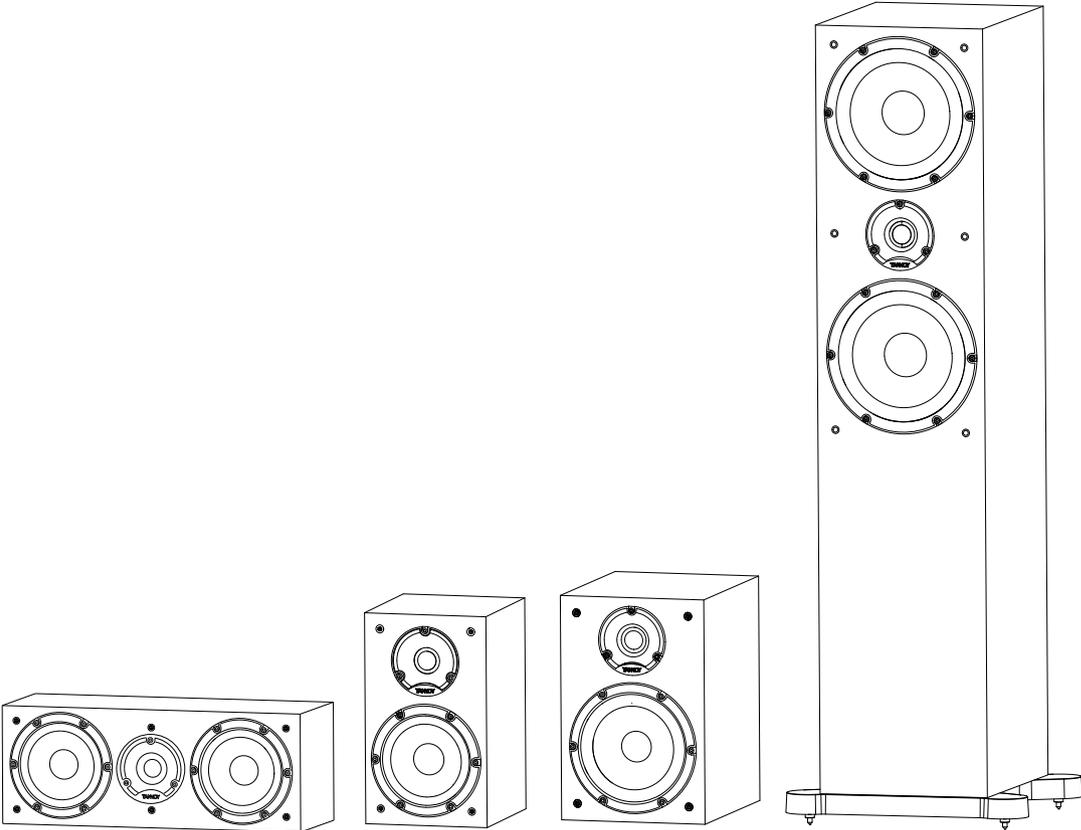


TANNOY

Mercury 7

OWNER'S MANUAL



Mercury 7

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WARRANTY

No maintenance of the Mercury 7 loudspeaker is necessary.

As part of the MUSIC Group, Tannoy is committed to providing the highest quality products, service and user experience for our customers. One element of this commitment is our after sales support which now incorporates our extended Limited Warranty. In the event of any concern that is not addressed by this extended Limited Warranty we would ask you to contact us at care@music-group.com

For full warranty details including the extended Limited Warranty, please visit <http://www.music-group.com/warranty.aspx> and register your purchase online at www.music-group.com or www.tannoy.com

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.

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 Mercury 7 loudspeakers for many years to come.

AMPLIFIER CHOICE

Consult the product specification 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 10 amps, without incurring any loss or signal impairment. This explains why the sound quality of the information reproduced by the loudspeakers is so dependent on the physical properties of the cables connecting them to the amplifier.

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

UNPACKING

To unpack the loudspeakers from their boxes remove tape from the top then fold the flaps right back before inverting the carton and contents. Lift the carton clear of the contents then remove all inner packaging.

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

FITTING OF ACCESSORIES

Check the following accessories are present in the carton, according to model:

- 7.1: Foam port bung x 1, self-adhesive feet x 4
- 7.2: Foam port bung x 1, self-adhesive feet x 4
- 7.4: Foam port bung x 2, plinth sections x 2, plinth mounting screws x 4, carpet spikes x 4, locking nuts x 4, spike locating cups x 4
- 7C: Self-adhesive feet x 4

7.1, 7.2 & 7C SELF ADHESIVE FEET

The supplied self-adhesive feet may be fitted to the underside of the loudspeaker to prevent slipping and avoid damage to surfaces.

