

## 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.

#### 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 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 the 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.
- 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. 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.
- 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.
- 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.
- 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-wireable 13 Amp mains plug. The plug contains a 5 Amp fuse. If the fuse has blown it can be replaced as follows:

- 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 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.

# Copyright and acknowledgements

Copyright © Linn Products Limited.

Linn Products Limited, Floors Road, Waterfoot, Glasgow, G76 0EP, Scotland, United Kingdom.

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 permission of the publisher.

Printed in the United Kingdom.

KEILIDH, KUDOS, MAJIK, WAKONDA, and Sneaky are trademarks of Linn Products Limited.

The information in this manual is furnished for informational use only, is subject to change without notice, and should not be construed as a commitment by Linn Products Limited. Linn Products Limited assumes no responsibility or liability for any errors or inaccuracies that may appear in this manual.

Part no: PACK 179

This manual was produced by Human-Computer Interface Ltd, Cambridge, England.

# Contents

Introduction	1
Your Linn system	2
KUDOS and music	3

Setting up KUDOS		5	
Unpacking	5		
Positioning the KUDOS Tuner			7
Connecting the KUDOS Tuner			. 8
Choosing an aerial		. 10	
FM reception	10		
AM reception	11		

Using KUDOS	13
Using the front panel	13
Switching on and off	15
Choosing a station	16
Tuning 18	
Tuning directly to a station	20
Setting presets	. 21
Displaying the signal strength	23
Setting the muting threshold	

Getting the best reception	27
Getting good reception on FM	27
Getting good reception on AM	29

Technical information	33
Tuning 33	
Specifications	. 35

Index		37
-------	--	----

# Introduction

We believe that good music is not a luxury, but a necessity, and we at Linn have dedicated the better part of two decades to making sure that our customers are given the best possible experience of the music they love. In other words, we take music seriously, which is why we dedicate ourselves to building hi-fi which sets the highest possible standards in bringing music to life within your home.

Listening to your new KUDOS Tuner should be the nearest you can get to being at a superb live performance. It combines superb quality, approaching that of CD on the FM waveband, with unusually high sensitivity, to allow you to reach even quite distant radio stations. With KUDOS you can now hear radio broadcasts as they originally sounded, and we want to make sure that you get the maximum enjoyment possible.

To do that, you need to know exactly how to get the best out of your KUDOS Tuner and that is what this manual is all about. In the next few pages you will find out everything you need to know about how to set up the KUDOS Tuner, and how to use it to get the best possible results.

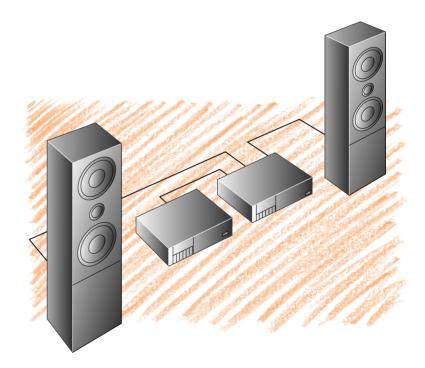
We hope that you will spend a few minutes getting to know the KUDOS Tuner well, and will keep on experimenting and, above all, enjoying it!

Listening	to your new
KUDOS T	uner should be
the neare	st you can get to
being at a	a superb live
performa	nce.

# Your Linn system

Every hi-fi system has three sections: source, control, and playback. With Linn hi-fi you have a range of choices for these three sections, and you have the freedom to extend or improve sections at a later date.

The ideal starter system incorporating a KUDOS Tuner consists of a MAJIK control amplifier with on-board stereo power amplifiers, and a pair of KEILIDH loudspeakers.



The KUDOS Tuner is also an ideal addition to the top Linn components, to provide superb quality radio reception to an existing system.

# KUDOS and music

The KUDOS Tuner is a very flexible radio tuner, giving you access to both the FM and AM wavebands. It provides extremely high quality stereo reception on the FM waveband, combined with very good sensitivity to allow even distant FM radio stations to be received with low distortion.

The AM waveband provides good selectivity to avoid interference between closely spaced stations.

To select a station you can either enter the frequency directly, or scan through the wavebands stopping at each station. You can also define up to 50 numbered presets to make finding your favourite stations as simple as possible.

