

## Important safety instructions

- Read the instructions.
- Keep these instructions.
- Follow all instructions.
- Do not use this apparatus near water.
- Clean only with a dry cloth.
- Install only in accordance with the manufacturer's instructions.
- Refer all servicing to approved service personnel.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE.

This apparatus has been designed with Class 1 construction and must be connected to a mains socket outlet with a protective earthing connection (the third grounding pin).

This apparatus uses a single-pole power switch. As a result it is not isolated from AC mains power when switched off at the rear panel. The apparatus may be isolated from mains power either by unplugging the power connector from the rear of the unit, or by unplugging the connector at the opposing end of the power cord or cable from its supply outlet. As a result, either or both of these connectors should remain accessible.

## Safety warnings



**Caution:** to reduce the risk of electric shock, do not remove cover. No user serviceable parts inside. Refer servicing to qualified service personnel.

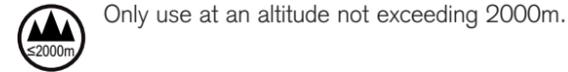
The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure than may be of sufficient magnitude to constitute a risk of electric shock to persons.

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

## IP20 Equipment

### Climate

The equipment has been designed for use in moderate climates and in domestic situations.



### Safety warnings

- Do not expose the unit to dripping or splashing.
- Do not place any object filled with liquid, such as a vase, on the unit.
- Do not place naked flame sources, such as lighted candles, on the unit.

### To avoid overheating

- Do not position the product in direct sunlight.
- Do not position the product near heat sources, such as a radiator.
- Leave at least 10cm around the product to ensure sufficient ventilation.

### Siting

Do not place the power amplifier:

- In direct sunlight.
- Near heat sources, such as a radiator.
- On a soft surface such as a carpet.

## Radio interference

FCC Warning: This equipment generates and can radiate radio frequency energy and if not installed and used correctly in accordance with our instructions may cause interference to radio communications or radio and television reception. It has been type-tested and complies with the limits set out in Subpart J, Part 15 of FCC rules for a Class B computing device. These limits are intended to provide reasonable protection against such interference in home installations.



EEC: This product has been designed and type-tested to comply with the limits set out in EN55032:2015 and EN55024:2010 + A1:2015.

## Introduction

The Meridian Eight Channel Amplifier 258 is a powerful, high-performance, cool-running Class D amplifier that can deliver more than 100W per channel into 4Ω, or more than 70W per channel into 8Ω.

The featured high efficiency (>95%) Class D amplifiers produce very little heat, allowing fanless operation with eight independent channels in a 1U enclosure. It is primarily designed to power multiple zones.

The 258 uses audiophile components, resulting in a level of performance typically associated with power amplifiers offered at a significantly higher price. Separate reservoir capacitors offer the advantages of a multiple-mono construction in a compact package. This also keeps signal paths very short and improves isolation between channels.

The 258 uses a linear power supply, which provides isolation from the AC supply and offers both sound quality and intrinsic durability. It is based on a massive low-noise toroidal power transformer, with an electronic trip for protection against short circuits or overheating. An indicator on the front panel shows the status as standby, on, or hot. Back panel indicators show the status of each channel.

## Unpacking

The Eight Channel Amplifier 258 is supplied with the following accessories:

- Power cord.
- Self-adhesive feet for non-rack installation.
- Mating speaker connectors.
- This manual.

If any of these items are missing please contact your retailer.

