

MERIDIAN M60 MkII USER MANUAL

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1 Introduction

The *Meridian* M60 MkII integrates with any high-quality music system and of course is ideally suited to other *Meridian* products and Multiroom installations.

In purchasing a pair of *Meridian* M60 MkIIs, you have acquired refined equipment which will continue to bring you listening pleasure for many years. This manual will enable you to get the most from them.

If you have any queries regarding the M60 remember that your *Meridian* dealer is selected for his expertise and you should refer to him in the first instance.

2 General description

The M60 MkII is part of the current line of *Meridian* Active loudspeakers. Active loudspeakers use built-in power amplifiers specifically designed for the cabinet and drive units giving a perfectly matched system. This superior approach to the design of high-fidelity loudspeaker systems has been a speciality of *Meridian* for over ten years.

Each M60 MkII has a two inputs unbalanced and balanced, an electronic crossover and three 65W power amplifiers, one for each of the drive units. The drive units are:

2 x 160mm polypropylene bass and bass/mid
1 x 25mm aluminium dome tweeter

The *Meridian* custom tweeter has a number of features:

- silver voice coil
- semi horn loading (for improved sensitivity and dispersion characteristics)
- ferro-fluid damping
- correctly aligned rear enclosure.

3 Unpacking

Be sure to retain the packaging for possible future transportation.

WARNING Take great care when unpacking or repacking the M60 that you do not put any pressure on the front area of the loudspeaker. The tweeter dome is very close to the grille cloth and will be damaged if pressed. Hold the cabinets only by the sides or top and bottom. When repacking make sure that the packing material that protects the tweeter dome is placed against the grille.

NOTE Do not hold the display or rear port-tube when moving the loudspeaker.

To unpack the M60s:

- Remove the speaker from its outer packing
- Stand the speaker in its inner packing with the label 'OPEN THIS END' upwards and open this end.

The bottom of the speaker should be visible with four inserts to take the spikes.

- Assemble each spike with a lock-nut about 2mm away from the end of the thread.

- Screw each spike into the inserts on the bottom of each cabinet but do not fully tighten at this stage.
- Until the speakers are in position it is best to fit the plastic covers that act as feet for safety reasons.
- When all four feet are fitted, carefully place the M60 upright and in their playing positions.
- Remove the inner packing.

In the two packs you should find:

- 2 M60 MkII Active speakers complete with display panels and grilles
- 8 screws-in spikes and wrench.
- 8 plastic covers
- 8 lock-nuts
- M60 MkII User Manual
- 2 phono-phono analogue audio leads
- 2 power cords suitable for your territory
- Hex wrench 3mm

4 Getting going

IMPORTANT: Before connecting to the AC supply check that the unit has been manufactured to the correct voltage for your supply.

Note Do NOT make any connections or insert or remove plugs while the units are connected to the AC supply and switched on.

To get going:

- Use the audio cables supplied to connect the preamplifier outputs to the unbalanced inputs of each speaker.
- Switch on the power to the source but start from a low volume level.
- Connect the M60's to AC power with the cords provided.
- Switch on the M60s at the bottom left where the AC power cord connects. A green light should come on at the front of the speaker and you should be able to play music.

If you cannot hear any sound refer to section 10.1

5 Installation

This section deals with how to get the best out of an M60 installation. The following sections cover the features of the M60 MkII and important points for achieving good sound.

5.1 Connections

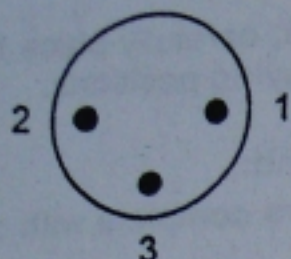
- AC power connects to the M60 at the bottom of the speaker. Where possible connect the M60 to a grounded (earthed) i.e. three-pin socket using an appropriate plug.

Note Try to arrange a separate AC power outlet for each M60. The use of adapter units is discouraged, at best they degrade the sound quality.

- Unbalanced audio input is on a single phono. This can be connected to the output of any analogue preamplifier. You may use a *Meridian* preamplifier like 201, 208 or 601.

- Balanced audio input is on a XLR. This can be connected to the balanced output of your preamplifier, if it has one. You may use a Meridian 601 which has a balanced output.

Connection to the XLR



1. Shield and ground or common
2. Signal phase positive
3. Signal phase negative

5.2 Use of spikes

To use the spikes pull the plastic covers off the feet. The spikes allow the M60s to rest firmly on the floor. The spikes pass through carpet to the wood or concrete below and do less damage than a wide foot.

The best sound will only be obtained if the M60s are firmly mounted and cannot rock at all. If the finish of the floor prevents the use of spikes leave the plastic covers on but adjust the feet to the floor so that the M60s are vertical and show no tendency to rock.

5.3 Positioning

M60s must be placed in suitable positions to get the best acoustic results.

For stereo ideally the two speakers are placed equidistant from the main listening position, and the same distance apart.