You can control the KUDOS Tuner from the front panel keys, or using the remote control handset supplied with it. This has a numeric keypad to allow you to enter frequencies or preset numbers directly.

#### **KUDOS** as a Sneaky module

If you have a MAJIK or WAKONDA amplifier you can choose to have the KUDOS Tuner fitted as a Sneaky module inside the amplifier, to make a very compact integrated unit.

The KUDOS Tuner automatically appears as an extra input, leaving your existing tuner input available for a second tuner, or TV input.

# Setting up KUDOS

This chapter explains how to unpack your KUDOS Tuner, and how to install it with your other hi-fi components.

It also gives advice on choosing and positioning the aerial to get best possible reception with your KUDOS Tuner.

# Unpacking

The KUDOS Tuner comes in a box with the following accessories:

- a remote control handset
- a mains lead
- two single phono to phono leads
- one spare fuse
- this manual.

We recommend you retain the packaging in case you need to transport the KUDOS Tuner at a later date.

WARNING: Do not connect the mains supply until you have verified that the KUDOS Tuner is set to the correct voltage for your mains supply.

#### Voltage selection

The KUDOS is factory-set for a 240 volts mains supply and must not be connected to a mains supply before it is adjusted for your local voltage, and fitted with the appropriate fuse. To set the voltage, rotate the voltage selector on the underside of the unit until the appropriate voltage is aligned with the white marker. To fit the fuse, first identify the correct fuse for your local voltage – 400mA anti-surge for 220V and 240V, and 800mA anti-surge for 100V and 120V. Pull open the fuse drawer at the left-hand side of the mains inlet, insert the fuse in the rear compartment, and close the drawer.

WARNING: This appliance must be earthed. Use the earthed moulded mains lead supplied. Never use an unearthed plug or adaptor.

#### Important note for UK use

The wires in this mains lead use the following colour 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 marking identifying the terminals in your plug, proceed as follows:

Connect this wire	To the terminal
Green and yellow	Marked with the letter E, or by the earth symbol, or coloured green or green and yellow.
Blue	Marked with the letter N or coloured black.
Brown	Marked with the letter L or coloured red.

# Positioning the KUDOS Tuner

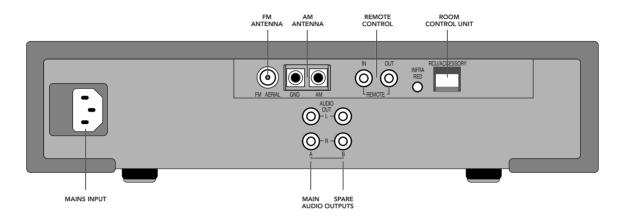
You can position your KUDOS Tuner almost anywhere you find convenient, but the following considerations may be useful.

The Linn remote control system is exceptionally sensitive. You should have no problems operating the KUDOS Tuner with the remote control wherever it is placed in a room, provided you keep it out of direct sunlight and you do not obscure the control window. It can even be operated when placed behind smokedglass cupboard doors.

The KUDOS Tuner can be placed on top of other Linn products, provided you allow plenty of air circulation around components that generate heat, such as the Linn MAJIK amplifier.

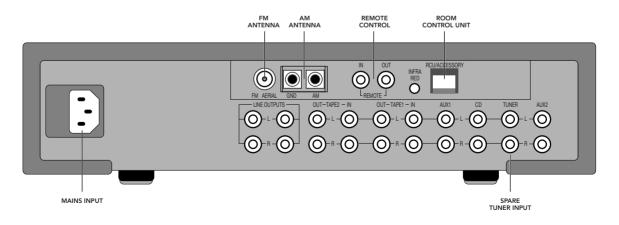
# Connecting the KUDOS Tuner

The following diagrams show the connections for the rear panel of the stand-alone KUDOS Tuner, and the Sneaky KUDOS Tuner:



#### Stand-alone KUDOS

**Sneaky KUDOS** 



#### Connecting the mains supply

Connect the KUDOS Tuner to a mains supply using the mains cord supplied with it.

Note that the KUDOS Tuner should be switched off before connecting or disconnecting any of the plugs on the rear panel, or you may generate surges which could damage other components in your hi-fi system.

#### Connecting the stand-alone KUDOS Tuner audio output

The stand-alone KUDOS Tuner provides two pairs of phono audio outputs. Connect one pair of outputs to the radio or line input of your preamplifier using the phono cables provided. The other pair of outputs are provided to allow you to connect to a second preamplifier or a multi-room system.

