

Meridian A500 User Guide

Introduction

The Meridian A500 is part of the 500-Series of advanced high-fidelity equipment. In purchasing Meridian A500 speakers, you have acquired an advanced and refined piece of equipment that will continue to bring you listening pleasure for many years. This manual will enable you to get the most from it.

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 allows you to assemble a system as simple or complex as you require. You can easily add to or change your system at a later date. The 500 Series is also compatible with the existing Meridian 200 and 600 Series components.

Unpacking the A500

As you remove the A500 from its packaging be careful not to press on the front of the speaker as you could damage the drive units. On opening the carton, you should have found the following parts in the box with this manual.

- Meridian A500
- Base Plinth
- Eight self tapping screws for the plinths
- Spike Set (Eight spikes, bolts and covers)
- Spanner

If any of these items is missing, please contact your dealer. We suggest that you retain the packing carefully as it provides maximum protection for the unit in transit.

Fitting the plinth

- You will need a cross head screwdriver that fits the eight screws provided.

The A500 is supplied with a base plinth to improve the speaker's stability. To fit this turn the speaker upside down. On the bottom you will find four small pilot holes. Align the holes in the plinth with the pilot holes. Screw the plinth onto the base with the four self tapping screw supplied.

Fitting the spikes

Spikes are provided to form the best possible acoustic coupling to the floor, this is very important for the sound stage stability. The spikes do not harm carpets however if you have a wooden floor spike covers are provided to prevent damage.

First screw a nut onto each of the spikes then screw the spike into the threaded insert in the bottom of the plinth. Turn the speaker the right way up and place it where you intend to use it. Put your hand on the top of the speaker and see if it rocks from side to side, if it does adjust the spikes by screwing them in or out until it is stable. A spanner is provided to tighten the locking nuts once you have adjusted the spikes.

If required, the spike covers simply slide over the spikes before you place the speaker on the floor. Adjust the height using the locking nuts which the spike covers rest against.

Removing the grille cloth

The grille cloth can be removed by simply taking hold of the cloth at the top two corners and pulling it up and over the rebate in which it sits.

Replacing the grille cloth

1. Find the join in the elastic, place this at the bottom in the middle.
2. Pull the elastic out sideways whilst pulling it backwards to pull it into the rebate at the bottom.
3. Pull the elastic upwards from the top two corners and fit it over the rebate at the top. If the cloth is not square straighten it up by pulling it around the corners. Be careful that the cloth does not snag on the corners.
4. The elastic can be pushed into the side rebate by rolling it round whilst running a smooth plastic card (e.g. a credit card) down behind the part you are rolling in.
5. Do each side in turn, try not to pull too hard on the cloth as you can easily pull it out of the other side.

Installing A500 General guidelines

You should not make any connections to the A500, or to any other component in your system, whilst the AC mains power supply is connected to the system and switched on. The A500's are sensitive so they work well with reasonably low power amplifiers. We recommend amplifiers in the range 20 to 100W. The Meridian 551 (55W) and the Meridian 555 (65W) are well suited to use with the A500's