M60 has good treble dispersion and it will usually be located for best appearances perpendicular to a back wall. For best sound try to achieve:

- most acoustically absorbent wall behind the speakers. This could be an open bookcase, curtained window or each side of a bow-window.
- speaker positioning at least 50cm from a corner and at least 20cm from the back wall.
- listening position so that your head is at least 60cm from the wall behind you (unless it is acoustically absorbent).

Also consider the following practical points:

- If possible locate the M60s so that the electronics (back) of the speaker are not subjected to long-term strong sunshine. When idling the back plates should be cool (less than hand hot).
- Do not, if possible, locate the M60s with their backs to any heat source e.g. central heating radiators.

6 Operation

The power switch is at the back of the M60 adjacent to the power inlet. Normally the M60 should be left switched on, even when the unit is not in use. The sound quality of the unit is at its best when the temperatures of the components have reached normal working levels; this takes about one hour.

The electronics in the M60 use the very latest techniques to ensure that the idle power consumption of the power amplifiers is very low. This ensures long periods of cool running and low energy consumption.

You should however switch off all audio equipment if you expect to be away from the house for an extended period.

7 Maintenance

Note There are no user-serviceable parts inside the M60.

One or two days after installation check the tightness of the screws retaining the drivers. These screws may loosen in shipping or with extremes of temperature or humidity, and the speaker will not sound at its best if these are loose. Care and common sense must be employed when tightening these to ensure that they are not over tightened. These screws should be checked every few months particularly if the speakers are played loud for extended periods of time. No routine maintenance of the electronics is required.

The audio sockets are gold plated, and where gold-plated phono plugs are used there should be no need for cleaning of the contacts. For non gold-plated phono plugs, it is good practice to unplug and re-plug them at least once a year. Some proprietary contact cleaners may be used to advantage, but you should seek your dealer's advice.

7.1 Cleaning

Disconnect the power cord before cleaning.

The top of the front of the M60 is glass set in a plastic frame. To clean the plastic do not use abrasive cleaners or solvents. A barely damp chamois leather is recommended.

The cabinet has a fine veneer coated in a thin layer of polyurethane. You may protect and treat this wooden finish in the normal ways with polish or wax. Do not oil this surface.

The grille should not be cleaned. If it becomes dusty a very gently vacuum cleaning is recommended. To remove the grille hold it in the centre of each side and gently pull away from the cabinet. It may help to ease it off the restraints.

DO NOT pull the grille away from the top or it may break!

8 Service

Note There are no user-serviceable parts inside the M60.

Should the unit need service, contact the dealer who supplied it, or in case of difficulty write to:

- In the UK:
Digital Gramophone & Wireless Ltd
14 Clifton Road, Huntingdon,
Cambridgeshire, PE18 7EJ.
Tel 0480 52144
- In the USA:
Meridian America Inc
3800 Camp Creek Parkway,
Building 2400 Suite 112,
Atlanta GA 30331
Tel (404) 3447111, Fax (404) 3447111
- Outside the UK, contact the importing agent for the territory. A list of *Meridian* agents abroad is available from the above addresses.

The owner is responsible for the product during transit therefore we recommend that you retain the original packing.

9 Guarantee

The M60 MkII is guaranteed against defects in material and workmanship for 12 months from the date of purchase.

The guarantee is void if the product has been subject to misuse, accident or negligence, or has been in any way modified without Digital Gramophone & Wireless Ltd. written authorisation. Attempted servicing by unauthorised people may result in loss of guarantee.

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

When seeking service under guarantee, it is necessary to produce dated proof of purchase.

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 nonrefundable charge for any service carried out on equipment not supplied through them.

This guarantee does not limit your statutory rights within the UK.

10 Help!

10.1 No sound

- Check the AC power supply to M60 - indicated by the [.] display in the window.
- Check AC supply to other units of system.
- Check correct source is selected and that the source itself is running and producing music.
- Check interconnections are made to correct sockets.

10.2 Sound from one channel only

- Check interconnects and speaker wiring
- Check balance control (if any).

10.3 M60s go silent when played hard

M60 has a temperature sensing system on board that prevents overheating of the electronics. The sound will continue when the speaker has cooled.

11 Specification

Response

35Hz-20kHz $\pm$ 3dB

Audio inputs

Balanced 775mV (nominal)
Unbalanced 3Vrms max.

Outputs

Power amplifiers:

Tweeter

Bass/mid

Bass

Acoustic, typically

65W mean power

65W mean power

65W mean power

>115dB spl @ 1m

Distortion

Below clipping

Typically

<0.02% thd

<0.01%

Noise

S/N

Acoustic

<110dB CCIR

<20dBspl @ 1m

Crossovers

400 Hz, first order

2.6 kHz, double Butterworth

Loudspeakers

2 x 160mm polypropylene bass and bass/mid

1 x 25mm BSL aluminium dome, tweeter

Cabinet

Constructed from 18mm (25mm front baffle) MDF
with wood veneer finish. Display window glass.

Power required

Voltage

Frequency

Consumption

100-125V AC or:

200-250V AC

50-60Hz

10VA idle

200VA max.

Dimensions

210mm x 900mm x 295mm, WxHxD

Weight

31kg each

M60 500917 A/B

M60 ELECTRICS 201726
201727