

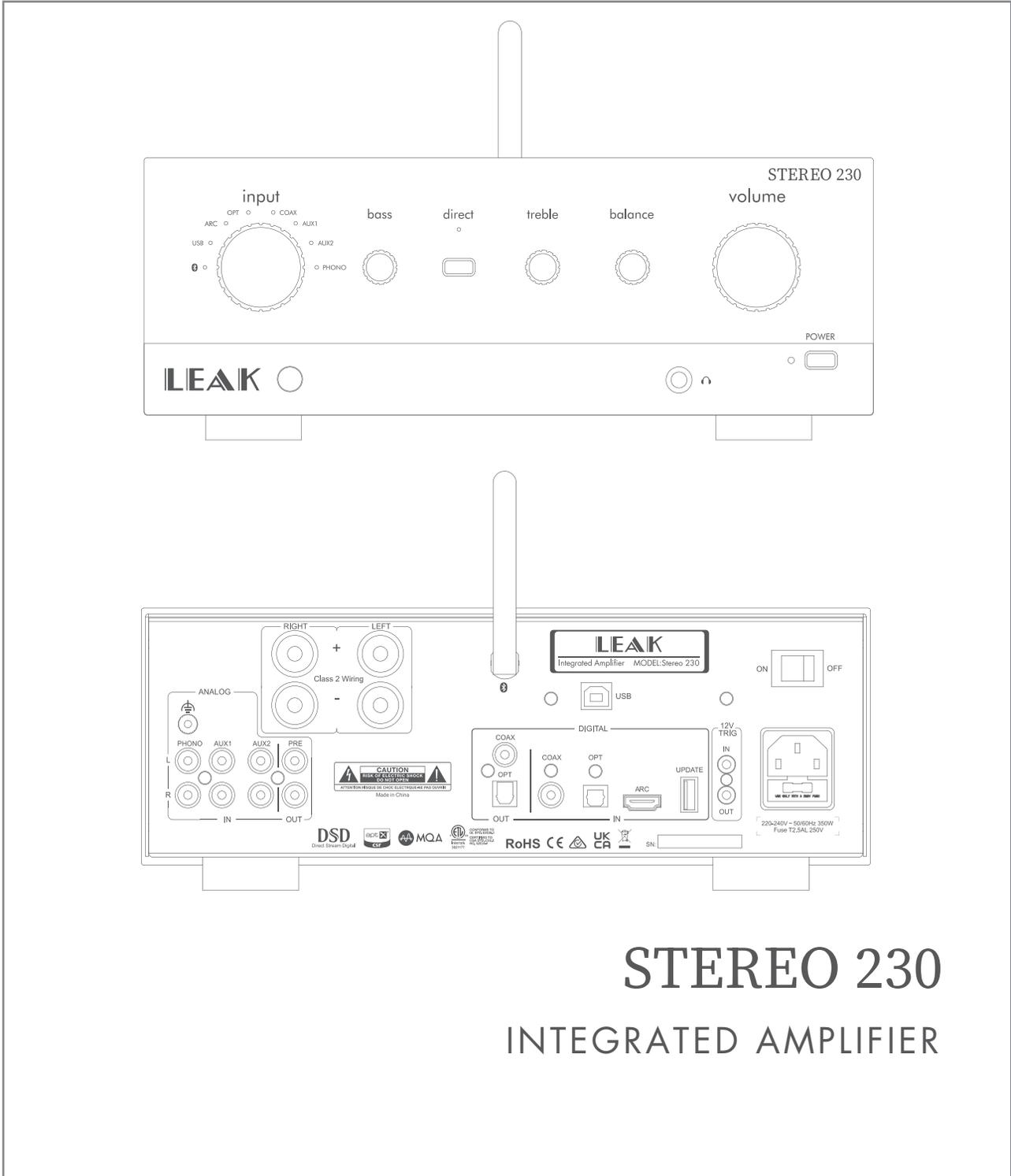
3 YEAR WARRANTY



Scan the QR code using a smart-phone device, for product warranty registration online.

# LEAK

# User Manual



## STEREO 230

## INTEGRATED AMPLIFIER

# Important Safety Information



This lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of non-insulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock.

Warning: To reduce the risk of electric shock, do not remove cover (or back) as there are no user-serviceable parts inside. Refer servicing to qualified personnel.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance instructions in the literature accompanying the appliance.

- Read these instructions.
- Keep these instructions.
- Heed all warnings.
- Follow all instructions.
- Do not use this apparatus near water.
- Clean only with dry cloth.

Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.

Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding 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.

Protect the power cord from being stepped on or pinched, particularly at the plugs, convenience receptacles, and at the point where they exit from the apparatus.

Unplug this apparatus during lightning storms or when unused for long periods of time.

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 is 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.

**CAUTION:** These servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.

Do not install this equipment in a confined or built-in space such as a bookcase or similar unit, and keep well ventilated in open space. The ventilation should not be impeded by covering the ventilation openings with items such as newspaper, table-cloths, curtains etc.

**WARNING:** Only use attachments/accessories specified or provided by the manufacturer (such as the exclusive supply adapter, battery etc).

**WARNING:** Please refer to the information on the exterior panel of the enclosure for electrical and safety information before installing or operating the apparatus.

**WARNING:** To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. The apparatus shall not be exposed to dripping or splashing and that objects filled with liquids, such as vases, shall not be placed on apparatus.

**WARNING:** For the terminals marked with symbol of "⚡" may be of sufficient magnitude to constitute a risk of electric shock. The external wiring connected to the terminals requires installation by an instructed person or the used of ready-made leads or cords.



Protective earthing terminal. The apparatus should be connected to a mains socket outlet with a protective earthing connection.

The product is designed to use in moderate/ tropical climates.

**WARNING:** No naked flame sources, such as lighted candles, should be placed on the apparatus.

**WARNING:** Attention should be drawn to environmental aspects of battery disposal.

**WARNING:** Use of the apparatus in tropical climates.

## THE FUSE VALUES ARE:

220 – 240V (UK, China, etc.) T2.0AL 250V Slow Blow

100 – 120V (USA, Japan, etc.) T5.0AL 250V Slow Blow



The Bluetooth® word mark and logos are registered trademarks, owned by Bluetooth SIG, Inc. and any use of such marks by IAG Group Ltd is under license. Other trademarks and trade names are those of their respective owners.



aptX® software is copyright CSR plc. or its group companies. All rights reserved.  
The aptX® mark and the aptX® logo are trademarks of CSR plc. or one of its group companies and may be registered in one or more jurisdictions.



