

# MISSION

**INSTRUCTION MANUAL**



FIG 1

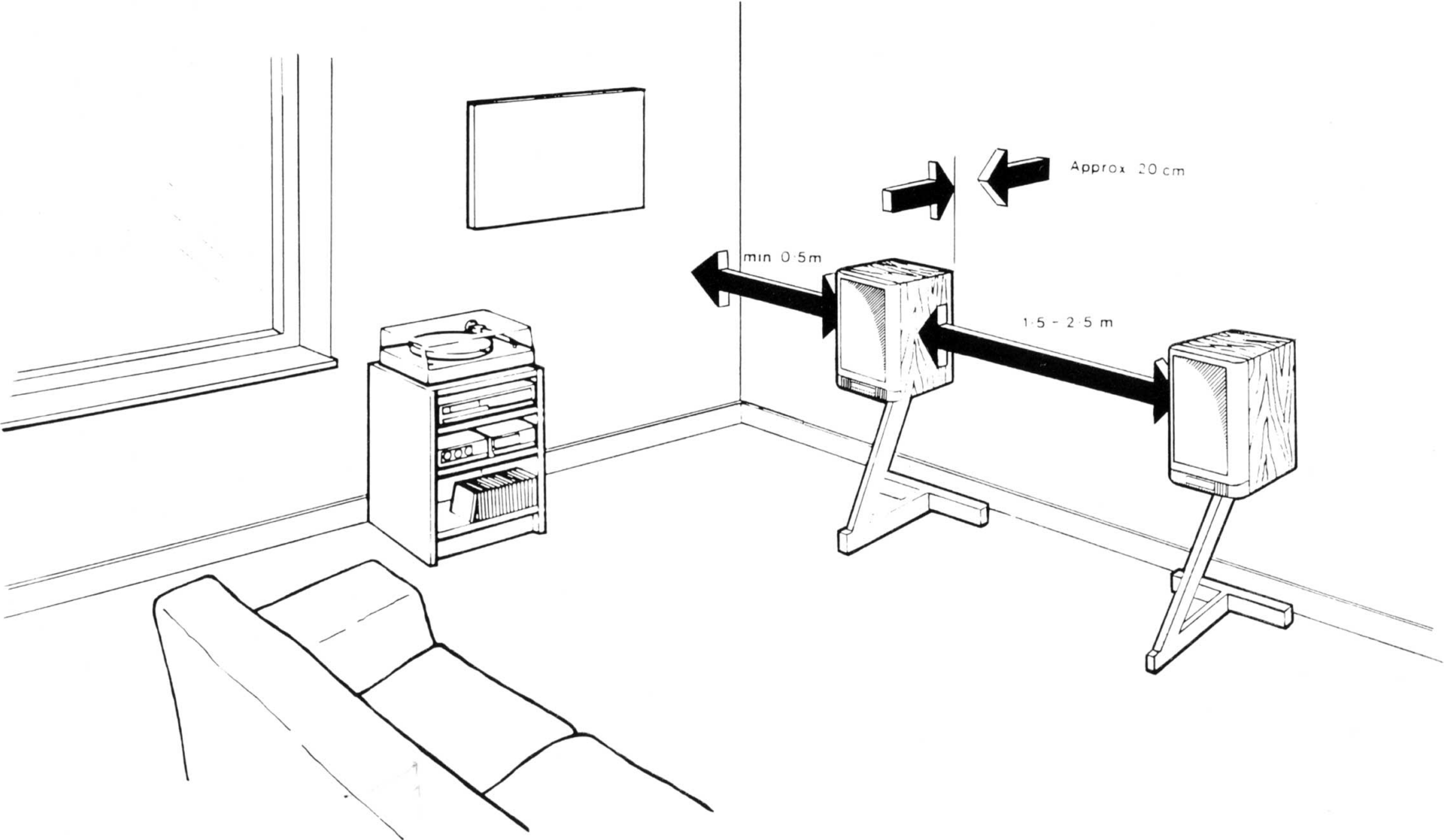
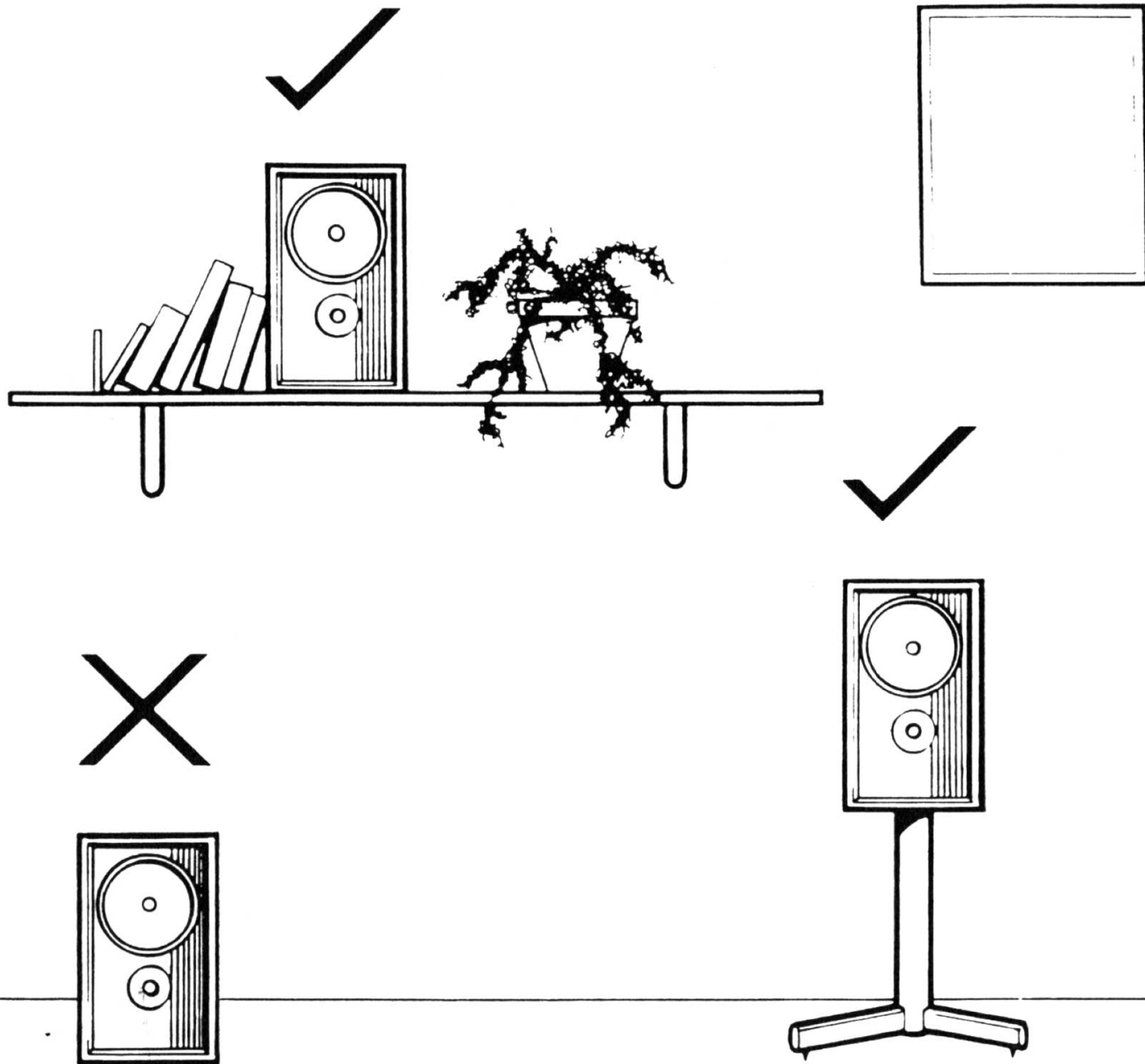


