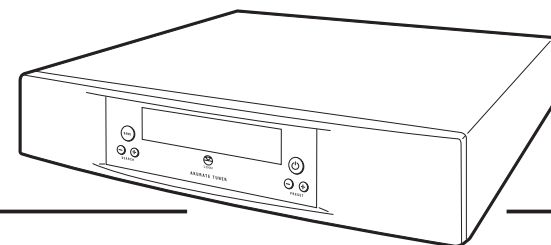


LINN

AKURATE TUNER

FM/AM/DAB TUNER



OWNER'S MANUAL

ENGLISH

Important Safety Instructions

Explanation of symbols used in this manual or on the rear/underside of the apparatus:



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 operation, maintenance and servicing information in the instruction and service manuals.

For apparatus connected to the mains electricity supply

CAUTION

TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE THE COVER.

NO USER SERVICEABLE PARTS INSIDE.

REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

REPLACE THE MAINS FUSE IN THE PLUG WITH ONE OF THE SAME TYPE AND RATING.

DISCONNECT SUPPLY CORD BEFORE CHANGING FUSE.

WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE. SHOCK HAZARD - DO NOT OPEN.

MAINS PLUGS

This apparatus 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.



Refer to the rear or underside of the product for fuse and power consumption information.

General Safety Instructions

1. **Read these instructions.**
2. **Keep these instructions.**
3. **Heed all warnings.**
4. **Follow all instructions.**
5. **Do not use the apparatus near water**, for example near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, near a swimming pool etc.
6. **Clean only with dry cloth.**
7. **Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.** Site the apparatus so that its location or position does not interfere with its proper ventilation. For example, the apparatus 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.
8. **Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.**
9. **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. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. **Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and at the point where they exit from the apparatus.**
11. **Only use attachments/accessories specified by the manufacturer.**
12. **Use only with the stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus.**
13. **Unplug this apparatus during lightning storms or when unused for long periods of time.**
14. **Refer all servicing to qualified service personnel.** Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug has been damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. **Wall or ceiling mounting.** Mount the apparatus to a wall or ceiling only as recommended by the manufacturer.

16. **Power sources.** Connect the apparatus to a power supply only of the type described in the operating instructions or marked on the apparatus.
17. **Mains plug.** Use the mains plug to disconnect the apparatus from the mains supply. The mains plug must be accessible at all times. Use the mains switch (if applicable) when the apparatus is not in use.
18. **Power lines.** An outdoor antenna should be located away from power lines.
19. **Outdoor antenna grounding.** If an outdoor antenna is connected to the apparatus, 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.
20. **Telephone line.** Do not connect the apparatus to a telephone line except where specifically instructed to do so.
21. **Objects and liquid entry.** Do not let objects or liquids fall into the apparatus. Do not expose the apparatus to dripping or splashing. Do not place a vessel containing liquid on top of the apparatus.
22. **No naked flame sources, such as lighted candles, should be placed on the apparatus.**
23. **The apparatus has been designed for use in moderate and tropical climates.**

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 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 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.

WARNING

THIS APPLIANCE MUST BE EARTHED.

CE Declaration of Conformity

Linn Products Ltd declare that this product is in conformance with the Low Voltage Directive 73/23/EEC and Electromagnetic Compatibility 89/336/EEC as amended by 92/31/EEC and 93/68/EEC.

The conformity of the designated product with the provisions of Directive number 73/23/EEC (LVD) is proved by full compliance with the following standards:

Standard number	Date of issue	Test type
EN60065	2002	General requirements Marking Hazardous radiation Heating under normal conditions Shock hazards under normal operating conditions Insulation requirements Fault conditions Mechanical strength Parts connected to the mains supply Components Terminal devices External flexible cords Electrical connections and mechanical fixings Protection against electric shock Stability and mechanical hazards Resistance to fire

The conformity of the designated product with the provisions of Directive number 89/336/EEC (EMC) is proved by full compliance with the following standards:

Standard number	Date of issue	Test type
EN55013	2001	Conducted emissions
EN55013	2001	Absorbed emissions
EN55020	2002	Immunity

FCC notice

Note:

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.

Waste Electrical and Electronic Equipment Directive Directive 2002/96/EC of the European Parliament and of the Council

The symbol (right) is shown on this product. It indicates that the product should not be disposed of with regular household waste, but should be disposed of separately.



Electrical and electronic equipment can contain materials that are hazardous to the environment and human health and therefore should be disposed of at a designated waste facility or returned to your retailer for the appropriate recycling to take place (see www.linn.co.uk for further information).

If you wish to dispose of this product and the product still functions, please consider recycling/reusing it by donating it to a charity shop, selling it or part-exchanging it with your retailer.

Copyright and Acknowledgements

Copyright © 2007 Linn Products Ltd. First edition June 2007.

Linn Products Limited, Glasgow Road, Waterfoot, Eaglesham, Glasgow, G76 0EQ, 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.

The content of this manual is furnished for information 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.

Trade marks used in this publication: **Linn** and the **Linn logo** are registered trade marks of Linn Products Limited. **AKURATE** and **KNEKT** are trade marks of Linn Products Limited.

Linn Products Limited disclaims any proprietary interest in trade marks and trade names other than its own.

UK Registered Design No 4001085

Printed in the United Kingdom.

Pack 1310/E

Contents

Introduction	1	Listening to DAB	11
Installation	1	What is DAB?	11
Unpacking	1	Selecting a station	11
Positioning	1	Secondary stations	12
Cleaning	2	Station information	13
Connecting	3	Rescanning the DAB band	14
Back panel	3	Presets	15
Connecting the aerials	4	Automatic preset storage	15
Connecting to a Linn AKURATE KONTROL, other pre-amplifier or AV system controller	4	Manual preset storage/Renaming stations	16
Connecting the DAB digital output	5	Selecting a preset	16
Connecting to the mains supply	5	Favourite presets	16
Automatic DAB scan	5	Deleting presets	17
		Radio Text	17
Front Panel and Handset	6	User Options	18
Front panel	6	Technical Specifications	21
Handset	7	Guarantee and Service	22
Handset modes	7		
Operation	8		
Standby	8		
Region selection	8		
Band selection	9		
Listening to FM and AM	9		
About RDS	9		
Selecting a station	9		
Station information	11		

Introduction

At Linn, we believe that music is fundamental to human well-being, whether it be music you know well and love, or something you have never heard before that delights you. The number and variety of radio stations that are available ensures that tuners are an excellent way of discovering music that is new to you, and the addition of digital transmission to radio broadcasting means that this range of stations has never been wider.

The FM/AM/DAB AKURATE Tuner is an advanced source product developed from engineering experience built up over three decades. It is designed to offer superb performance from FM, AM and DAB radio bands, and will provide you with many years of listening pleasure.

The AKURATE Tuner is the perfect partner for Linn's AKURATE KONTROL pre-amplifier and AKURATE power amplifier range. Add the AKURATE CD and AKURATE loudspeakers and experience the exceptional sound quality delivered by this dedicated music system.



Installation

It is strongly recommended that the AKURATE Tuner is installed and configured by an authorised Linn retailer.