7.1, 7.2 & 7.4 FOAM PORT BUNG FITMENT

If the loudspeaker is positioned closer than the recommended 0.5 m (20 inches) distance from the rear wall, excessive bass reinforcement can sometimes occur. This can be counteracted by placing the foam bungs supplied in the rearward firing port. In the case of the 7.4, which has 2 rear ports, a further degree of tuning is possible by using either one or both foam bungs. The 7C model is largely insensitive to boundary reinforcement issues such as this, due to the bass management provided within the AV receiver.

7.4 FLOOR STANDING MODELS

The Mercury floor standing model performs best with the plinth and carpet piercing spikes fitted, giving optimum stability and sound quality. First fit the plinth sections to the underside of the loudspeaker with the 4 screws provided, taking care not to over tighten. The spikes provided, along with lock nuts, should be inserted into the threaded holes in the underside of the plinth. Level the speaker and then tighten the lock nuts firmly but without using undue force. Spike locating cups are provided in the accessory pack and these may be used to protect sensitive floor surfaces. (See fig. 1)

WARNING:

Ensure that the spikes are levelled and that the lock nuts are tightened firmly. The spikes should be pushed through the carpet to locate into the flooring surface by applying pressure to the top of the cabinet. If using on a sensitive floor surface place the protective cups under the levelled spikes. Failure to do so could render the speaker unsteady and result in damage or injury should it be knocked over.

STAND MOUNTING MODELS

Stand mounting or bookshelf speakers should be located securely on stands or a shelf in an appropriate position to place the tweeter roughly at ear height when seated in the chosen listening position. Positioning recommendations for stand mounted speakers can be found under the section entitled Positioning and Fine-Tuning.

The Mercury 7.1 may also be wall mounted with a suitable bracket, using two inserts on the rear of the loudspeaker, with standard 60mm spacing. The thread in the inserts is M5. It is the responsibility of the customer to ensure the chosen bracket is used within its load rating, and the bracket is securely mounted to the wall with suitable hardware.

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.

CONNECTION 7.1, 7.2 & 7C

- 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. (See fig. 2)

CONNECTION 7.4

Single Wire mode

For single wire mode it is necessary to retain the link bars between the LF and HF terminals. (See fig. 3)

For optimum performance in single wire mode, loudspeaker cable connections from the amplifier should 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.

Bi-Wire mode:

Please note in bi-wire mode that the link bars must not be used. (See fig. 4)

- 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-Amp Mode:

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 link bars 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. (See fig. 5)

POSITIONING AND FINE-TUNING

To get best results from your new Tannoy Mercury 7 loudspeakers it is worthwhile spending a little time finding the optimum setup 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 (5 ft to 15 ft) 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. (See fig. 6)

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 spikes, to level the loudspeaker and ensure stability, tighten the lock nuts firmly but without using undue force.

HOME THEATRE 5.1 - GENERAL INFORMATION

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. (See fig. 6)

THE SYSTEM

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

In home Theatre applications the matched dispersion of all Mercury 7 models provides a very focussed soundstage retaining natural voicing and ensuring that aural effects and speech localisation 'pan' from left to right and front to rear seamlessly.

WARNING, STRONG MAGNETIC FIELDS

The powerful magnet system in Mercury 7 models will cause picture distortion with conventional CRT televisions and monitors, and should not be used in close proximity. There are no issues with plasma, LCD or LED televisions or monitors.

FRONT SPEAKERS

The ultra-wide dynamic range and power handling capability of Mercury 7 loudspeakers will provide a stunning home cinema experience. The speakers should be positioned on either side of the TV or projection screen and then placed in line with the screen surface.

CENTRE CHANNEL SPEAKER

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.

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. Placement should mirror as near as possible the location of the front pair.

SUBWOOFER

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.

GRILLES

The Mercury 7 grilles have 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.

CARE OF CABINET

The cabinets should only be cleaned with a dry cloth or with a light application of quality non-silicone furniture polish.

