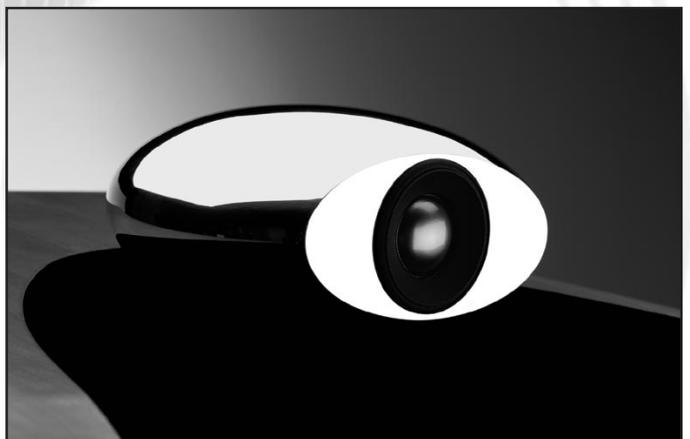


**TANNOY®**



**Dimension**

O W N E R ' S M A N U A L

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### WARRANTY

*This equipment has been produced and tested with care and precision. All Tannoy speaker systems are built to give first class service and carry a 5-year warranty. Active subwoofers carry a 1-year warranty.*

*If the equipment proves to be defective within this period for any reason other than accident, misuse, unauthorised modification or fair wear and tear, Tannoy will repair any such defect or, at our option, replace it without charge for parts, labour or return carriage. This warranty is given in addition to the customer's statutory rights.*

*If you suspect a problem with your loudspeakers please contact your local Tannoy dealer who will be able to advise on appropriate action.*

### INTRODUCTION

Thank you for selecting Tannoy loudspeakers developed in the UK by our dedicated team of design engineers. They are the choice of discriminating music lovers the world over. Musical excellence is designed into our loudspeakers from the start. Careful selection of the very best components combined with strict quality control procedures in the production process ensures this level of excellence is maintained.

To gain maximum performance from your loudspeakers, please take time to read this owner's manual in full before installation. Once you have set up your new loudspeakers please complete and return the registration document - this does not limit your legal rights.

Loudspeakers are electromechanical devices that 'run-in' through use; performance will therefore improve after an initial period of 24hrs use. Once they have been further run-in over a longer period, there will be clear enhancement of the stereo imaging, mid-band quality and bass performance characteristics.

We are confident that you will continue to enjoy your new Tannoy Dimension loudspeakers for many years to come.

### WIDEBAND TECHNOLOGY

A Tannoy SuperTweeter is incorporated into the design of all Dimension models, not only to resolve fine detail of high frequency information but also to effectively enhance the listening experience throughout the whole frequency range. The Dimension SuperTweeter creates an increased immediacy, airiness and impact making music sound more natural and true to life.

Music contains transient information and rich harmonics beyond the range of human hearing for pure tones. Even bass notes have leading edge transients reaching 30kHz. Operating between the roll-off point of the Dual Concentric™ high frequency unit and 54kHz, the Dimension SuperTweeter will accurately reproduce the leading edge of individual notes allowing the listener to experience the entire bandwidth information of instruments.

In addition, by extending the frequency response by two octaves corrects time and phase response within the bandwidth of normal human hearing. Taking these acoustical phase anomalies beyond the range of human hearing adds realism to the soundstage by improving imaging and placement of instruments.

## AMPLIFIER CHOICE

Consult the enclosed product specification sheet as this clearly shows the acceptable power range for amplifier matching to your speakers. The high peak power handling of Tannoy loudspeakers permits responsible use with more powerful amplifiers - please read the Warranty.

As with all loudspeaker systems, the power handling is a function of voice coil thermal capacity. Care should be taken to avoid overdriving any amplifier, as this will cause output overload resulting in 'clipping' or distortion within the output signal. This, if done for any extended period, will cause damage to the speakers.