Unpacking

The AKURATE Tuner is supplied with the following accessories:

- luminous handset
- 2 x AAA batteries for the handset
- FM aerial
- F-type adaptor for the FM aerial
- AM aerial
- DAB aerial
- 1 pair of black interconnect cables
- mains lead
- warranty pack
- this manual

We recommend you retain the packaging in case you need to transport the unit at any time.

Positioning

You can position your AKURATE Tuner almost anywhere you find convenient (including in a 19" rack, for which a mounting kit is available – consult your retailer), but please consider the following points:

- The unit should be placed on a flat, stable and rigid surface.
- Do not position the unit where sunlight can shine (whether directly, diffused or reflected) on its display as the infra-red (IR) radiation in sunlight will be picked up by the unit's IR remote sensor and this can adversely affect its operation. Similarly, some electrical devices such as plasma TVs, fluorescent lights and energy saving lamps can emit IR which can likewise affect the operation.

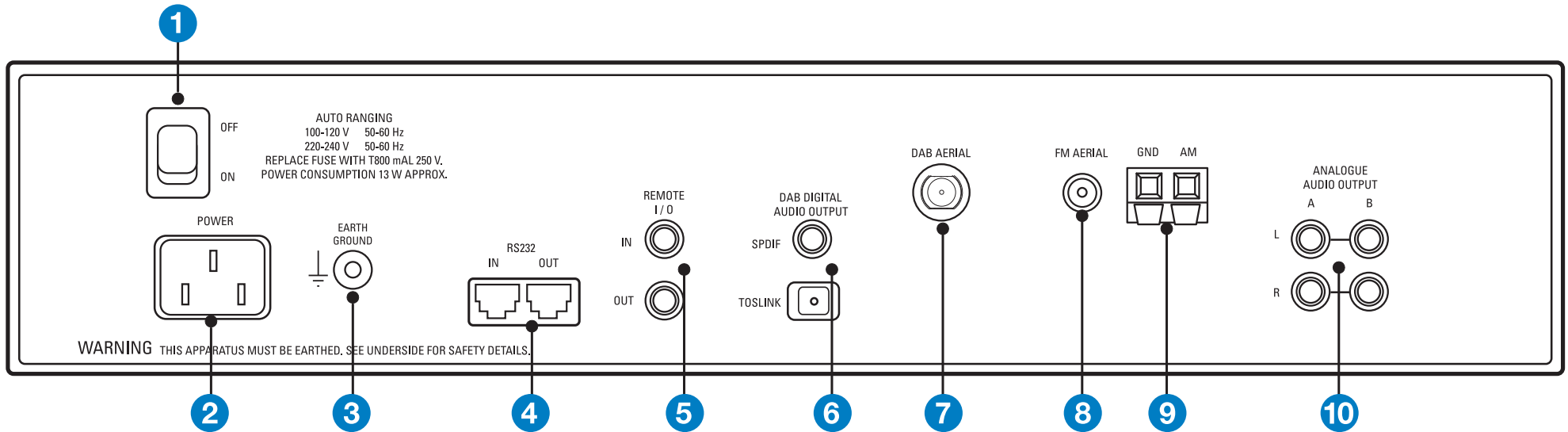
- For best performance, do not stack the unit with other products. Ideally, position the unit on a shelf by itself or, if proximity to other products is unavoidable, positioning side-by-side is preferable to stacking.
- The unit should not be situated above, or otherwise directly adjacent to, sources of heat such as radiators, power amplifiers etc. Nor should it be enclosed in a cabinet with such devices.
- Allow at least 4" (10 cm) free space above and at each side of the unit.

Cleaning

Disconnect the AKURATE Tuner from the power supply before cleaning. Remove dust and fingerprints with a soft, dry cloth. Avoid using domestic cleaning products on the unit.

Connecting

Back panel



- 1 OFF, ON** Mains power switch
- 2 POWER** Mains power inlet
- 3 EARTH GROUND** For connecting the unit to an earthing terminal if no mains earth is available
- 4 RS232: IN, OUT** For operating the unit via a PC or touch-screen device
- 5 REMOTE: IN, OUT** For installing the unit in a Linn KNEKT system
- 6 DAB DIGITAL AUDIO OUTPUT** For connection to a recording device which accepts a digital audio connection. These connectors output DAB only
- 7 DAB AERIAL** For connection of the DAB aerial

- 8 FM AERIAL** For connection of the FM aerial
- 9 GND, AM** For connection of the AM aerial
- 10 ANALOGUE AUDIO OUTPUT** Line outputs for connection to a pre-amplifier or AV system controller. These connectors output DAB, FM, and AM



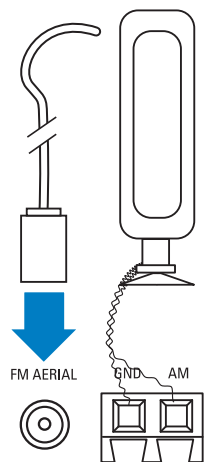
The AKURATE Tuner should be powered down then disconnected from the power supply before connecting or disconnecting any of the plugs on the back panel. If this is not done, you may generate surges which could damage the AKURATE Tuner or other components in your system.

Connecting the aerials

The AKURATE Tuner is supplied with indoor aerials, however better reception will be obtained by using external aerials mounted on a roof. The supplied F-type adapter is for connection to the FM AERIAL input, if required. For DAB, use a dipole antenna, or in areas of poor reception a Yagi-type antenna. In either case, the antenna should be connected to the AKURATE Tuner using 75 Ω coaxial cable. For further advice on external DAB, FM or AM aerials please contact your Linn retailer.

FM and AM aerials

Connect the supplied FM and AM aerials as shown.



FM aerial

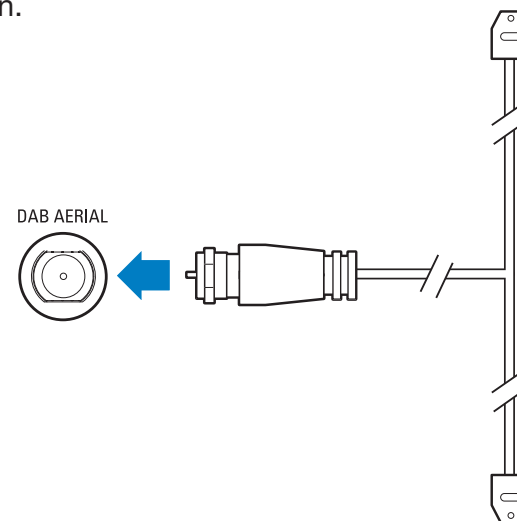
The end of the FM aerial should be connected to a wall as high as the length of the aerial will allow. You may have to experiment with its positioning to obtain the best reception.

AM aerial

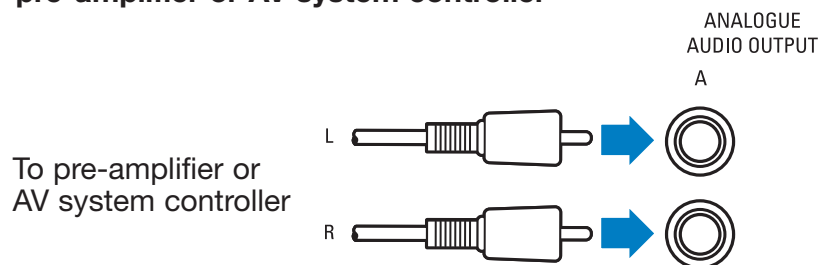
For best reception, position the AM aerial away from the AKURATE Tuner and sources of radio frequency emissions (e.g. television, computer). As with the FM aerial, you may have to experiment with its position to achieve the best reception. For some stations you may obtain better reception by rotating the aerial.