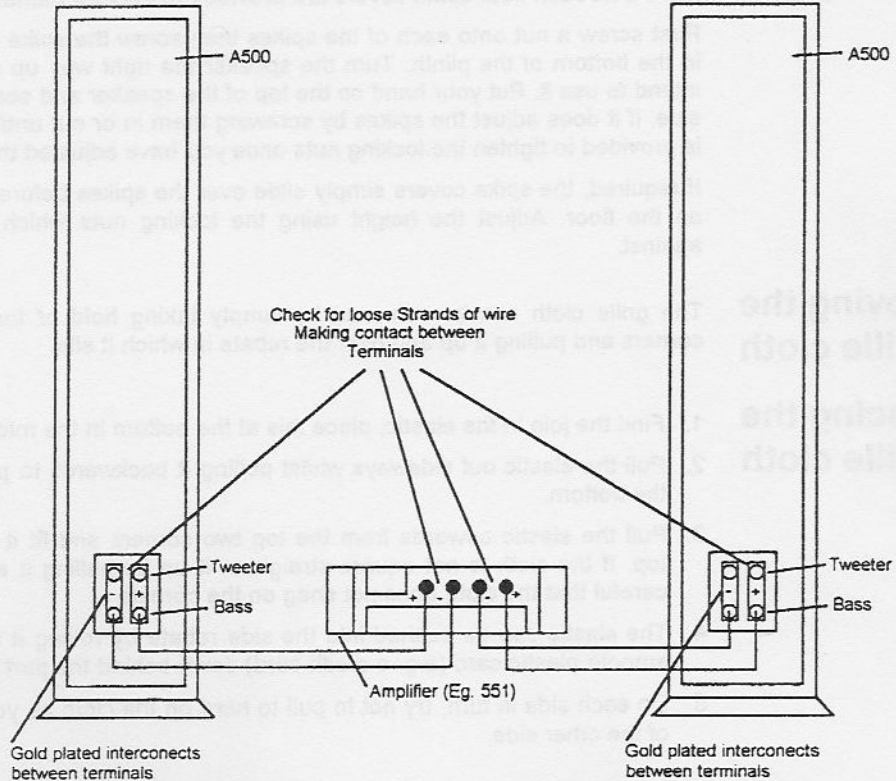
Connections

The connections on the A500 are designed to accept 6mm spade connectors and bare wire. The red terminals are positive and the black ones negative. When connecting bare wires make sure the strands are tightly twisted together and the terminal is screwed down securely to prevent any loose strands.

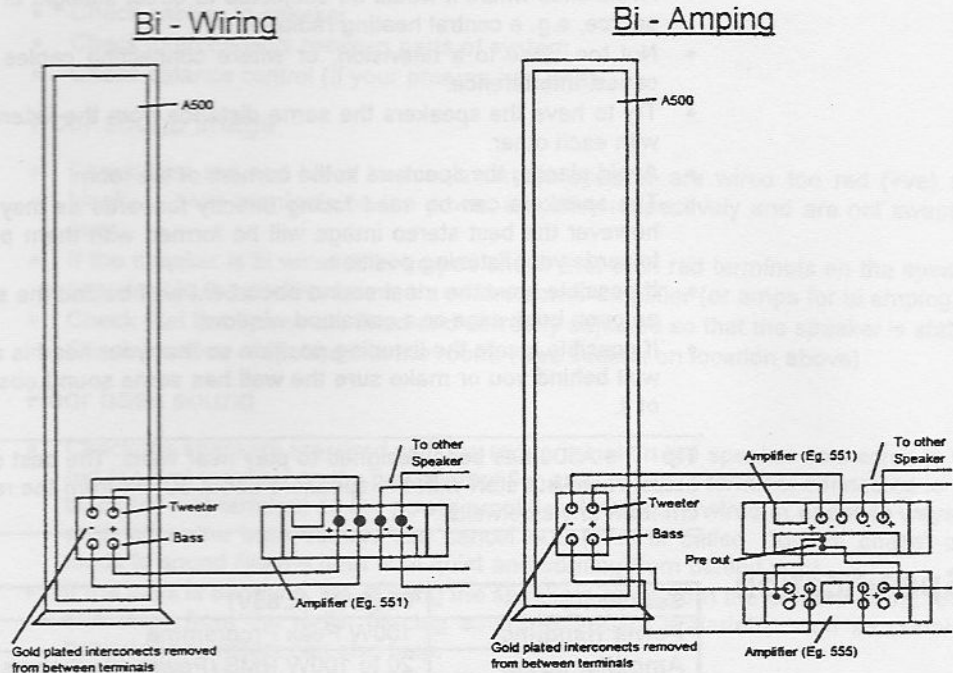
To connect the A500 to your system

1. It is very important to make sure that the speakers are both wired with the red terminal on the speaker connected to the red (Or positive +ve) terminal on the power amplifier. Similarly the black terminal should be connected to the black (or negative -ve) terminal.
- Normally speaker cable has two wires and one will be marked in a different colour, with a white line or a raised rib running along the length; this is to allow you to get the right wire to the right terminal.
2. Connect the speaker cables you have chosen to the back of the A500, make sure that the cables are screwed down securely and that the gold plated connectors between the top and bottom terminals still makes good contact.
3. Wire the speaker on the left as you look at the speakers to the output labelled left on the back of the amplifier and similarly for the right channel.
4. Before you switch the system on make a final check that no connection is made across the black and red terminals on the A500 or the amplifier by loose strands of wire or incorrect wiring. Connecting these together could cause damage to your amplifier