Generally an amplifier of higher power that is running hard, but free of distortion, will do less damage to the loudspeaker than a lower power amplifier continually clipping. Remember also that a high powered amplifier running at less than 90% of output power generally sounds a great deal better than a lower powered example struggling to achieve 100%. An amplifier with insufficient drive capability will not allow the full performance of the loudspeakers to be realised.

## CABLE CHOICE

Always use the best quality of cable available within your budget. High quality audio signals passing from the amplifier to the loudspeaker are unusual in their demands on the cable. Wide dynamic range and frequency bandwidth information has to coexist with the ability to transmit peak currents of at least 10amps, without incurring any loss or signal impairment. This explains why the sound quality of the information reproduced by the loudspeakers is so dependant on the physical properties of the cables connecting them to the amplifier.

We would recommend that you always keep the cable runs the same length for each speaker. Remember, cable construction can affect the sound quality so be prepared to experiment to find a cable that suits your ear and audio system.

## TERMINAL PANEL

(See fig. 1)

In order to take advantage of the driver earthing feature within the Dimension range and to optimise performance further, use a shielded or screened loudspeaker cable. The screening termination should be connected to the earth or 'ground' (green) terminal on the loudspeaker and to the ground or earth connection on the amplifier. Alternatively if you are not using a screened loudspeaker cable but wish to utilise the earthing facility, run a single cable between the earth or 'ground' (green) terminal on the loudspeaker to the earth (ground) connection on the amplifier.

## UNPACKING

**WARNING: THESE LOUDSPEAKERS ARE HEAVY - SEEK ASSISTANCE WHEN LIFTING.**

To remove the loudspeakers from the packaging please follow these instructions carefully:

Lay the carton on the floor noting that the text (OPEN THIS END) on both ends of the box are visible and the arrows on the carton ends point towards the floor - in this position the speaker in the carton will be positioned on its back. Remove the packing tape from both ends of the carton and fold the carton flaps right back. The spike kit (containing rear spikes, nuts, washers, cone tips and floor protection cups) is immediately visible. These accessories are essential for optimum performance and for providing a rigid and stable footing for the speaker. The secure interface between the cabinet and the floor brings about an improvement in clarity, bass 'speed' and definition.

To facilitate easier removal of the Dimension speakers from their packaging, the carton side has been fitted with plastic locking devices, which allow the carton to be fully opened along its length, and then folded back. To remove each of the plastic locks, insert two fingers into the device and pinch the two flat ribs together - this will unlock the ribs and allow the whole locking mechanism to be pulled free from the box. Once all the locking devices have been removed, fold back the carton to reveal the contents. Carefully remove the packing material from the bottom of the loudspeaker so that this end of the speaker can be carefully lowered onto the floor. Follow the rest of the instructions below regarding the fitting of cones and spikes BEFORE tilting the speaker into an upright position.

It is strongly recommended that you store all the packaging to allow protected transportation in future.

**WARNING: IT IS IMPERATIVE THAT THE SPIKES AND CONE TIPS ARE FITTED BEFORE THE SPEAKER IS PLACED IN AN UPRIGHT POSITION. FAILURE TO DO SO MAY CAUSE THE SPEAKER (ESPECIALLY TD 12) TO TIP OVER WITH THE RISK OF DAMAGE OR INJURY.**

The spikes, along with washers and lock nuts, should be fitted loosely into the threaded holes in the base at the rear of the cabinet. The cone tips should then be threaded into the ends of the polished alloy cones at the front of the speaker. Level the rear spikes to the front cones by eye then hand tighten the lock nuts. Spike locating cups are provided and these may be used to protect sensitive floor surfaces.

The loudspeaker can now be carefully lifted into an upright position and the packing piece removed from the top panel.

3. Refer to the paragraph headed 'Positioning' for speaker placement advice.
4. The alloy side strips of the speaker are protected with a plastic film; it is recommended that this be left on for protection and should not be removed until the speaker is fully installed.

## INSTALLATION

To avoid potential damage to your loudspeaker, ensure that the amplifier is switched OFF prior to connecting or disconnecting any cables. Before switching on double check that all connections are secure and that polarity is correct.

