A large, stylized, dark gray letter 'M' is centered on a black background. The 'M' is composed of thick, solid lines. The words 'user guide' are written in a white, lowercase, sans-serif font, following the diagonal slope of the right-hand side of the 'M'.

user guide

Meridian 555 Power Amplifier

Sales and service in the UK

Meridian Audio Ltd
Stonehill
Stukeley Meadows
Cambs
PE18 6ED
England

Tel (01480) 52144
Fax (01480) 459934

World Wide Web
<http://www.meridian.co.uk>

Sales and service in the USA

Meridian America Inc
3800 Camp Creek Parkway
Building 2400
Suite 112
Eastpoint
Atlanta
GA 30331

Tel (404) 344 7111
Fax (404) 346 7111

Designed and manufactured in the UK by

Digital Gramophone and Wireless Ltd
Stonehill
Stukeley Meadows
Huntingdon
PE18 6ED
England

Copyright © 1993-1995 Digital
Gramophone and Wireless Ltd

Part no: 555/1

This guide was produced by
Human-Computer Interface Ltd,
Cambridge, England.

Contents

Introduction 1

Introduces the 555 Stereo Power Amplifier, and provides an overview of the other products available in the Meridian 500 Series.

The Meridian 500 Series	2
Sample configurations	3
Specification and accessories	6

Setting up the Stereo Power Amplifier 7

Describes how to unpack, install, and use the stereo power amplifier, and explains what you should do if your stereo power amplifier requires servicing.

Unpacking	8
Connecting the stereo power amplifier ..	9
Troubleshooting	12
Maintenance	13
Service and guarantee	14
Index	15



Introduction

In choosing the 555 Stereo Power Amplifier you have acquired a component that combines major advances in audio and engineering design.

The 555 Stereo Power Amplifier uses a unique feedback topology and precision local error correction system. It is designed and constructed in dual mono format, including a massive twin wound toroidal transformer, and the unit has full thermal, load, and DC protection.

This guide is designed to enable you to obtain the best possible results from the unit in conjunction with the other units in your system.

The Meridian 500 Series

The Meridian 500 Series is a unique system of digital, analogue, and video components designed to meet the demand for absolute quality, ease of use, and lasting value.

The flexibility of the Meridian 500 Series is such that you can assemble a system as simple or as complex as you need, perfectly suited to your musical and environmental requirements, and with the ability to add to it or change it at a later date should your requirements change. The 500 Series is also compatible with the existing Meridian 200 Series and 600 Series components.

Each Meridian 500 Series component is housed in a matching slim line case. Front panel controls provide access to the most important functions, and the full range of functions is available from the Meridian System Handset using a simple and intuitive control interface.

500 Series communications

The Meridian 500 Series includes a sophisticated communications link, to ensure that any configuration of units will work together as a fully integrated system.

The 500 Series communications system allows you to control any combination of units using a single handset, and ensures that your commands from the handset are interpreted unambiguously. Any unit can be designated as the controller for the system, allowing you to position the other units out of range from the handset beam if desired. It also allows all the units to be switched off from the front panel of any unit in the system.

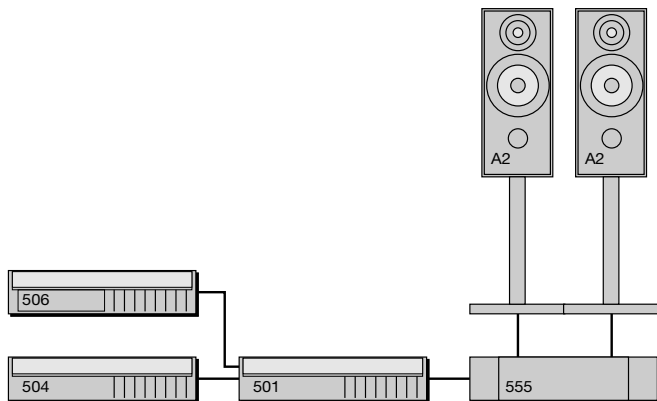
Professional features

The 500 Series also includes features for professional users, including RS232 computer control (501, 562, and DSP5000), and balanced outputs (563).

The following pages give examples of four suggested configurations to illustrate the flexibility of the Meridian 500 Series.

