

## Important Safety Precautions

- Use only an approved power cable and plug or distribution board to connect your amplifier to a power outlet. Do not use an extension cable.
- Never touch the mains plug if your hands are wet.
- Do not attempt to open the equipment. Refer servicing to qualified service personnel. Touching live components inside the case can result in a fatal electrical shock!
- Read the Owner's Manual and Safety Precautions before operating the equipment.
- Keep this Owner's Manual in a safe place so that you can refer to it later.
- Please heed all warnings on the equipment itself and in the Owner's Manual.
- Please follow the instructions contained in your Owner's manual and never use this equipment for any purpose other than is explained in this Owner's Manual.
- Only connect this equipment to a power source of the type described in the Owner's Manual and specified for this equipment.
- Make sure that there is adequate ventilation around the equipment to allow proper cooling. Keep the equipment away from direct sunlight. Avoid installing the unit close to sources of heat or in spaces such as bookshelves or cupboards where heat radiation may be obstructed. Avoid excessive temperatures in the room, as these could ultimately damage sensitive components and reduce the service life of your amplifier.
- Never use the unit in damp rooms, at temperatures of below 15°C, or in the open air. When bringing your amplifier in from the cold, allow it time to achieve room temperature before plugging it in.
- Always switch the unit off before removing or inserting interconnects. Doing this with the amplifier switched on can damage not only the unit itself but also equipment connected to it.
- If you ever spill water or any other liquid onto the equipment, do not touch the case! Remove the plug from the wall outlet and contact your dealer or our service department.
- Never remove the earth pin from the plug. It is there to ensure your safety.
- Route the power cable so that no one can accidentally stand on it. Avoid locating it under objects that might put pressure on the cable. Pay particular attention to areas where the cable exits from plugs, AC outlets and from the unit itself.
- Never operate the unit without being present. Disconnect the plug from the wall outlet and remove all aerial connections (including cable aerials) when: you clean the unit, you do not expect to use the unit for long periods, during electrical storms.
- If you have an external antenna or a cable antenna connected to your hi-fi system, we recommend that you use a signal-isolating filter to avoid interference or damage during thunderstorms.
- If you lose the sound while the amplifier is operating, or if you notice smoke or burning, switch the unit off immediately and contact your dealer or our service department.
- Only replace defective fuses after you have traced and removed the cause of the fault and then only with a fuse of the same rating. Remove the mains plug before changing fuses. Use an insulated screwdriver to remove and replace the fuse.

### Dear Music Lover,

Congratulations on becoming the owner of the Lindemann 858 power amplifier. This is an exclusive high-end audio component, built in Germany in limited quantities.

Our team designed this amplifier to the highest standards so that you could enjoy the highest level of audio reproduction. Because we use only the finest components and the most modern production technologies, we confidently guarantee that our products will retain their superb qualities for many years.

Keep the carton and packaging materials that your 858 came in. They will protect your amplifier should you need to transport it in the future. Transporting the 858 in anything other than the original packaging may result in physical damage not covered by your warranty.

A final note -- please take the time to read this Owner's Manual before using the equipment for the first time. It contains a number of useful tips gathered from our many years of experience, which will help you get the most from your hi-fi system.