TECHNICAL SPECIFICATIONS

	MERCURY 7.1	MERCURY 7.2	MERCURY 7.4
PERFORMANCE			
Recommended amplifier power (Watts RMS)	20 - 80	20 - 100	20 - 150
Continuous power handling (Watts RMS)	40	50	75
Peak power handling (Watts)	160	200	300
Sensitivity (2.83 Volts @ 1 m)	87 dB	89 dB	93 dB
Nominal impedance (Ohms)	8	8	8
Frequency response (-6 dB)	53 Hz – 32 kHz	42 Hz – 32 kHz	32 Hz – 32 kHz
DRIVE UNITS			
High frequency	28 mm (1.1") Nitro-urethane damped layer woven polyester dome, neodymium magnet system	28 mm (1.1") Nitro-urethane damped layer woven polyester dome, neodymium magnet system	28 mm (1.1") Nitro-urethane damped layer woven polyester dome, neodymium magnet system
Low frequency	127 mm (5") Multi- fibre coated pulp paper cone	152 mm (6") Multi- fibre coated pulp paper cone	178 mm (7") Multi- fibre coated pulp paper cone x 2
CROSSOVER			
Crossover frequency	3.4 kHz	3.4 kHz	2.4 kHz
Crossover type	Passive low loss 2nd order low pass, 3rd order high pass	Passive low loss 2 nd order low pass, 3 rd order high pass	Passive low loss 2 nd order low pass, 3 rd order high pass, bi- wired
CONSTRUCTION			
Enclosure type	Rear ported reflex	Rear ported reflex	Twin rear ported reflex
Volume	4.7 l (0.17 cu. ft.)	9.4 l (0.33 cu. ft.)	44.0 l (1.55 cu. ft.)
Dimensions (H x W x D) (incl. plinth)	270.0 x 160.0 x 194.7 mm (10.6 x 6.3 x 7.7")	292 x 193 x 266.4 mm (11.5 x 7.6 x 10.5")	955 x 314.3 x 308 mm (37.6 x 12.4 x 12.1")
Net weight	2.7 kg (5.9 lbs)	5.0 kg (11.0 lbs)	15.0 kg (33.1 lbs)
Finish	Light Oak Walnut Black Oak	Light Oak Walnut Black Oak	Light Oak Walnut Black Oak

TECHNICAL SPECIFICATIONS

	MERCURY 7C
PERFORMANCE	
Recommended amplifier power (Watts RMS)	20 - 120
Continuous power handling (Watts RMS)	60
Peak power handling (Watts)	240
Sensitivity (2.83 Volts @ 1 m)	91 dB
Nominal Impedance (Ohms)	8
Frequency response (-6 dB)	62 Hz – 32 kHz
DRIVE UNITS	
High frequency	28 mm (1.1") Nitro-urethane damped layer woven polyester dome, neodymium magnet system
Low frequency	127 mm (5") Multi-fibre coated pulp paper cone x 2
CROSSOVER	
Crossover frequency	3.5 kHz
Crossover type	Passive low loss 2 nd order low pass, 3 rd order high pass
CONSTRUCTION	
Enclosure type	Twin rear ported reflex
Volume	6.2 l (0.22 cu. ft.)
Dimensions (H x W x D) (incl. plinth)	160.0 x 420.0 x 167.3 mm (6.3 x 16.5 x 6.6")
Net weight	4.4 kg (9.7 lbs)
Finish	Light Oak Walnut Black Oak