**NOTE:** You should retain the packaging in case you need to transport the unit.

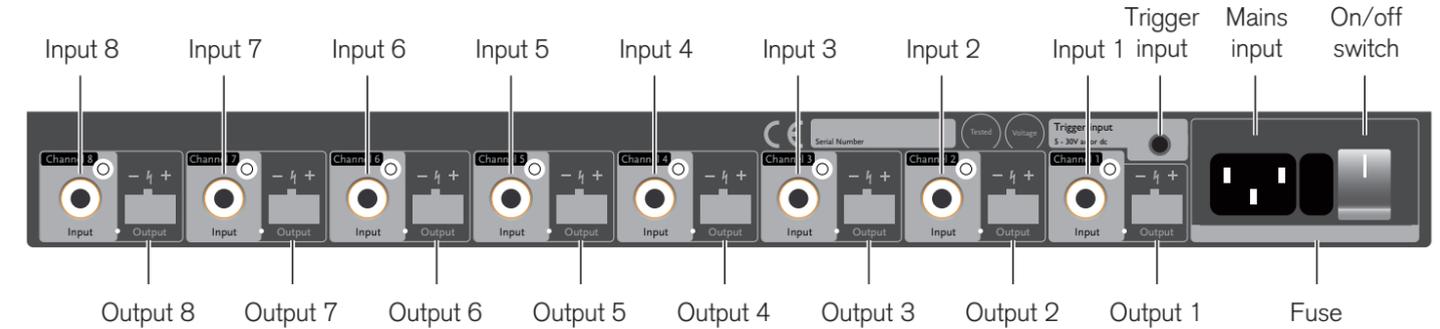
### Standby

Once set up, the power amplifier can be left in standby as it consumes minimal power in this mode.

If you are not going to use the power amplifier for a period of several days you should switch off the unit completely, at the back panel and disconnect it from the AC power supply.

## Back panel

The following diagram gives details of the back panel connections:



## Audio inputs

### Use this input

Input 1 to Input 8

### To connect to this

The outputs of sources with unbalanced outputs, using phono cables.

## Loudspeaker outputs

### Use this output

Output 1 +/- to Output 8 +/-

### To connect to this

Loudspeakers of between 4Ω and 8Ω, using Phoenix pluggable 2-way terminal blocks, 12AWG/20A.

## Communications connections

### Use this connection

Trigger input

### To connect to this

A 12V trigger output from a preamplifier or control system which can be used to bring the power amplifier out of standby.

## Indicators

An indicator for each channel on the back panel shows that the amplifier is out of standby and that the Class D modulator for that channel is running.

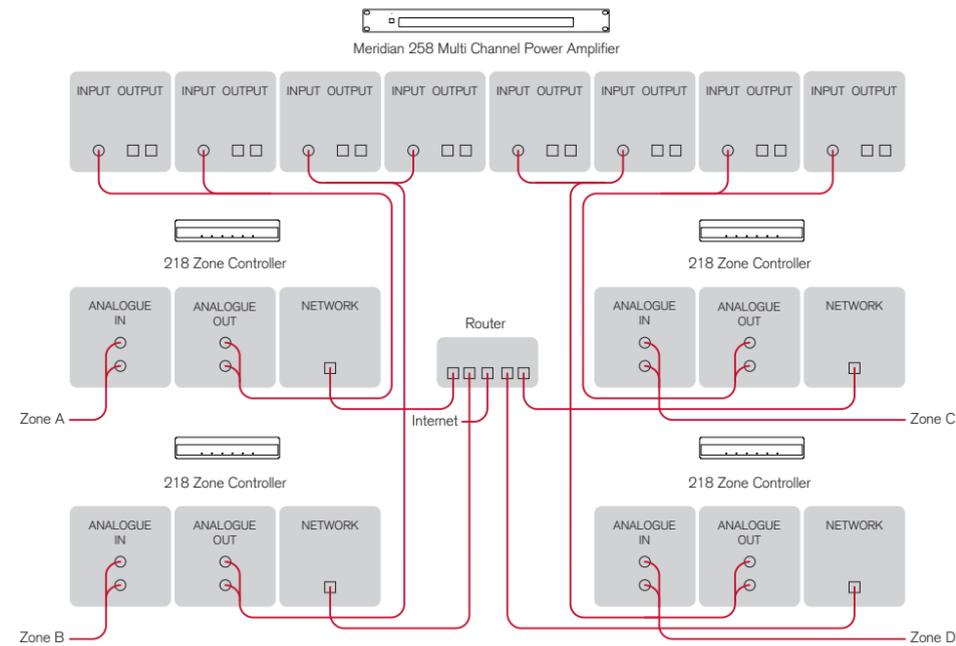
## Operation

After supplying power the amplifier comes out of standby automatically after four seconds.