Being Roon Tested means that IAG Group Ltd and Roon have collaborated to ensure you have the best experience using Roon, software and IAG Group Ltd equipment together, so you can just enjoy the music.



MQA (Master Quality Authenticated)

MQA is an award-winning British technology that delivers the sound of the original master recording.

The master MQA file is fully authenticated and is small enough to stream or download.

Visit [mqa.co.uk](http://mqa.co.uk) for more information. LEAK STEREO 230 includes MQA technology, which enables you to playback MQA audio files and streams, delivering the sound of the original master recording.

MQA and the Sound Wave Device are registered trademarks of MQA Limited ©2016



The LEAK STEREO 230 LED on the front panel glows green or blue to indicate that the unit is decoding and playing an MQA stream or file, and denotes provenance to ensure that the sound is identical to that of the source material. It glows blue to indicate it is playing an MQA Studio file, which has either been approved in the studio by the artist/producer or has been verified by the copyright owner.

# Contents

GETTING STARTED .....	5
CONTROLS AND CONNECTORS .....	6
REMOTE HANDSET .....	7
CONNECTION .....	11
OPERATION .....	12
WARRANTY .....	14
SPECIFICATIONS .....	17

# Getting Started

## INTRODUCTION

The LEAK STEREO 230 is a high-performance, high-fidelity integrated amplifier designed for the audio enthusiast. It is designed to be the perfect match to a wide variety of sources and provides the necessary amplification to realise the highest quality of your stored music through your loudspeakers and headphones.

The LEAK STEREO 230 can be connected to both analogue and digital sources, thanks to its diversity of inputs. A built-in Moving Magnet (MM) phono pre-amplifier allows for direct connection to turntable record players. It also offers a newly developed HDMI ARC connectivity function to realise the highest quality audio in AV applications, for a fully equipped integrated amplifier to meet the demands of modern audiophiles and cinephiles.

The LEAK STEREO 230 will operate as a high-fidelity Digital Audio Converter (DAC). You can also stream music to the LEAK STEREO 230 from any Bluetooth device such as portable music players and smartphones. The LEAK STEREO 230 is designed with the innovative built-in aptX codec so that you can hear CD-quality audio over the Bluetooth wireless connection.

To ensure proper operation, please read this owner's manual carefully before using the product. After reading this manual, be sure to keep it for future reference.

## FEATURES

- 2 x 75W (8 ohms) / 2 x 115W (4 ohms) amplifier
- ST MOSFET TDA7293 dual parallel amplifier
- ES9038Q2M 32-bit DAC
- Bluetooth 5.0 (aptX / aptX HD) input
- HDMI ARC support
- PC USB port for replaying stereo from a compatible host
- MQA full decoder for PC USB / coaxial SPDIF / optical SPDIF inputs
- Roon Tested for PC USB
- Low-noise moving magnet phono stage
- Dedicated current-feedback headphone amplifier
- USB firmware update functionality
- 2 x Analogue inputs
- 1 x Phono (MM) input
- 1 x Coaxial SPDIF digital input
- 1 x Optical SPDIF digital input
- 12V Trigger input
- Pre-amplifier output
- Loudspeaker output
- Headphone output
- Trigger output

## UNPACKING THE EQUIPMENT

Unpack the product fully. The carton should contain:

- The LEAK STEREO 230 amplifier
- One IEC power cord suitable for your area
- One remote handset
- One antenna (for metal enclosure version only. The LEAK STEREO 230 with wooden chassis does not have antenna)
- The LEAK STEREO 230 user manual