#### **Connecting the Sneaky KUDOS Tuner**

The Sneaky KUDOS Tuner is connected internally to the MAJIK amplifier or WAKONDA preamplifier, and you do not need to make any further audio connections.

#### Connecting the aerial

The KUDOS Tuner requires external FM and AM aerials to receive stations on the corresponding wavebands. For more information about choosing and positioning each type of aerial refer to the next section, *Choosing an aerial*.

## Choosing an aerial

The KUDOS Tuner is capable of providing an extremely high-quality signal, with low distortion and very good sensitivity. However, its performance is determined by the quality of the signal you provide to it, and this is dependent on the type of aerial you are using.

The type of aerial you will need depends on the quality of reception in your area, and so it is difficult to give specific recommendations. However this section describes the range of options available, with recommendations to help you choose the best one.

Your Linn dealer can offer advice relevant to your area, and help you install a suitable antenna.

# FM reception

For best results, the FM antenna should provide a signal strength of at least 70dBµV for strong stations, which corresponds to a reading of S70 on the KUDOS display.

#### **Ribbon** antenna

If you are in an area of high signal strength, you may find that a ribbon antenna, also referred to as a split-flex dipole, gives acceptable results. However, they are prone to fading, and the signal can be affected when you walk around the room. They are also prone to interference from computers or televisions in the same room, so it is best to install them away from electrical equipment, such as near a window. A balun transformer is often recommended at the antenna end of the cable, but in practice this may make little difference.

#### Whip antenna

A whip antenna can work well, and is not directional.

#### Three element antenna

For best reception use a three-element antenna. This can add up to  $10dB\mu V$  to the received signal strength, and mounting the antenna higher, such as in a loft, can add a further  $10dB\mu V$ . A three-element antenna is highly directional and so should be oriented for best results.

# AM reception

For best results use a large loop of wire, six feet across or more. This will pick up strong signals with a minimum of interference. The loop antenna is directional and it should be mounted vertically, facing the stations you want to receive. Keep it away from computers, televisions, and mains wiring to minimise interference.

# Using KUDOS

This chapter explains everything you need to know to use KUDOS, from switching it on and off to setting up presets for your favourite stations.

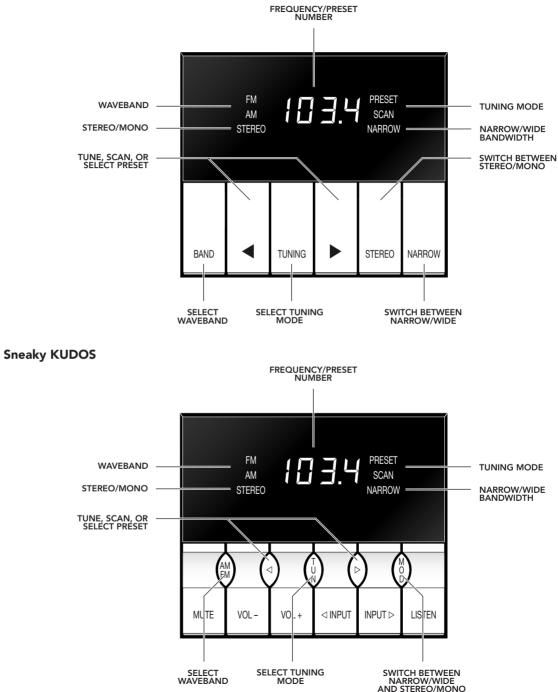
# Using the front panel

We designed the KUDOS Tuner to be as simple as possible to operate. The front panel display gives clear information about what you are doing and, although there are many sophisticated features, all the most commonly-used ones require only one key press.

#### **Remote control**

The KUDOS Tuner is supplied with a remote control, and this provides access to all of the functions available from the front panel, in addition to being able to let you enter preset numbers and station frequencies directly from a numeric keypad.

The illustrations on the next page explain the function of each of the control keys, and the meaning of the different parts of the display. Stand-alone KUDOS



The function of each key is explained in the following table:

Press this key	To do this
BAND	Switch between AM and FM. In Europe the AM band includes both medium wave and long wave.
TUNING	Change the tuning mode between direct tuning, signal strength display, preset mode, and scan mode.
< and >	Change the frequency or preset, or scan, depending on the tuning mode.
STEREO	Switch between Mono and Stereo operation. The STEREO display will show whether the station can be received in stereo.
NARROW	Switch between wide and narrow bandwidths. NARROW is displayed in narrow mode.
MOD	Sneaky KUDOS only. Steps between the different combinations of stereo and narrow.