DAB aerial

For best reception attach the aerial to a wall as high as the length of wire will allow. Attach the arms of the aerial to the wall vertically, as shown.



Connecting to a Linn AKURATE KONTROL, other pre-amplifier or AV system controller

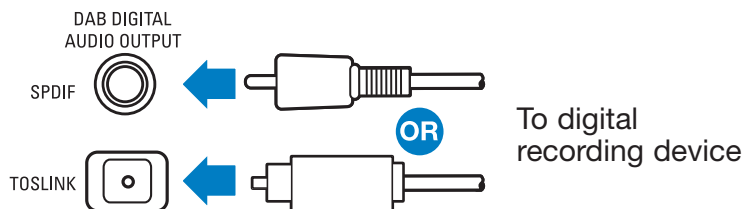


Note:

The analogue connectors output DAB, FM and AM.


Connecting the DAB digital output

If you wish to record the DAB signal, connect one of the outputs to a recording device which accepts a digital audio connection.



Connecting to the mains supply

The unit can be connected to any worldwide mains voltage with no adjustment. It incorporates Automatic Voltage Selection (AVS) and the power supply automatically adjusts for the incoming mains supply.

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

Automatic DAB scan

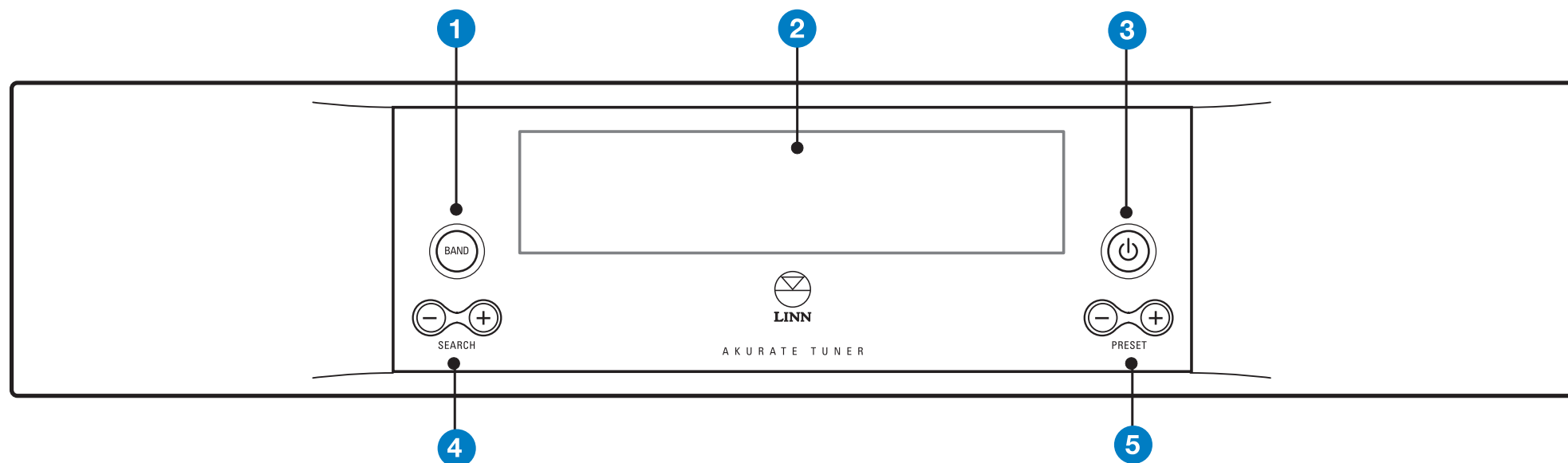
Before you can listen to DAB stations the AKURATE Tuner must perform a scan of the DAB band (both Band III and L Band). It will start this process automatically the first time it is brought out of standby. Therefore, prior to switching the unit on for the first time, please check that you live in an area where DAB is available and that your DAB aerial is connected and positioned correctly (see *Connecting the aerials*, page 4). When you bring the tuner out of standby then select the DAB band, the display will indicate whether the scan is in progress or has completed. You are able to operate the AKURATE Tuner on the FM and AM bands during the automatic DAB scan.

If you wish to perform a scan at another time (e.g. if you wish to scan for new stations), or if you do not have a DAB aerial connected but

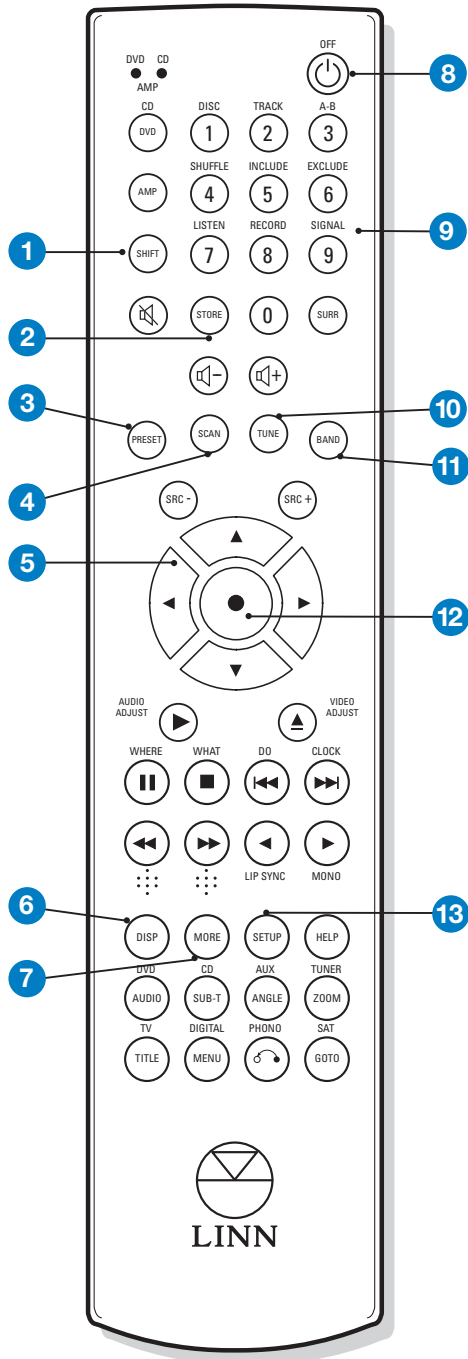
add one at a later date and therefore need to perform a scan of the DAB band, see *Rescanning the DAB band*, page 14.