## USB DRIVERS (AND FIRMWARE UPDATES)

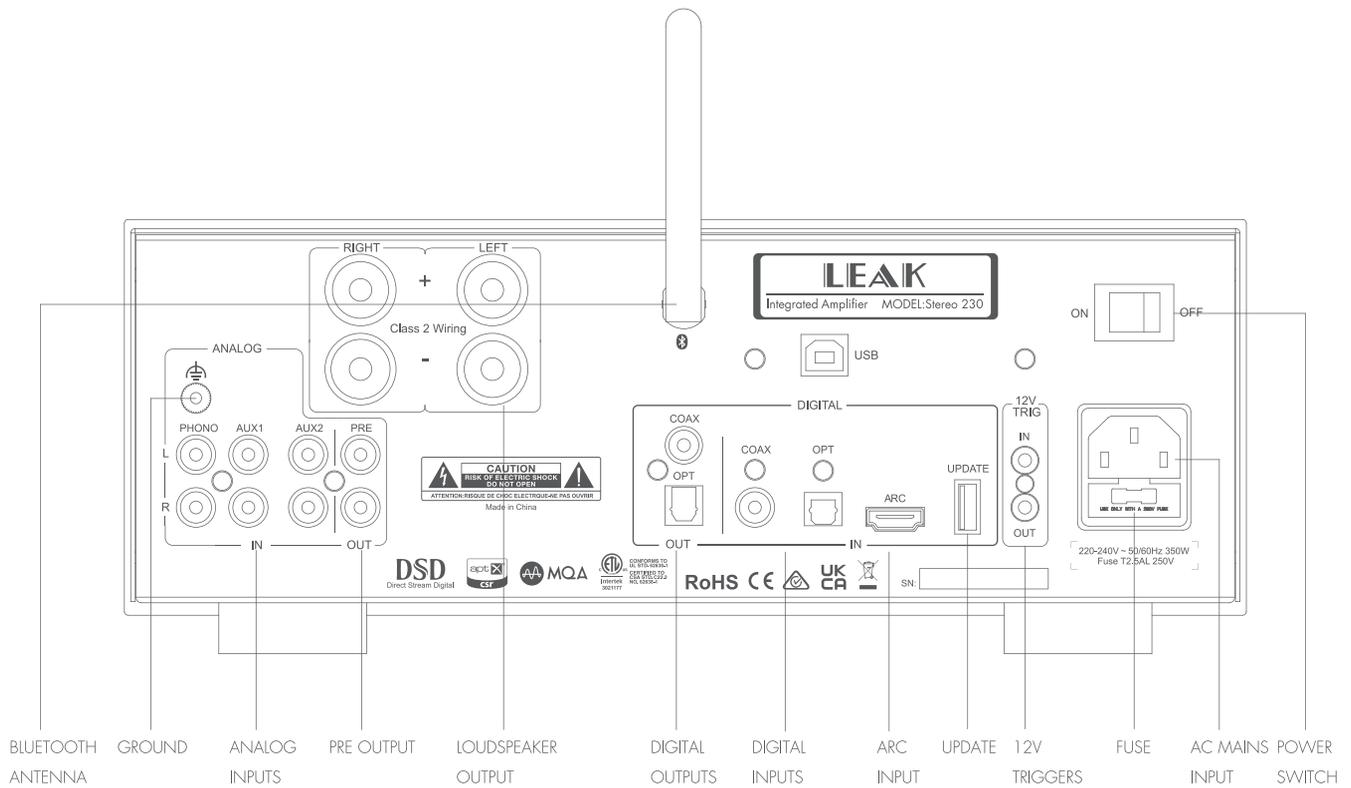
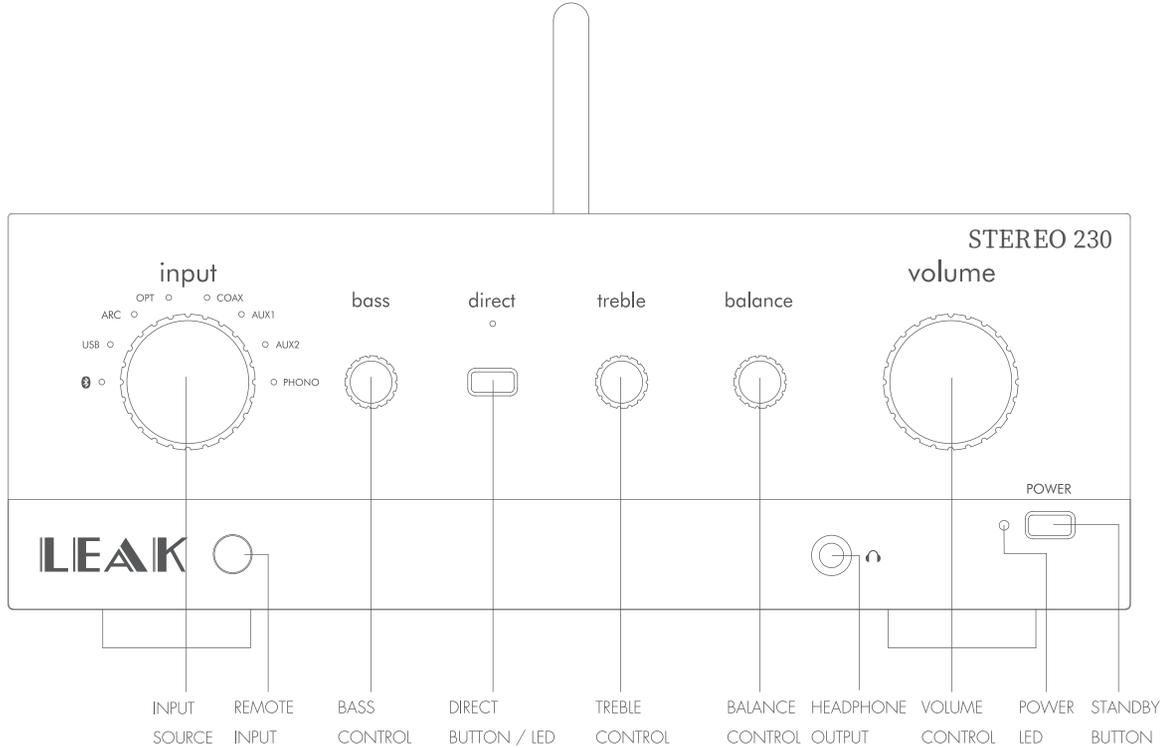
To download Windows Drivers, please see the separate manual. Any firmware updates will also be available from [www.leak-hifi.co.uk](http://www.leak-hifi.co.uk)

## PLACEMENT

The unit must be mounted on a solid, level and stable surface.

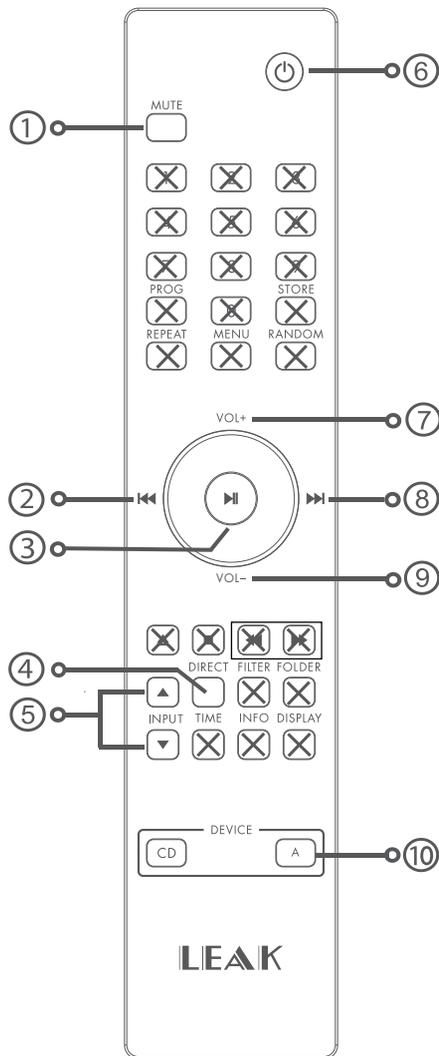
Before you connect the LEAK STEREO 230 to the AC mains power, ensure your AC mains voltage corresponds to the rating on the rear panel of the product. If in doubt, consult your dealer. If you move to an area which has a different AC mains voltage, seek advice from a LEAK appointed dealer or a competent service technician.

## Controls and Connectors



## Remote Handset

NOTE : the handset buttons shown crossed out are for use with other LEAK units such as the LEAK CDT and are therefore not functional when used with the LEAK STEREO 230.



- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>1 MUTE</li> <li>2 ⏮</li> <li>3 ⏪</li> <li>4 DIRECT</li> <li>5 INPUT</li> <li>6 STANDBY</li> <li>7 VOL+</li> <li>8 ⏩</li> <li>9 VOL-</li> <li>10 A</li> </ul> | <ul style="list-style-type: none"> <li>Press to mute/unmute the sound. In mute mode, the source indicator on the front panel will flash</li> <li>Press to skip track backwards in Bluetooth / PC USB playback mode</li> <li>Press to Play/Pause in Bluetooth / PC USB playback mode<br/>Press and hold for 3 seconds to disconnect Bluetooth</li> <li>Press to select the direct mode</li> <li>Press to select the source input</li> <li>Press to bring the unit in/out of Standby</li> <li>Press to increase the volume</li> <li>Press to skip track forward in Bluetooth / PC USB playback mode</li> <li>Press to decrease volume</li> <li>Press to select the LEAK STEREO 230 remote mode<br/>(press the CD button for the LEAK CDT controls)</li> </ul> |
|---|---|

### NOTE:

Always use AAA batteries (not supplied) and replace them in sets - never mix old and new batteries.

Very weak batteries can leak and damage the handset. Replace them in good time! There is a risk of fire and burns if a battery is handled improperly. Do not disassemble, crush, puncture, short the contacts or dispose of the batteries in fire or water.

Do not attempt to open or service a battery. Discard used batteries in full accordance with recycling regulations in force in your area.

# Connection

## INSTALLATION

Before making any connections to your high fidelity equipment make sure that all units in the system are switched off and unplugged at the mains.

### AC POWER CONNECTION

The Power On/Off switch is on the rear panel. Before connecting the LEAK STEREO 230 to the AC mains supply check and make sure the voltage marked on the back matches your supply voltage.

### DIGITAL SIGNAL OUTPUT CONNECTIONS

#### Coaxial Output

The LEAK STEREO 230 has one coaxial SPDIF output. Connect an RCA digital interconnect between the LEAK STEREO 230 unit and the required input of your equipment.

#### Optical Outputs

The LEAK STEREO 230 has one optical SPDIF output. Connect an optical (TOSLink) interconnect between the LEAK STEREO 230 and the required input of your equipment.

### ANALOGUE SIGNAL OUTPUT CONNECTIONS

#### Preamplifier Output

The LEAK STEREO 230 has one pair of unbalanced RCA outputs which can make the unit operate as a preamplifier.

Connect an RCA cable between the unbalanced pre output of the LEAK STEREO 230 and the unbalanced input of a power amplifier or associated equipment. Interconnection should be of low-noise construction and fully screened to minimize hum and noise transmission.

#### Loudspeaker Outputs

The LEAK STEREO 230 has two sets of loudspeaker outputs. They are independent for right and left stereo amplifier outputs.

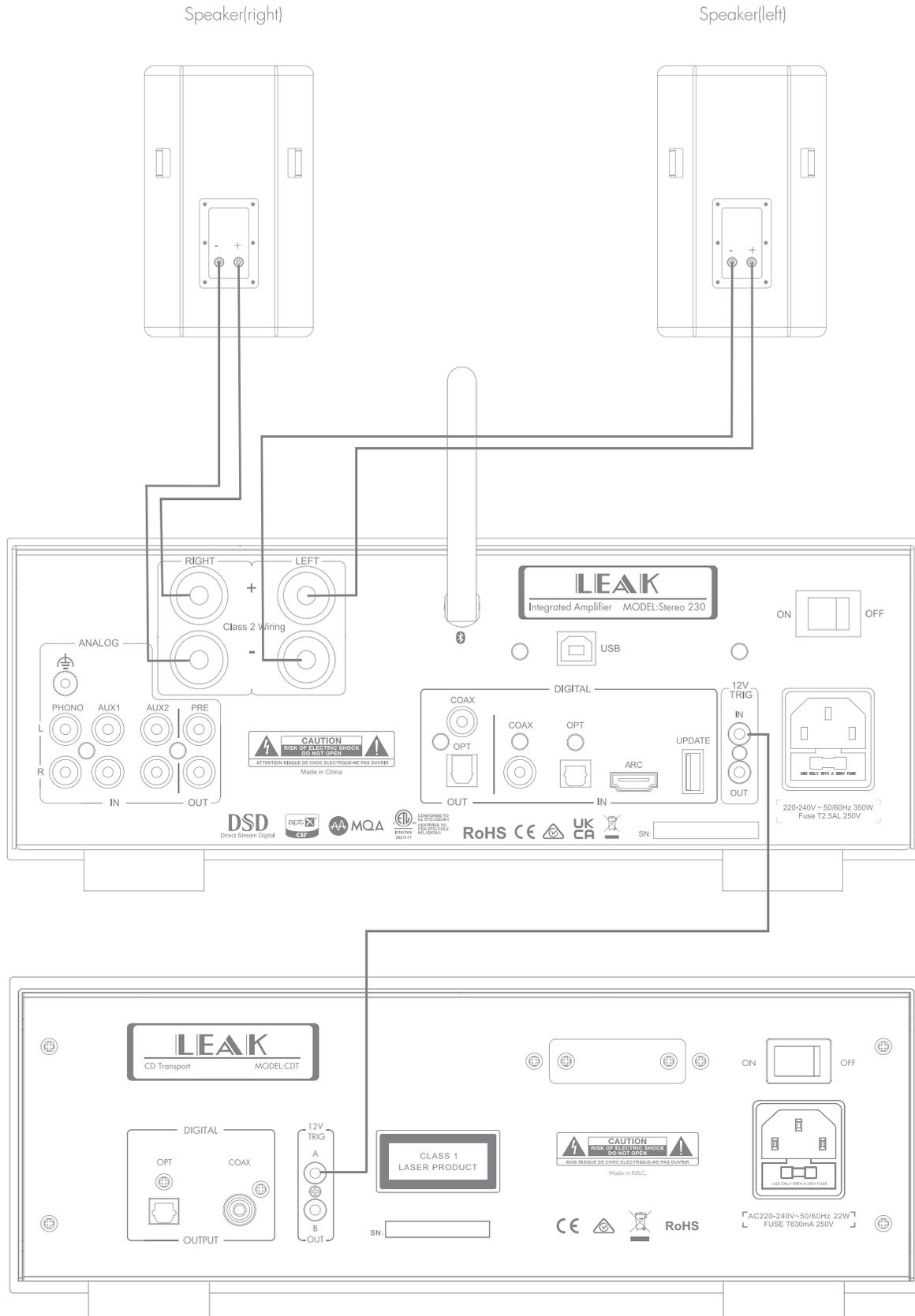
Connect the Positive (+) RED terminals of the amplifier to the Positive (+) RED terminals of the loudspeakers. Connect the Negative (-) BLACK terminals similarly. If the speaker has the wrong polarity connection, the sound becomes unnatural or lacks bass. When connecting loudspeakers tighten the terminals securely by hand. Make sure there are no loose strands of wires which could cause short circuits.