# Switching on and off

#### Switching on

To switch KUDOS on press the power button. The tuner will select preset 0 and the display shows:

# 

You can store your favourite station as preset 0 so that it is selected whenever you switch on; for information about doing this see *Setting presets*, page 21.

#### Switching off

To switch off press the power button again.

#### To select the KUDOS Tuner

The stand-alone KUDOS will normally be connected to the tuner input on your amplifier. Select it in the normal way; for example, by pressing the **TUNER** key on the remote control.

#### To select the Sneaky KUDOS Tuner

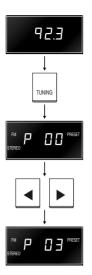
The Sneaky KUDOS appears as an additional input on the amplifier, leaving the original tuner input free for a second tuner.

When you first switch on the amplifier the KUDOS Tuner is automatically selected as the input, with preset 0 chosen.

**Remote:** Press the WHERE key. On other remote controls this is marked **ZONE** or MATRIX.

# Choosing a station

The KUDOS Tuner allows you to store up to 50 stations as presets, so that you can tune to them directly simply by entering the number of the preset. The presets can be freely mixed between AM and FM and, in addition to the station frequency, the preset also stores the options selected for best reception of that station: mono/stereo and narrow/wide.



#### **To select a preset** Press the **TUNING** key (**TUN** on the Sneaky KUDOS) until the **PRESET** light illuminates on the front panel.

Then press < or > until the display shows the preset you want to select; for example P  $\square$ 3.

Hold down the < or > button to step quickly between presets.

**Remote:** Press **PRESET** to select preset mode, and then press + or - to select a preset. Hold down + or - to step between presets.

#### To enter a preset number directly

Using the remote control you can type a preset number directly as follows.

If you have been controlling another source, such as a CD player, first select the tuner by pressing **TUN** on the remote control (or **WHERE** for a Sneaky KUDOS).

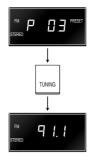
Then press **PRESET** to select preset mode.

To select a preset from 0 to 9 press the corresponding number on the remote control.

To select a preset above 9 press and hold the first digit until it appears as the left-hand digit of the preset number; for example:



Then press the second digit.



# Tuning

#### To display the preset frequency

Once you have selected a preset you can display the frequency of the preset you have selected by pressing the **TUNING** key (**TUN** on the Sneaky KUDOS).

The KUDOS Tuner lets you find a frequency by tuning manually, or you can scan automatically to find the next station. When you are scanning the tuner will only stop on stations above the muting threshold; for more information see *Setting the muting threshold*, page 24.

#### To select the band

Press the **BAND** key (**AM/FM** on the Sneaky KUDOS) to change between FM and AM. The display shows the current band; for example:





#### **To scan for a station** Press the **TUNING** key (**TUN** on the Sneaky KUDOS) until the display shows SCAN.

Then press < or > to scan up or down in frequency to the next station. The KUDOS Tuner will stop scanning when it finds a station.

To cancel scanning before a station is found press the **TUNING** button again (**TUN** on the Sneaky KUDOS).

Press and hold the < or > key to scan quickly through the frequencies, without stopping on any stations. Normal scanning resumes when you release the button.

To tune more accurately when scanning, KUDOS automatically selects narrow tuning mode. After cancelling scanning you may wish to select wide tuning mode again for best reception.

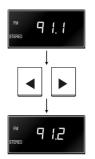
**Remote:** Press **SCAN** to select scan mode, and then use the **+** or **-** keys to scan up or down in frequency.

#### To use the long waveband (Europe only)

The long waveband is joined to the medium wave (AM) band, and scanning beyond the medium waveband scans into the long waveband, and vice-versa.

# Tuning directly to a station

If you know the frequency of the station you want to listen to you can select it from the front panel, or enter it directly from the remote control.



#### To tune directly to a station

Press the **TUNING** button on the front panel (**TUN** on the Sneaky KUDOS) until the scan and preset lights disappear and the current frequency is displayed.