FIG 2



Congratulations on your choice of loudspeakers. Your MISSION loudspeakers are precision manufactured products using the latest computer controlled technology and have been matched and tested to the highest standards to give years of trouble free performance. A few minutes spent in studying this instruction manual will ensure breathtaking results. Please turn to page 1

## IMPORTANT

### RUNNING IN PERIOD

DUE TO THE SOPHISTICATED CONSTRUCTION OF THE DRIVE UNITS IN THESE LOUDSPEAKERS, WE RECOMMEND THAT FOR OPTIMUM PERFORMANCE THE LOUDSPEAKERS SHOULD BE RUN IN FOR A PERIOD OF 10 HOURS BEFORE FINAL POSITIONING.



# IMPORTANT

Your loudspeakers are precision manufactured and in the interest of sound quality they are not electrically protected. For long term satisfaction and optimum performance it is strongly recommended that special care and attention be paid to the following points.

- **DO NOT** change any component in your system without first disconnecting your loudspeakers. Every time you change connections of tape decks, tuners, turntables, compact disc players, etc. to your amplifier, ensure that you first SWITCH OFF the amplifier and DISCONNECT the loudspeakers.
- **DO NOT** use your amplifier at maximum power. This will 'clip' the amplifier and damage your loudspeakers.
- When changing records, re-dialling tuners, rewinding tapes, etc. please turn the volume control down to its minimum.
- When switching on your system, turn the volume control down for a few seconds as some amplifiers put a 'thump' through the loudspeakers which can cause damage.
- **DO NOT** use the filters, tone controls or graphic equalisers on your amplifier. These are nearly always

detrimental to the accurate reproduction of music and should be set at '0'.

- **DO NOT** expose your loudspeakers to excessive cold, heat, humidity or sunlight - see Maintenance.
- Where possible use MISSION stands for the smaller models and position them rigidly, if necessary using spikes (carpet piercing feet), so that they are stable and do not rock.
- **DO NOT** connect your loudspeakers to the mains electricity supply.
- It is imperative that your loudspeakers are correctly wired and are in phase - see Connecting your loudspeakers.
- **DO NOT** dispose of the packing materials for your loudspeakers as you may wish to transport them at some future date. Correct packing will ensure that they can be shipped without damage.



## SETTING-UP PROCEDURE

**Please read this section carefully before any connections are made.**

**Carefully unpack the loudspeakers from the carton(s) making sure that you remove all the staples to prevent damage to the cabinets. All packing materials should be retained for any future transit.**

### Connecting your loudspeakers

Your loudspeaker terminals are equipped to take 4mm banana plugs or bare wire. However, most 4mm banana connectors make poor contact. Where possible we recommend a high quality plug such as the MISSION banana plug or bare wire tightly attached to the loudspeaker connectors. In the case of multi-strand heavy gauge cables, if the entire cable will not fit through the hole in the binding post, divide the conductors into two parts, pass one half through the hole in the terminal and wrap the rest around the terminal post. This will ensure optimum contact. Please take care, however, to ensure that no strands stray across to the other loudspeaker terminal presenting the amplifier with a short-circuit, thus potentially causing damage.

**DO NOT** use short lengths of loudspeaker cable joined together.

Connect the red positive (+) terminal of your right hand loudspeaker to the red or positive (+) terminal on the right channel of your amplifier. Connect the black negative (-) terminal of the same loudspeaker to the corresponding black or negative (-) terminal of your amplifier. Repeat the above procedure for the other channel. This will ensure that your loudspeakers are connected in phase.

Check, from time to time, that the loudspeaker connections on both the amplifier and loudspeakers are secure and tight.

To check that you have correctly connected the loudspeakers to the amplifier place them face to face (ie. the drive units firing directly at each other) about 150mm (6") apart and play some music with extended bass or a mono signal. If you have incorrectly connected the loudspeaker cables and the system is out of phase the bass will be very limited and the overall sound level will be low. To correct this switch off the amplifier and reverse the connections on the terminal panel of one loudspeaker only (ie. exchange the wire fitted to the black, negative (-) terminal for that fitted to the red, positive (+) terminal). Switch the amplifier on again and play the same piece of music you should now hear a much louder sound together with well extended bass.



## Positioning your loudspeakers

The interface between the loudspeaker and the room is extremely complex and has been the subject of research by engineers and academics for many years. The problem is compounded since domestic rooms have no fixed architectural/acoustical specifications. In the design of the new generation of MISSION loudspeakers, we have taken steps to make loudspeaker positioning as easy as possible.