**WARNING: SEE THE SECTION ON SCREENING IF POSITIONING NEAR TO A TELEVISION SCREEN.**

### CONNECTION IN SINGLE WIRE MODE

(See fig. 2)

Connect the pair of link cables supplied in the accessory kit to each loudspeaker terminal panel as follows:

- Starting with the red (positive) lead, loosen the locking pin which passes through the plug by turning the plastic head of the locking pin one full anti-clockwise rotation.
- The 'unlocked' plug can now be inserted into the red (positive) low frequency (LF) terminal on the loudspeaker.
- Tighten the plug by turning the locking pin clockwise until finger-tight.
- The spade connection at the other end of the lead should be connected to the red (positive) high frequency (HF) terminal on the loudspeaker. To do this, loosen the terminal nut sufficiently to allow insertion of the spade connector and then re-tighten the terminal nut finger-tight.
- Repeat this operation for the black (negative) HF and LF terminals
- Repeat the whole operation for the other loudspeaker

For optimum performance in single wire mode, loudspeaker cable connections from the amplifier should now be made to the high frequency (HF) terminals of the loudspeaker:

- The positive (plus) terminal on the amplifier left channel (marked + or coloured red) must be connected to the positive HF terminal on the left speaker. The left speaker is the one on the left as you look at the stereo pair from your listening position.
- The negative (minus) terminal on the amplifier left channel (marked - or coloured black) must be connected to the negative HF terminal on the left speaker.
- Repeat this connection process for the right speaker. Remember that the positive (+ or red) on the amplifier must be connected to the positive (+ or red) on the speaker and the negative (- or black) to negative.

Select a signal source, such as a CD player; switch on the amplifier and slowly turn up the volume control to check that both loudspeakers are reproducing bass and treble information.

### CONNECTION IN BI-WIRE MODE

(See fig. 3)

Please note in Bi-wire mode that the link leads, which are supplied in the accessory pack, should NOT be fitted.

- Be sure that the amplifier is switched OFF and then prepare the two sets of cabling for each 'side' of the system separately. Measure and cut four lengths of cable, two per speaker. Label two of the cable lengths Left LF and Left HF (low frequency and high frequency) then repeat this process for the right pair.
- If your amplifier is not equipped with separate output terminals for bass and treble information then, at the amplifier end of the cables, twist the Left LF+ (positive) and the Left HF+ (positive) together. Connect these to the amplifier Left channel positive terminal marked + (plus) or coloured red.

Twist the Left LF- (negative) and the HF- (negative) cables together and connect them to the amplifier Left channel negative terminal marked - (minus) or coloured black.

At the loudspeaker end connect the cables labelled Left LF+ and Left LF- to the left hand loudspeaker LF terminals, ensuring that you note the polarity markings on the cable sheathing.

Then proceed to connect the Left HF+ and Left HF- to the HF terminals on the same loudspeaker.

- Repeat this process to connect the right hand loudspeaker to the amplifier right channel output, once again ensuring that polarity is correct throughout.
- Switch the amplifier on with the volume control set at its lowest setting. Select a favourite source and slowly turn up the volume to a low level. Check that bass and treble information is being reproduced from both speakers - if not, switch off the amplifier and recheck the connections.

### BI-AMPING

(See fig. 4)

Bi-amping extends the principle of Bi-wiring one stage further. In this connection option separate power amplifiers are used for bass and treble signals in each loudspeaker. Four mono (or two stereo) amplifiers of the same type are required for a stereo pair of loudspeakers. Ensure that the cable links between the loudspeaker terminals are removed and that correct polarity is maintained throughout.

If two stereo amplifiers are used, it is recommended that one amplifier supply bass information to left and right loudspeakers and the other, the treble information.

