linn speaker cable is marked with the Linn logo to indicate directionality. The cable should be connected to the amplifier with the logo pointing towards the loudspeaker.



Ensure that the wiring is correct. The red socket is positive and the black is negative. The positive wire (red connector) is identified by a rib along the side of the K20 cable.

**NOTE** When using the Linn KAIRN pre-amplifier, or another phase inverting pre-amplifier, the signal to the KLOUT is inverted. Therefore, to maintain absolute phase, connect the positive output of the KLOUT to the negative (black) loudspeaker terminal, and the negative output to the positive (red) loudspeaker terminal.

## ADDITIONAL CONNECTIONS

To operate the KLOUT via the KAIRN, connect the KAIRN **REMOTE IN** socket to the KLOUT **REMOTE OUT** socket. Additional KLOUTs can be chained using phono-phono interconnects from the **REMOTE IN** socket of one KLOUT to the **REMOTE OUT** socket of the next KLOUT.

## MAINS CONNECTION

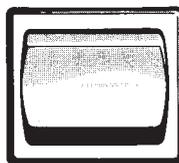
**WARNING** The KLOUT must be switched off and disconnected from the mains before checking the fuse.

The KLOUT will be fitted with the correct fuse by your dealer. Before plugging into the mains, check that the voltage selected is correct for the country of use. To set the voltage, rotate the voltage selector on the underside of the product until the appropriate voltage is aligned with the white marker.

## OPERATION

The KLOUT can be switched on either manually or via the KAIRN mains switch. A three-way switch is positioned on the back panel of the KLOUT.

POWER    ON ▲  
          OFF ■  
          STANDBY ▼



To switch the KLOUT on manually, press the switch to the **ON** position. The indicators will light red, there will be a click and after a few seconds, when the power supplies are stabilised, the indicators will light green showing the KLOUT is ready for use.

To control the KLOUT from the KAIRN, press the switch on the KLOUT to **STANDBY**. Switch the KAIRN on. After a few seconds there will be a click from the KLOUT, the indicators will light red then, after a few more seconds, green. The KLOUT is ready for use.

**NOTE** As more KLOUTs are chained with the REMOTE link, the delay to switch on will increase by a few seconds per KLOUT.

To switch off manually, press the switch on the KLOUT to **OFF**. From the KAIRN, simply switch off the KAIRN. When the KLOUT is switched off, the green indicators will light red after a brief delay before fading out.

The KLOUT is fitted with sophisticated self-protection circuitry. If the self-protection circuitry is activated for any reason, the affected channel indicator will light red, and the channel will be muted. In the case of a brief current overload, the indicator will return to green and the channel will un-mute after approximately six seconds. If the indicator remains red, and the channel remains muted, a short circuit or over temperature condition exists. See Maintenance for further information.

If the red indicator is on, and the channel is not muted, this indicates a fault with the KLOUT. If this happens, return the KLOUT to your dealer for examination.

## GENERAL SYSTEM INSTALLATION

**TURNTABLES** For best results a turntable should be placed on a small, light, rigid table, or alternatively wall mounted on a light, rigid shelf.

**CD PLAYER** The KARIK and NUMERIK should be positioned on a level surface. Extensive internal screening in the KAIRN pre-amplifier, KREMLIN tuner, KARIK and NUMERIK facilitates stacking the products one on top of the other without interference, if desired.

**POWER SUPPLIES** Take care not to position too close to signal leads, turntables or pre-amplifier.

**AMPLIFIERS** Pre and power amplifiers may hum if positioned too close together. For minimum hum, experiment by moving the components with the system at full volume but not playing music (although it is best to turn the volume down whilst actually moving the components). The KLOUT power amplifier has a screened transformer which enables it to be positioned close to other audio products in your system without interference. Position the KLOUT to allow free movement of air around the heatsinks. Do not stack a KLOUT with other products which will obstruct the airflow, or which cannot support the weight.

**LOUDSPEAKERS** Loudspeakers should be positioned correctly. They should be mounted on rigid stands and not subject to any rocking movement.

**CLEAN CONTACTS** It is important that the electrical contacts in a hi-fi system are kept mechanically sound and clean. Occasionally unplugging and re-plugging all the connectors will effectively clean contacts.

**WARNING** This should be carried out after the mains supply has been switched off.

**INTERCONNECT LEADS** Correct cables should be used. We recommend good quality copper cable for interconnect leads and advise 4mm<sup>2</sup> multicore copper cable, such as Linn K20, for speaker leads.

Your Linn dealer can supply high quality interconnects for linking all your hi-fi components.

## MAINTENANCE

**FUSE PROTECTION** A fuse is fitted to the power input socket on the rear of the KLOUT. There is also a space to store the spare fuse provided.

**WARNING** The KLOUT must be switched off and disconnected from the mains before checking the fuse.

If you require to check the fuse, unplug the mains cord and use a small screwdriver to open the fuse carrier on the mains inlet connector. Check the fuse and replace if necessary with the spare fuse provided.

**WARNING** Never attempt any home maintenance. Large capacitors, containing lethal voltages, remain charged for a considerable time after the KLOUT is switched off and disconnected from the mains. Any servicing should be carried out by an authorised dealer.

**PROTECTION CIRCUITRY** The KLOUT is protected against current overload, short circuits and over temperature. If the KLOUT has overheated, switch off and provide more ventilation to allow free movement of air around the heatsinks. If the KLOUT has shut down due to a short circuit, switch off and check the speaker cables and connections.

**CLEANING** Dust or finger marks can be removed by using a soft, slightly damp cloth. Do not use domestic cleaning products.

## GENERAL SYSTEM INSTALLATION

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

In addition to any statutory rights the customer may have, we undertake to replace parts which have failed due to faulty manufacture for a period of time. To help us, please ask your Linn retailer about the Linn warranty scheme in operation in your country. In many countries registration of your purchase with Linn or its distributor will enable you to receive copies of the Linn Record Newsletter to keep you up to date with developments and products from Linn.

### **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 doubt, please contact your nearest Linn retailer. For information on your nearest retailer, contact the Linn Helpline 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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INTERNET: <http://www/linn.co.uk/linn>

## SPECIFICATIONS

### DIMENSIONS

Width - 320mm Depth - 326mm Height - 80mm (incl. feet)

### INPUT IMPEDANCE

5 Kiloohms

### VOLTAGE GAIN

28.5 dB

### POWER OUTPUT

80 Watts per channel into 8 Ohms

160 Watts per channel into 4 Ohms

### POWER CONSUMPTION

840 VA maximum

### MAINS SUPPLY/FUSE

220V/240V T3.15 Amps antisurge

100V/120V T6.3 Amps antisurge



