LINN
OWNERS
MANUAL

LK1 PREAMP

LK280 POWER AMP
INTRODUCTION Thank you for buying this Linn product. The Linn LK1 preamplifier and the Linn LK280 power amplifier have been designed to give the best possible musical performance in a domestic environment.

The Linn LK1 preamplifier incorporates fully solid state signal handling controlled by a microprocessor. This enables various unique features, including remote control, to be incorporated without compromising sound quality.

The Linn LK280 power amplifier has been designed to drive loudspeakers properly, and perfectly complements the Linn LK1 preamplifier both in appearance and engineering. However, the results achieved by any amplifier are dependent on the use of suitable ancillary equipment.

INSTALLATION Unpack the units and retain the packing for future transportation. The power amp is most comfortably handled front to back rather than side to side, thus avoiding fins. Both units run warm in operation, therefore ensure adequate ventilation for the power amp.

The preamp should be located close to the turntable. The power amp should be at least 15cm (6") from the preamp to avoid hum.
Ensure the power switches are in the **OFF** position (proud of fascia). Connect the mains leads, ensuring plugs are pushed firmly into place.

Connect the preamp to the power amp using the interconnect leads supplied with the preamp. Ensure in each case that the key in the plug and the slot in the socket are correctly aligned before pushing into place.

**INPUT CONNECTIONS**

**PHONO:** On the arm cable lead the red plug is the right-hand channel. The arm cable earth, if present, should be connected to the binding post.

**AUX/TUNER:** Three pin female XLR plugs are used for these inputs.

**TAPE INPUTS/OUTPUTS:** Five pin female XLR plugs are used for the two tape connections.

These connectors were chosen for their quality and reliability. Good quality interconnect leads and connectors are available from Linn dealers.

**LOUDSPEAKER CONNECTION**

The 4mm plugs supplied should be well soldered to good quality cable. For best results, we recommend Linn K20 loudspeaker cable.

**IMPORTANT: ABSOLUTE PHASE** Since the preamp inverts the phase of the signal to the power amp, both sets of speaker connections should be reversed at the power amp. Therefore the positive loudspeaker lead is connected to the negative amplifier output. Linn K20 cable is marked with the Linn symbol to indicate directionality. The wires shown should be connected to the LK280 amplifier and the other end, marked by the circular logo, connected to the speakers. The positive wire is identified by a rib along the side of the cable.
OPERATION  The preamp and power amp can be switched on in any order, without audible thump. A light above the REC button will appear on the preamp. The mains indicator next to the mains switch will light on the power amp. The preamp will power up in its last used input state, therefore other lights may appear. When you press any button on the preamp or on the remote control, the green and red lights will flash to indicate that a command has been received.

To return to standby state, press the REC button, then MUTE, then MUTE again. Pressing MUTE disconnects all inputs.

To select an input, simply press one of the six source buttons. A green light will appear at the corresponding position on the display.

Since the preamp powers up at minimum volume, press the VOL+ button for a few seconds. A slight ticking may be heard from the loudspeakers. This is perfectly normal, and indicates the correct functioning of the volume control. The selected input should now be audible.

EXPLANATION OF CONTROL BUTTONS

<table>
<thead>
<tr>
<th>MC</th>
<th>Moving Coil input. Select MC when using a low output moving coil cartridge on record deck.</th>
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</thead>
<tbody>
<tr>
<td>MM</td>
<td>Moving Magnet input. Select MM when using a moving magnet cartridge or a high output moving coil cartridge.</td>
</tr>
<tr>
<td>TUN</td>
<td>Radio Tuner</td>
</tr>
<tr>
<td>AUX</td>
<td>Aux input, usually used for CD</td>
</tr>
<tr>
<td>TP1</td>
<td>First Tape input</td>
</tr>
<tr>
<td>TP2</td>
<td>Second Tape input</td>
</tr>
<tr>
<td>REC</td>
<td>Record</td>
</tr>
<tr>
<td>MUTE</td>
<td>Mute</td>
</tr>
<tr>
<td>BAL+</td>
<td>Balance right</td>
</tr>
<tr>
<td>BAL-</td>
<td>Balance left</td>
</tr>
<tr>
<td>VOL+</td>
<td>Volume up</td>
</tr>
<tr>
<td>VOL-</td>
<td>Volume down</td>
</tr>
</tbody>
</table>
CONTROL FUNCTIONS The microprocessor control of the LKI enables some novel control features:

**RECORDING**

To record, for example, the tuner, press REC followed by TUN. The signal will then be routed to both tape outputs.

To record from your record deck, press REC followed by MM or MC depending on which type of phono cartridge you are using.

To record from one tape machine to another, press REC then TP1. This enables you to record from TP1 to TP2. Similarly, pressing REC then TP2 enables you to record from TP2 to TP1.

When you have selected a source for recording, a red light will appear on front panel of the LKI beside this source.

In order to monitor the recording, press TP1 or TP2 according to which tape machine is being used.

While recording from one source, it is possible to listen to another. For example, it is possible to record from the radio while listening to your record player.

To stop a recording press REC followed by MUTE.

NOTE: because MM and MC inputs share a common equalisation stage in the preamp, it is not possible to listen to MC when recording MM or vice versa.

**STORING VOLUME LEVEL**

Select input required, adjust volume and balance if necessary and press REC then MEM. This can be done for all six inputs. The stored volume setting can be recalled by selecting an input and pressing MEM. The stored volume settings are held by microprocessor which is powered by a rechargeable battery. This will hold settings for many months with the power disconnected.