## CONNECTION OF EARTH OR 'GROUND' LEAD

(See figs. 2, 3 and 4)

To optimise performance further, use a shielded or screened loudspeaker cable. The screening termination should be connected to the earth or ground (green) terminal on the loudspeaker and to the ground or earth connection on the amplifier. Alternatively if you are not using a screened loudspeaker cable but wish to utilise the earthing facility, run a single cable between the earth. It is essential that the coupling link cables between the loudspeaker terminals be removed. Avoid potential damage to your amplifier - ensure that all connections are secure and the polarity is correct in all wiring.

## POSITIONING AND FINE-TUNING

(See fig. 5)

To get best results from your new Tannoy Dimension loudspeakers it is worthwhile spending a little time finding the optimum set-up configuration.

Begin by angling the speakers towards your chosen listening position, usually this is on the centre line of the room, so that when seated you can just see the inner side panel of each speaker. The front of the loudspeaker should not be obstructed in any way. The loudspeakers should be located between 1.5 to 4.5 metres (5ft to 15ft) apart - with the listening position set slightly further away than the speakers are apart. Avoid positioning the loudspeakers in corners of the room, as this will have a negative effect on performance. Ideally, maintain a distance of at least 0.5 metres (20 inches) from the rear wall, and 1 metre (39 inches) from the side.

With the speaker in its listening position, rock the loudspeaker gently from side to side so that the spikes find their way through the weave of the carpet and on to the solid surface below. Once fine adjustments have been made to the rear spikes, to level the loudspeaker and ensure stability, tighten the lock nuts firmly but without using undue force.

## GRILLES

The Dimension grille has been designed to provide acoustic transparency. However, for ultimate fidelity the enthusiast will appreciate the slight improvement in clarity and detail that is achieved by removing the grilles during listening.

### SuperTweeter:

The mesh grille in front of the diaphragm is held in place by magnetism and may easily, but carefully, be removed. It is essential that the SuperTweeter diaphragm is not touched, as damage will destroy its performance and require specialist repair by your Tannoy dealer.

Any such damage will not be covered under warranty.

### Grille panel:

Provided in the accessory pack are six felt covered studs. These are designed to fit into the holes on the front baffle panel once the main grille is removed. If the grille is to be refitted the studs should be removed and stored in the six holes provided on the inside of the grille frame.

## CARE OF CABINET

The accessory kit supplied with your Dimension speakers provides the materials necessary to maintain the high quality finish.

### Wood surfaces:

The real wood veneer cabinets should only be cleaned with a dry cloth or with a light application of quality non-silicone furniture polish. Take care not to get polish on the velvet surfaces of the loudspeaker. It should be remembered that as a natural substance all wood products will change colour when exposed to the UV content of ambient light. Light veneer will darken appreciably to a rich natural patina.

### Polished alloy surfaces:

The polished alloy side rails, cone feet and SuperTweeter housing should be polished using the polishing cloth provided. Extra care is needed whilst polishing the SuperTweeter housing and it is recommended that the SuperTweeter protective grille is in place so as to avoid damaging the diaphragm.

### Velvet surfaces:

To remove dust from the velvet and smooth the pile of the velvet material use the non-scratch open weave side of the foam pad, which is also to be found in the accessory kit.

## DIMENSION HOME THEATRE 5.1 – GENERAL INFORMATION

### (See fig. 6)

Unlike other forms of encoded surround audio, 5.1 offers full bandwidth capability for the surround and centre channels, with the ability to treat the subwoofer as a single discreet channel for special effects playback or, for music applications, as a dedicated low frequency instrument channel. This places new demands on the surround and centre channel loudspeakers in both the mixing environment and the playback environment.

The 5.1 format allows the mix engineer in the recording studio to assign audio information to one or more discreet channels of playback; providing very vivid and exacting localisation for the apparent sound sources in the listening environment. To reliably recreate that accurate localisation during playback, the selection and location of loudspeakers becomes the single most critical issue next to the talent of the mix engineer in the studio.

## THE SYSTEM

A fully operational 5.1 system consists of two main front loudspeakers, two rear effects speakers at the rear (usually wall mounted) and a centre channel. The subwoofer provides the .1 part of the system.

