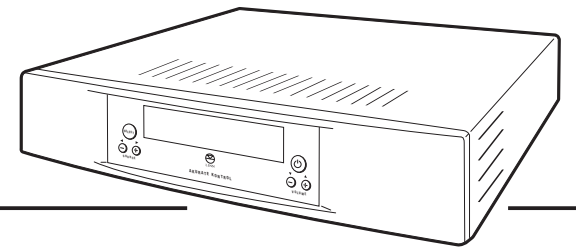


LINN

# AKURATE KONTROL

PRE - AMPLIFIER

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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](http://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

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## Introduction

The AKURATE KONTROL pre-amplifier has been designed to provide superb audio performance with both stereo and multi-channel source material. AKURATE KONTROL uses technology developed for Linn's award-winning flagship KLIMAX KONTROL pre-amplifier and offers purist audio performance and access to and control of the new generation of multi-channel sound formats.

Among its many features, the AKURATE KONTROL offers an internal phono stage for connecting to a turntable, six analogue and six digital inputs, and processing of all major audio algorithms, including Dolby Digital 5.1, Dolby Pro Logic II, DTS Surround and DTS 96/24.

The AKURATE KONTROL pre-amplifier exemplifies a commitment by Linn to new products which can take advantage of the latest technology and audio formats, whilst continuing to support existing Linn customers with improved performance and superb value.

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

## Installation

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

### Unpacking

The AKURATE KONTROL is supplied with the following accessories:

- luminous handset
- 2 x AAA batteries for the handset
- 1 pair of black interconnect cables
- RS232 lead
- mains lead
- warranty pack
- this manual

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

### Connecting to the mains supply

Manual voltage selection is not required as the AKURATE KONTROL operates from any mains AC power supply. There are no user-replaceable fuses inside the unit. The mains lead supplied may be fitted with a fused plug according to local regulations. If this is the case, always replace this fuse with another of the same type and rating.



The AKURATE KONTROL must always be earthed when connected to the mains supply. Use the earthed mains lead supplied. Never use an unearthed plug or adapter with this unit.

## Positioning

You can locate your AKURATE KONTROL anywhere you find convenient (including in a 19" rack), but there are a few simple points to note regarding positioning:

- 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.
- Do not block the vents on the product's casing.

## Cleaning

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

## Important information – phono input

Please read the following **before** installing the AKURATE KONTROL: your unit may require reconfiguration.

The AKURATE KONTROL includes a phono input (it is marked 6/PHONO on the back panel) for connecting to a record turntable. Even if you do not have a turntable, please consider the following points:

6/PHONO can be configured to operate as a moving-magnet (MM) phono stage, a moving-coil (MC) phono stage or an extra line-level input. See notes below for an explanation of these terms.

6/PHONO is factory-set to operate as an MM phono stage.

If you require 6/PHONO to operate in MC or line-level mode, this requires a change to the internal hardware which must be carried out by your Linn retailer. Dismantling or adjustment by persons other than Linn appointed personnel will invalidate the manufacturer's warranty.

If you wish to know the current configuration of 6/PHONO, this can be viewed in the AKURATE KONTROL's setup menus – see *ANALOG 6 TYPE*, page 13.

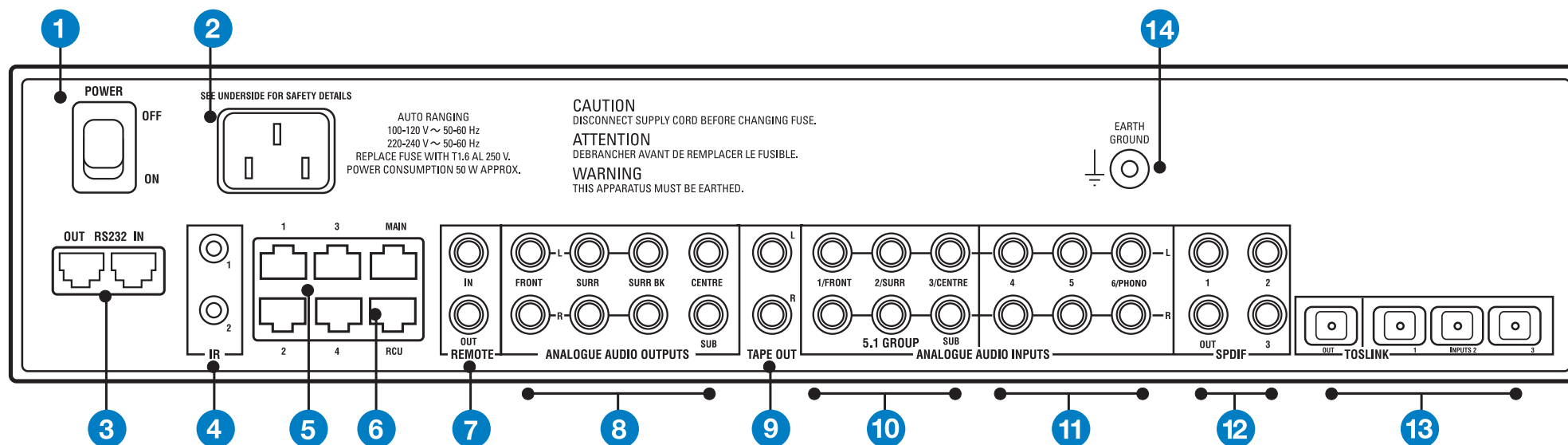
### Notes:

'Moving-magnet' and 'moving-coil' are the two types of phono cartridge available. If you have a turntable and are not sure which type of cartridge you are using, consult the cartridge packaging, the manufacturer's published information or the retailer from whom it was purchased. 'Line-level' inputs are for audio sources other than turntables, e.g. CD players, DVD players, radio tuners and satellite receivers.

Phono stages amplify extremely low-level signals, and if they are not treated with great care they can be susceptible to noise and signal degradation. Linn have therefore designed the AKURATE KONTROL's phono stage as a hard-wired circuit, rather than one which can be altered via a switch or by software. This has been done in order to optimise audio performance and remove components such as switches, which could potentially degrade the signal in this most precise of circuits.

# Setup

## Back panel



- 1 POWER: OFF, ON** Mains power switch
- 2 No name or marking** Mains power inlet
- 3 RS232: IN, OUT** Pass control instructions to and from the AKURATE KONTROL. The OUT connection is for use if you are setting up an AKURATE CD as a multi-channel source, or adding a Linn UNIDISK player as a source. The IN connection is used if you want to operate the AKURATE KONTROL from a third-party controller
- 4 IR: 1, 2** Pass IR commands to auxiliary devices
- 5 1 to 4, MAIN** Used if the AKURATE KONTROL is part of a Linn KNEKT system
- 6 RCU** For installing the AKURATE KONTROL in a Linn KNEKT system or for connection to an infrared repeater
- 7 REMOTE: IN, OUT** RC5 in/out local loop for use in a Linn KNEKT system



- 8 ANALOGUE AUDIO OUTPUTS** One 7.1 analogue audio output. The SURR outputs are for connection to the two surround loudspeakers in a 5.1 system. The SURR BK outputs are for connection to the two additional loudspeakers in a 7.1 system – located at the rear of the room.  
For two-channel systems, use the FRONT outputs (and SUB if required) only
- 9 TAPE OUT** One pair of analogue outputs for connection to a recording device e.g. DAT recorder
- 10 ANALOGUE AUDIO INPUTS: 1 to 3/5.1 GROUP** Three stereo analogue audio inputs or one 5.1 analogue audio input
- 11 ANALOGUE AUDIO INPUTS: 4 to 6** Three stereo analogue audio inputs. Input 6/PHONO is for the connection of a turntable
- 12 SPDIF: OUT, INPUTS 1 to 3** One electrical digital audio output and three inputs
- 13 TOSLINK: OUT, INPUTS 1 to 3** One optical digital audio output and three inputs
- 14 EARTH GROUND** For connecting the earthing lead from the tonearm cable of a turntable. Also for connecting the unit to an earthing terminal if no mains earth is available



Switch off the AKURATE KONTROL before connecting plugs to, or disconnecting plugs from, the back panel to avoid generating an electrical surge that may damage the unit or other components in your system.