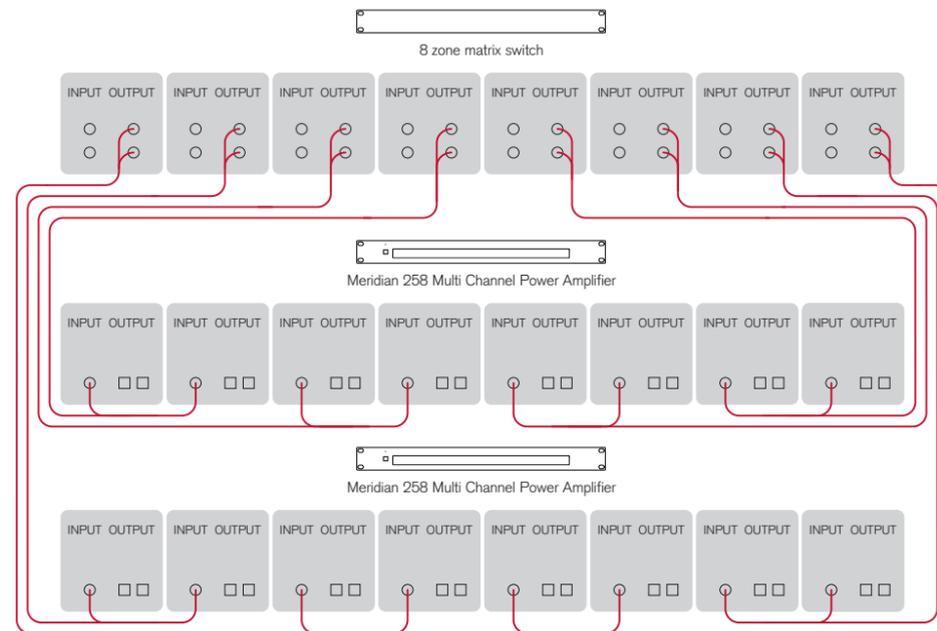
The indicator on the front panel shows the status:

Indicator	Status	Explanation
Blue	Standby.	Press the button to switch the amplifier between on and standby.
White	Normal.	Normal operation.
Red	Overheated.	Outputs muted.  The outputs will unmute when the amplifier has cooled down.
Blank	Tripped.	Amplifier off, caused by a fault, such as an input with a DC offset or a shorted output.  Correct the fault, then reset by turning off the power at the back panel and then on again.

## To connect to four Meridian 218 Zone Controllers



## To connect to a zone matrix switch



Use this application to connect up a four-zone system using four Meridian 218 Zone Controllers, using the 258 Multi Channel Power Amplifier to power one pair of loudspeakers for each zone.

- Connect the outputs from the Multi Channel Power Amplifier to loudspeakers, using loudspeaker cables.
- Connect the Analogue Out sockets on each Zone Controller to two of the Input sockets on the Multi Channel Power Amplifier.
- Connect the Analogue In sockets on each Zone Controller to the analogue source for that zone.
- Connect the Network sockets on each Zone Controller to an Internet Router.

You can now control the system via the network from a Meridian Sooloos system.

Use this application to connect an 8-zone audio matrix switch to two 258 Multi Channel Power Amplifiers, to drive the pairs of loudspeakers in each of eight zones.

- Connect the outputs from the Multi Channel Power Amplifier to loudspeakers, using loudspeaker cables.
- Connect the analogue outputs for each zone on the matrix switch to two of the Input sockets on the Multi Channel Power Amplifier.
- Connect the analogue source for each zone to the corresponding analogue inputs on the matrix switch.
- Connect the network input on the matrix switch to the Internet Router.

## Specifications

### Audio inputs

- Eight RCA inputs (16k $\Omega$ ) 1.0V RMS.

### Audio outputs

- Eight terminal blocks supplied with mating connectors suitable for 12-24 AWG wire.

### Characteristics

- >100W per channel into 4 $\Omega$ , or >70W per channel into 8 $\Omega$ .

### Control signals

- Trigger input: 3.5mm 5-30VDC.

### Controls

- Standby button with indicator for standby/on/hot.
- Back panel indicators for each amplifier.

## Physical

- Dimensions: 480mm x 44mm x 360mm (18.9" x 1.73" x 14.17") (W x H x D).
- Weight: 5.5kg (12.13lb).
- Stand-alone or rack-mounted versions.

## Power

- Linear power supply with trip.
- 5W standby; 500W max.

This product is available factory pre-set in the following voltage options:

- 100V AC 50-60Hz.
- 115V AC 50-60Hz.
- 230V AC 50-60Hz.

Meridian Audio reserves the right to amend product specifications at any time.

## Acknowledgements

Meridian is a registered trade mark of Meridian Audio Ltd.

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Register your Meridian Eight Channel Amplifier 258 at:

[www.meridian-audio.com/support](http://www.meridian-audio.com/support)

## Sales and service in the UK

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# Eight Channel Amplifier 258 User Guide

**MERIDIAN**