## SCREENING

The Dimension loudspeaker drive units contain very large magnets to ensure optimum performance, power handling, efficiency and reliability. These are capable of generating a substantial magnetic field extending a considerable distance beyond the sidewalls of the speaker enclosure. This field will cause picture distortion if the speakers are placed too close to the TV. It is therefore recommended that the front (left and right) speakers are positioned at least 1 metre (39 inches) to each side of the television screen. Rear projection and plasma televisions are not prone to interference from these magnetic effects.

## FRONT SPEAKERS

The ultra wide dynamic range and power handling capability of Dimension loudspeakers will provide the ultimate home cinema experience. The speakers should be positioned either side of the TV or projection screen placed in line with the screen surface.

## CENTRE CHANNEL SPEAKER TDC1

### (See figs. 2 and 3)

The Dimension centre channel speakers are fully magnetically shielded and are designed for installation directly above or below the TV. As the main effects speaker for the front soundstage, the critical factor in its performance is the placement. In all cases the centre channel speaker should be positioned as near to the TV screen as possible. The viewing position when seated determines the ideal mounting height, but in all cases this should be as close as possible to ear height. As with the main speakers the front baffle panel should be as near as possible in line with the screen surface.

The Dimension TDC 1 centre channel can be wired in single wire or bi-wire mode. Please refer to the figures 2 and 3 for connection guidance bearing in mind that connection should be made to the dedicated centre channel output on your A/V processor amplifier.

## REAR EFFECTS SPEAKERS

The integrity of the special effects soundstage created by the source material will be compromised if the speakers are installed on the sidewalls, for that reason they should always be placed behind the main viewing position.

The placement of floor standing speakers at the rear should mirror as near as possible the location of the front pair and 0.5 metres (20 inches) from the rear wall. Wall-mounted loudspeakers should be shelf or bracket mounted 1.5 to 4.5 metres (5ft to 15ft) apart with a height mounting height range of 1.5 to 2 metres (5ft to 7ft).

## SUBWOOFER TD-SUB

As the subwoofer only produces low frequency, therefore monaural information, it is difficult to detect its location by ear. It could as a result be situated anywhere in the room, but optimum performance will be gained by locating the subwoofer between the main stereo pair of speakers. Bass output will increase when placed next to a wall or in a corner so use the subwoofer volume control to balance the output with the rest of the system.

Please refer to the manual supplied with the subwoofer for advice on installation and set-up.

TRANSLATED .PDF DOWNLOADS OF THIS MANUAL ARE AVAILABLE ON OUR WEBSITE AT

[www.tannoy.com](http://www.tannoy.com)

# TECHNICAL SPECIFICATIONS

	TD8	TD10	TD12	TDC1
<b>PERFORMANCE</b>				
Recommended amplifier power - Watts RMS	40 - 160	50 - 200	50 - 280	40 - 200
Continuous power handling - Watts RMS	100	130	180	130
Peak power handling - Watts	375	480	675	480
Sensitivity (2.83Volts @ 1 m)	90dB	91dB	92dB	92dB
Nominal impedance - Ohms	6	6	6	6
Frequency response -6dB	42Hz - 54kHz	38Hz - 54kHz	30Hz - 54kHz	42Hz - 54kHz
Dispersion	90 ° conical	90 ° conical	90 ° conical	90 ° conical

<b>DRIVE UNITS</b>				
SuperTweeter	25mm (1") 25 micron titanium dome, neodymium magnet system	25mm (1") 25 micron titanium dome, neodymium magnet system	25mm (1") 25 micron titanium dome, neodymium magnet system	25mm (1") 25 micron titanium dome, neodymium magnet system
Dual Concentric™ High Frequency	25mm (1") 50 micron aluminium dome with Tulip Waveguide	25mm (1") 50 micron aluminium dome with Tulip Waveguide	25mm (1") 50 micron aluminium dome with Tulip Waveguide	25mm (1") 50 micron aluminium dome with Tulip Waveguide
Dual Concentric™ Low Frequency	200mm (8") Paper pulp cone, with a twin roll impregnated fabric surround	254mm (10") Paper pulp cone, with a twin roll impregnated fabric surround	300mm (12") Paper pulp cone, with a twin roll impregnated fabric surround	200mm (8") Paper pulp cone, with a twin roll impregnated fabric surround
Low Frequency				2 x 200mm (8") Paper pulp cone, with a twin roll impregnated fabric surround