## Connecting

The first stage in setting up your AKURATE KONTROL is to connect your sources, power amplifier(s) and other peripheral devices to the AKURATE KONTROL.

1. Ensure your AKURATE KONTROL and all components that you will be connecting to it are disconnected from the mains power supply.
2. Connect your source components, power amplifier(s) and any communication/control devices you wish to use, referring to the back panel diagram on page 3.
3. Connect the AKURATE KONTROL to the mains power supply and turn the unit on using the switch on the back panel. For the next 10 seconds or so the AKURATE KONTROL will configure itself. During this time three dots will be shown on the display.
4. Wait until the three dots are replaced by the  symbol, then press the  key on the front panel or handset.

The main stage in setup is configuring the AKURATE KONTROL to suit your requirements. This is achieved using the setup menus. How to configure the AKURATE KONTROL is explained in the rest of this chapter.

## Setup menus

The setup menus enable you to configure your AKURATE KONTROL for all sources it is connected to, the loudspeakers in your system and much more. To take advantage of your AKURATE KONTROL's features, please take the time to configure your unit correctly.

The setup menus are divided into five categories and are accessed via the MAIN MENU:

### **SPEAKER SETUP**

For configuring the AKURATE KONTROL for the number, size and distance of the loudspeakers in your system, and for calibrating their volume level.

### **SOURCE SETUP**

For configuring sources on the AKURATE KONTROL.

### **AUDIO SETUP**

For configuring the audio output of the AKURATE KONTROL.

### **GENERAL SETUP**

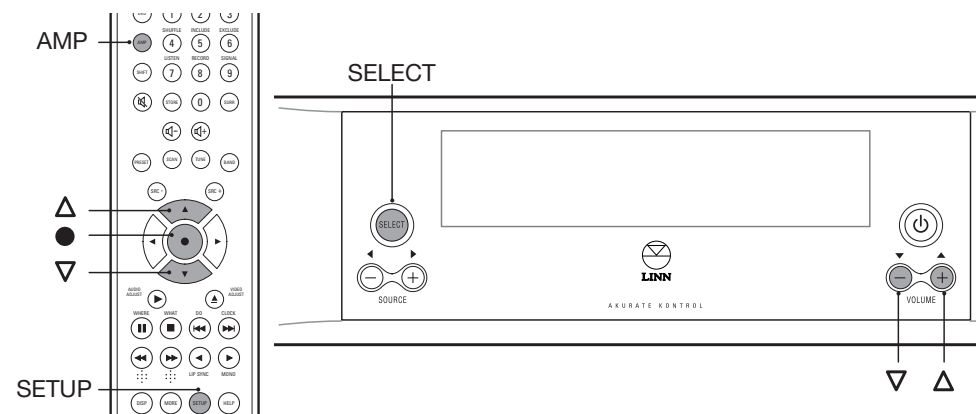
For adjusting general settings on the AKURATE KONTROL.

### **LINN DISC SETUP**

For adjusting the input settings if you are using a Linn AKURATE CD player as a multi-channel source, or a UNIDISK player, with the AKURATE KONTROL.

In addition, the AKURATE KONTROL features an INSTALLER MENU for saving the configuration of the unit as set in the above menus, and restoring the factory defaults. For full information see *Installer menu*, page 14.

## Using the setup menus



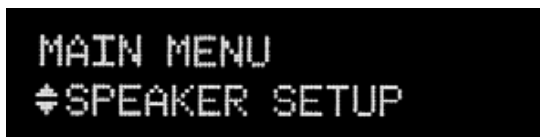
### To access the setup menus:

If you wish to use the handset to setup the AKURATE KONTROL -

- Press **AMP**, then **SETUP** on the handset.

If you wish to use the front panel -

- Hold **SELECT** on the front panel until MAIN MENU / SPEAKER SETUP is shown on the display.



### To navigate through the menus and options:

- Use the  $\Delta/\nabla$  keys on the handset or front panel.

### To make a selection:

- Press  $\bullet$  on the handset, or **SELECT** on the front panel.

### To exit from the setup menus:

- Press **SETUP** on the handset, or select **EXIT** from the MAIN MENU (if changes have been made you will be prompted to save or not save the changes).

## Speaker setup

### SIZE

Accesses the SPEAKER SIZE sub-menu.

For all loudspeakers in your system (except a subwoofer) you must inform the AKURATE KONTROL whether the loudspeakers are **LARGE** or **SMALL**. These terms refer to the frequency response of the loudspeakers, not to their physical size. **LARGE** refers to loudspeakers that respond to frequencies from the very low to the very high. **SMALL** refers to loudspeakers that do not respond to very low frequencies (typically, a loudspeaker that does not respond to frequencies below 80 Hz can be considered **SMALL**).

If you are unsure as to whether your loudspeakers respond to very low frequencies, consult the information supplied with the loudspeakers, the manufacturer's published information or the retailer from whom they were purchased.

### SMALL FREQUENCY

Select the operating frequency that your limited bass response (**SMALL**) loudspeakers operate above. Frequencies in the audio signal that are below the selected option will be routed to a subwoofer if present, or any full-range (**LARGE**) loudspeakers if not. (As the human ear cannot detect the position of the source of very low frequencies, it will not affect your enjoyment of your music or movies if some of your loudspeakers are set to **SMALL**.)

Options: **40 Hz, 60 Hz, 80 Hz, 100 Hz, 120 Hz**

Default setting: **80 Hz**

### FRONT

For full-range front loudspeakers, set to **LARGE**.

For front loudspeakers with limited bass response, set to **SMALL**.

Default setting: **LARGE**

## CENTRE

For a full-range centre loudspeaker, set to **LARGE**.  
For a centre loudspeaker with limited bass response, set to **SMALL**.

If there is no centre loudspeaker, set to **NONE**.

Default setting: **NONE**

## SURROUND

For full-range surround loudspeakers, set to **LARGE**.  
For surround loudspeakers with limited bass response, set to **SMALL**.

If there are no surround loudspeakers, set to **NONE**.

Default setting: **NONE**

## SURROUND BACK

For full-range surround back loudspeakers, set to **LARGE**.  
For surround back loudspeakers with limited bass response, set to **SMALL**.

If there are no surround back loudspeakers, set to **NONE**.

Default setting: **NONE**

## SUBWOOFER

If you have connected a subwoofer, set to **YES**.  
If you have not connected a subwoofer, set to **NO**.

Default setting: **NO**

Select **SAVE** to save your changes and return to the SPEAKER SETUP menu.

Select **BACK** to return to the SPEAKER SETUP menu without saving changes.