Front Panel and Handset

Front panel



- 1 **BAND** Changes band
- 2 **Front panel display**
- 3 **STANDBY** Brings the unit out of, or puts into, standby mode
- 4 **SEARCH - / +** Search for stations
- 5 **PRESET - / +** Select preset stations



Handset

- 1 **SHIFT** Allows access to region selection function (SHIFT followed by '9' key)
- 2 **STORE** For storing stations as presets
- 3 **PRESET** Allows access to preset stations
- 4 **SCAN** Toggles between scan and search functions
- 5 $\Delta/\nabla/\triangleleft/\triangleright$ For use with various tuner functions, and for navigating/adjusting user options
- 6 **DISP (display)** To turn off, on, or repeat station text messages
- 7 **MORE** To access technical station information
- 8 **OFF** Brings unit out of, or puts into, standby mode. Sends 'off' (i.e. puts into standby) command to all available Linn equipment
- 9 **Digits 0-9** Numeric keys. To directly access radio frequencies and presets, and for naming presets
- 10 **TUNE** Allows access to tune function
- 11 **BAND** Changes radio band
- 12 **●** Selects/executes options and certain commands
- 13 **SETUP** Enters/exits setup mode

Keys and functions of the handset not listed above do not function with the AKURATE Tuner but may with other Linn products.


Handset modes

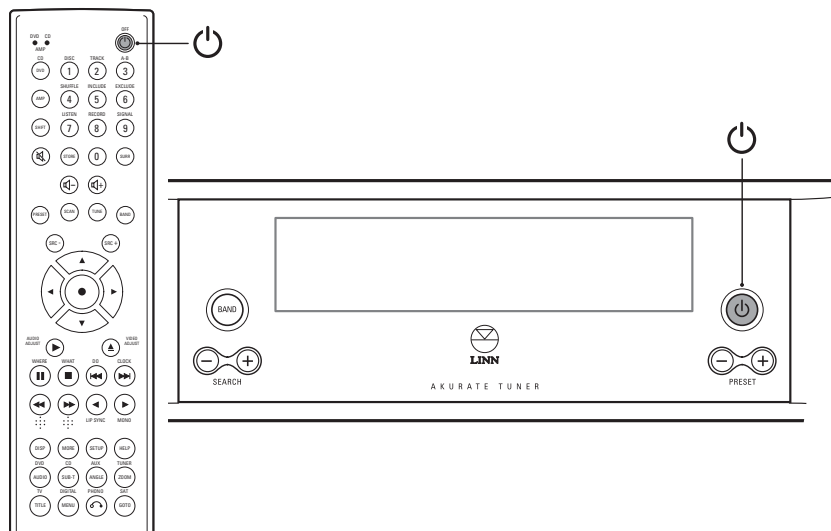
For convenience, the handset can operate in different modes in order to operate a variety of Linn products. This is to ensure that the number of handsets required to operate a Linn system is minimised.

You may find that on occasion when using the handset that the AKURATE Tuner does not respond as expected. The likely reason is that the handset is in the wrong operating mode. To correct this, simply press one of the tuner function keys (PRESET, SCAN, TUNE, BAND).

Operation

Standby

When powered up, your AKURATE Tuner will be in standby and the display will show the standby symbol .



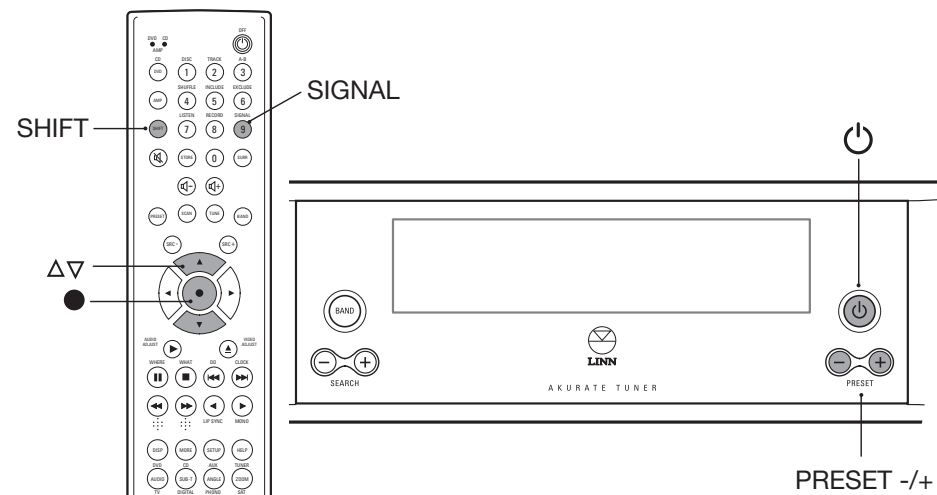
To toggle between standby mode and operating mode:

- Press  on the front panel or handset.

Note:

Standby mode reduces the power used by the unit and is useful for situations where the unit is not being used for a short time and/or requires to be switched on remotely. For longer periods of non-use, switching off at the mains (using the mains switch at the rear or unplugging) is recommended.

Region selection



The first time the AKURATE Tuner is brought out of standby, the display shown below appears on the front panel.




The AKURATE Tuner must be set for the correct FM and AM frequency range for your country. Use the **PRESET - / +** keys on the front panel to select your region (see information below), then press .

Europe: Europe and rest of the world (bar USA, Canada and Japan)

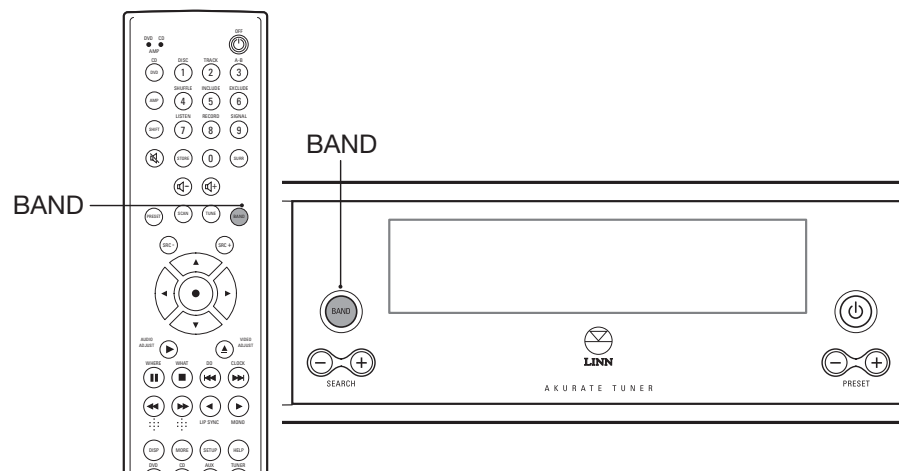
USA: USA and Canada

Japan: Japan

If you wish to change the region setting at a later date:

- Press **SHIFT** then press and hold **SIGNAL** ('9' key) on the handset until the Region? screen shown above is displayed.
- Use the Δ / ∇ keys on the handset to select the required region, then press .

Band selection



To select the FM, AM or DAB band:

- Repeatedly press **BAND** on the front panel or handset.

FM, AM or DAB is shown on the display.