A500 Wiring



Bi Wiring and Bi Amping



Bi wiring This technique is used to help separate the high and low frequency sections of the loudspeaker. To do this:

1. Remove the gold plated interconnecting pieces from the terminal panel on the back of the A500.
2. Wire a separate cable to your power amplifier from the tweeter terminals and the bass terminals.
3. Connect both the cables from the red terminals to the red (or positive +ve) terminals on your power amplifier, similarly wire both the cables from the black terminals to the black (or negative -ve) terminals on your power amplifier. (Make sure that the red and black wires do not get crossed as this will prevent the speaker from working correctly)

Bi Amping To completely separate the high and low frequency sections of the loudspeaker two amplifiers can be used one for the tweeter and one for the bass. This gives an improvement in power handling and greatly improves the bass dynamics and stereo image of the speaker. To do this:

1. Remove the gold plated interconnecting pieces from the terminal panel on the back of the A500.
2. Wire separate cables from the tweeter (H.F) and bass (L.F) to the two power amplifiers.
3. Make sure that the red terminals on the A500 are wired to the red (or positive +ve) terminals on the amplifiers, similarly make sure the black terminals are wire to the black (or negative -ve) terminals on the amplifiers. (Make sure that the red and black wires do not get crossed as this will prevent the speaker from working correctly)
4. Wire both the amplifiers so that the left signal from the preamp is fed to both the left inputs of the amplifiers and the right signal to both the right inputs.

For bi amping to work correctly the amplifiers must have the same gain as each other. The easiest way to ensure this is to use two of the same type of amplifier. In the Meridian 500 series the 551 and 555 both have the same gain and so can be used for bi amping. If you are using this type of set up the 551 should be used to operate the tweeter (H.F) and the 555 the Bass (L.F). It is also possible to use two 555 and a 501 to bi amp the speakers. The 501 has two sets of outputs so that the connections to the inputs of the two 555's can be made separately.

Location

We recommend the following guidelines for location:

- Avoid sites where it would be subjected to direct sunlight or where it is near a heat source, e.g. a central heating radiator
- Not too close to a television, or where connecting cables may be subject to, or cause, interference.
- Try to have the speakers the same distance from the listening position and in line with each other.
- Avoid placing the speakers in the corners of the room.
- The speakers can be used facing directly forwards as they have good dispersion, however the best stereo image will be formed with them pointing inwards slightly towards your listening position.
- If possible have the most sound absorbent wall behind the speakers. This could be an open book case or a curtained window.
- If possible locate the listening position so that your head is at least 60 cm from the wall behind you or make sure the wall has some sound absorbent material in front of it.

Tip The A500 has been designed to play near walls. The best site depends upon your actual room but start with the speakers about 50 cm from the rear wall and at least 50 cm from any side walls.

Specification

Sensitivity	90dB/W (2.83V)	
Power Handling	100W Peak Programme	
Amplifier power	20 to 100W RMS (Power into 8 ohms)	
Impedance	6 Ohms Nominal	
Frequency response	40Hz to 20KHz in room equalised +/- 3dB.	
Construction	Triple cross-braced MDF sealed cabinet T-nuts and gaskets on drive units Bitumen damping Sound absorbent wadding Real wood veneer with glass top plate.	
Grille	Lyra material with rubber surround	
Crossover	Mid /H.F Frequency 3.5 KHz Bass Frequency 200Hz H.F 4th order Linkwitz -Riley Mid 4th order L-R acoustic L.F 2nd order bass extension.	
Wiring options	Single, Bi wire, Bi amp	
Tweeter 25mm	Coated diaphragm of fabric with silk Linear response front plate Low damping high stability ferrofluid Damped cavity in pole piece Replaceable voice coil	
Mid/ Bass 170mm	Meridian design High sensitivity Coated paper cone low damping rubber surround Vented through pole piece	
Dimensions	<u>A500</u> 830mm tall 196mm wide 290mm deep	<u>A500 + Plinth</u> 880 tall 236 wide 315 deep