### Copyright and trade mark acknowledgements

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## Accessories supplied

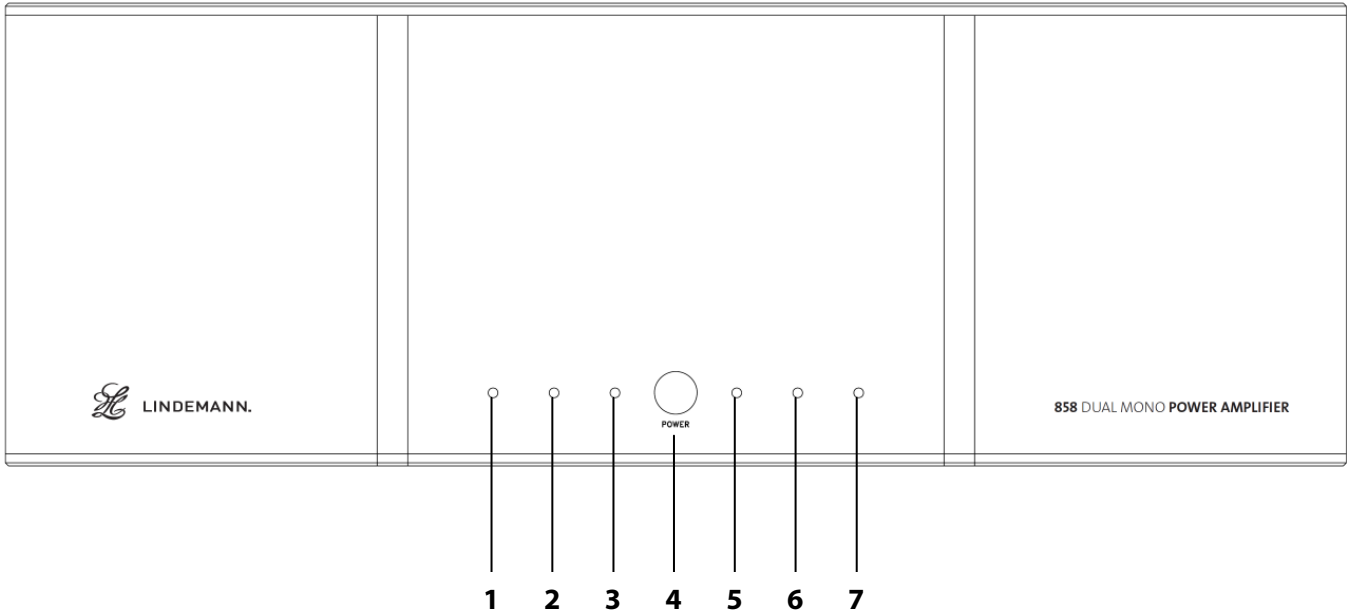
- 858 Dual Mono Power Amplifier
- Power cord, 2.0m
- SYSCOM connector cable, 1.0m
- Owner's Manual

We recommend that you keep the packaging for use when transporting the 858 in the future.

## 858 Dual Mono Power Amplifier

- Place your amplifier on a stable support. We recommend you use a solid hi-fi rack. In our experience, you will achieve good results with racks fitted with MDF shelves. Glass, metal or stone being less suitable for use as hi-fi equipment supports. Never stack the 858 directly on other items of equipment. 800-Series products are not suitable for installation in enclosures such as 19" racks or cabinets. The on/off switch at the rear of the unit must always be accessible.
- Take some time to organize your cabling. Try to keep power cables away from interconnect and speaker cables. Shielded power cords can significantly reduce the transfer of interference to your signal cables.
- Make sure that all system components are operated from one mains socket. You can achieve this by connecting all system components through a single, high quality mains distribution board. The lower the resistance between signal sources and amplifiers, the less the audio signal will be polluted and the better your hi-fi system will sound. Connecting your components with the correct mains polarity is also important. Use a phase finder to determine which pin is live. Mark the appropriate side of the power outlet. The marked pin on the IEC power receptacle on the 858 should connect to the positive conductor.
- Cleaning and maintenance. To clean your amplifier, use a soft cloth. To remove stubborn dirt from the front panel, use a proprietary glass cleaner. Do not use water! Never use solvents or white spirit. These will cause irreparable damage to the surface of the unit.

## Front view



- |    |                             |          |
|----|-----------------------------|----------|
| 1. | Fault LED, left             | (red)    |
| 2. | Over-temperature LED, left  | (yellow) |
| 3. | On LED, left                | (blue)   |
| 4. | Power button                |          |
| 5. | On LED, right               | (blue)   |
| 6. | Over-temperature LED, right | (yellow) |
| 7. | Fault LED, right            | (red)    |

### Power button

The power button switches the amplifier on from standby. The 858 must be connected to the AC mains supply and the power switch on the rear panel must be switched on.