Note:

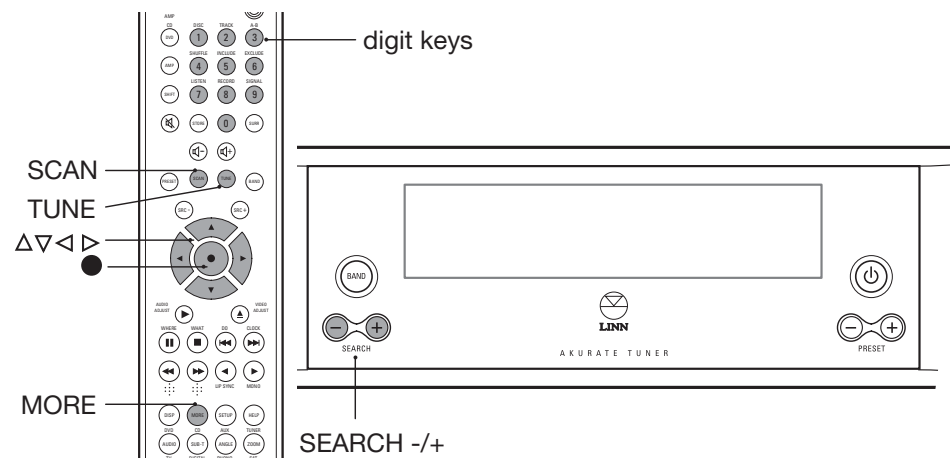
Pressing **BAND** once will show the current band.

Listening to FM and AM

About RDS

RDS (Radio Data System) information is transmitted in many countries for stations in the FM band. If RDS is available, the name of the station plus the programme type (Pop Music, Light Classic, etc.) will be displayed on the AKURATE Tuner's front panel. In addition, Radio Text which may include the title of the programme, piece of music being broadcast, news headlines, etc. will regularly scroll across the tuner's front panel (see *Radio Text*, page 17).

Selecting a station



Station searching

This function allows you to search up or down the FM or AM band for stations.



To search for stations:

using the handset-

- Press **SCAN**. (If SEARCH is not shown on the display, press and hold **SCAN**.)
- To search for the next station, press Δ .
- To search for the previous station, press ∇ .

using the front panel-

- To search for the next station, press **SEARCH +**.
- To search for the previous station, press **SEARCH -**.

Station scanning

This function is the same as Station searching (page 9) but searching continues automatically five seconds after a station is found.

To scan for stations:

- Press **SCAN** on the handset. (If SCAN is not shown on the display, press and hold **SCAN**.)
- To scan upwards/downwards through the band, press Δ or ∇ .

The tuner will pause for five seconds on the next station it finds. To skip the pause, press Δ or ∇ .

- When you reach the desired station, press \bullet .

Station searching/scanning by Programme Type (FM band only)

This function allows you to find FM stations which use RDS, by the type of programme being broadcast, e.g. Pop Music, Jazz Music, News (see *About RDS*, page 9).

To search or scan for stations by Programme Type:

- Repeatedly press and hold **SCAN** on the handset to choose either station SEARCH or SCAN (see *Station searching* and *Station scanning*, above).
- Turn on the Programme Type function by pressing \triangleleft or \triangleright . Arrows will appear on the display on either side of the currently shown Programme Type.



- Repeatedly press \triangleleft or \triangleright . The various programme types will cycle on the display.
- When your chosen type is shown, press Δ or ∇ to search or scan upwards/downwards for stations of that type.

To turn the Programme Type function off:

- Press \bullet . The arrows on either side of the Programme Type will disappear.

Note:

If no station of a particular type is available after all stations have been checked, the AKURATE Tuner will return to the last station selected.

Frequency selection

To tune to a radio station by selecting a specific frequency:

- Press **TUNE** on the handset.

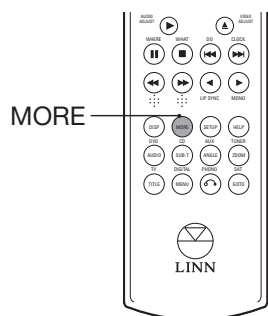
TUNE is shown on the display.

- To increase the received frequency, repeatedly press or hold Δ .
 - To decrease the received frequency, repeatedly press or hold ∇ .
- or
- Enter a frequency using the digit keys.



As you enter a frequency it is automatically adjusted to ensure it is valid. To remove an incorrect digit, press \triangleleft .

Station information



When listening to a station on the FM or AM band you can view the station's frequency on the display by pressing the **MORE** key. Press **MORE** again to return to the previous view.

Listening to DAB

What is DAB?

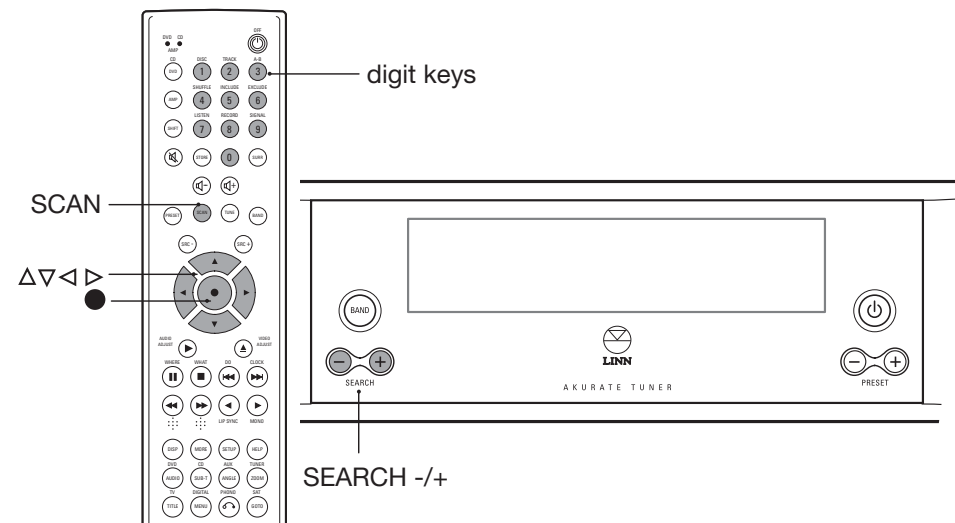
DAB (Digital Audio Broadcasting) is a technology for transmitting radio stations using digital signals, rather than the analogue signals used for FM and AM. Being digital provides DAB with a number of advantages over FM and AM. For one, DAB signals are not subject to the hiss and crackle (caused by hills, tall buildings and weather conditions) that can affect analogue signals. Another advantage is that the nature of the digital technology allows many stations to be transmitted on one frequency, allowing broadcasters to provide a far wider range of programming.

All DAB stations broadcast the station's name, and most also broadcast 'programme-associated data' (Radio Text), similar to the RDS system for FM. This can include information on the music being broadcast or news headlines, and will regularly scroll across the tuner's front panel (see *Radio Text*, page 17).

Note:

Due to the nature of digital broadcasting, when using the AKURATE Tuner you may notice a short delay between selecting a DAB station and audio being heard.

Selecting a station



Station searching

This function allows you to search stations in the DAB band.

To search stations: using the handset-

- Press **SCAN**. (If SEARCH is not shown on the display, press and hold **SCAN**.)
- To search for the next station, press Δ .
- To search for the previous station, press ∇ .

using the front panel-

- To search for the next station, press **SEARCH +**.
- To search for the previous station, press **SEARCH -**.

Station scanning

This function is the same as Station searching (see page 11) but searching continues automatically five seconds after a station is found.

To scan stations:

- Press **SCAN** on the handset. (If SCAN is not shown on the display, press and hold **SCAN**.)
- To scan upwards/downwards through the DAB band, press Δ / ∇ .