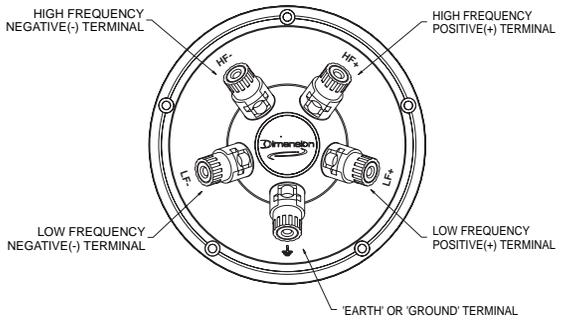
<b>CROSSOVER</b>				
Dual Concentric™ type	Bi-wired, hard-wired passive low loss, 2nd order low pass, 1st order high pass	Bi-wired, hard-wired passive low loss, 3rd order low pass, 1st order high pass	Bi-wired, hard-wired passive low loss, 3rd order low pass, 1st order high pass	Bi-wired, hard-wired passive low loss, 1st order low pass, 1st order high pass
Frequency	1.4 kHz	1.2 kHz	1.1 kHz	1.4 kHz
Low frequency to Dual midrange type				Bi-wired, hard-wired passive low loss, 1st order
Frequency				400Hz
SuperTweeter type	3rd order high pass filter			
Frequency	14kHz	14kHz	14kHz	14kHz

<b>CABINET</b>				
Enclosure type	Dual chamber coupled reflex	Twin port reflex	Twin port reflex	Closed box
Construction	High-density 18mm birch-ply enclosure, internally cross-braced High-density 30mm birch ply front baffle	High-density 18mm birch-ply enclosure, internally cross-braced High-density 30mm birch ply front baffle	High-density 18mm birch-ply enclosure, internally cross-braced High-density 40mm birch ply front baffle	High-density 18mm birch-ply enclosure, internally cross-braced High-density 30mm birch ply front baffle
Dimensions mm (inches)	943 x 299 x 305 (37.1 x 11.8 x 12)	1095 x 350 x 370 (43.1 x 13.8 x 14.6)	1254 x 435 x 435 (49.4 x 17.1 x 17.1)	373 x 774 x 420 (14.7 x 30.5 x 16.5)
Volume litres	38	67	110	63
Weight kgs (lbs)	22 (48.5)	32 (70.5)	52.5 (115.7)	31.5 (69.4)
Finish options	American cherry with polished alloy trim or Rose-nut with black anodised alloy trim	American cherry with polished alloy trim or Rose-nut with black anodised alloy trim	American cherry with polished alloy trim or Rose-nut with black anodised alloy trim	American cherry with polished alloy trim or Rose-nut with black anodised alloy trim
Optional Accessories				Front grille assembly