Help! No Sound

- Check interconnections are correct through the whole system
- Check AC mains supply to other units of system
- Check the correct source (For example a CD player) is selected on the pre amplifier and that the source is running.
- Check that no loose strands of wire have shorted across the power amplifier. (If this has happened the fuse may have blown or the protection trip operated in the amplifier)

Help! Sound from one channel only

- Check cabling to speaker
- Check interconnects between parts of system
- Check balance control (If your preamp has one)

Poor sound image

- Check that red and black terminals on the speaker are wired too red (+ve) and black (-ve) terminals on the power amplifier respectively and are not swapped over.
- If the speaker is bi wired or bi amped check that both red terminals on the speaker are wired to the positive terminals on the power amplifier (or amps for biamping)
- Check that the Spikes are fitted and correctly adjusted so that the speaker is stable.
- Check location of speakers in the room. (See section on location above)

Poor bass sound

- Check the speakers are wired with the red terminal on the speaker connected to the red (or +ve) terminal on the power amplifier and the black terminal connected to the black (or -ve) terminal on the power amplifier. If they are wired in opposite ways to each other the bass sounds can cancel out. (This is called "out of phase" and tends to sound like the bass is too quiet and coming from behind you)
- If the bass is booming, try moving the speakers away from the corners of the room and away from the walls. Placing sound absorbent materials, such as curtains, behind the speakers can also help.
- If there is too little bass try moving the speakers closer to the walls.

No treble from speaker

- If you are using a single cable to the speaker check the interconnecting plate is making a good contact between top and bottom terminals.
- If the speaker is bi wired or bi amped check cable to H.F terminal is making a good contact at both the speakers and the power amplifier.
- If the speaker is bi amped make sure that the amplifier connected to the H.F input is turned on and correctly connected to the rest of the system. (See Diagram biamping)

No bass from speaker

- If you are using a single cable to the speaker check the interconnecting plate is making a good contact between top and bottom terminals.
- If the speaker is bi wired or bi amped check cable to L.F terminal is making a good contact at both the speakers and the power amplifier.
- If the speaker is bi amped make sure that the amplifier connected to the L.F input is turned on and correctly connected to the rest of the system. (See Diagram biamping)

Cleaning

When cleaning the A500 bear in mind that the cabinet is made of Medium Density Fibreboard (MDF) veneered with real wood and lacquered, the top plate is back screened glass. Furniture polish can be used but be careful not to get any on the grille cloth or drive units. The grille can be cleaned by gently vacuum cleaning the surface, do not press on it as you could damage the drive units behind the cloth.

Cleaning the drive units

Normally if you keep the grille cloth on it will not be necessary to clean the drive units however if they are dirty follow the procedures below.

First you will need to remove the grille cloth, see the earlier section on how to do this. If the bass drivers are dusty they can be cleaned by very lightly dusting them with a clean soft cloth, do not put any pressure on the cone as it can be deformed. Do NOT attempt to dust the tweeter, it may damage the dome, if it is very dusty you can blow the dust off with an air puffer such as the ones used for cameras.

Note Do not use abrasive cleaners on any part of the A500

Maintenance & Service

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

In the unlikely event that your A500 fails to function correctly, it should be returned, in its original packing, to your *Meridian* dealer. In case of difficulty within the UK or USA please contact our sales and service offices shown below.

Outside the UK: contact the importing agent for the territory. A list of *Meridian* agents abroad is available from the address below.

No responsibility can be accepted for the A500 whilst in transit to the factory or an agent and customers are, therefore, advised to insure the unit.

Guarantee

The *Meridian* A500 is guaranteed against defects in material and workmanship for 2 years from the date of purchase.

The guarantee is void if the A500 has been subjected to misuse, accident or negligence, or has been in any way tampered with or modified without the written authorisation of DGW Ltd.

Labour and carriage charges are not covered unless by local agreement.

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

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.

Addresses

Sales and service in the UK

Meridian Audio Ltd
14 Clifton Road
Huntingdon
Cambs. PE18 7EJ
England
Tel (0) 480 52144
Telex 32577 (MERIDN)
Fax (0) 480 459934

Sales and service in the USA

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Atlanta, GA 30331
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Fax (404) 346-7111

Designed & manufactured in the UK by

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