#### Headphone Output

The LEAK STEREO 230 has a stereo 6.3mm (1/4") jack on the front panel for connecting headphones. Connecting the headphones will mute the audio signal to the loudspeakers. The LEAK STEREO 230 headphone output can be adjusted up to 4.5V. Select a comfortable output level to suit your headphones.

**WARNING:** Listening to music at high volume levels and for extended durations can damage one's hearing. In order to reduce the risk of damage to hearing, one should lower the volume to a safe, comfortable level, and reduce the amount of time listening at high levels. Headsets should comply with EN 50332-2 requirements (for GS certification).

## Output Connection



## ANALOGUE SIGNAL INPUT CONNECTIONS

The LEAK STEREO 230 has two sets of unbalanced RCA inputs for connection to units which do not feature balanced outputs. Both sets are identical.

Connect an RCA cable between the unbalanced input of the LEAK STEREO 230 and the unbalanced output of a source unit like a CD player or DAC. Interconnections should be of low noise construction and fully screened to minimize hum and noise transmission.

## PHONO SIGNAL INPUT CONNECTIONS

The LEAK STEREO 230 has a PHONO signal input, the PHONO input should only be connected to turntables fitted with MM or high output MC cartridges.

## DIGITAL SIGNAL INPUT CONNECTIONS

The LEAK STEREO 230 has a variety of digital inputs, which can be connected to most popular digital sources, like the digital output of a CD or DVD player, DAC or PC etc.

### Coaxial Inputs

The LEAK STEREO 230 has a coaxial SPDIF input. Connect an RCA digital interconnect between the digital coaxial output of the source unit to the COAX input of the LEAK STEREO 230.

### Optical Inputs

The LEAK STEREO 230 has an optical SPDIF input. Connect an optical (TOSlink) interconnection between the digital optical output of the source unit to the LEAK STEREO 230.

### Bluetooth Input

The LEAK STEREO 230 has a built-in Bluetooth signal processor module which can play audio files transmitted from a source unit via Bluetooth wireless transmission. Please refer to page 12 for instructions on how to operate this function.

### USB Input

The LEAK STEREO 230 has one type-B USB input which allows you to play audio files stored on a computer.



Type-B USB

## UPDATE

The LEAK STEREO 230 provides a type-A USB port for firmware upgrades.

Upgrade method: Put the upgrade file onto a USB disk, plug it into the UPDATE USB interface, press and hold the STANDBY button on the front panel while switching on the power using the rear panel POWER switch. The LEAK STEREO 230 will upgrade automatically. After upgrading, unplug the USB disk and power on the amplifier for normal use.

## GROUND TERMINAL

The grounding terminal connected with this product is used to reduce noise when connecting with other associated equipment fitted with a separate ground lead. This terminal is required to be used when the turntable amplifier and turntable player are both double insulated. In this case, the metal housing of the machine is grounded to eliminate the residual hum, and the ground terminal cannot be used as safety for other equipment. If you have any questions, please consult your dealer.