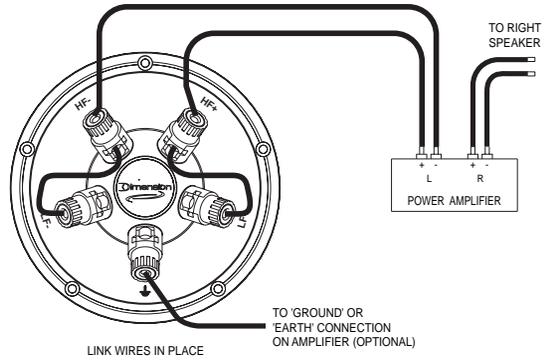


# SET-UP DIAGRAMS

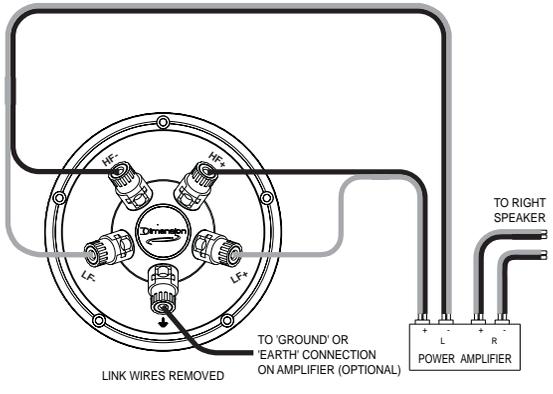
**FIG. 1** TERMINAL PANEL CONNECTIONS



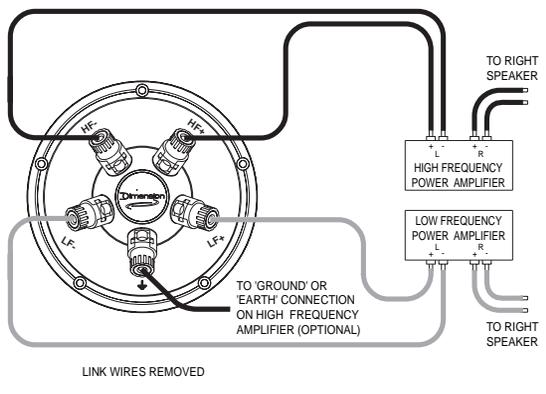
**FIG. 2** SINGLE WIRE MODE AND EARTH (GROUND) LEAD CONNECTION