Sample configurations

506 Compact Disc Player

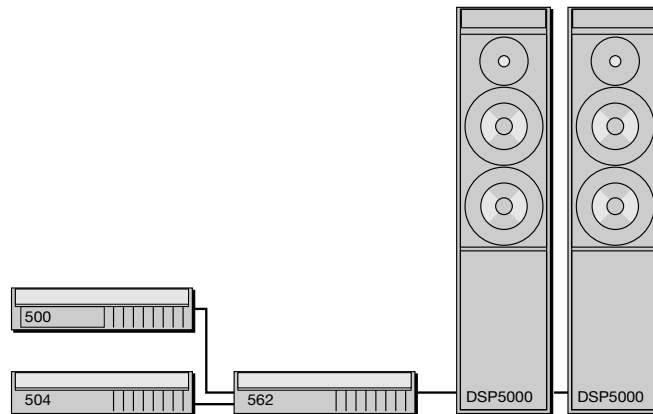


The 506 Compact Disc Player is an integrated CD transport and converter, providing both digital and analogue outputs.

The 506 Compact Disc Player is ideally suited for use with the Meridian 555 Stereo Power Amplifier and A2 Loudspeakers, with control over the volume and source selection provided by the 501 Remote Control Preamplifier.

The 504 FM Tuner is an ideal addition to the system if radio reception is required.

500 Compact Disc Transport



The 500 Compact Disc Transport provides a precision digital output, and can drive DSP5000 Digital Loudspeakers directly.

A 562 Digital Controller can be added to cater for conventional analogue sources, such as the 504 FM Tuner, and provide source selection between up to 12 different analogue or digital sources.

563 Digital to Analogue Converter

501V Control Unit



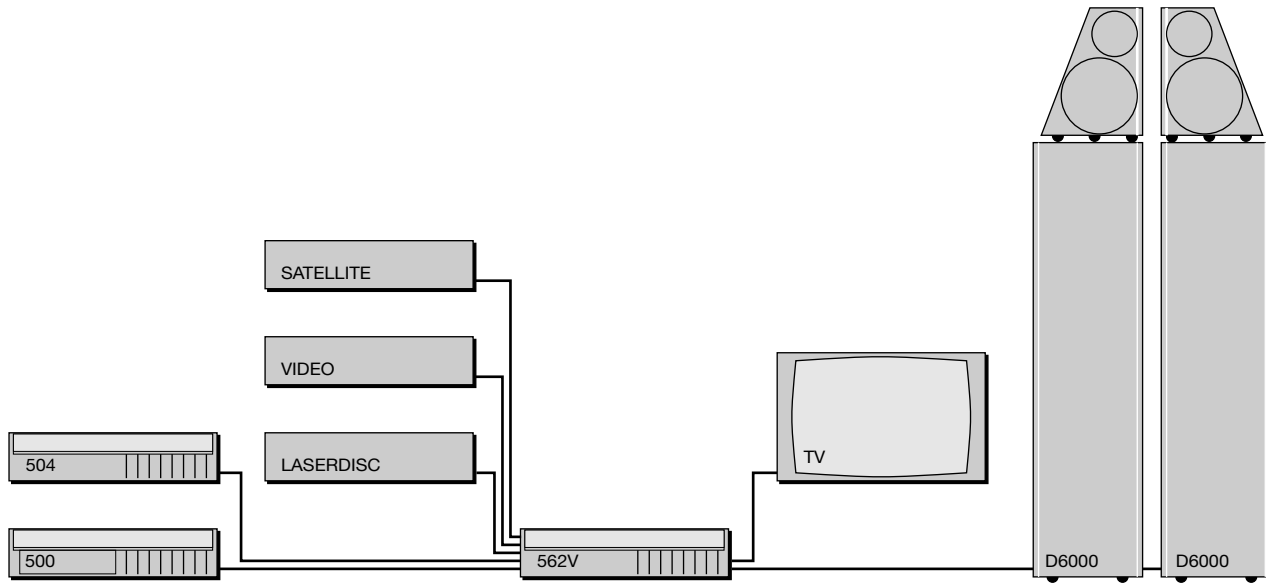
The digital output provided by the 500 Compact Disc Transport can be decoded by the 563 Digital to Analogue converter to provide a high-quality audio output for use with a conventional audio preamplifier.

The 563 Digital to Analogue Converter can also decode digital signals from other sources, including LaserDisc players and Digital Audio Tape.