The settings can be readjusted at any time by repeating the above procedure. This convenient facility enables you to compensate for different input and listening levels.
BALANCE

To balance both channels precisely, press REC then VOL+. To adjust balance to left or right, simply press and hold BAL or BAL+, until desired level has been achieved.

If you want to check the performance of one channel only, press REC then BAL or BAL+, which will put the balance control fully left or right. To return to original setting, simply touch VOL+ or VOL−.

TAMPER-PROOF FACILITY

To disable the control panel and stop it responding to commands, press REC then VOL−. This function renders the unit tamper-proof (useful for parties, young children etc.). To cancel ‘disable’ press REC then VOL− again.
REMOTE CONTROL The unique signal handling arrangement incorporated in the LK1 preamp enables the use of a remote control unit without compromising performance.

To enable the remote control to talk to the preamp you must first press the button marked PRE. A green light will appear above the record button. Except for REC VOL-, the remote control functions are identical to the preamp functions. Pressing REC VOL- disables the remote control but not the control panel. The remote control can be re-enabled by pressing REC VOL- again.

The unmarked buttons on the remote control unit are for future use with other Linn products and will not affect the preamplifier.

LINN LK280 POWER AMPLIFIER The only control on the power amp is the ON/OFF switch, however you should be aware that the LK280 incorporates protection circuitry. If the power amp is overloaded the power supply of the overloaded channel will shut down completely. The other channel is unaffected. To reset the power supply, the power amp must be switched off for five minutes. Cure the cause of the overload before switching on again.

If there is a fault condition causing the power amp to overheat, a thermal trip in the mains supply will remove power to both channels until a safe temperature is reached. In normal use this trip should not operate. If it does, it almost certainly indicates a fault or a lack of ventilation.
PACKING AND TRANSPORT  If transporting the amplifiers, please use the original packing as this will protect them from mechanical damage.
FAULT FINDING For the safety of your loudspeakers, if you suspect a fault, disconnect the loudspeakers immediately and connect only after tracing the fault. Check 1 Power light on preamp. 2 Power light on power amp. 3 Mains supply.
4 Mains fuse: remove the supply cord, then the fuse drawer on mains input/output connector on the back panel, turning the preamp on to its left side to do this. 5 Plug top fuses: lever out from the fuse holder. 6 Signal connections. 7 Switch off power amp for five minutes, then switch on again.

MAINTENANCE Unlike other amplifiers, there are no moving parts in the Linn LK1 and LK280 therefore problems associated with dirty switch and volume control contacts are non-existent. The only maintenance suggested is occasionally to unplug the connectors from the back panel and reconnect them. This ‘wiping’ action ensures good contacts. Finger marks and dust can be removed with a damp cloth.

The back-up battery for the memory settings is a rechargeable Ni-Cad with an expected life of at least five years. Should the battery fail, all memory settings will be set to zero when power is removed. The preamp will continue to function and the battery can be replaced by any Linn dealer.

GENERAL INFORMATION For optimum sound quality, we recommend that the preamp should be left on continuously. For the safety of your loudspeakers, the power amp should be switched off when not in use. To avoid warpage, records should not be placed on top of amplifiers and remember to MUTE the preamp before cleaning your stylus!

GUARANTEE AND SERVICE The unit 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 any parts which have failed due to faulty manufacture. Keep a copy of the sales receipt as this will establish the purchase date. Refer all enquiries to authorised dealers only.

For information on your nearest dealer, contact the Linn factory in the UK or an overseas distributor.

OWNER REGISTRATION Please return the enclosed registration form to Linn Products, if you are resident in the UK, or to your national distributor outside the UK. We will add your name to our mailing list and send you regular news about Linn and hi-fi developments in general.
THE LK1 PREAMPLIFIER

For 0.5V rms output at 1kHz, 2k Ohm load.

INPUTS
MOVING COIL : 250mV, 150 Ohm
75k internal links for cartridge outputs over 500mV/5cm/s
MOVING MAGNET : 3.3mV, 47k Ohm, 68pf
AUX/TAPE/TUNER : 1/2 0.5V rms, 10k Ohm
TAPE OUTPUT : 0.4V rms, 2K Ohm load
MAINS SUPPLY : 100V, 115V, 220V, 240V 50/60 Hz (one voltage per mains module)
DIMENSIONS : 260mm W x 265mm D x 75mm H
WEIGHT : 3.2kg
FUSE : T200mA antisurge (220V, 240V)
T300mA antisurge (Canada)

THE LK2 POWER AMPLIFIER

VOLTAGE GAIN : 28.5dB
INPUT IMPEDANCE : 5k Ohm
POWER OUTPUT : 80 Watts per channel / 3 Ohm
160 Watts per channel / 4 Ohm
Continuous sinusoidal rating
REACTIVE LOAD STABILITY : Safe and stable into +/- 90 degrees
load (+/- 14 Ohm)
MAINS SUPPLY : 100, 115, 220, 240 V ac, 50 / 60 Hz
(one voltage per mains module)
DIMENSIONS : 320mm W x 265mm D x 75mm H
WEIGHT : 8.1kg
FUSE RATING : T 3.15 Amps anti surge 230/240 V
T 6.3 Amps anti surge 100/115 V
POWER CONSUMPTION : 700 VA maximum, 30 VA idling.