Use the < and > keys to tune to the frequency you want to select.

Press and hold down the < or > key to tune quickly through the frequencies.

Tuning is performed in steps of 100kHz (Europe) or 50kHz (USA).

**Remote:** Press the **TUNE** button to select tuning mode and then use the **+** or - keys to move up or down in frequency.

#### To enter a frequency directly

You can use the remote control to tune by entering a frequency directly.

If you have been controlling another source, such as a CD player, first select the tuner by pressing **TUN** on the remote control (or **WHERE** for a Sneaky KUDOS).

Press the **TUNE** key to select tuning mode.

Then type the frequency in 50kHz steps. For example, to enter 101.7MHz key 10170, or to enter 99.95MHz key 9995.

# Setting presets

The KUDOS Tuner allows you to store up to 50 stations as presets so that you can select them by entering the number of the preset.

The preset remembers not only the frequency, but also the other settings you have selected for best reception of that station: narrow or wide, and mono or stereo.

The simplest way to define presets is to use the remote control. You can also define them using the front panel, but this requires more key presses.

#### To store a preset using the remote control

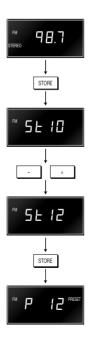
First tune the KUDOS Tuner to the station you want to store. You can also choose narrow or wide, and stereo or mono for best reception.

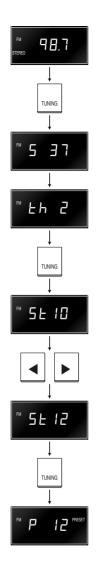
Then press the **STORE** key on the remote control.

Press the + or - keys to select the number of the preset you want to use; for example, 5E i2.

Then press and hold down the **STORE** key on the remote control to store the preset until the display changes to **PRESET** mode; for example P 12.

Alternatively, if you decide not to store the preset press one of the other keys to return to normal operation.





#### To store a preset using the front panel

If the KUDOS Tuner is not in direct tuning mode, press the **TUNING** key (**TUN** on the Sneaky KUDOS Tuner) so that the **SCAN** and **PRESET** lights disappear and the current frequency is displayed.

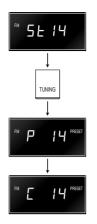
Press and hold the **TUNING** key until the display shows the current threshold setting; for example, Eh = 2.

Then press the **TUNING** key again to display the preset to be stored; for example 5Ł  $I_{-}^{D}$ .

Choose the number of the preset you want to use, using the > or < keys.

Then press and hold the **TUNING** key until the display returns to preset mode and displays the preset you defined; for example, P 12.

The preset is now stored.



#### To clear a preset

Enter store mode and select the preset, as if you were going to store into it.

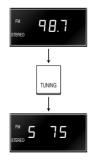
The display should show the number of the preset you want to clear; for example 5Ł 14.

Now press and hold the **TUNING** key on the front panel (**TUN** on the Sneaky KUDOS) until the display shows, for example  $\mathcal{L}$  14. The preset will then revert to the factory-stored default.

# Displaying the signal strength

The KUDOS Tuner allows you to display the signal strength of any station, to help you to choose the best frequency for a station, or to enable you to set up an antenna for best reception.

The signal strength is displayed as a number between 0 and 99 in dB $\mu$ V. For good AM reception the signal strength should be between 30 and 50dB $\mu$ V. For good FM reception the signal strength should be at least 70dB $\mu$ V on strong stations.



#### To display the signal strength

Press the **TUNING** key (**TUN** on the Sneaky KUDOS) until the display shows the current signal strength. For example 5 75.

# Setting the muting threshold

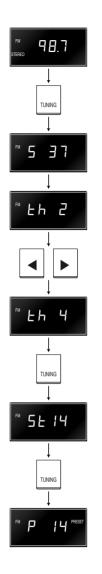
The KUDOS Tuner allows you to set a muting threshold, to reject weak signals while you are tuning or scanning.

Signals below the muting threshold will be muted, and signals near the muting threshold will be set to mono to eliminate noise. When scanning the KUDOS Tuner will not stop on signals below the muting threshold.