### On LEDs

When the 858 is in standby none of the indicator lamps illuminates. They show blue when the amplifier is operating. When the amplifier is switched off, the 'on' LEDs will flash continuously for 5 seconds, during which time it is not possible to switch the amplifier back on.

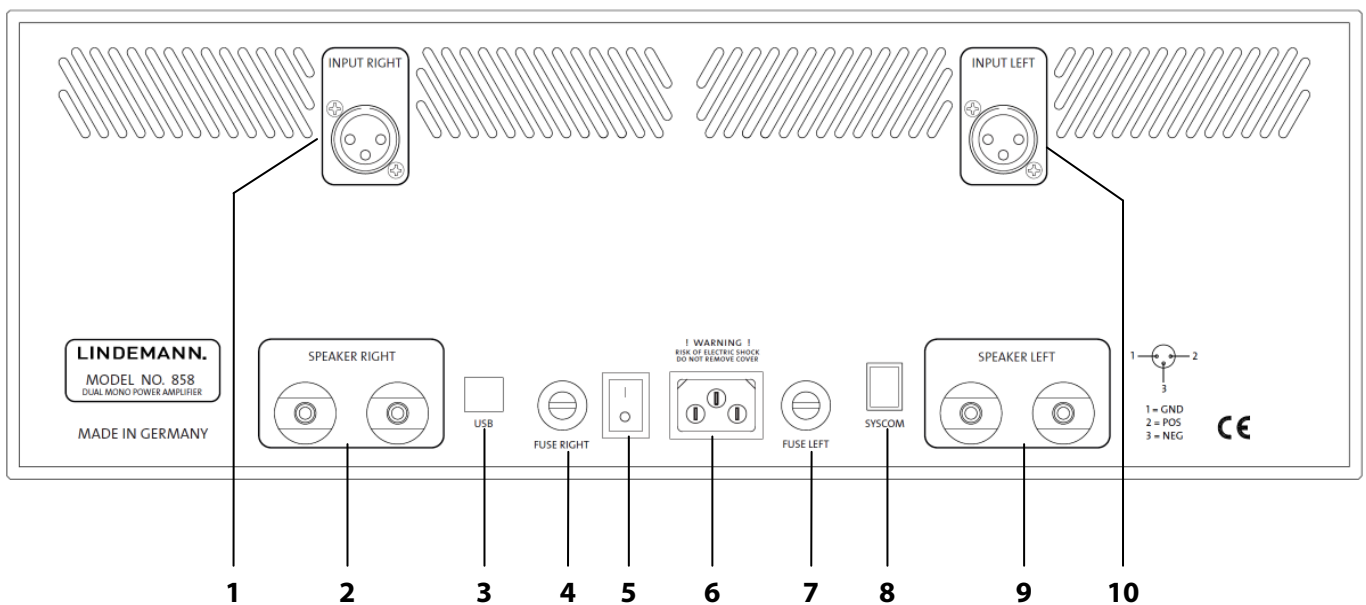
## Over-temperature LEDs

When the temperature first exceeds normal levels, these LED flash yellow. If the temperature continues to rise, the LEDs illuminate constantly and the output will be muted until the temperature returns to normal.

## Fault LEDs

The red LEDs illuminate whenever the protection circuit cuts in. This warns you that there is a fault condition. The protection circuit first mutes the output and, if the fault condition persists, switches off the amplifier.

## Rear view



1. XLR input, right
2. Speaker terminals, right
3. USB port (maintenance only)
4. Fuse right
5. Power (on/off) switch
6. AC power socket
7. Fuse left
8. SYSCOM connection
9. Speaker terminals, left
10. XLR input, left

## Audio inputs

The audio inputs of the 858 are balanced only. Input impedance is 600 ohms. Please bear this in mind when choosing a preamplifier. Preamplifiers with weak output stages, and particularly tube preamps, are not suitable, as they are unable to handle this input impedance without distorting.