Select **EXIT** to leave setup (if changes have been made and SAVE has not been selected, you will be prompted to save or not save the changes).

## DISTANCE

Accesses the SPEAKER DISTANCE sub-menu.

### DISTANCE UNITS

Select the units for loudspeaker distance measurements.

Options: **FEET, METRES**

Default setting: **FEET**

### SPEAKER DISTANCE

In order to ensure that sound from all loudspeakers in your system reaches you at the same time, you must inform the AKURATE KONTROL as to the distance each loudspeaker is from your seating position. The AKURATE KONTROL will then add a time delay to the appropriate loudspeakers.

Set the distance from your seating position for all loudspeakers in your system.

Range: **0 ft (0.0 m) to 27 ft (8.2 m)**

Default setting: **6 ft (1.8 m)**

Select **SAVE** to save your changes and return to the SPEAKER SETUP menu.

Select **BACK** to return to the SPEAKER SETUP menu without saving changes.

Select **EXIT** to leave setup (if changes have been made and SAVE has not been selected, you will be prompted to save or not save the changes).

## CALIBRATION

Accesses the SPEAKER CALIBRATION sub-menu.

### SPEAKER CALIBRATION

You can use the speaker calibration feature to ensure that the volume level that reaches your seating position is the same for each loudspeaker (speaker calibration is not required for two-channel systems). Calibration can be done by ear or by using an SPL (Sound Pressure Level) meter.

#### To perform speaker calibration:

- Switch on your power amplifier(s) and subwoofer, if one is connected.
- Select **CALIBRATION LEVEL**. Adjust the reference calibration level so that the signal you hear is at a comfortable listening level (or reaches a preset level on an SPL meter).
- Select **START**. The signal will move round the loudspeakers in your system in a clockwise direction and will be indicated on the display.
- When the signal reaches a loudspeaker which is louder or quieter than the other loudspeakers, use the  $\Delta/\nabla$  keys on the handset to trim the volume as required. A few seconds after the  $\Delta$  or  $\nabla$  key has been released the signal will continue its clockwise direction.
- To stop loudspeaker calibration, press **SETUP** on the handset.

Range: **-15 dB to 15 dB** (in 0.5 steps)

Default setting: **: 0 dB**

Select **SAVE** to save your changes and return to the SPEAKER SETUP menu.

Select **BACK** to return to the SPEAKER SETUP menu without saving changes.

Select **EXIT** to leave setup (if changes have been made and SAVE has not been selected, you will be prompted to save or not save the changes).

Select **BACK** to return to the MAIN MENU.

Select **EXIT** to leave setup.

### Source setup

Please complete the following setup procedure for each source component you are connecting to your AKURATE KONTROL.



Select the back panel input you have connected to your source component.

Options: **SPDIF 1 to 3, TOS (TOSLINK) 1 to 3, ANALOG 1 to 6, ANALOG GROUP, KNEKT**

Notes:

By default, ANALOG 1 is assigned to an AKURATE CD player, and ANALOG 6 to a turntable.

The ANALOG GROUP uses the ANALOG 1, 2 and 3 inputs, therefore if a source is assigned to ANALOG GROUP you cannot also assign a source to ANALOG 1, 2 or 3. Conversely, if a source is assigned to ANALOG 1, 2 or 3, you cannot assign a source to ANALOG GROUP.

The KNEKT option will not be available unless the KNEKT item in General setup has been set to **LOCAL ROOM** (see *KNEKT*, page 12).

For back panel inputs that you do not wish to use, set Type to **NONE** (see next page). This will mean that when you are selecting a source, inputs set to **NONE** will not be seen.



## NAME

You are able to give the source a name which will be shown on the display when that source is selected.

### To change the flashing character:

- Repeatedly press or hold  $\Delta/\nabla$  on the handset or front panel.

The following characters are available: A to Z, 0 to 9, space.

### To move to the next or previous character:

- Press  $\triangleright$  or  $\triangleleft$ .

When you have finished inputting the name, press  $\bullet$  or **SELECT**.

Default setting: **(name of back panel connector, 'AKURATE CD' or 'PHONO')**

Note:

The name can be up to twelve characters long.

## TYPE

Select a type for this source. These are the types that are shown in blue above the bottom two rows of keys on the handset.

Options: **DVD, CD, AUX (auxiliary), TUNER, TV, DIGITAL, PHONO, SAT (satellite), NONE**

Default setting: **AUX** (Except for inputs ANALOG 1 which is set to **CD**, ANALOG 6 which is set to **PHONO**, and ANALOG GROUP which is set to **NONE**.)

Note:

The type for the Linn Disc source (see *Linn Disc setup*, page 13) is DVD. It is not possible to change the type for this source.

## VOLUME OFFSET

Volume Offset is for adjusting the volume of a source in comparison to other sources. You may want to adjust Volume Offset if, for example, your tuner sounds quieter than your CD player when played at the same volume setting.

Range: **-15 to 15** (in 0.5 steps). No volume offset equals 0.

Default setting: **0**

## SAT (satellite) SOURCE - applies to digital sources only

Set to **YES** if this source is a satellite or cable TV receiver. Setting to **YES** will stabilise the audio signal when the channel on the receiver is being changed. Set to **NO** if this source is not a satellite or cable TV receiver.

Options: **YES, NO**

Default setting: **NO**

## SURROUND CHANNELS

If you are setting up the ANALOG GROUP source, or are adding a Linn UNIDISK player and have a 7.1 loudspeaker configuration, you are able to select whether to use your side surround or back surround loudspeakers when listening to a 5.1 channel audio source.

Set to **SURROUND** to send the surround audio signal to your side surround loudspeakers.

Set to **SURROUND BACK** to send the surround audio signal to your back surround loudspeakers.

Default setting: **SURROUND**

Select **SAVE** to save your changes and return to the SOURCE SETUP menu.

Select **BACK** to return to the SOURCE SETUP menu without saving changes.

Select **EXIT** to leave setup (if changes have been made and SAVE has not been selected, you will be prompted to save or not save the changes).

Select **BACK** to return to the MAIN MENU.

Select **EXIT** to leave setup.

### Audio setup

#### VOLUME RATE

Set the speed at which the AKURATE KONTROL changes volume when the volume keys are pressed.

Range: **1/10** (slowest) to **10/10** (fastest)

Default setting: **8/10**

#### MUTE RATE

Set the speed at which the AKURATE KONTROL mutes or unmutes the volume when **M** is pressed, or when the source is changed.

Range: **1/10** (slowest) to **10/10** (fastest)

Default setting: **8/10**

#### VOLUME LIMIT

Set the maximum volume level of the AKURATE KONTROL.

Range: **0 to 100** (in 0.5 steps)

Default setting: **100**

#### VOLUME PRESET

Set the volume level of the AKURATE KONTROL when it is brought out of standby. The setting cannot be higher than the Volume Limit setting (see above).

Range: **0 to 100** (in 0.5 steps)

Default setting: **40**

**MIDNIGHT MOVIE** For use with a Linn UNIDISK player or other DVD player.

This feature allows you to add compression to the Dolby Digital signal on DVD-Videos. Adding compression reduces sudden increases in volume, such as the sound of an explosion. When watching a DVD-Video it is operated by pressing and holding **SURR** on the handset until MIDNIGHT MOVIE ON/OFF is shown on the front panel display, then pressing **SURR** to toggle between on and off (see *Midnight Movie mode*, page 23).