The 501V Control Unit is a full function preamplifier for use with any analogue source, and includes video switching for complete control of systems that include video sources such as a LaserDisc player and video recorder.

It provides a high-quality audio output ideal for use with the Meridian M60 Active Loudspeakers.

562V Multimedia Controller



The 562V Multimedia Controller is the ideal control unit for use with the Meridian D6000 Digital Loudspeakers.

It provides direct digital inputs for digital sources, such as the 500 Compact Disc Transport and LaserDisc sound, together with precision Delta Sigma Analogue to Digital Conversion, for

conventional analogue sources such as the 504 FM Tuner and video sound.

It also includes video switching for CVBS and S-VHS signals, such as from a satellite receiver, LaserDisc player, or video recorder.

Specification and accessories

Specification

Input	1.4V RMS.
Output	65W per channel into 8Ω. 100W per channel into 4Ω.
Distortion	Less than 0.05%.
Noise	Less than -90dB.
Finish	Black textured enamel and glass. Heatsinks black painted aluminium.
Dimensions	88mm x 321mm x 320mm (3.46" x 12.64" x 12.6").
Weight	9kg.
Consumption	30VA quiescent, 300VA max.

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

Available accessories

The following accessories are available from your dealer:

- Power cord Europe.
- Power cord Canada and USA.

If you have problems purchasing these items, you can order them direct from Meridian Audio Limited, who can also supply a range of cables suitable for connecting the 555 Stereo Power Amplifier to other equipment.

Setting up the Stereo Power Amplifier

This chapter explains how to install the stereo power amplifier. It describes what you should find when you unpack the stereo power amplifier, how you should connect it to your other audio equipment, and the siting constraints.

You should not make any connections to the stereo power amplifier or to any other component in your system whilst the AC power supply is connected and switched on.

Unpacking

The 555 Stereo Power Amplifier comes in a box containing the following components:

- 555 Stereo Power Amplifier.
- 1 power cord.
- This manual.

You are advised to retain the packing in case you need to transport the unit.

Before connecting power

Before you begin installation you should ensure that your stereo power amplifier is set to the correct voltage for your local AC supply. If it is not, do not try to install the unit, and contact your dealer.

Do not make connections, or insert or remove plugs, while the unit is connected to the supply and switched on, as the transients generated could damage the loudspeakers.

Once set up, the stereo power amplifier can be left switched on as it consumes negligible power when not in use.

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

To position the stereo power amplifier

During normal operation the heatsinks, ie the fins at each end of the case, may become quite hot. The stereo power amplifier should therefore be positioned to allow a free flow of air around the fins.

Do not place the stereo power amplifier:

- In direct sunlight.
- Near heat sources, eg a radiator.
- Stacked with any other audio products, as the heat it generates may damage the other products.

Connecting the stereo power amplifier

Rear panel

The diagram below shows the rear panel connections.

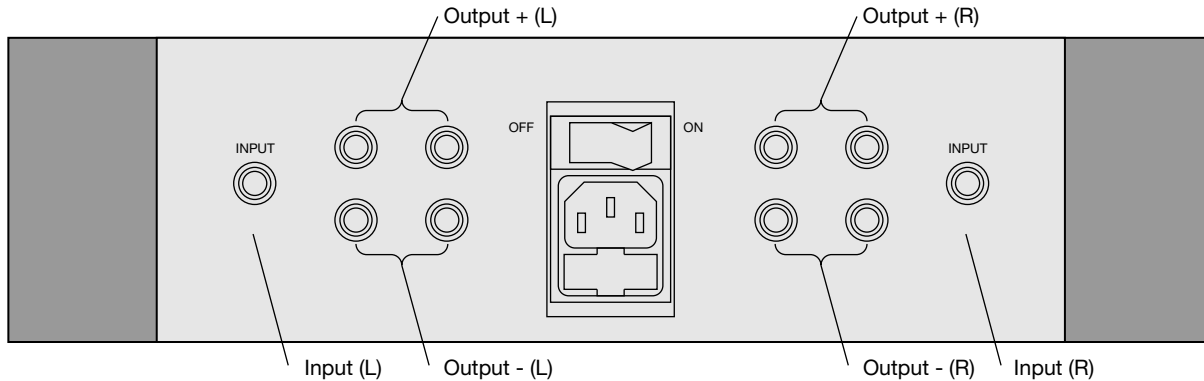
Outputs

The output terminals should be connected to loudspeakers of 4Ω to 15Ω , using either banana plug or bare wire connections.