SET-UP DIAGRAMS

Fig.1 7.4 Plinth Assembly

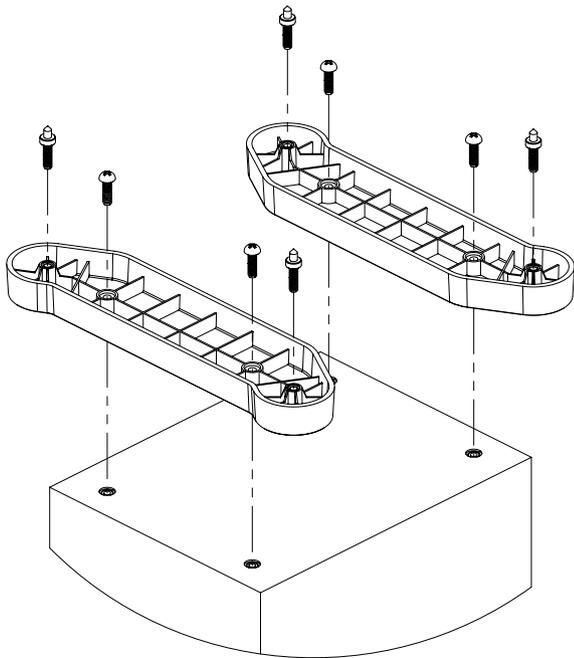


Fig. 2 Connection 7.1, 7.2 and 7C

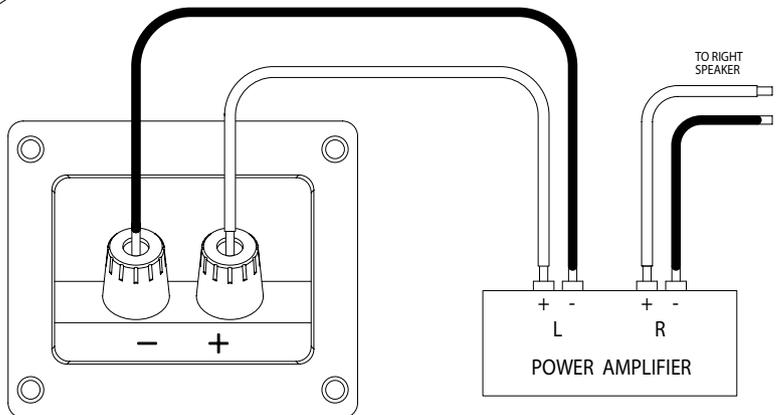
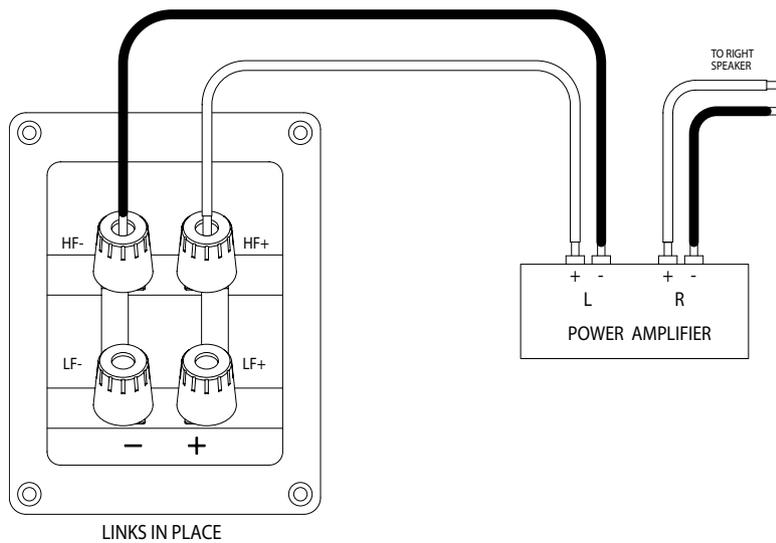