Range: **LOW** (least effective), **MEDIUM, HIGH** (most effective)

Default setting: **LOW**

#### DOLBY PRO LOGIC II MUSIC

Dolby Pro Logic II is an audio signal processing algorithm that converts a stereo audio signal to a five-channel audio signal. Dolby Pro Logic II Music is a mode of Dolby Pro Logic II that is particularly suited to music. It features three user-adjustable parameters that are accessed from this item.

#### CENTRE WIDTH

This parameter allows adjustment of the audio signal between the centre and front loudspeakers.

If set to **0**, all of the signal for the centre channel is sent to the centre loudspeaker.

If set to **3**, a portion of the centre channel signal is also sent to the front loudspeakers.

If set to **7**, all of the centre channel signal is split evenly between the front left and right loudspeakers.

Range: **0 to 7**

Default setting: **3**

## PANORAMA CONTROL

If set to **ON** the Panorama Control extends the audio signal from the front loudspeakers to include the surround loudspeakers. This adds a "wraparound" effect to the sound.

Options: **ON, OFF**

Default setting: **OFF**

## DIMENSION CONTROL

This parameter allows you to shift the balance between the front and rear loudspeakers. Positive values move the sound towards the front, negative values towards the rear. If a recording is too spacious or strong from the surround loudspeakers it can be shifted "forward" to get a better balance. Likewise, a recording that is too strong from the front loudspeakers can be shifted "backward" to make the sound more enveloping.

Range: **-3** (most rear) **to 3** (most front)

Default setting: **0** (neutral)

Select **SAVE** to save your changes and return to the AUDIO OPTIONS menu.

Select **BACK** to return to the AUDIO OPTIONS menu without saving changes.

Select **EXIT** to leave setup (if changes have been made and SAVE has not been selected, you will be prompted to save or not save the changes).

Select **SAVE** to save your changes and return to the MAIN MENU.

Select **BACK** to return to the MAIN MENU without saving changes.

Select **EXIT** to leave setup (if changes have been made and SAVE has not been selected, you will be prompted to save or not save the changes).

## General setup

### DISPLAY INTENSITY

Set the brightness of the front panel display.

Options: **LOW, MEDIUM, HIGH**

Default setting: **MEDIUM**

### DISPLAY CONTENT

Set what information you want displayed on the AKURATE KONTROL's front panel when it is in normal operation.

Options: **LAST USED\*, SOURCE AND VOLUME, VOLUME, SOURCE**

Default setting: **SOURCE AND VOLUME**

\* If you change source, the new source will remain displayed on the front panel. If you change volume, the volume level will remain displayed.

### DISPLAY TIMEOUT

Set the time that new volume or source information is displayed on the front panel before the AKURATE KONTROL shows its Display Content (see above).

Options: **1 SEC. to 10 SEC.**

Default setting: **2 SEC.**

### SLEEP TIMEOUT

Set the elapsed time before the front panel display enters sleep mode (i.e. shows three dots) after a key on the front panel or handset is pressed.

Options: **NEVER SLEEP, IMMEDIATE, 30 SEC., 5 MINS.**

Default setting: **NEVER SLEEP**

**SELECTION TIMEOUT**

Set the time the AKURATE KONTROL takes to select a source when the source is changed.

Range: **1 SEC. to 10 SEC.**

Default setting: **2 SEC.**

**STARTUP SOURCE**

Set the source the AKURATE KONTROL selects when brought out of standby.

Options: **LAST USED, NONE, (any of the source inputs)**

Default setting: **LAST USED**

**STANDBY RECORD FROM**

You can record from a source component to a recording device through the AKURATE KONTROL, even if the AKURATE KONTROL is in standby mode.\* Set which source you want the AKURATE KONTROL to select when it is in standby.

Options: **LAST USED, NONE, (any of the sources), KNEKT\*\***

Default setting: **LAST USED**

\* For information on setting-up a record path see *Record function*, page 23.

\*\* Is only available when KNEKT (see below) is set to LOCAL ROOM.

**KNEKT**

If your AKURATE KONTROL is installed in a Linn KNEKT multi-room system, select the appropriate setting. If your AKURATE KONTROL is not installed in a KNEKT system, select **NONE**.

Options: **NONE, MAIN ROOM, LOCAL ROOM, INTERSEKT**

Default setting: **NONE**

**RCU/IR SOCKET**

Define the use of the socket marked RCU on the back panel.

Options: **RCU\*** (KNEKT Room Control Unit), **IR** (Infrared Repeater)

Default setting: **RCU**

\* For use with Linn KNEKT systems only.

**PRODUCT IR**

Enable or disable the infrared receiver on the front of the unit.

Options: **ENABLED, DISABLED**

Default setting: **ENABLED**

**RS232 SETUP**

Accesses the RS232 SETUP sub-menu.

The RS232 Setup sub-menu is for use if the AKURATE KONTROL is communicating with other RS232 enabled products (e.g. a third-party controller).

**BAUD RATE**

Set the baud rate to suit the RS232 protocol being used.

Range: **4800 to 230400** (9 settings)

Default setting: **9600**

**PARITY**

Set parity to suit the RS232 protocol being used.

Options: **EVEN, ODD, NONE**

Default setting: **EVEN**

**DATA BITS**

Set the data bits to suit the RS232 protocol being used.

Options: **7, 8**

Default setting: **7**

**STOP BITS**

Set the stop bits to suit the RS232 protocol being used.

Options: **1, 2**

Default setting: **1**

**RS232 EVENTS**

If set to **ENABLED**, the unit passes information regarding its internal status to an external device that accepts RS232 data.

Options: **ENABLED, DISABLED**

Default setting: **DISABLED**

Select **SAVE** to save your changes and return to the GENERAL SETUP menu.

Select **BACK** to return to the GENERAL SETUP menu without saving changes.

Select **EXIT** to leave setup (if changes have been made and SAVE has not been selected, you will be prompted to save or not save the changes).

**ANALOG 6 TYPE**

This item informs you of the setting for the internal phono stage (connected to the 6/PHONO input). Either **PHONO MM** (moving-magnet), **PHONO MC** (moving-coil) or **LINE LEVEL** will be displayed. If the internal phono stage is reconfigured, the shown setting will update automatically.

Select **SAVE** to save your changes and return to the GENERAL SETUP menu.

Select **BACK** to return to the GENERAL SETUP menu without saving changes.

Select **EXIT** to leave setup (if changes have been made and SAVE has not been selected, you will be prompted to save or not save the changes).

**Linn Disc setup**

This menu is for use if you are adding a Linn AKURATE CD player as a multi-channel source, or a UNIDISK player (see pages 14 to 16).

**ANALOG SOURCE**

Options: **ANALOG GROUP, ANALOG 1 to 6, NONE**

Default setting: **NONE**

**DIGITAL SOURCE**

Options: **SPDIF 1 to 3, TOS (TOSLINK) 1 to 3, NONE**

Default setting: **NONE**

Select **SAVE** to save your changes and return to the MAIN MENU.

Select **BACK** to return to the MAIN MENU without saving changes.

Select **EXIT** to leave setup (if changes have been made and SAVE has not been selected, you will be prompted to save or not save the changes).

**Notes:**

If an AKURATE CD player is used as the Linn Disc source, the name for the source as shown on the front panel will be 'LINN DISC', not 'AKURATE CD'.