By default the muting threshold is set to 2. You can set it to a value between 0 and 4 to determine the approximate threshold, as shown in the following table:

Threshold setting	Description
0	Accept all signals. In FM you will hear a loud hiss between stations.
1	Reject signals below signal strength 10µV.
2	Reject signals below signal strength 20µV.
3	Reject signals below signal strength 30µV.
4	Reject signals below signal strength 40µV.

You can set the muting threshold independently for the AM and FM bands so, for example, if you have strong FM signals you can set a different threshold.



### To alter the muting threshold Press the TUNING key (TUN on the Sneaky KUDOS) until the SCAN and PRESET lights disappear.

Then press and hold the **TUNING** key until the display shows the signal strength, followed by the current muting threshold; for example Lh = 2.

Then use > and < keys to set the threshold to the value you want to use.

You can change band using the **BAND** key (**FM/AM** on the Sneaky KUDOS) to view and adjust the threshold for the other band if you wish.

Finally, to store the new muting threshold press the **TUNING** key again (**TUN** on the Sneaky KUDOS) until the display shows PRESET.

# Getting the best reception

The KUDOS Tuner is capable of giving superb results even with relatively poor signals. However, to hear it at its best you need to provide a good quality input signal. The signal affects the reception in two ways:

- If the signal is not strong enough you will hear noise as a hiss in the background on weak stations.
- If interference is being received you will hear buzzing or whistling noises in the background.

This chapter provides guidelines to help you get the best possible reception on FM and AM with your KUDOS tuner.

# Getting good reception on FM

#### **Minimising noise**

For the best signal-to-noise ratio your aerial should provide a signal strength of at least 70dBµV, corresponding to a reading of S70 on the KUDOS display, for the majority of stations you listen to regularly. If the received signal is not strong enough noise will be heard as a hiss in the background on weak stations.

There is no disadvantage in having a higher signal strength, although if the signal strength is greater than 99dBµV on the strongest stations you may need an RF attenuator or a smaller antenna.

#### **Minimising interference**

Interference from nearby stations, or from electrical noise sources such as computers, can be heard as faint rustling or whistling noises in the background of the signal. The KUDOS tuner is designed to provide excellent rejection of interference, but the following guidelines can help if this proves to be a problem.

Select the narrow bandwidth, for the best rejection of adjacent FM stations.

If the interference is from strong interfering radio stations try orienting the antenna away from them. You can even install an antenna rotator to remotely control the antenna direction. Ask your dealer for assistance.

If the interference is from electronic equipment move the antenna to another position.

Install a better, more selective, antenna which will pick up the stronger wanted signals and reject unwanted ones.

If all else fails, try mono. A signal which is unusable in stereo will often sound better in mono.

#### **Minimising distortion**

Unless interference is a problem you can achieve the lowest possible distortion by selecting the wide bandwidth option.

## Getting good reception on AM

Although the quality available with AM is obviously lower than with FM, the KUDOS Tuner is capable of excellent results on AM with a well set-up aerial.

#### **Minimising noise**

Signal strength on AM is less important than on FM. If there is little interference a signal strength of  $30dB\mu V$  is usable, and there is not much advantage of signal strengths greater than  $50dB\mu V$ . With signals weaker than this you can benefit from improving the antenna.

If you have signals stronger than 99dBµV you may need an RF attenuator or a smaller antenna to avoid overloading the AM front end. This will not damage the KUDOS tuner, but may prevent reception of weaker signals nearby.

#### **Minimising interference**

As on FM, interference can be caused by other stations, or by electrical equipment or wiring.

The best way to avoid interference is to move the antenna away from interfering electrical equipment, or rotate it to reduce the strength of interfering stations.

Interference can also be reduced by selecting the narrow bandwidth, at the expense of high frequency response. Sometimes the remaining interference can be eliminated by deliberately tuning up to 4kHz off the correct frequency, away from the interference above or below the station. This will also increase the high frequency response again. At night the reception conditions can change dramatically, and stations you can receive clearly in the daytime may suffer from interference at night.

#### Maximising the frequency response

Unless interference is a problem, selecting the wide bandwidth will give the best possible frequency response. This provides a 7kHz frequency response which gives much better sound quality than narrow, which provides a frequency response of only 3.5kHz.

# Guarantee and service

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 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 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 Linn retailer and should be stamped by them. This will also enable you to receive the Linn RECORD newsletter and details of hi-fi and music available 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 any doubt, please contact your nearest Linn retailer. For information on your nearest Linn retailer, 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.