Fig.3 Connection 7.4, Single Wire Mode



SET-UP DIAGRAMS

Fig.4 Connection 7.4 Bi-Wire Mode

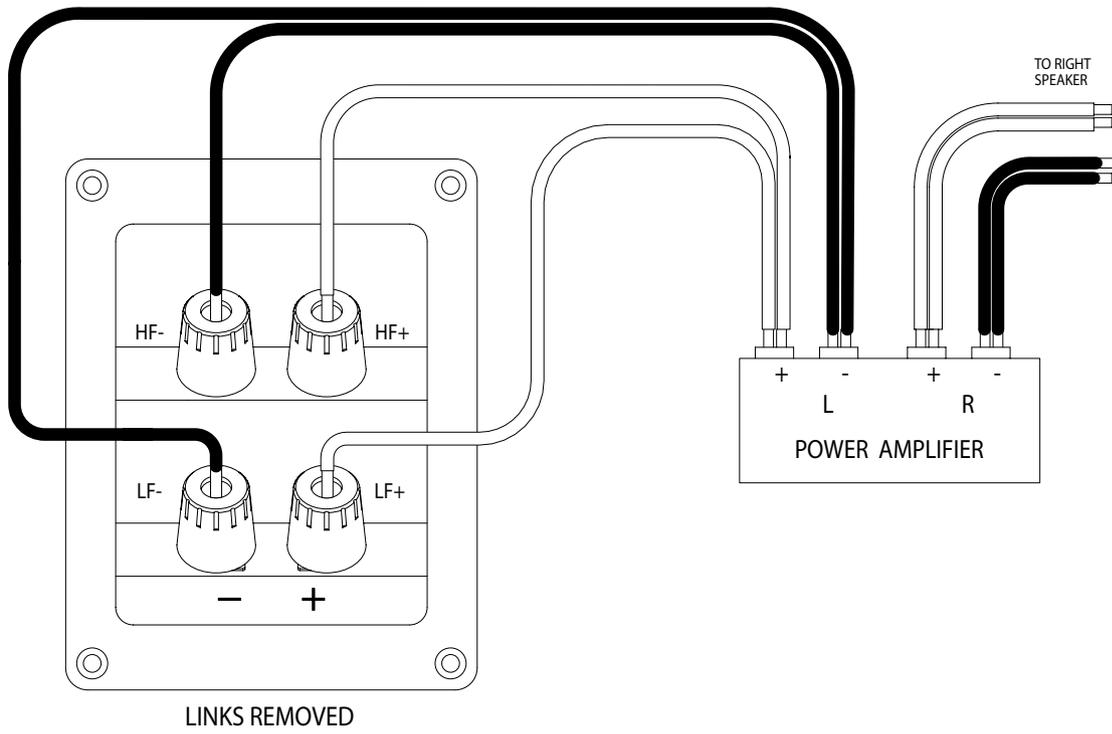
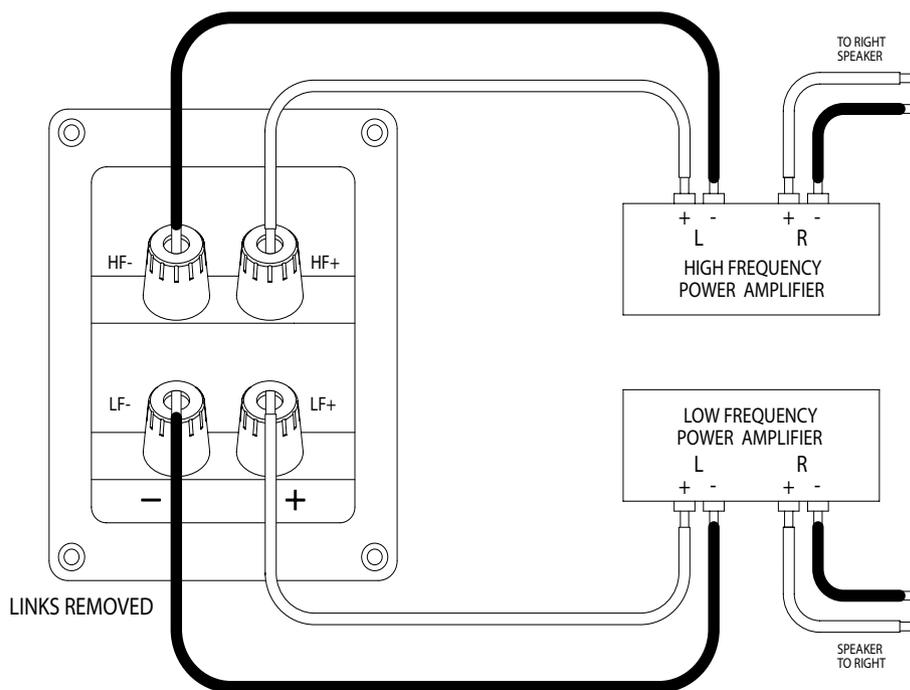