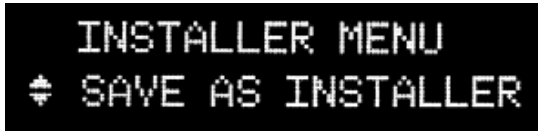
If a Linn AKURATE CD or UNIDISK player is not connected to the AKURATE KONTROL using the supplied RS232 lead (see pages 14 to 16), 'LINN DISC' will not be seen on the front panel as an available source.

If the input you wish to use is not shown when you cycle through the options, it is because that input has already been assigned to a source. To correct this, enter the Source setup menu, select the back panel input you require, set Type to **NONE**, then save the change. When you re-enter the Linn Disc setup menu the new input will be available.

## Installer menu

To access the Installer menu:

- Press **AMP**, then hold **SETUP** on the handset, or hold **SELECT** on the front panel, until INSTALLER MENU is shown on the display (approximately 5 seconds).



### SAVE AS INSTALLER

After you have set up the AKURATE KONTROL you can save the settings by selecting this item. The saved Installer configuration can be restored at any time should the AKURATE KONTROL's setup be changed (see below). Any alterations to the AKURATE KONTROL's setup that you wish to keep can be stored by selecting this item, which will overwrite the existing Installer configuration.

### RESTORE INSTALLER

If you have made changes to the setup of the AKURATE KONTROL that you do not wish to keep, use this option to restore the Installer configuration.

### RESTORE FACTORY

Use this option to restore the default settings for all the setup menus.

### H8 SOFTWARE VERSION

Displays the version of the software installed on the AKURATE KONTROL.

## Using the AKURATE KONTROL with a Linn AKURATE CD player

If an AKURATE CD is being used as a two-channel (stereo) source, simply connect the AKURATE CD's FRONT A or B analogue line outputs to the AKURATE KONTROL's 1/FRONT ANALOGUE AUDIO INPUTS (the AKURATE KONTROL is factory configured for an AKURATE CD to be connected to this input).

If an AKURATE CD is being used as a multi-channel source there are advantages in operation when using the AKURATE KONTROL:

- The AKURATE KONTROL will choose an appropriate surround sound format for a disc's audio stream.
- When playing a CD you will be able to select the Dolby Pro Logic II surround sound format.

**If you wish to use your AKURATE KONTROL with an AKURATE CD player in multi-channel configuration, follow the instructions below.**

1. Switch off all equipment.
2. Connect the AKURATE CD's FRONT A or B, SURR, CENTRE and SUB line output connectors to the 5.1 GROUP input on the AKURATE KONTROL (requires 6 RCA phono-to-phono leads)
3. Connect the RS232 product-to-product lead (supplied with the AKURATE KONTROL) from the AKURATE KONTROL's RS232 OUT to the AKURATE CD's RS232 IN.
4. Connect the AKURATE KONTROL's REMOTE OUT to the AKURATE CD's REMOTE IN (requires an RCA phono-to-phono lead).
5. Switch on all equipment.

6. Enter User Options on your AKURATE CD.  
Set –  
Front Panel IR Commands to **IGNORED**  
Channel Setup to **5.1 CHANNEL**  
RS232 Events to **ENABLED**  
RS232 Baud Rate to **9600**
7. Exit User Options.
8. Enter the Speaker setup menu on the AKURATE KONTROL.  
Configure the menu as appropriate for the loudspeakers in your system.
9. Enter Source setup. Set ANALOG 1, 2 and 3 to **NONE**.  
Select ANALOG GROUP and alter the SURROUND CHANNELS setting if required (see *SURROUND CHANNELS*, page 9).  
Save settings.
10. Enter General setup.
11. Enter the RS232 Setup sub-menu.  
Set –  
Baud Rate to **9600**  
Parity to **EVEN**  
Data Bits to **7**  
Stop Bits to **1**  
RS232 Events to **(either setting)**  
Save settings.
12. Enter the Linn Disc setup menu and set ANALOG SOURCE to **ANALOG GROUP**.  
Save settings and exit setup.

## Using the AKURATE KONTROL with a Linn UNIDISK player

There are advantages in operation when using the AKURATE KONTROL with a Linn UNIDISK player:

- When a disc is loaded into the UNIDISK player and the Linn Disc source is selected as the source on the AKURATE KONTROL, the AKURATE KONTROL will automatically switch to the required input for the loaded disc.
- The AKURATE KONTROL will choose an appropriate surround sound format for a disc's audio stream.

### If you wish to use your AKURATE KONTROL with a Linn UNIDISK player, follow the instructions below.

1. Switch off all equipment.
2. Connect –
  - the UNIDISK player's FRONT A or B, SURR, CENTRE and SUB line output connectors to the 5.1 GROUP input on the AKURATE KONTROL (requires 6 RCA phono-to-phono leads)
  - the TOSLINK or SPDIF output from the UNIDISK player to one of the TOSLINK or SPDIF inputs on the AKURATE KONTROL (requires a Toslink lead or digital audio lead).
3. Connect the video outputs you wish to use from the UNIDISK player to your display device.
4. Connect the RS232 product-to-product lead (supplied with the AKURATE KONTROL) from the AKURATE KONTROL's RS232 OUT to the UNIDISK player's RS232 IN.
5. Connect the AKURATE KONTROL's REMOTE OUT to the UNIDISK player's REMOTE IN (requires an RCA phono-to-phono lead).
6. Switch on all equipment.

7. Enter User Options on your UNIDISK player.  
Set –  
Front Panel IR Commands to **IGNORED** or **OFF**  
Baud Rate to **9600**  
RS232 Events/Enable RS232 Events to **ENABLED** or **ON**  
(Also, for a UNIDISK SC set Knekt Mode to **SOURCE**.)
8. Exit User Options.
9. Enter the Speaker setup menu on the AKURATE KONTROL.  
Configure the menu as appropriate for the loudspeakers in your system.
10. Enter Source setup. Set the source inputs you wish to use for the UNIDISK to **NONE**. Save settings.
11. Enter the General setup menu.
12. Enter the RS232 Setup sub-menu.  
Set –  
Baud Rate to **9600**  
Parity to **EVEN**  
Data Bits to **7**  
Stop Bits to **1**  
RS232 Events to **(either setting)**  
Save settings.
13. Enter the Linn Disc setup menu and change the ANALOG SOURCE and DIGITAL SOURCE settings as appropriate (see *Linn Disc setup*, page 13).
14. Enter the Source setup menu. Select the back panel input(s) used for the UNIDISK player and adjust the SAT SOURCE and SURROUND CHANNELS settings as required (see *SAT SOURCE* and *SURROUND CHANNELS*, page 9).  
Save settings and exit setup.