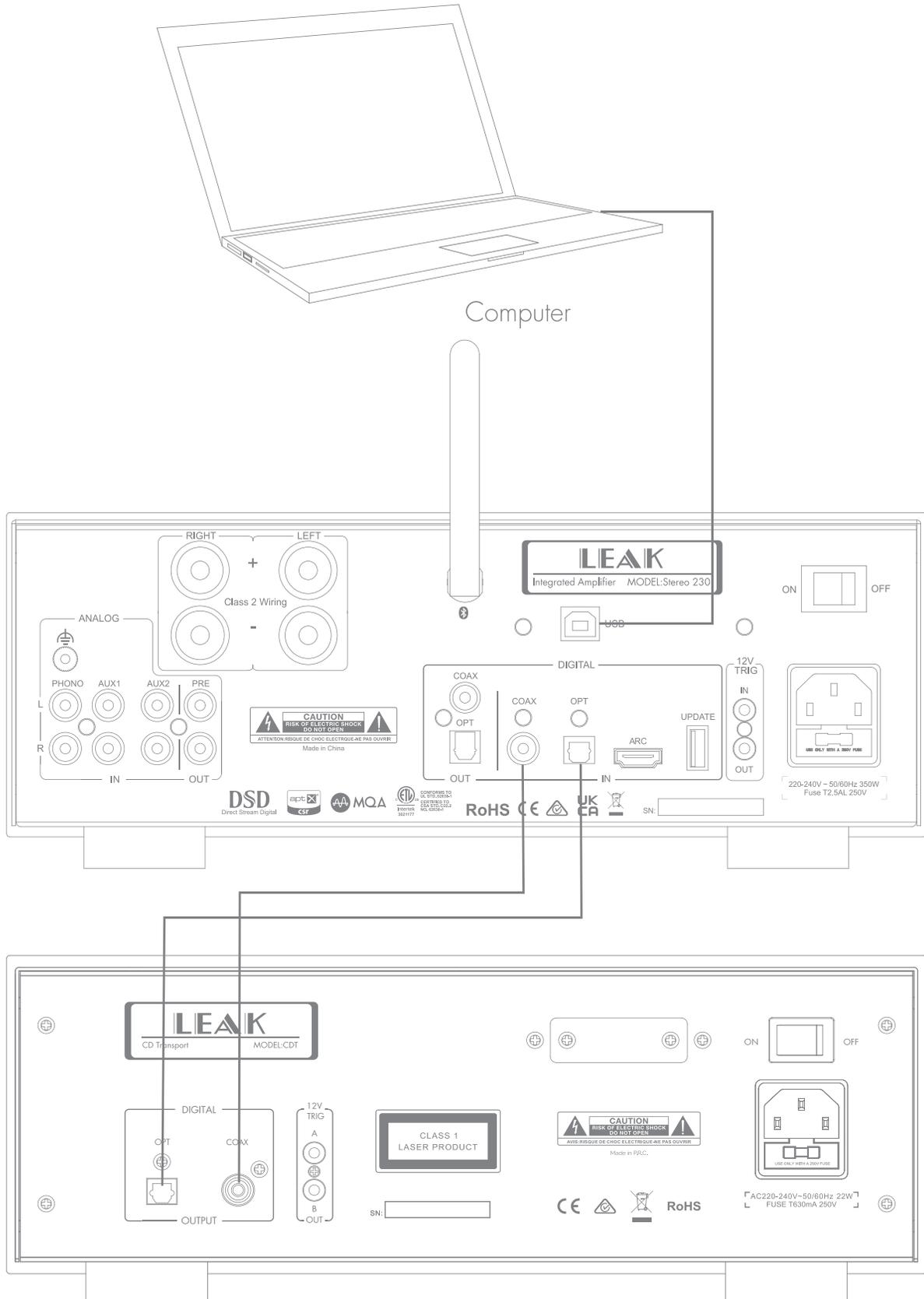
## ARC

ARC function allows you to send audio from your ARC-compliant TV to the LEAK STEREO 230 through a single HDMI connection. To enjoy the ARC function, please ensure your TV is both HDMI-CEC and ARC compliant and set up accordingly. Please note: Your TV must support the HDMI-CEC and ARC function. HDMI-CEC and ARC must be set to 'ON'. The configuration method of HDMI-CEC and ARC may differ depending on the brand or model of your TV. For details about the ARC function, please refer to your TV owner's manual. Only HDMI 1.4 cables can support the ARC function.

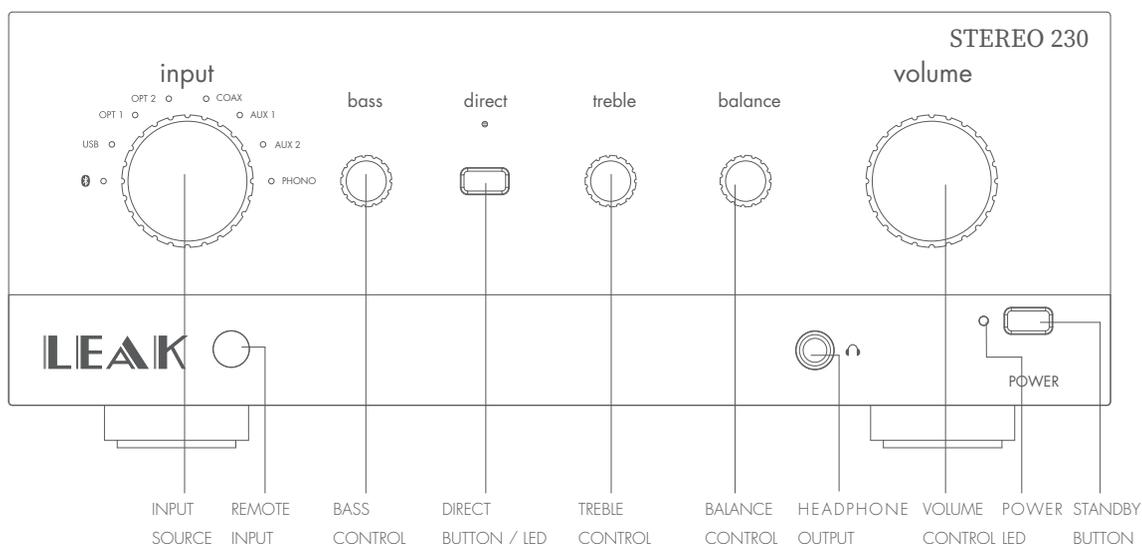


ARC

## Input Connection



## Operation



### STANDBY MODE

The LEAK STEREO 230 will be in standby mode when powered on. Power LED indicator on front panel will show dark red. Press the Standby button or the  button on the remote handset to bring LEAK STEREO 230 out of standby.

You can adjust the 'auto standby' function by pressing and holding the Standby button on the front panel until the LED blinks. A short press of the Standby button then selects the Auto - Standby function as follows:

#### 20 min Auto-Standby

The Power LED indicator flashes twice: Auto-Standby 20 minutes. The LEAK STEREO 230 will automatically go into Standby mode if there is no signal input or operation for 20 minutes.

#### 1 Hour Auto-Standby

The Power LED indicator flashes thrice: Auto-Standby 1 hour. The LEAK STEREO 230 will automatically go into Standby mode if there is no signal input or operation for 1 hour.

#### Never Auto-Standby (Default)

The Power LED indicator flashes once: Auto-Standby Never. The LEAK STEREO 230 will not go into Standby mode.

### VOLUME CONTROL

Before turning on the LEAK STEREO 230, please check the volume level before playing the source. The volume control will remain at the level it was last set at when the unit was put in stand-by.

You can adjust the volume knob on the front panel or press the volume button of the remote control to adjust the volume level as needed.

Press the MUTE button on the remote control to enter MUTE mode. Note: the selected input indicator flashes to show the amplifier is in MUTE mode.

### PLAYING MUSIC VIA ANALOGUE INPUTS

Connect the analogue signal of a source unit to the LEAK STEREO 230's AUX1 or AUX2 input. Rotate the INPUT selector on the front panel (or press the INPUT select key on the remote control) to select the AUX1 or AUX2 input. The selected input indicator will light and music will start playing.

### PLAYING MUSIC VIA DIGITAL INPUTS

Connect the coaxial SPDIF or optical (TOSlink) output from your source unit to the digital in COAX jack or the optical (TOSlink) input on the LEAK STEREO 230's rear panel. Rotate the INPUT selector on the front panel (or press the INPUT select key on the remote control) to select the COAX / OPT input. The selected input indicator will light and music will start playing when signal is present.