1. The 760, 761 and 762 loudspeakers are designed for positioning on MISSION stands which determine their height from the floor.
2. The loudspeakers are designed for an extremely smooth 'off axis' frequency response performance. This means that they are not to be 'toed in' or angled towards the listener. Position your loudspeakers with their backs parallel to a rigid back wall.

The loudspeakers should be positioned some 20 cm (8") away from the back wall and 1.8 metres (6 feet) apart with their fronts facing straight out. The distance from either loudspeaker to the side wall should be a minimum of 0.5 metres (1.5 feet). Vary the distance between the two loudspeakers from 1.5 to 2.5 metres until a perfect stereo stage is achieved. Adjusting the distance of the loudspeaker

from the back wall will affect the virtual image of the loudspeaker behind the wall. The bass response will also be affected, the closer the loudspeakers are to the wall the more the bass will be boosted.

When positioned correctly the high frequency response sounds smooth and the bass response is definitive, compact and solid.

When correctly positioned the loudspeakers will disappear as point sources (see FIG.1).

Your loudspeakers are designed to be book-shelf mountable. Where possible, however, we strongly recommend the use of MISSION stands.

These models should not be placed directly on the floor. MISSION Loudspeakers should not be positioned against bay windows or French windows, loose partitioning or in the corners of your room (see FIG.2).

As far as the rest of your hi-fi system is concerned, it should be positioned well away from the loudspeakers on a rigid and light stand or cabinet.

A FEW MINUTES SPENT ADJUSTING THE POSITION OF YOUR LOUDSPEAKERS TO SUIT YOUR LISTENING ENVIRONMENT WILL BE REWARDED WITH A TRULY BREATHTAKING THREE-DIMENSIONAL STEREO STAGE UNMATCHED BY ANY OTHER MANUFACTURER'S PRODUCTS BUT, OF COURSE, SUBJECT TO THE QUALITY OF YOUR ANCILLARY EQUIPMENT.



## Use of Stands and Spikes

**WARNING:** IF USING SPIKES, MAKE SURE THAT THEY DO NOT PIERCE MAINS CABLES ETC UNDER THE CARPET.

Place the loudspeakers firmly on the MISSION metal stands. You should ensure that the loudspeakers do not rock on top of the stands and that the stands sit firmly on the floor. If necessary use MISSION spikes (carpet piercing feet) to couple the stands through to the floor.

## Loudspeaker Cables

In recent years much debate has taken place around loudspeaker cables.

At MISSION ELECTRONICS we have carried out extensive research into the complex interface between loudspeakers and amplifiers and are now providing a very special, relatively low cost loudspeaker cable. This cable is manufactured in one pair of separated conductors.

Each conductor is manufactured of high flexibility pure annealed copper wires, 651 x 0.07 mm (laid in units) with nominal cross-section of 2.5mm<sup>2</sup>. The two conductors are laid parallel, separated and insulated together in figure 8 section. Nominal thickness of

insulation is 0.7 mm and nominal dimension of the cable is 3.8 x 9.6 mm. Measured at 20 degrees C single conductor resistance is 7.7 ohms/km. Inductance = 1.6uH/m and capacitance is approximately 35pF/m.

Mission cable is clearly designated with + and - marks. Like all esoteric cables it is directional and we recommend that the 'M' of Mission is nearest the amplifier whilst the 'n' of Mission goes towards the loudspeakers.

## RECOMMENDED ANCILLARY EQUIPMENT

In the earlier sections we explained that a great deal depends on the quality of your amplifier, compact disc player, turntable, etc. Your choice of such ancillary equipment will not only determine the power handling capabilities of your loudspeakers but will affect other parameters such as the system's dynamic range, distortion, stereo stability and so on. Many people may not be aware that the same pair of loudspeakers used with alternative compact disc players, turntables and amplifiers can sound completely different. For example, some amplifiers (or indeed compact disc players, turntables, tonearms and cartridges) can sound harsh. Others can make your system sound soft or 'boomy' and with low dynamics. As a MISSION owner your system will be important as the more accurate the loudspeaker system the more audible these factors will be.