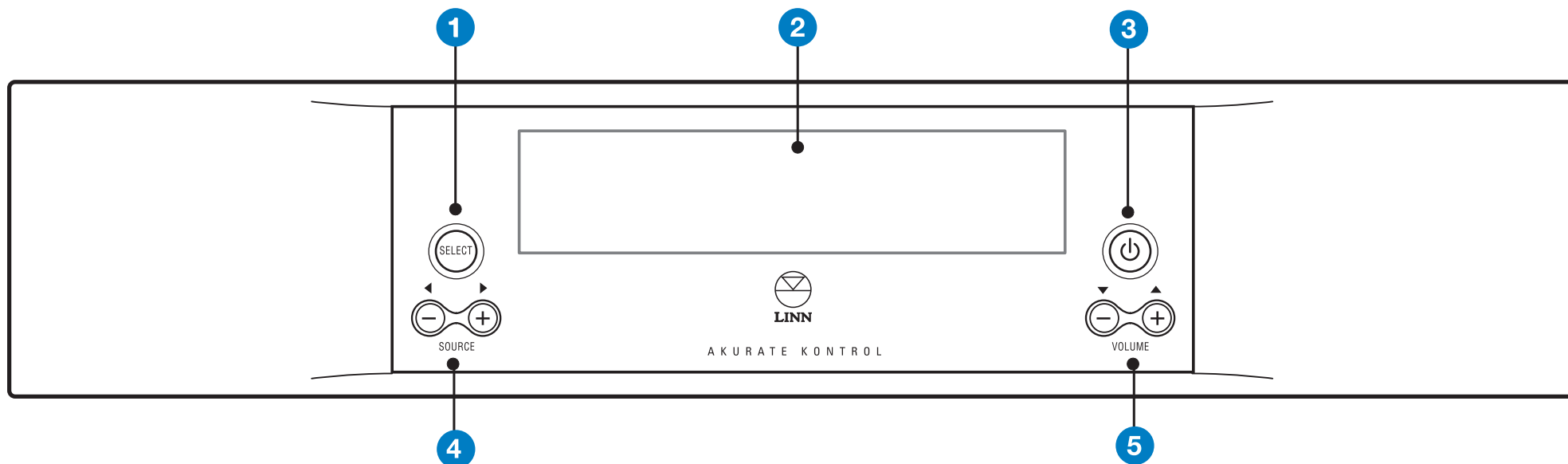


## Front Panel and Handset

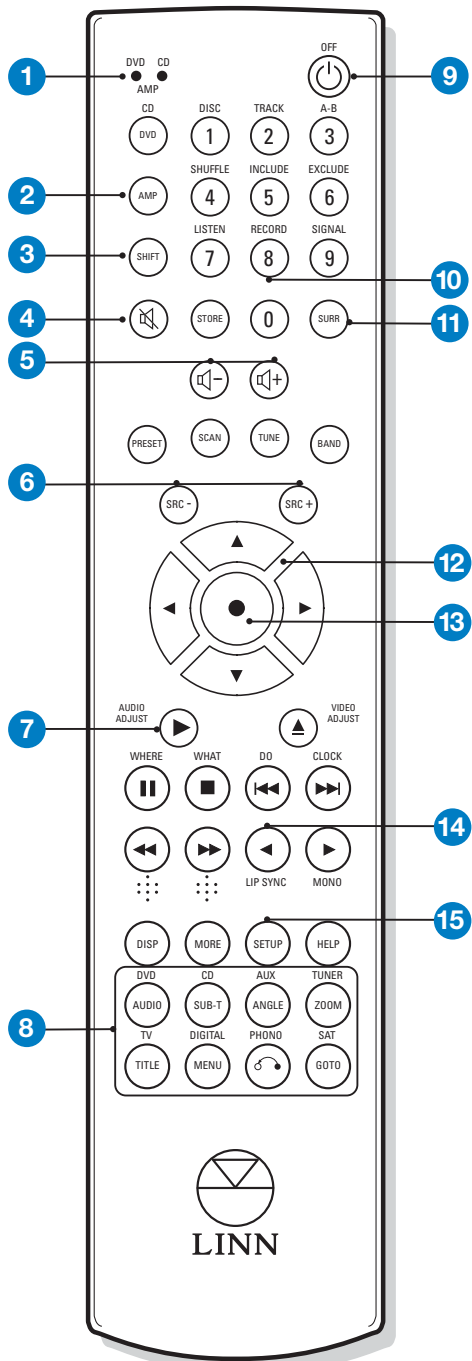
### Front panel

The front panel display shows you information regarding what you are listening to. The current volume, current source, or both, can be displayed along with the input audio signal and audio processing

format. The display also shows the setup menus and other information depending on the current operation.



- 1 **SELECT** Selects/executes options and certain commands. Accesses setup menus
- 2 **Front panel display**
- 3 **Power** Brings unit out of, or puts into, standby mode
- 4 **SOURCE -/+**, **◀/▶** Change source, adjust settings
- 5 **VOLUME -/+**, **▽/△** Adjust volume level, navigate setup menus and adjust settings



## Handset

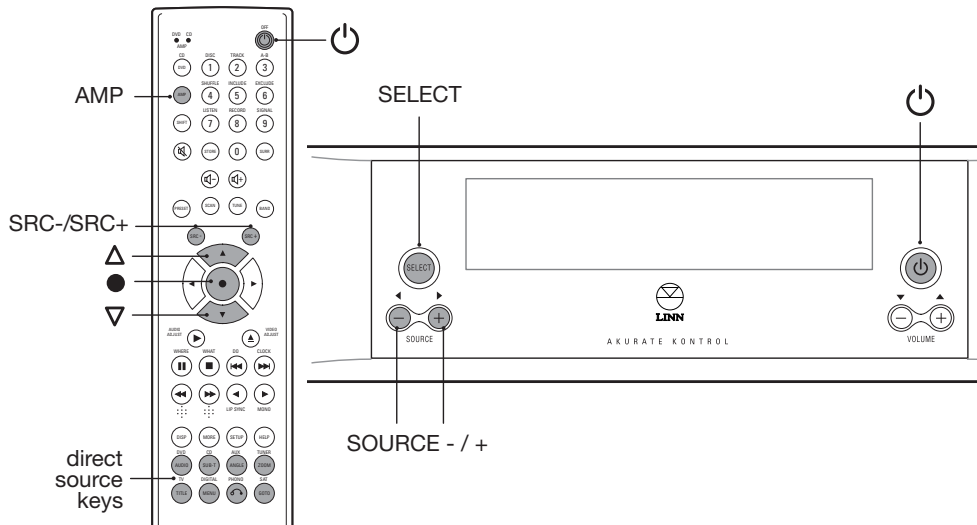
- 1 LEDs** Indicate the mode of the handset when a key is pressed
- 2 AMP** Puts handset into Amp mode (functions marked in blue above keys)
- 3 SHIFT** Allows access to RECORD and OFF functions
- 4** Mutes/unmutes the audio output
- 5** - / + Adjust volume level
- 6 SRC- / SRC+ (source - / source +)** Change source
- 7 AUDIO ADJUST** Adjusts loudspeaker balance and trim. Resets audio settings
- 8 Direct source keys** Provide direct selection of sources
- 9** , **OFF** Brings unit out of, or puts into, standby mode. Sends 'off' (i.e. puts into standby) command to all available Linn equipment
- 10 RECORD** For setting up/altering a record path
- 11 SURR** Selects a surround sound format. Switches Midnight Movie mode on/off
- 12** / / / For navigating setup menus and adjusting settings
- 13** Selects/executes options and certain commands
- 14 LIP SYNC** Accesses Lip Sync Delay feature
- 15 SETUP** Enters/exits setup menus

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

### Note:

If your AKURATE KONTROL is not responding as expected to handset keys, it is likely that the handset is not in Amp mode. To correct this, press the **AMP** key on the handset.

## Operation



### Standby key

To toggle between standby mode and operating mode:

- Press  on the front panel or handset.