XLR pin connections:



- Pin 1: Ground
- Pin 2: Signal +
- Pin 3: Signal -

## Speaker outputs

The loudspeaker outputs on the 858 are in the form of WBT terminal posts, which accept WBT spade connectors and 4mm banana plugs. Important: the 858 is a fully balanced amplifier! This means that both the red and the black terminals are connected directly to the amplifier outputs. Never connect the black terminal to earth! This could cause serious damage to one half of the power amplifier!

## Power requirement

The power inlet is designed to take a removable IEC cable. We recommend you use a high quality power cable. Please observe the red marking on the power receptacle: red should connect with the live (L) conductor from the mains circuit.

## Power (on/off) switch

The power switch completely disconnects the amplifier from the AC mains supply.

## SYSCOM

The SYCOM connector enables you to switch the 858 on remotely. Use the SYSCOM cable supplied with your amplifier to connect the amp to 830/832. When you switch 830/832 on, the 858 will power up automatically at the same time.

## Setting up

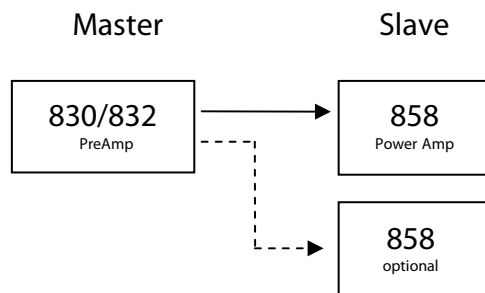
Place the 858 in the location in which you intend to use it. Do not try to move the amplifier when there are cables connected or when it is switched on. Connect your other components using high quality interconnects and speaker cables. Make sure that the polarity of the speaker cables is correct. Now, plug your power amplifier into the mains. Before you do this, use a phase finder to determine which conductor on your distribution board is live. The live conductor should be connected to the pin marked red on the 858's IEC socket.

## Switching on and off

Switch the 858 on with the power switch on the rear of the unit. The 858 is now in **standby** mode. The blue 'on' LEDs will illuminate briefly. To switch the unit on and off, press the POWER button. When using the SYSCOM cable, the power amplifier will power up at the same time as the preamplifier. The blue LEDs remain illuminated during normal operation.

## SYSCOM

If the 858 is linked to an 800-Series master unit, the latter takes over remote on and off switching. Remote switch-on is only possible when the 858 is in standby mode. It is also possible for a component in the chain from another manufacturer to remotely switch the 858 on and off via a Remote link. The switching voltage must be between 5V and 12VDC. Lindemann audiotechnik can supply adapter cables upon request.





# Cooling

The amount of heat generated by the 858 depends on how hard it is driven. It is very important to ensure that there is unimpeded circulation of fresh air from below and that hot air can escape behind and above the unit. When you install your amplifier, therefore, make sure to provide adequate clearance above and behind the unit. Make sure also that the location is protected against direct sunlight. Operating the amplifier at room temperatures higher than 30°C can lead to heat dissipation problems and is not recommended. The 858 is equipped with active cooling via a speed-controlled fan, which switches on according to the ambient temperature and how hard the amplifier is driven. At normal listening volumes, however, this is unlikely to happen.

# Protection circuits

Intelligent protection circuits constantly ensure the proper functioning of the 858 amplifier. If a fault such as a DC, surge current or overtemperature fault should occur, power to the electronics is immediately shut down to prevent damage to the amplifier and speakers. A built-in inrush current limiter operates at turn-on to protect the amplifier's components and prevent the mains circuit breaker or fuse from tripping.

## **Over-temperature**

Flashing yellow LEDs will warn you if the operating temperature becomes too high while the amplifier is running. If you do not take steps to reduce the output level, the amplifier will switch off and the fan will run at maximum speed to cool the amplifier down to a safe temperature. While this is happening, both yellow overtemperature LEDs illuminate continuously and you will not be able to switch the 858 back on.