It is imperative that you use high quality equipment to optimise the performance of your loudspeakers. It is useful to note that 'high quality' need not necessarily mean expensive. In fact, much of the better quality equipment currently available is often of both a simple and elegant design - this in itself resulting in certain cost savings. A good example of this is the inherent superiority of belt-drive turntables over direct-drive types. We strongly recommend CYRUS amplifiers from CYRUS Electronics to optimise the performance of your loudspeakers.

As you can see from the specifications of your MISSION loudspeakers, they are both very efficient and have high power handling capabilities. This means that a wide range of amplifiers can be chosen to match your loudspeaker system. A direct benefit of such choice, as far as you are concerned, is that you could potentially purchase a high quality amplifier with less power for the same cost, as a poor quality higher powered amplifier. The message here is that the quality of amplifiers has very little to do with their power ratings. As far as pre-amplifiers are concerned, we strongly recommend the models with the least number of gimmicks and controls.

Regarding turntables, nearly all discerning audiophiles are already familiar with the benefits of simple belt-drive systems and high quality tonearms and cartridges.

MISSION Electronics also manufactures:

- Loudspeaker stands.
- Loudspeaker cable.

CYRUS Electronics manufactures:

- Compact disc players.
- Integrated amplifiers.
- Tuners.
- Loudspeakers.
- Loudspeaker stands.
- Loudspeaker cable.
- Isoplat (Vibration Isolating Platform).