# Technical information

# Tuning

#### Tuning range – USA

FM	87.5 to 108.5MHz
AM	530 to 1730kHz

#### Tuning range – Europe

FM	87.5 to 108.5MHz
AM	144 to 297kHz and 522 to 1611kHz

#### Tuning range – Japan

FM	75.5 to 90.5MHz
AM	530 to 1730kHz

A KUDOS Tuner can be converted between USA operation and European operation by a Linn dealer. The Japanese version is specific to Japan and cannot be re-configured.

#### **Tuning resolution**

AM, TUNE mode	1kHz
AM, SCAN mode	10kHz USA and Japan, 9kHz Europe
AM, direct frequency entry	1kHz

FM, TUNE or SCAN mode 100kHz FM, direct frequency entry 50kHz

#### Preset tuning

50 presets can be defined, and each stores:

- the wave band
- the frequency
- the STEREO and NARROW options.

The tuner is reset to preset 0 when first switched on.

#### Signal strength meter

Shows the signal strength in the range 0 to  $99dB\mu V$ .

#### Mute/Scan threshold

Adjustable in five steps from fully off, to 30 to  $40 dB\mu V$  muting sensitivity.

# Specifications

Antenna inputs	FM: 75 $\Omega$ coaxial connector.
	AM: Screw terminals
Outputs	Two pairs RCA phono connectors.
	Output impedance 200 $\Omega$
	Minimum load: $1k\Omega$ total
Output levels	FM: 775mV rms into $1k\Omega$ at 75kHz peak
	deviation.
	AM: 775mV rms into $1k\Omega$ at 100% modulation.
Mains fuse	220V and 240V: T400mA 50/60Hz
	100V and 120V: T800mA 50/60Hz.
Power consumption	20VA approx.
Size	320mm x 326mm x 80mm
	(12.6" × 12.8" × 3.2") (W × D × H)
Weight	3.3Kg (7.3lb)

# Index

# Keys

< key 17 > key 17

# А

acknowledgements iv aerials choosing 10 connecting 9 loop antenna 11 ribbon antenna 10 three element antenna 11 whip antenna 11 AM reception aerials 11 maximising the frequency response 8 minimising interference 7 minimising noise 7

AM/FM key 20 antennae. *See* aerials

### В

band selecting 20 BAND key 17, 20

# С

clearing presets 25 connections 8 aerial 9 audio output 9 mains supply 9 Sneaky KUDOS 8 stand-alone KUDOS 8 copyright iv

# D

defining presets 23 distortion minimising on FM 6

# F

FM reception aerial 10 minimising distortion 6 minimising interference 6 minimising noise 5 frequency, entering directly 22 frequency response, maximising on AM 8 front panel 15 Sneaky KUDOS 16 stand-alone KUDOS 16 fuse replacement iii

# G

guarantee 29

interference 5 minimising on AM 7 minimising on FM 6 introduction 1

# К

KEILIDH loudspeakers 2 key functions 17 KUDOS and music 3

long waveband (Europe only) 21 loop antenna 11

### Μ

mains lead wiring 6 mains plugs i mains supply connecting 9 MAJIK control amplifier 2 MATRIX key 18 MOD key 17 **muting threshold** displaying 27 setting 26 specification 32

# Narrow key 17 noise 5 minimising on AM 7 minimising on FM 5

# Р

positioning 7 PRESET display 19 presets clearing 25 displaying frequency 20 entering number 19 selecting 19 storing using the front panel 24 storing using the remote control 23

## R

reception, getting best 5 remote control 15 replacing the fuse iii ribbon antenna 10

# S

safety instructions i, ii SCAN display 21 scanning 21 using the remote control 21 service 29 setting up 5 signal strength displaying 25 specification 32 Sneaky KUDOS 3 front panel 16 selecting 18 specifications 33 stand-alone KUDOS front panel 16 stations, choosing 18 Stereo key 17 storing presets 23 switching off 18 switching on 17

### Τ

technical information 31 three element antenna 11 tuning 20, 22
entering a frequency
directly 22
frequency steps 22
specification 31
with the remote control 22
TUNING key 17
tuning range 31
tuning resolution 31

# U

 $\backslash$ 

unpacking 5

voltage selection 5

W waveband selecting 20 WHERE key 18 whip antenna 11

Z ZONE key 18 