## PLAYING MUSIC VIA USB INPUT

When connecting the LEAK STEREO 230 to a Windows computer for the first time, you will need to install the USB driver on your computer.

Connect to a Mac or PC via the type-B USB interface on the LEAK STEREO 230's rear panel. Rotate the INPUT selector on the front panel (or press the INPUT select key on the remote control) to select the USB input, the selected input indicator will light. Select the unit as the playback output device on the computer and then start playing music with your chosen music software program.

## PLAYING MUSIC VIA BLUETOOTH

You can wirelessly connect the LEAK STEREO 230 to a music source via Bluetooth wireless technology. When the Bluetooth device (smartphone, tablet or PC etc) is not connected, the indicator light of the Bluetooth input will flash. When a Bluetooth device is connected, the indicator LED will be illuminated.

To connect a Bluetooth device, access the Bluetooth connectivity menu on your Bluetooth device (smartphone, tablet or PC etc) and connect to 'LEAK STEREO 230 BT'. If prompted to enter the password, enter '0000'.

Bluetooth will disconnect after 1 minute, if you switch to another input from Bluetooth playback. Your device will automatically reconnect to the LEAK STEREO 230 when you switch back to the Bluetooth input (assuming the device is within range).

To disconnect the Bluetooth:

- Hold press the ►|| button on the remote control for 3 seconds to force the current Bluetooth connection to be disconnected.
- Bluetooth will automatically disconnect if you remove the Bluetooth source beyond the communication area or turn off the connected device or turn off its Bluetooth function.

## BASS

You can adjust the bass output by adjusting the BASS knob on the front panel. To increase, turn clockwise. To decrease, turn counterclockwise. The BASS control range is -6dB to +6dB.

## TREBLE

You can adjust the treble output by adjusting the TREBLE knob on the front panel. To increase, turn clockwise. To decrease, turn counterclockwise. The TREBLE control range is -6dB to +6dB.

Note:

The RIAA playback characteristic has been incorporated in the LEAK STEREO 230, as this is the internationally agreed standard. This characteristic does not take into account the acoustics of the recording studio, the position of the microphones relative to the artists, your pickup, your loudspeaker systems, the acoustics of your room and your particular ears! In other words, the play-back characteristic is of use only as an approximation, and it may well be necessary to adjust the final result by using the controls marked as 'BASS' and 'TREBLE'; this is the reason for their presence. When playing LP records (33<sup>1/3</sup> and 45 r.p.m) made prior to 1955, for instance, the bass and treble controls may be used to correct differences in the recording characteristic.

When playing European 78 records, the 'TREBLE' control should, theoretically, be turned to '2 O'Clock'.

Consumer opinion in some countries insists on a magnitude of available bass boost which, if used at maximum, can only result in a travesty of the original music. We have provided you with an availability of bass boost which you certainly should not need if your pickup and loudspeakers are moderately good. It is not possible to obtain true bass from small loudspeaker systems by turning the 'BASS'; control to maximum, though an intermediate setting may be helpful, particularly when listening at low intensity levels (as in an apartment late at night).

## BALANCE

The balance knob on the front panel can adjust the sound output balance of the left and right speakers to compensate for an unbalanced sound.

Note: if you turn the balance control knob to full Left or Right, the opposite channel will be silent.

## DIRECT

Press the Direct button on the front panel of the LEAK STEREO 230 to activate the direct function, and the indicator above the key will light up. Click to turn off Direct again and the indicator goes off.

The LEAK STEREO 230 will bypass certain circuits within the amplifier design by stopping the power supply to these circuits. It will reduce noise and electronic interference (albeit minor) in order to reproduce the purest sound as is electronically possible.

Note: bass, treble, and balance controls are not available when direct is activated.

## PROTECTION MODE

The LEAK STEREO 230 is protected by a thermal switch which interrupts the AC Power supply if the amplifier is grossly overloaded for a period of time. To restore operation, simply press the Standby button on the front panel. It is thus fully protected against gross overload, short-circuited output etc, but not necessarily against seriously inadequate ventilation.

# Warranty Coverage

LEAK warrants its products, subject to the following terms and conditions below, to be free from defects in materials and workmanship.

## ONLINE REGISTRATION



Scan the QR code using a smart-phone device, for product warranty registration online.

The three (3) year extended warranty is applicable to items purchased from Jan 1st 2021, onwards. Items purchased prior to this date are not eligible for this extended warranty service but are subject to statutory warranty claims and all applicable consumer rights.

To qualify for the extended 3 year warranty, you must register your product within ninety (90) calendar days from the date of purchase. Visit [leak-hifi.co.uk/warranty-registration](http://leak-hifi.co.uk/warranty-registration) to complete your online registration. Items not registered online will have a Limited Warranty for one (1) year, or for the period of your country's statutory warranty, whichever is longer.

Warranty can only be offered to products registered with proof of purchase with date, model and details of the authorised dealer clearly stated on the receipt/invoice. Please keep the original receipt/invoice in case it is required for a warranty claim.

This Limited Warranty is non-transferable and is offered exclusively to the original owner.

This Limited Warranty is valid only in the original country of purchase.

Repairs or replacements are provided under this warranty are the exclusive remedy of the consumer. LEAK shall not be liable for any incidental or consequential damages for breach of any expenses or implied warranty with any product. Except to the extent prohibited by law, this warranty is exclusive and in lieu of all other warranties whatsoever, both expressed and implied, including but not limited to the warrant of merchantability and fitness for practical purpose.

This warranty provides benefits that are additional to and do not affect your statutory consumer rights.

This Limited Warranty offer is subject to correct information being submitted in your application. Incorrect dates or mismatched purchase receipt dates that are outside of the warranty terms will immediately invalidate any warranty claim.

\*Please check with your dealer local distributor for further information.

## EXCLUSIONS

The following items are excluded from the LEAK warranty:

Normal wear and tear and cosmetic damage (including but not limited to any wear from reasonable use, environmental deterioration or neglect)

Products on which the serial number has been removed, altered or otherwise made illegible.

Products not purchased from an authorised LEAK dealer.

Products that were not new at the time of original purchase.