**FIG. 3** BI-WIRE MODE AND EARTH (GROUND) LEAD CONNECTION

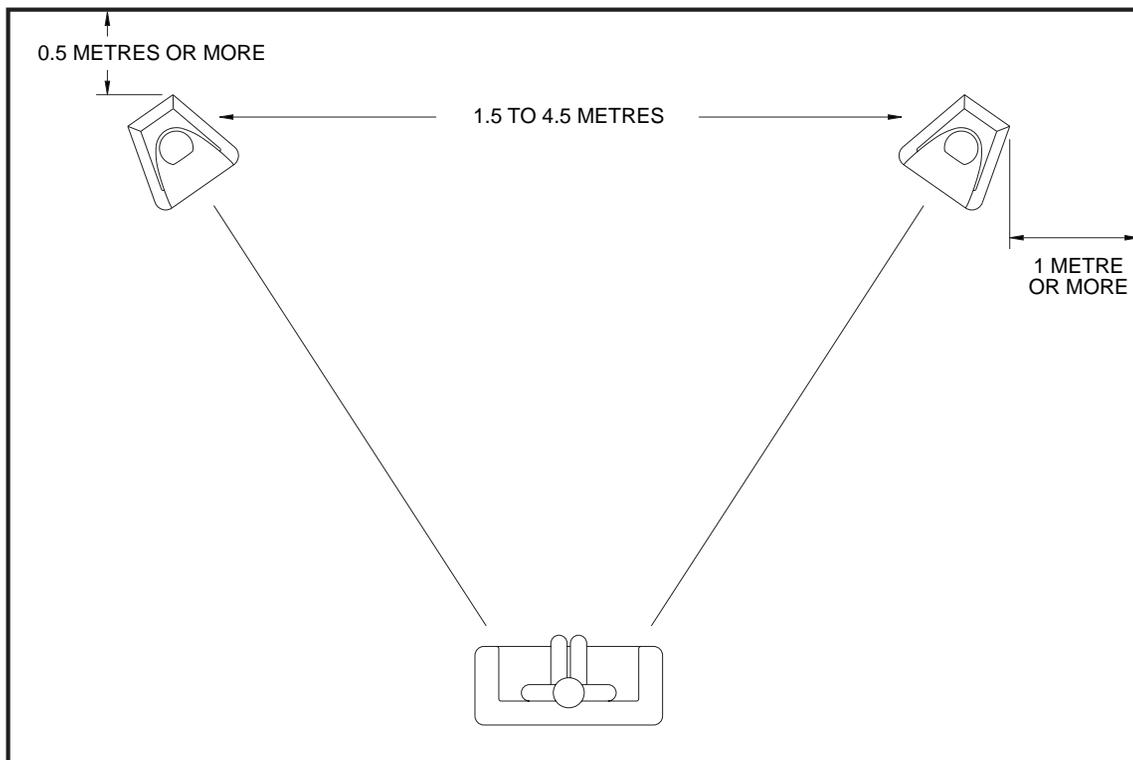


**FIG. 4** BI-AMPING MODE AND EARTH (GROUND) LEAD CONNECTION

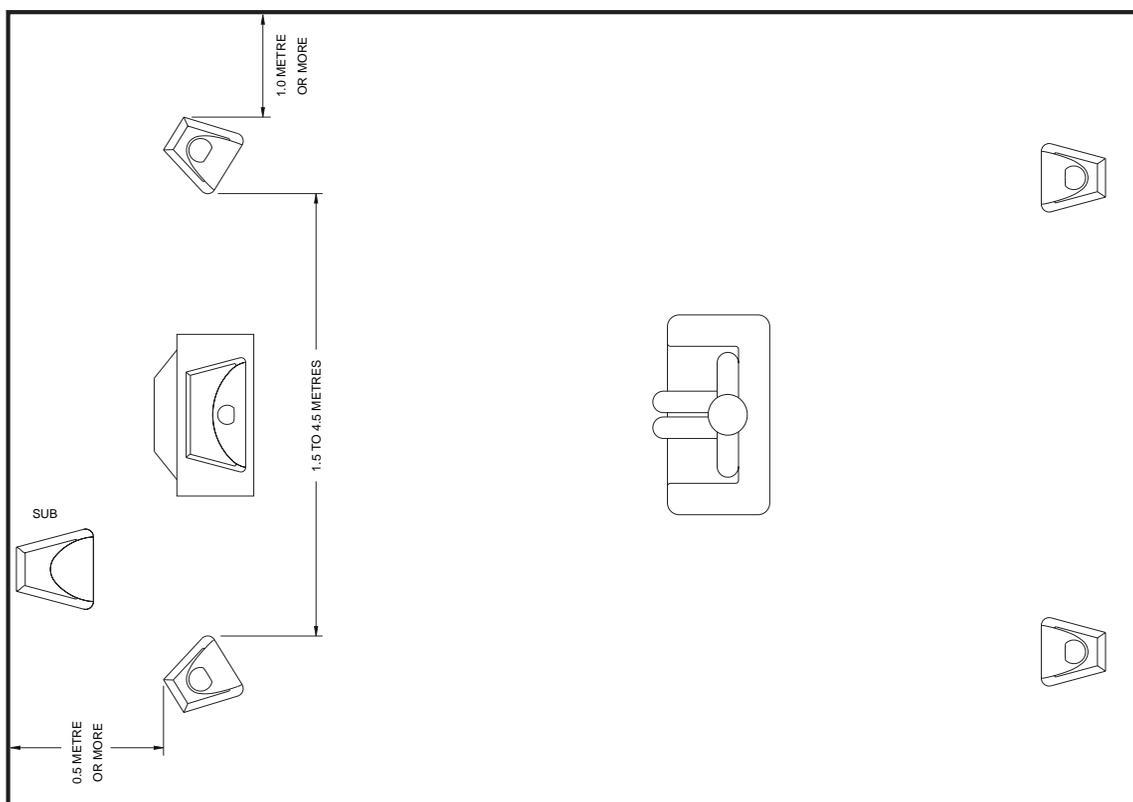


# SET-UP DIAGRAMS

**FIG. 5** POSITIONING RECOMMENDATIONS - TWO CHANNEL STEREO



**FIG. 6** POSITIONING RECOMMENDATIONS - HOME CINEMA



# TANNOY®

BREAKING SOUND BARRIERS

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