The tuner will pause for five seconds on the next station. To skip the pause, press Δ / ∇ .

- When you reach the desired station, press \bullet .

Station searching/scanning by Programme Type

This function allows you to find DAB stations by the type of programme being broadcast (e.g. Pop Music, Jazz Music, News).

To search or scan for stations by Programme Type:

- Repeatedly press and hold **SCAN** on the handset to choose either station SEARCH or SCAN (see *Station searching* and *Station scanning*, above).
- Turn on the Programme Type function by pressing \triangleright or \triangleleft . Arrows will appear on either side of the currently shown Programme Type.



- Repeatedly press \triangleright or \triangleleft . The various programme types will cycle on the display.

- When your chosen type is shown, press Δ or ∇ to search or scan upwards/downwards for stations of that type.

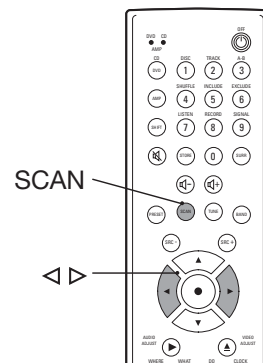
To turn the Programme Type function off:

- Press \bullet . The arrows on either side of the Programme Type will disappear.

Note:

If no station of a particular type is available after all stations have been checked, the AKURATE Tuner will return to the last station selected.

Secondary stations



Some DAB stations broadcast a secondary station. These are 'part-time' stations that might be used for sport or musical events. If this symbol \gg is shown to the right of a station's name, then a secondary station is available.



To listen to a secondary station:

- Press **TUNE** on the handset, then ▷.

<< will be shown to the left of the station's name.

To return to the main station:

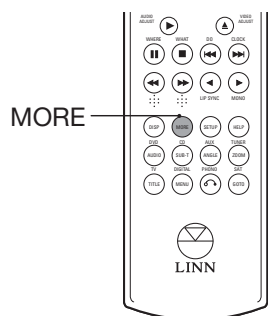
- Press <.

Note:

Secondary stations cannot be saved as presets. If you try to save a secondary station as a preset it is the main station that will be saved (see *Presets*, pages 15 to 17).

Station information

When listening to a station on the DAB band you can view the station's frequency, bitrate, error rate, etc.

**To view station information:**

- Press **MORE** on the handset.

To cycle through the available information:

- Press Δ or ▽ on the handset.

To turn station information off:

- Press **MORE** again.

The station information screens are:

SERVICE INFORMATION

Shows the station's name* and the Service ID (a unique identifier for each station).

AUDIO INFORMATION

Shows the format of the transmitted signal, either Stereo, Joint Stereo (a compressed form of stereo) or Mono, and the bitrate (in kilobits per second) of the transmitted signal (the higher the bitrate the better the audio quality, a low bitrate would be 64 and a high bitrate, 192).

SIGNAL INFORMATION

Shows the number of errors in the signal received by the DAB aerial, both in digital and graphical form. A high number of errors (a poor signal) across many stations may be due to the placement of your DAB aerial, or your location.

ENSEMBLE INFORMATION**

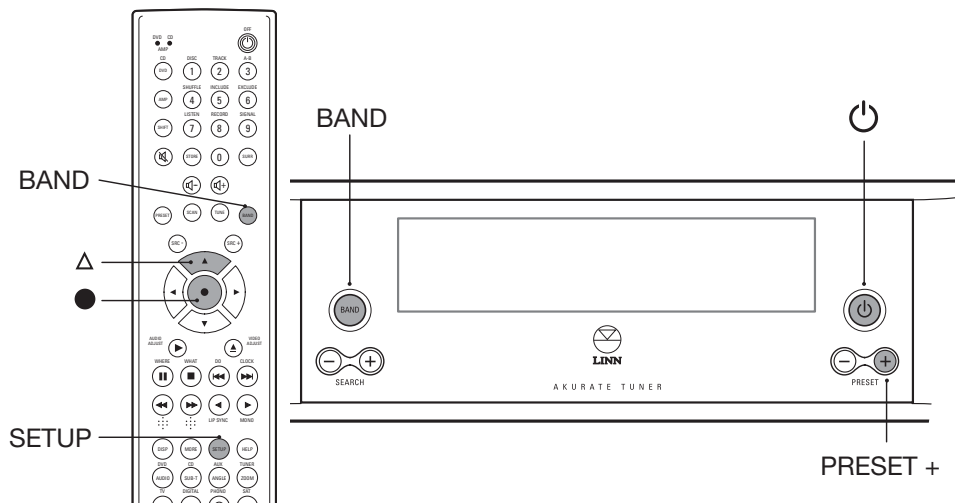
Shows the name of the broadcaster transmitting the ensemble, and the frequency of the transmission. The information in brackets is a short-hand way of displaying the frequency.

* If you have saved a station as a preset and changed its name, it is the saved name that will be displayed (see *Presets*, pages 15 to 17).

** An ensemble is a number of stations that are grouped together and transmitted on the same frequency.

Rescanning the DAB band

If new DAB stations begin broadcasting in your area, you will have to rescan the DAB band before you can listen to them. If you move to another area you should also perform a rescan.



To rescan for available DAB stations: using the handset –

- Press **SETUP**.
- Select Unit Configuration by pressing the **●** key.
- Repeatedly press **Δ** until Rescan DAB Stations is displayed.
- Press **●**.
- Repeatedly press **Δ** to select UK Services (for the UK only – Band III) or All Services (for the rest of the world - Band III and L Band).
- Press **●** twice.

RESCAN DAB STATIONS
All Services
➡ Scanning (25%)

Scanning will begin. When finished, Scan Complete with the number of stations found shown in brackets will be displayed.

- To exit, press **SETUP**.

using the front panel –

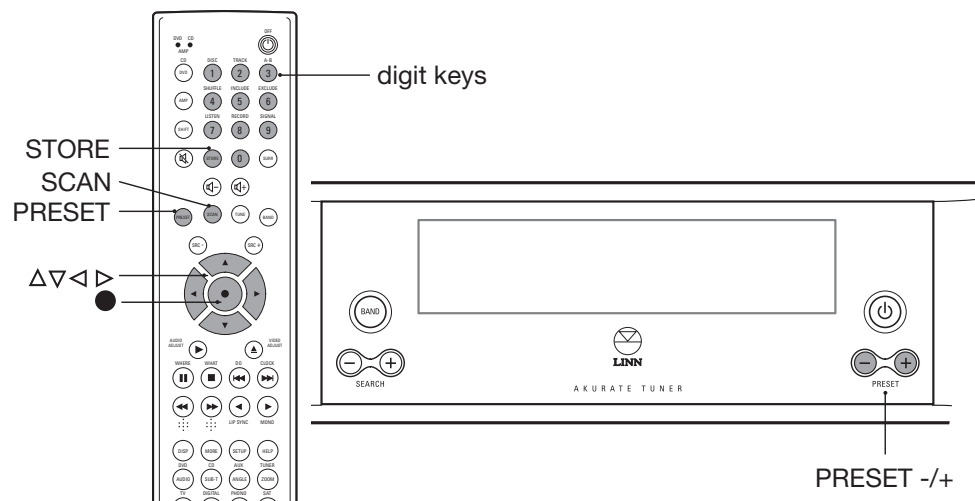
- Press and hold **BAND** until Unit Configuration is shown on the display.
- Press the **⏻** key.
- Repeatedly press **PRESET +** until Rescan DAB Stations is displayed.
- Press **⏻**.
- Repeatedly press **PRESET +** to select UK Services (for the UK only – Band III) or All Services (for the rest of the world - Band III and L Band).
- Press **⏻** twice.