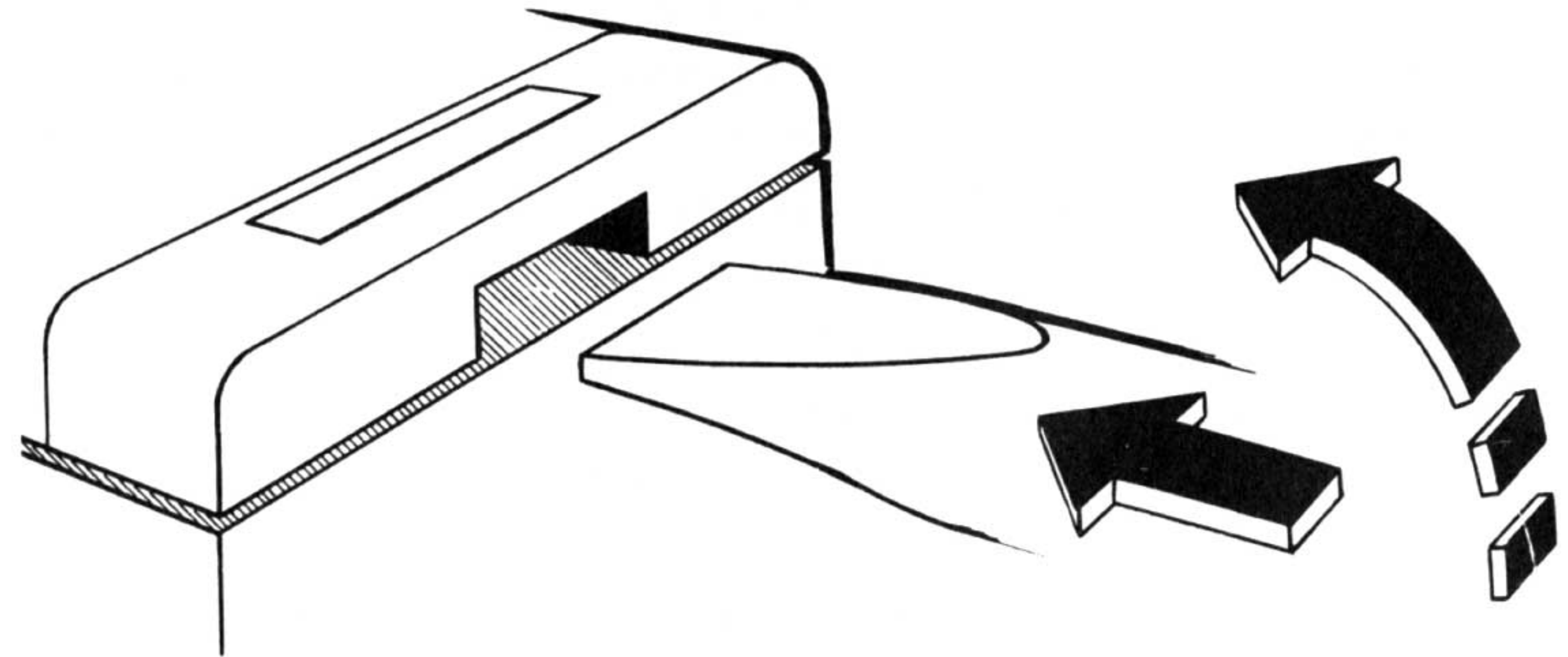
## MAINTENANCE/SERVICE

- There are no user serviceable parts inside your loudspeaker; the drive units are gasket sealed for life. Please avoid taking your loudspeakers apart. Any attempt to dismantle the loudspeaker will result in loss of warranty.
- It is very important for the mid/bass drive unit to be rigidly fixed. We recommend that you tighten up the screws on this driver (but on the bass driver only) occasionally.
- Cleaning - Your MISSION loudspeakers are treated with a special sealant which makes regular polishing unnecessary. In fact, frequent wax polishing will darken and dull the finish. Use a lightly dampened soft cloth to clean your loudspeakers and very occasionally use a household spray polish to restore their original sheen. When using a household spray we recommend that you spray into a soft polishing cloth first, well away from the loudspeaker itself (to avoid overspray falling on the drive units), and then apply the cloth to the cabinet. If you need to clean the grille we recommend that this first be removed from the loudspeaker cabinet to avert damage to the drive units. To remove the grille grip firmly the sides of the grille frame at the outer edges and gradually

pull while holding the cabinet so that it cannot move. Brush the grille gently with a soft, clean brush to remove any deposits.

**NOTE: Model 760 only**

The 760 grilles are removable primarily to facilitate servicing, in case of a fault. However, should you wish to listen to 760s without their grilles attached, locate the slot provided at the bottom of the grille and gently lever the frame off of the baffleboard with a flat blade screw driver, avoiding damage to the loudspeaker cabinet.



- Should a fault occur with your loudspeakers we recommend that they be returned as a pair even if only one loudspeaker appears to be faulty. Use the original packing materials, taking care to pack them correctly.



<b>SPECIFICATIONS</b>	<b>760</b>	<b>761</b>	<b>762</b>
ENCLOSURE TYPE	2-Way Reflex	2-Way Sealed	2-Way Reflex
FREQ RESPONSE 70Hz-20KHz -6dB	+ /- 2.5dB 60Hz	+ /- 2.5dB 58Hz	+ /- 2dB 50Hz
NOMINAL IMPEDANCE	6 Ohms	6 Ohms	8 Ohms
SENSITIVITY SPL 1M/2.83V	89dB	89dB	93dB
RECOMMENDED AMPLIFIER	20-75 W/C	20-75 W/C	20-100 W/C
MAX SPL PER PAIR	103dB	104dB	106dB
CROSSOVER FREQUENCY	4.5 KHz	4.2 KHz	4.3 KHz
EFFECTIVE VOLUME	6.5 Litres	11 Litres	23 Litres
DRIVE UNITS: LF: HF:	130mm Plasiflex 19mm Fabric Dome F.F. Cooled	175mm Plasiflex 19mm Polyamide F.F. Cooled	210mm Plasiflex 19mm Fabric Dome F.F. Cooled
INPUT CONNECTOR	Sprung Clip	5-Way Post	5-Way Post
CABINET DIMENSIONS (HxWxD)	295x180x200mm	380x210x220mm	500x250x283mm
SHIPPING CARTON (HxWxD)	490x490x374mm	450x510x265mm	580x590x345mm
SHIPPING WEIGHT (PAIR)	7Kg	12Kg	21Kg
FINISH	Black Ash	Black Ash	Black Ash

Specifications subject to change without notice.





DESIGNED AND PRINTED IN ENGLAND

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MISSION CYRUS GROUP HUNTINGDON CAMBS PE18 6ED ENGLAND TEL (0480) 52777 FAX (0480) 432777

MISSION ELECTRONICS INC 2461 BELLEVUE AVENUE WEST VANCOUVER BC V7V 1E1 TEL 0101 604 926 7837 FAX 0101 604 926 8727