Fig.5 Connection 7.4 Bi-Amp Mode



SET-UP DIAGRAMS

Fig.6 Recommended Positioning - Stereo Pair

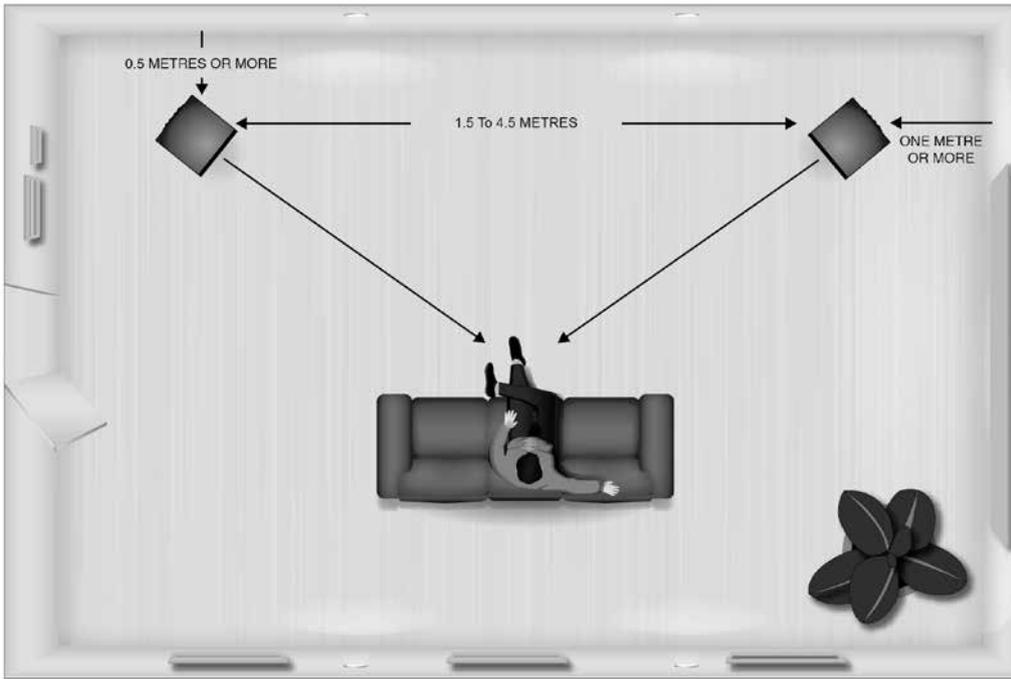
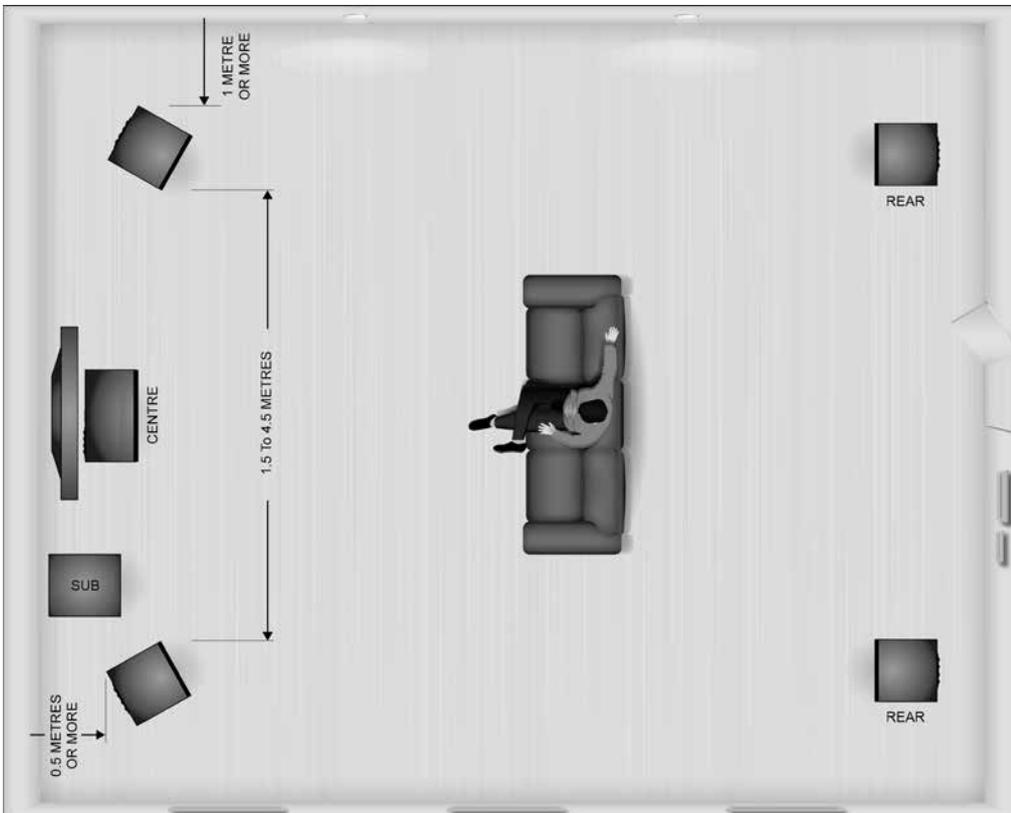


Fig.7 Recommended Positioning - Home Cinema



NOTES

Mercury 7

Tannoy Limited - product designed in the United Kingdom.
Tannoy operates a policy of continuous research and development. The introduction of new materials or manufacturing methods will always equal or exceed the published specifications.
All specifications are subject to change without notice.
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