Scanning will begin. When finished, Scan Complete with the number of stations found shown in brackets will be displayed.

- To exit, press **BAND**.

Presets

This section explains how to store and access stations as presets (maximum of 100).



Automatic preset storage

To automatically scan for all available stations and store them as presets:

- Select the band you wish to store presets from.
- Press **STORE** on the handset.

STORE PRESET is shown on the display.

- Press and hold **STORE** until the progress bar in the bottom right of the display is filled and AUTO STORING is shown.



As each station is found there is a five second pause before it is stored.

To store a station as a preset and skip the five second pause:

- Press Δ.

To **not** store a station as a preset and skip the five second pause:

- Press ∇.

Scanning will stop automatically when the tuner has finished searching the chosen band.

Notes:

Automatic preset storage must be carried out separately for each band.

You are able to give a preset a different name if you prefer (see *Manual preset storage/Renaming stations*, page 16).

If the name of a station is displayed on the front panel (see *About RDS*, page 9), the preset is stored using the station's name. For stations which do not broadcast their name, presets are automatically named by radio band and frequency (e.g. FM 99.50).

Stations that are already saved as presets will be skipped.

Manual preset storage/Renaming stations

To manually store a station as a preset, or rename a station that is already stored:

1. Set the AKURATE Tuner to the station you wish to store or rename.
2. Press **STORE** on the handset.
The display shows STORE PRESET, the station's name or frequency and a flashing cursor.
3. You are able to give each preset a name of up to 10 characters.
Enter a name using the following handset keys –
 Δ / ▽ Cycle through A-Z, 0-9 and commonly used symbols.
 - Switches between capital and non-capital letters.**digit keys** Can be used to quickly access numbers and A-Z in the same manner as a telephone key pad, e.g. repeatedly press 2 to access A/B/C/2, or 3 to access D/E/F/3 etc. Repeatedly press 1 and 0 for symbols.
 - When you have selected the desired character, press ▷ to move to the next space.
 - To change or delete a character use the ◁/▷ keys until the character flashes, then enter the new character, or press and hold ◁ to delete it.
 - To insert a character use the ◁/▷ keys to reach the position at which you wish to insert the new character. Press and hold ▷. The flashing character and all others that follow it move one space to the right. Add the new character.
4. When you have finished entering the name for the preset, press **STORE**.

Notes:

If you try and store a station with a name that is already in use for a preset, you will be prompted to change the name.

If you change the name of a station it is the new name that will be displayed when you search, scan or tune to that station.

Selecting a preset

To select a preset:

using the handset –

- Press **PRESET**.

PRESET is shown on the display.

- Repeatedly press or hold Δ/ ▽.

or

- Press ▷/◁ to select the first/last preset stored under each letter of the alphabet.

using the front panel –

- Press or hold **PRESET +** to cycle numerically then alphabetically through the presets.
- Press or hold **PRESET -** to reverse the order.

Note:

Presets for all bands are stored together by number or letter (i.e. a DAB preset may be next to an FM preset).

Favourite presets

For quick access to your favourite stations you are able to assign up to 10 presets to the 0 – 9 digit keys.

To assign a preset to a digit key:

- Select the preset you wish to assign (see *Selecting a preset*, above).
- Press and hold the digit key you wish to use until PRESET ASSIGNED is displayed.

Note:

If you wish to change the preset that is assigned to a digit key, follow the steps above. The new preset will overwrite the current one.

To select a favourite preset:

- Press **PRESET**.
- Press the appropriate digit key.

Deleting presets

To delete a preset:

- Select the preset you wish to delete.
- Hold **PRESET** until **PRESS ● TO CLEAR PRESET** is shown on the display.
- Press ●.

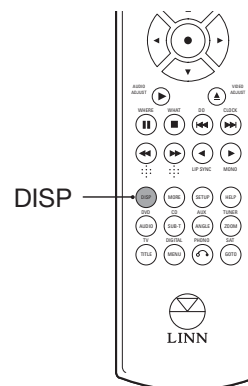
The display shows **PRESET CLEARED**.

To delete all presets:

- Select any of the presets.
- Hold **PRESET** until **PRESS ● TO CLEAR PRESET** is shown on the display.
- Hold ● until the display shows **PRESETS CLEARED**.

Radio Text

If a station transmits the name of the current programme, piece of music or other text, it will regularly scroll across the display if Radio Text is turned on.



To turn Radio Text on, or if already on, to force the last message to scroll:

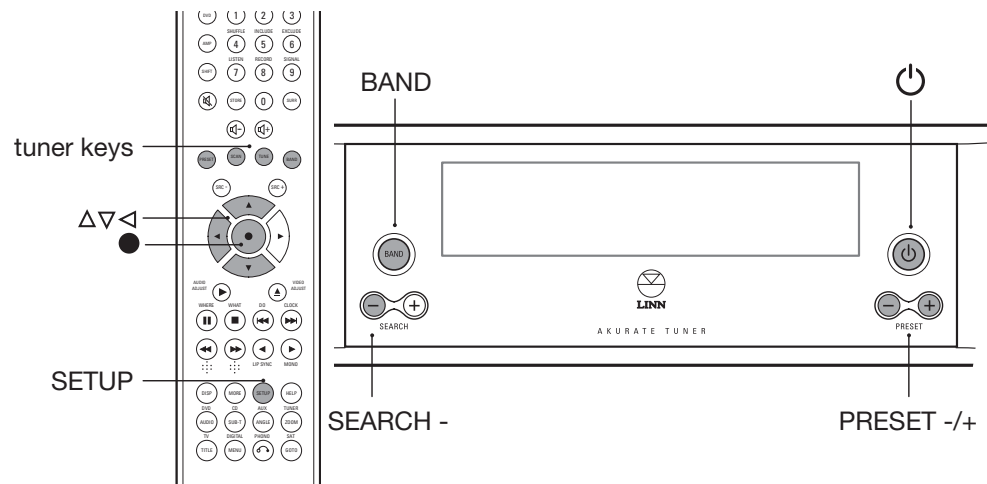
- Press **DISP** on the handset.

To turn Radio Text off:

- Press and hold **DISP** until Radio Text OFF is displayed.

User Options

The user options can be used to customise certain features of the AKURATE Tuner to suit your requirements, or to rescan the DAB band.



- To cycle through menus, options and settings, use **PRESET - /+.**
- To select a menu, option or setting, press **⏻.**
- To return to the previous option or menu, press **SEARCH -.**
- To exit user options, press **BAND.**

Notes:

The setting for an option that is currently active (either by default or selected by you) will be indicated by a ✓ beside it.

Default settings (where applicable) are shown in the tables in bold.