## **DC voltage**

If an excessively high DC voltage is detected at the output, the 858 mutes the signal and the red Fault LED illuminates. If the fault continues, the 858 disconnects the power to the amplifier. If this happens, the amplifier must be switched off and restarted. However, if the amplifier will not restart, it has been damaged and must be serviced!

## **Overcurrent**

An over-current limiter protects the output stage of the 858 against excessive current.

## **Power failure**

A supply voltage sensor constantly monitors the mains supply voltage and switches the unit off in the event of a power failure.

# Specification

Measuring conditions: 22°C, 230 V supply voltage.

Dimensions ..... 440 x 165 x 363mm (W x H x D)  
Weight ..... 27.0 kg  
Power requirements..... 230V 50/60 Hz  
Power consumption .....1600 W maximum  
Power consumption (normal operation) ..... 70 W  
Power consumption (standby) ..... 0.5 W

Power output ..... 450 W per channel into 4 ohms  
Frequency response ..... 1Hz – 200 kHz (-3dB)  
Voltage Gain ..... 26dB  
S/N (A-weighted, ref. 10V output) .....>106dB  
Input impedance .....600 ohms balanced  
Input sensitivity ..... 1.0 V for 20V output  
.....2.15 V for rated output

Please note:

Our product policy is one of continuous development. Specifications are therefore subject to change without notice

## CE declaration of conformity

Product type: Power amplifier

Model: 858 DUAL MONO POWER AMPLIFIER

LINDEMANN audiotechnik GmbH declares that this product complies with the Low Voltage Directive 73/23/EEC and the Electromagnetic Compatibility Directive 89/336/EEC, amended by the directives 92/31/EEC and 93/68/EEC.

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

EN 60065 (Date of issue 1998)  
EN 61000-3-2 (Date of issue 2000)  
EN 61000-3-3 (Date of issue 2001)

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

EN 55013 (Date of issue 2001)  
EN 55020 (Date of issue 2002)

## Guarantee and Service

At Lindemann we value our customers. When a Lindemann product leaves our factory we do not see this as the last step of the process, rather it is the beginning of our long-standing relationship with you. Thereafter we seek to support you in every way that we can. Should you require any further information feel free to contact us at Lindemann audiotechnik.

This product is guaranteed under the conditions that apply in the country of purchase and your statutory rights are not limited. In addition to any statutory rights you may have, Lindemann undertake to replace any parts that have failed due to faulty manufacture. To help us, please ask your Lindemann retailer about the Lindemann warranty scheme in operation in your country.

In parts of Europe and some other markets, extended warranty may be available to customers who register their purchase with the local Lindemann distributor. A warranty registration card is included with the product and should be stamped by your retailer and returned to the local distributor as soon as possible.

### **Warning**

Unauthorised servicing or dismantling of the product invalidates the manufacturer 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 your local retailer, the local Lindemann distributor or Lindemann audiotechnik. Full details of your local distributor can be found on the Lindemann website: [www.lindemann-audio.de](http://www.lindemann-audio.de)

### **Important**

- Please keep a copy of the sales receipt to establish the purchase date of the product.
- Please ensure that your equipment is insured by you during any transit or shipment for repair.

### **Lindemann audiotechnik GmbH**

Felix-Wankel-Str.4

D-82152 Krailling

Germany

Tel: +49 (0)89 8913679-0

Fax: +49 (0)89 8913679-29

Website: [www.lindemann-audio.de](http://www.lindemann-audio.de)

E-mail: [info@lindemann-audio.de](mailto:info@lindemann-audio.de)  
[service@lindemann-audio.de](mailto:service@lindemann-audio.de)

## Directive on waste electrical and electronic equipment

Electronic equipment should not be disposed of with household waste but in compliance with the Directive 2002/96/EU of the European Parliament and of the Council of 27 January 2003 on waste electrical and electronic equipment. When this equipment reaches the end of its working life, please take it to one of the available collection points.

The symbol (below) is attached to this product.