Products sold 'as is', 'as seen' or 'with faults'

Product not purchased from an Authorised Dealer/Distributor within the region of the claim (ie parallel imports or grey market products)

Accidental damage or faults caused by commercial use, acts of God, incorrect installation, incorrect connection, incorrect packaging, misuse or careless operation or handling which is not in accordance with the user instructions.

Equipment that has been operated in conjunction with unsuitable, inappropriate or faulty apparatus.

Repairs, alterations or modifications carried out by parties other than LEAK or its authorised service partners.

Damage in transit that cannot be attributable to the fault of LEAK, the authorised distributor or dealer (ie. claims otherwise covered by transit insurance.)

Faults relating to abnormal or inappropriate power supply voltage or power surges.

Faults relating to extremities in temperature, exposure to heat, water or other liquids, insects, excessive moisture, sand, chemicals, battery leakage or any other contaminants.

Any force majeure events, including but not limited to any acts of God, fire, lightning, typhoon, storm, earthquake, hurricane, natural disaster, tsunami, flood, war, riot, public disturbance.

Any other causes beyond the reasonable control of either LEAK and its Authorised Distributor.

Please note items purchased before 1st Jan 2021 are not eligible for the extended warranty claim.

## HOW TO CLAIM

To obtain warranty service please contact the authorised dealer from which you purchased this product and present the limited warranty certificate offered upon registration of your product's extended warranty offer.

Do not dispatch goods without the prior agreement of the dealer distributor or authorised service centre.

If asked to return products for inspection and or repair, please pack carefully preferably in the original carton or packaging affording an equal degree of protection and returned via insured, trackable courier service.

The authorised dealer or distributor will offer full return details and instructions. However, please note if unsuitable packaging is used the warranty may be deemed void due to improper action in return.

LEAK or the authorised distributor, dealer or service centre may make a charge for the supply of new packaging for the return of the repaired item. Please note, insurance is recommended as goods are returned at the owner's risk. Authorised distributors or service centres cannot be held liable for loss or damage in transit. Insurance and freight charges on the return journey will be paid for by LEAK, authorised dealer, distributor or service centre if corrective work proves to be necessary.

In the event of 'no-fault found' or 'no repair necessary,' the return shipping charge will be the responsibility of the owner.

## REPAIRS

All repairs will be carried out by the appointed distributor (or locally appointed service centre). Repairs handled or processed without authorisation or approval of the appointed representative will be excluded from this limited warranty. Please note, LEAK is not able to supply parts or replacement items to any other entity than the official distributor or authorised service centre.

Other than the warranty and services set out in this warranty, to the fullest extent permitted by law, LEAK shall not be liable to you and/or any third party or entity whatsoever for:

- Any loss, damages and/or malfunction caused to any product(s) which is/are connected to any of the products covered by this warranty.
- Any damages, loss and liability, whether direct, indirect, incidental, consequential special, punitive or otherwise, howsoever caused by, arising out of or otherwise, in relation to the installation, delivery, use, service, repair, replacement and/or maintenance of the product;
- Any damages, loss and liability under this warranty in respect of any act, omission, or negligence of any of their technicians, employees, agents, representatives or independent contractors relating to the actual or purported performance of any of the obligations under this warranty.

## SERVICE CENTRE ADDRESS

Should a fault occur with your product, please pack it correctly using the original packing, so you can ship it safely. For technical support, servicing or product queries and information, please contact either your local retailer or the office below:

IAG Service Dept.  
13/14 Glebe Road  
Huntingdon  
Cambridgeshire  
PE29 7DL  
UK

Tel: +44(0)1480 452561

Email: [service@leak-hifi.co.uk](mailto:service@leak-hifi.co.uk)

For information on other authorised service centres worldwide contact LEAK International, UK.

A world wide distributors list is available on the LEAK website: [www.leak-hifi.co.uk](http://www.leak-hifi.co.uk)

# Specifications

Measurement made with 230V power supply

Model	STEREO 230
D/A Converter	ESS Sabre32 Reference ES9038Q2M
Input Sampling Rates	Optical, Coaxial: 44.1kHz~192kHz; USB: 44.1kHz~512kHz (PCM)/DSD64, DSD128, DSD256, DSD512
Rated Output Power	2 x 115W (4 ohms) / 2 x 75W (8 ohms)
Total Harmonic Distortion	< 0.003% (1kHz @ 30W / 8 ohms)
Frequency Response	20Hz-20kHz (+/-0.5dB)
Input Sensitivity	550mV (RCA AUX IN); 4.1mV (Phono MM)
Input Impedance	10k ohm (AUX) ; 47k ohm / 100pF (Phono MM)
Signal to Noise Ratio (S/N)	≥ 109dB (A-weighted)
Pre Output Level	2.3Vrms
Pre Output Total Harmonic Distortion (THD)	< 0.002%
Pre Output Signal to Noise (S/N)	> 110dB (A-weighted)
Bluetooth Version	5.0
Profile	A2DP
Codec	aptX / aptX HD
USB Input	1 x USB Type B (MQA Full Decoder & Roon Tested)
Digital Audio Inputs	1 x Optical TOSlink , 1 x RCA COAX (MQA Full Decoder)
Digital Audio Outputs	1 x Optical TOSlink , 1 x RCA COAX, 1 x ARC
Analogue	2 x RCA (AUX1, AUX2) , 1 x RCA (Phono MM)
Analogue	1 x RCA (PRE OUT)
Power Requirement (Depends on your area)	220-240V ~ 50/60Hz 100-120V ~ 50/60Hz
Dimensions W x H x D (mm)	328 x 147 x 414 (Walnut) 328 x 115 x 414 (Silver)
Carton Size W x H x D (mm)	514 x 428 x 210
Net Weight	11.1kg (Silver) 12.7kg (Walnut)
Gross Weight	12.7kg (Silver) 15.2kg (Walnut)
Finish	Silver / Walnut



Current disposal of this product. This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmental safe recycling.





**LEAK**

IAG House, 13 /14 Glebe Road, Huntingdon, Cambridgeshire, PE29 7DL, UK  
Tel: +44(0)1480 452561 Email: [service@leak-hifi.co.uk](mailto:service@leak-hifi.co.uk) Website: <http://www.leak-hifi.co.uk>