### Amp mode

To use the following functions the handset must be in Amp mode –

- Direct source selection (e.g. selecting a CD source by pressing the **CD** key)
- Adjusting the balance or speaker trim
- Adjusting the Lip Sync Delay

To put the handset in Amp mode, press the **AMP** key on the handset. For all other functions the handset does not need to be in Amp mode.


## Selecting a source

To select the source you want to listen to:

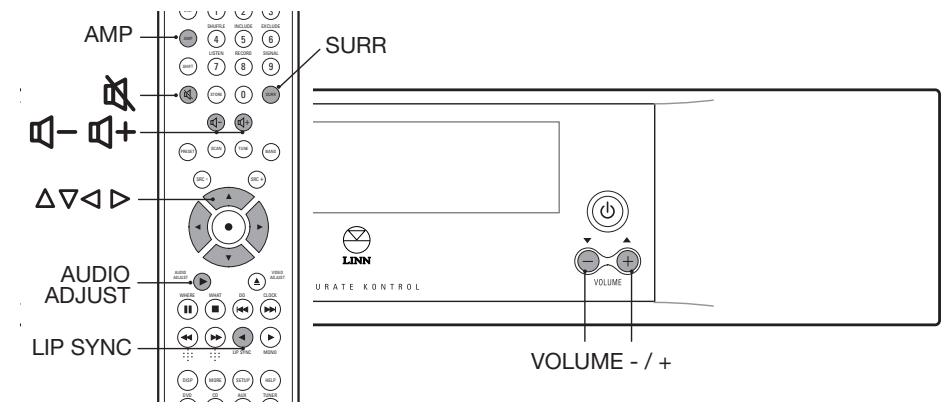
use this method

- Hold or repeatedly press the **SOURCE -/+** key on the front panel or **SRC -/+** key on the handset. This will cycle through all available sources.
- When the desired source is shown on the front panel display, release the key then press **SELECT** on the front panel, or wait and the AKURATE KONTROL will select the source automatically.

or this method (handset must be in Amp mode)

- Press the appropriate direct source key (e.g. **DVD** or **CD**) found on the bottom two rows of keys of the handset. For a Linn AKURATE CD, press **CD**. For the Linn Disc source, press **DVD**.
- Use the  $\Delta/\nabla$  key to cycle through available sources of that type.
- When the desired source is shown on the front panel display, press , or wait and the AKURATE KONTROL will select the source automatically.

## Adjusting the audio



## Volume

### To change the volume:

- Repeatedly press or hold **VOLUME +/-** on the front panel or  /  on the handset.



Volume range is from 0 to 100 (in 0.5 steps).

### To mute or un-mute the volume:

- Press  on the handset.

## Balance (handset must be in Amp mode)

### To change the balance for all loudspeakers (excluding a centre loudspeaker and subwoofer):

- Press **AUDIO ADJUST** on the handset.  
BALANCE is shown on the front panel display.
- Repeatedly press or hold  to shift the balance to the right, or  to shift the balance to the left.



Balance range is from 10 increments to the left to 10 increments to the right, with neutral balance being 0.

## Speaker trim (handset must be in Amp mode)

This feature is for use in systems that have more than two loudspeakers.

When listening to music or watching a DVD-Video, you may want to adjust the volume level of your centre, surround, back surround loudspeakers or subwoofer without affecting any of the other loudspeakers. This is done by trimming the loudspeaker volume.

### To trim loudspeaker volume:

- Repeatedly press **AUDIO ADJUST** on the handset until the desired loudspeaker(s) is/are shown on the front panel display.
- Repeatedly press or hold  /  on the front panel or handset to decrease/increase the amount of loudspeaker trim.

The trim range is from -10.0 to 10.0 (in 0.5 steps), with neutral trim being 0.

#### Note:



The loudspeakers shown when **AUDIO ADJUST** is repeatedly pressed is dependent on the number of loudspeakers in your system and the currently selected surround sound format.

## Lip Sync Delay (handset must be in Amp mode)

For use with a Linn UNIDISK player or other DVD player.

You may find with certain DVD-Videos that the action on the screen (e.g. movement of the actors' lips) lags behind the audio. You can correct this on the AKURATE KONTROL by using the Lip Sync Delay feature to delay the audio until it is synchronized with the picture.

### To adjust Lip Sync Delay:

- Press **LIP SYNC** on the handset.
- Repeatedly press or hold  to add more delay, or  to reduce the delay of the audio signal until the picture and audio are synchronized.

Lip Sync Delay range is from 0 to 250 milliseconds (in 10 millisecond steps).

#### Note:

Lip Sync Delay can only be applied to digital sources and is not available for DTS audio signals.

### Surround sound formats

The AKURATE KONTROL is equipped with a wide range of surround sound formats to enhance your audio experience.

#### To change the surround sound format:

- Repeatedly press **SURR** on the handset until the desired format is shown on the front panel display.

The available surround sound formats, and a brief description of each, is as follows:

Surround sound format	Description
Dolby Digital	A standard for storing 5.1 channels of audio signal on to discs such as DVD-Videos
Dolby Digital EX	Spreads the surround speaker portion of a Dolby Digital 5.1 audio signal to two back loudspeakers - converting 5.1 audio to 7.1 audio
Dolby Pro Logic II*	Converts any non-surround sound audio signal into a surround sound 5.0 signal
Dolby Pro Logic II Music*	Same as Dolby Pro Logic II but is particularly suited to music. Features three user-adjustable parameters that are accessed via the AKURATE KONTROL's setup menus
DTS Digital Surround	A standard for storing 5.1 channels of audio signal on to discs such as DVD-Videos
DTS 96/24	Same as DTS Digital Surround but offers better audio quality
DTS ES Matrix	Spreads the surround speaker portion of a DTS 5.1 audio signal to two back loudspeakers - converting 5.1 audio to 7.1 audio

Surround sound format	Description
DTS ES Discrete	A standard for storing 6.1 channels of audio signal on to discs such as DVD-Videos. On the AKURATE KONTROL the extra channel can be spread over two back loudspeakers - converting 6.1 audio to 7.1 audio
DTS 96/24 ES Matrix	Higher quality of DTS Digital Surround with the addition of the surround sound speaker portion of the signal being spread to two back loudspeakers - converting 5.1 audio to 7.1 audio
Phantom	Passes the centre channel portion of a 5.1 or 7.1 audio signal to the front left and right loudspeakers
3 Stereo	Downmixes a 5.1 or 7.1 audio signal and passes it to the front and centre loudspeakers only
Stereo Sub	Downmixes a 5.1 audio signal to a two-channel signal and then routes the signal to the front loudspeakers and subwoofer. Routes a stereo signal to the front loudspeakers and subwoofer
MPEG Stereo	A standard for storing two-channel audio in MPEG files
MPEG Surround	A standard for storing surround sound audio in MPEG files
AAC Stereo	A standard for storing two-channel audio
AAC Surround	A standard for storing surround sound audio
LIMBIK Party	A Linn algorithm that sends essentially the same audio signal to all loudspeakers in your system

\* You do not need a full surround sound loudspeaker system to hear these formats. If you have more than front loudspeakers (and a subwoofer) in your system, when you select either of these formats the signal will be converted into a 5.0 signal then downmixed to match the number of loudspeakers in your system.

The surround sound formats that are available for two-channel and surround sound input signals are shown in the tables below.