To enter, navigate and change settings in the user options: using the handset -

- Press any of the tuner keys (i.e. **PRESET, SCAN, TUNE, BAND.**)
- Press **SETUP.**
- Navigate up or down the options or settings within a menu, using Δ or ∇.
- To select a menu, option or setting, press **⏻.**
- To return to the previous option or menu, press **◀.**
- To exit user options, press **SETUP.**

or

using the front panel -

- Press and hold **BAND** until MAIN MENU is shown.

Unit Configuration

Option	Description	Settings
Handset Commands Accepted	If set to 'Yes', unit will respond to commands received via the IR receiver on the front panel.	Yes No
Remote In to Remote Out	If set to 'Yes', passes RC5 commands received at REMOTE IN to REMOTE OUT.	Yes No
IR to Remote Out	If set to 'Yes', passes commands received via the IR receiver on the front panel to REMOTE OUT. Will function even if 'Handset Commands Accepted' is set to 'No'.	Yes No
Baud Rate	Sets the baud rate for RS232 control.	9600 4800 to 230400 (9 settings)
RS232 Start Message	If set to 'Yes', will output an RS232 start message when the unit is switched on.	Yes No
RS232 Events	If set to 'Yes', a message will be sent via the RS232 IN socket whenever a change in the unit's status occurs (e.g. if the station is changed).	Yes No
FM Tuning Bandwidth	If a cable feed is being used and the AKURATE Tuner has difficulties tuning to certain stations, it may be because these stations are being transmitted with a slight offset. Set this option to Medium or Wide (depending on what setting provides the best results).	Narrow Medium Wide

Option	Description	Settings
DAB Digital Output	If set to 'On', the DAB audio signal will be sent to the DAB digital outputs as well as to the analogue outputs. If set to 'Off', the DAB audio signal will only be sent to the analogue outputs.	On Off
Reset Defaults	Resets all options to their factory default settings.	-
Rescan DAB Stations	If UK Services, followed by Scan is selected, the unit will scan Band III frequencies (used by all UK stations). If All Services, followed by Scan is selected, the unit will scan all DAB frequencies (Band III and L Band).	UK Services All Services
Unit Information	Allows the following details about the unit's functional specifications to be viewed. This category is mainly intended for Linn personnel and Linn-appointed service agents. Selecting each heading will display the relevant data. Please note – no adjustment is possible in the 'Unit Information' category. <ul style="list-style-type: none"> • H8 S/W Version – shows the revision of the H8 software. • RDS S/W Version – shows the revision of the RDS software 	-

Option	Description	Settings
Unit Information	<ul style="list-style-type: none"> • Main Board ID – shows the ID and revision number of the main board. • Front Panel Board ID – shows the ID and revision number of the control board. • Mains On Time – shows the total length of time that the unit has spent powered up. • Operational Time – shows the total length of time that the unit has spent out of standby. 	-

Display Configuration

Option	Description	Settings
Display Brightness	Allows adjustment to the brightness of the front panel display. When set to AUTO the unit will select a brightness level based on the ambient light level in the room (the greater the ambient light level, the brighter the display will be).	Auto 2% to 100% (non-linear)
Sleep Display Delay	Sets the number of seconds after the last key press before the sleep display (three dots) is shown on the front panel.	Off 0m 10s to 5m 00s (in 10 sec steps)

Technical Specifications

Frequency range FM (Europe) FM (USA) FM (Japan) AM (Europe) AM (USA) AM (Japan)	87.5 – 108.5 MHz 87.5 – 108.5 MHz 75.5 – 108.5 MHz 522 – 1611 kHz 530 – 1730 kHz 522 – 1629 kHz
Tuning resolution FM (scan/tuning mode) AM (scan mode – Europe and Japan) AM (scan mode – USA) AM (tuning mode) DAB (Band III) DAB (Band L)	50 kHz steps 9 kHz steps 10 kHz steps 1 kHz steps 174 – 240 MHz 1452 – 1492 MHz
Antenna impedance FM DAB	75 Ω 75 Ω
Sensitivity FM DAB (measurement to EN50248)	Typically 4 μ V Typically 98 dBm
Analogue output type	RCA Phono
Analogue output impedance	300 Ω +/-5%
Digital output types Coaxial (electrical) Optical	RCA Phono Toslink
Digital output impedance	75 Ω +/-5%
Frequency response FM (-3 dB) AM (-3 dB) DAB (-0.5 dB)	13 Hz – 18.5 kHz 125 Hz – 1.6 kHz 20 Hz – 20 kHz

Channel separation FM (60 dBuV, 75 kHz modulation)	35 dB
Signal-to-noise ratio FM (60 dBuV, 75 kHz modulation) AM (60 dBuV, 30% modulation) DAB	69 dB 51 dB 130 dB
Harmonic distortion (THD+N) FM (60 dBuV, 40 kHz modulation) AM (60 dBuV, 30% modulation) DAB	0.30% 1.30% <0.1%
Output voltage FM (75 kHz modulation) AM (30% modulation) DAB	880 mV rms 255 mV rms 1.6 V rms
Presets User definable	100
Power consumption Standby Operational	7.5 W 12 W
Mains input range	AC 100 - 120 V; AC 220 - 240 V
Mains frequency range	50 - 60 Hz
Fuse replacement	T800 mA
Dimensions	381 (W) x 355 (D) x 80 (H) mm 15" (W) x 14 1/8" (D) x 3 1/8" (H)
Weight	3.9 kg / 8 lb 10 oz
Control	6 control keys on front panel. Remote controllable (handset supplied). RS232 IN/OUT for control via RS232 compatible devices. REMOTE IN/OUT for relay of commands to/from other Linn devices.

Guarantee and Service

This product is guaranteed under the conditions which apply in the country of purchase and your statutory rights are not limited. In addition to any statutory rights you may have, Linn 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 parts of Europe, the United States of America and some other markets, extended warranty may be available to customers who register their purchase with Linn. A warranty registration card is included with the product and should be returned to Linn as soon as possible. Alternatively, you can register your warranty online at www.linn.co.uk.

Warning

Unauthorised servicing or dismantling of the product invalidates the manufacturer's warranty. There are no user serviceable parts inside the product and all enquiries relating to product servicing should be referred to authorised retailers only.

Technical support and information

For technical support, product queries and information, please contact either your local retailer or one of the Linn offices opposite.

Full details of your local retailer/distributor can be found on the Linn web site: www.linn.co.uk.

Important

Please keep a copy of the sales receipt to verify the purchase date of the product.

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

Linn Products Limited

Glasgow Road
Waterfoot
Eaglesham
Glasgow G76 0EQ
Scotland, UK

Phone: +44 (0)141 307 7777
Fax: +44 (0)141 644 4262
Helpline: 0500 888909
Email: helpline@linn.co.uk
Website: www.linn.co.uk

Linn Incorporated

8787 Perimeter Park Boulevard
Jacksonville
FL 32216 USA

Phone: +1 (904) 645 5242
Fax: +1 (904) 645 7275
Helpline: 888-671-LINN
Email: helpline@linninc.com
Website: www.linninc.com

Linn Deutschland GmbH

Hühnerposten 1d
D-20097 Hamburg
Deutschland

Phone: +49-(0) 40-890 660-0
Fax: +49-(0) 40-890 660-29
Email: info@linngmbh.de
Website: www.linn.co.uk