Each channel of the 555 Stereo Power Amplifier provides twin outputs for bi-wiring. On speakers that provide separate

connections to the bass/mid and tweeter units this allows the units to be connected independently to the stereo power amplifier, for optimum sound quality.

Alternatively, for loudspeakers providing a single pair of inputs, either of the output terminals can be used.

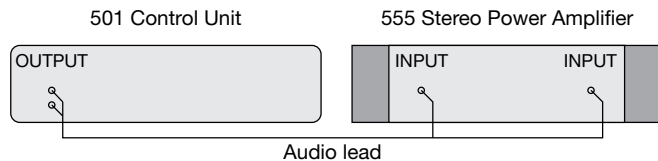


To connect to a conventional preamplifier

- Connect the sockets marked INPUT on the rear panel of the stereo power amplifier to the outputs from your preamplifier.

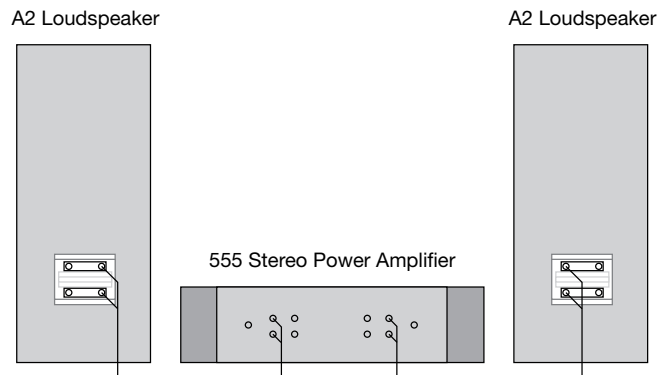
You should either use a twin-screened audio cable, or a pair of single-screened audio cables. These cables can have a considerable effect on the quality of the sound, and you are advised to seek your dealer's advice on the best type of cables for your system.

To connect to a 501 Control Unit



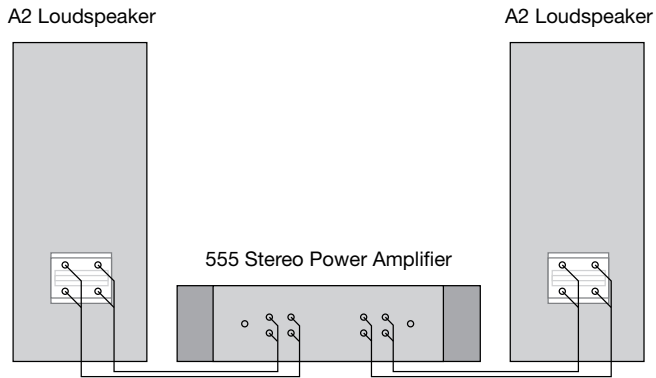
- Connect the sockets marked OUTPUT L and R on the rear panel of the 501 Control Unit to the INPUT sockets on the rear panel of the 555 Stereo Amplifier.

To connect to A2 Loudspeakers



- Use the links provided to bridge the BASS/MID and TWEETER terminals on the rear of each loudspeaker.
- Connect one of each pair of the red and black terminals on the rear panel of the 555 Stereo Power Amplifier to the red and black terminals on the A2 Loudspeakers.

To bi-wire to A2 Loudspeakers



- Connect the TWEETER red and black terminals from each loudspeaker to the other pair of red and black terminals on the appropriate channel of the stereo power amplifier.

- If necessary, remove the links bridging the BASS/MID and TWEETER terminals on the rear of each loudspeaker.
- Connect the BASS/MID red and black terminals from each loudspeaker to the red and black terminals on the appropriate channel of the stereo power amplifier, using twin loudspeaker cable.

Troubleshooting

This section describes problems you may encounter when using the stereo power amplifier, and includes suggested solutions.

If these suggestions fail to cure the problem, please contact your Meridian dealer for further assistance.

No front panel indicator is shown

- Check that your AC power supply is connected correctly.
- Check that the **ON OFF** switch on the rear panel is in the ON position.
- Check that the fuse on the stereo power amplifier rear panel and the fuse in the unit's power plug have not blown; see *To change the mains fuse*, page 13.