### Two-channel audio input

	Analogue signal	PCM stereo signal	LtRt downmixed signal*	LoRo downmixed (Pure Stereo) signal*
Stereo	2.0	2.0	2.0	2.0
Dolby Pro Logic II**	5.0	5.0	5.0	5.0
Dolby Pro Logic II Music**	5.0	5.0	5.0	5.0
LIMBIK Party	5.0 & 7.0	5.0 & 7.0	-	5.0 & 7.0
Stereo Sub	2.1	2.1	2.1	2.1

\* If you are using a Linn AKURATE CD player as a multi-channel source, see *User Options, Downmix* on page 17 of the AKURATE CD's owner's manual. If you are using a Linn UNIDISK 1.1 or 2.1 player, see *Downmix* on page 11 of the UNIDISK player's owner's manual.

\*\* You do not need a full surround sound loudspeaker system to hear these formats. If you have more than front loudspeakers (and a subwoofer) in your system, then when you select either of these formats the signal will be converted into a 5.0 signal then downmixed to match the number of loudspeakers in your system.

### Surround sound audio input

	Dolby	DTS	MPEG	AAC	Analogue signal
Stereo	2.0	-	-	-	2.0
Phantom	4.1	4.1	4.1	4.1	4.1
3 Stereo	3.1	3.1	3.1	3.1	3.1
Stereo Sub	2.1	2.1	2.1	2.1	2.1
Dolby Digital	5.1	-	-	-	-
Dolby Digital + Dolby Digital EX	6.1	-	-	-	-
DTS Digital Surround	-	5.1	-	-	-
DTS 96/24	-	5.1	-	-	-
DTS ES Matrix	-	7.1	-	-	-
DTS ES Discrete	-	7.1	-	-	-
DTS 96/24 ES Matrix	-	7.1	-	-	-
MPEG Stereo	-	-	2.0	-	-
MPEG Surround	-	-	5.1	-	-
AAC Stereo	-	-	-	2.0	-
AAC Surround	-	-	-	5.1	-
LIMBIK Party	5.0 & 7.0	5.0 & 7.0	5.0 & 7.0	5.0 & 7.0	-

#### Notes:

The available surround sound formats are dependent on the type of signal being processed.

When you are cycling through the surround sound formats, the default format for the current audio signal will be indicated briefly by "\*" symbols on the front panel display, e.g. \*stereo\*.

### Midnight Movie mode

For use with a Linn UNIDISK player or other DVD player.

This feature allows you to add compression to the Dolby Digital audio signal on DVD-Videos. Adding compression reduces sudden increases in volume, such as the sound of an explosion.

#### To switch Midnight Movie mode on/off:

- Press and hold **SURR** on the handset until MIDNIGHT MOVIE MODE ON/OFF is shown on the display.
- Press **SURR** to toggle between on and off.

When Midnight Movie mode is on, MIDNIGHT is shown on the front panel display.

#### Note:

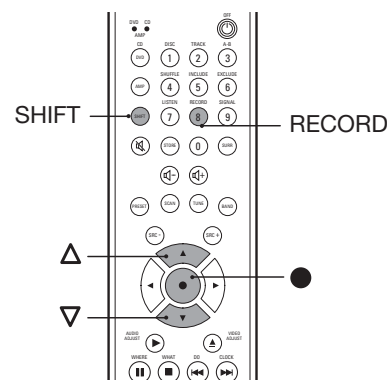
The amount of compression can be adjusted using the Midnight Movie item in the Audio setup menu (see *MIDNIGHT MOVIE*, page 10).

### Restoring the original audio settings

#### To reset all the above audio items to their neutral/default settings:

- Press and hold **AUDIO ADJUST** on the handset until AUDIO SETTINGS RESET is shown on the front panel display.

### Record function



The record function allows you to route an audio signal through the AKURATE KONTROL to a recording device such as a DAT recorder. The table below details the routing capabilities of the AKURATE KONTROL.

	Analogue record outputs	Digital record outputs
Analogue source	Any analogue source can be routed to the analogue outputs	No analogue source can be routed to the digital outputs
Digital source	Only the digital source currently being listened to can be routed to the analogue outputs	Only the digital source currently being listened to can be routed to the digital outputs

#### To set a record path:

- Press **SHIFT**, then **RECORD** ('8' key) on the handset.
- Use the  $\Delta/\nabla$  keys to select the source you want to record, then press  $\bullet$ .
- Use the  $\Delta/\nabla$  keys to select the record mode you want to use for making the recording, then press  $\bullet$ .

Notes on the list of sources:

NO SOURCE: No record path will be set.

KNEKT: When a record path on the AKURATE KONTROL is being used, this setting will allow users of a KNEKT Line Driver system to change the source they are listening to (which also changes the record path). To protect a record path, select the required record option. Once recording has finished, reselect the KNEKT option.

The available record modes are:

Option	Information
LtRt 44.1 kHz	Choose the option that suits your recording device's operating frequency. (With these options, multi-channel signals are downmixed to two channels)
LtRt 48 kHz	
LtRt 88.2 kHz	
LtRt 96 kHz	
LtRt As Input	Output frequency is the same as the input frequency, and multi-channel signals are downmixed to two channels
Bit Perfect	Output frequency is the same as the input frequency and there is no processing of the signal
Analog	Passes audio signals to the analogue outputs

Notes:

The audio signal from the selected source is routed to either all of the analogue and/or all of the digital outputs simultaneously. It is not necessary to specify which output your recording device is connected to.

The available record modes are dependent on whether the input signal is analogue or digital.

For reasons of copyright protection some audio and video discs incorporate systems that prevent them from being recorded.



## Technical Specifications

### Electrical

Mains input range	AC 100 - 120 V; AC 220 - 240 V
Mains frequency range	50 - 60 Hz
Power consumption	less than 30 W

### Physical

Weight	3.7 kg / 8 lb 2 oz
Dimensions	W 381 mm, D 355 mm, H 80 mm / W 15", D 14 $\frac{1}{8}$ ", H 3 $\frac{1}{8}$ "

### Signal Interfaces - Inputs

Type	Connector	Level	Impedance	Notes
Digital electrical (SPDIF)	3 x RCA	500 mVp-p	75 $\Omega$	-
Digital optical	3 x TOSLINK	-	-	-
Line-level	12 x RCA	2 Vrms	10 k $\Omega$	Analogue
MM phono	2 x RCA	70.0 mV peak @ 1 kHz, +40 dB @ 1 kHz	48 k $\Omega$ 68 pF	-
MC phono	2 x RCA	High gain (default): 5.0 mV peak @ 1 kHz, +64 dB @ 1 kHz Low gain (Dealer configurable): 15 mV peak @ 1 kHz, +54 dB @ 1 kHz	180 $\Omega$ 10 nF	-

### Signal Interfaces - Outputs

Type	Connector	Level	Impedance	Notes
Digital electrical (SPDIF)	1 x RCA	500 mVp-p	75 $\Omega$	-
Digital optical	1 x TOSLINK	-	-	-
Line-level	8 x RCA	2 Vrms	330 $\Omega$	Surround outputs
Line-level	2 x RCA	2 Vrms	330 $\Omega$	Record outputs

### Control Interfaces

Type	Port name	Connector
RS232	RS232: In, Out	2 x RJ12
IR	IR: 1, 2	2 x 3.5 mm jack
Knekt	1 to 4, Main	5 x RJ45
Knekt/IR	RCU	1 x RJ45
RC5	RC5: Remote In, Out	2 x RCA

## 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](http://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](http://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.

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