The sound has cut out

The 555 Stereo Power Amplifier includes a thermal shutdown, which mutes the output if the amplifier becomes too hot.

- Leave the amplifier for a few minutes to cool down, and the sound will come back on.

The 555 Stereo Power Amplifier also includes a power circuit breaker to protect the loudspeakers.

- Check the system for the cause of the cut out.
- Switch off, wait 5 seconds, then switch on to reset the power.

Maintenance

Cleaning

When cleaning the stereo power amplifier bear in mind that the front of the unit is metal, and the lid is glass.

Disconnect the power cord before cleaning the unit.

Note: Do not use abrasive cleaners on any part of the stereo power amplifier.

To clean the case

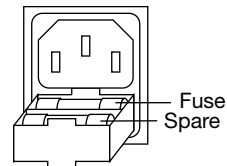
- Use a slightly damp cloth.

Ensure that no water is allowed to get inside the case, and do not reconnect the power until you are certain that the stereo power amplifier is completely dry.

To clean the audio connections

The audio sockets on the rear of the stereo power amplifier are gold-plated and need no cleaning if gold-plated phono plugs are used. Otherwise, it is recommended that you unplug and reconnect the plugs at least once a year. A proprietary contact cleaner can be used to some advantage.

To change the mains fuse



- Remove the mains connector, and pull out the drawer next to the power input to access the fuses.

Before replacing a blown fuse, if possible ascertain the cause of the failure.

The fuse drawer includes a spare fuse. This should be replaced by one of the same rating.

Service and guarantee

Service

The Meridian 500 Series of hi-fi components have been carefully designed to give years of untroubled service. There are no user-serviceable parts inside the case, nor do the units require any form of maintenance.

In the unlikely event that your stereo power amplifier fails to function correctly, it should be returned, in its original packaging, to your Meridian dealer.

In case of difficulty within the UK or USA please contact the appropriate sales and service address shown on page ii.

In case of difficulty outside the UK or USA, contact the importing agent for the territory. A list of Meridian agents abroad is available from Meridian Audio.

No responsibility can be accepted for the stereo power amplifier whilst in transit to the factory or an agent, and customers are therefore advised to insure the unit.

When seeking service under guarantee, proof of the date of purchase will be required.

Guarantee

The 555 Stereo Power Amplifier is guaranteed against defects in material and workmanship for 2 years from the date of purchase.

The guarantee is void if the 555 Stereo Power Amplifier has been subject to misuse, accident, or negligence, or has been tampered with or modified in any way without the written authorisation of Meridian Audio Limited. Attempted servicing by unauthorised people may also invalidate this guarantee. Labour and carriage charges are not covered unless by local agreement.

Outside the UK, local warranty liability is restricted to equipment purchased within the territory. Our agents abroad are only under contractual obligation to service under guarantee equipment sold through them. They are entitled to make a non-refundable charge for any service carried out on other equipment.

This guarantee does not limit your statutory rights within the United Kingdom.

Index

- A Accessories** 6
- B Bi-wire connection** 9, 11
- C Cleaning**
 - the audio connections 13
 - the case 13
 - Components** 8
 - Connecting**
 - to a 501 Control Unit 10
 - to a conventional preamplifier 10
 - to A2 Loudspeakers 10, 11
- F Fuse, replacing** 13
- G Guarantee** 14
- H Heat generated during operation** 8
- I Installing** 8
 - Introduction 1
- M Maintenance** 13
 - Meridian 500 Series** 2
 - 500 Compact Disc Transport 3
 - 501 Remote Control Preamplifier 3
 - 501V Control Unit 4
 - 504 FM Tuner 3
 - 506 Compact Disc Player 3
 - 555 Stereo Power Amplifier 3
 - 562 Digital Controller 3
 - 562V Multimedia Controller 5
 - 563 Digital to Analogue Converter 4
 - communications 2
 - Meridian A2 Loudspeakers** 3
 - Meridian D6000 Digital Loudspeakers** 5
 - Meridian DSP5000 Digital Loudspeakers** 3
 - Meridian M60 Active Loudspeakers** 4
 - Meridian System Handset** 2
- O Outputs** 9
 - Overheating 8, 12
- P Positioning** 8
- S Service** 14
 - Sound has cut out** 12
 - Specification** 6
 - Switching on** 8
- T Thermal protection** 12
 - Troubleshooting** 12
- U Unpacking** 8

