

SILVER SERIES

owners manual



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Introduction

The revered Silver Series is now entering its sixth generation, introducing groundbreaking design throughout the entire range. Each model has been developed to provide a wider appeal to audiophiles and home cinema enthusiasts alike, whilst elevating performance to a new level. Two new centre speakers now make it possible to assemble stylish, discrete or large, powerful home theatre systems. Silver 50 and Silver 200 models are more compact, providing a more attractive proposition for modern living spaces, yet delivering the same kind of performance expected from much larger speakers. Silver 50 and Silver 200 can be combined with the compact Silver C150 centre speaker, tonally matched and visually discrete to form a compact high-performance multi-channel system. The Silver C350 centre now provides the ability to create a no-compromise home theatre system, based around the Silver 100, Silver 300 or Silver 500 models.

Spikes and Feet



Select finishes are supplied with a foam gasket on the out-rigger, please ensure this side is placed on the cabinet.

For Wooden/Hard Floors

(Silver 200, 300 and 500 only)

The feet and 'out-riggers' are supplied assembled for use on non-carpeted, wooden or hard floors or where spikes are inappropriate. All that is required is to fix them to the speaker base using the supplied bolts (A & B).

You can check that the speaker is level on all sides by using a spirit level. If it's slightly off-level, unscrew the foot at the lowest point and check again. Continue this process until the cabinet is fully level. Use the locking nuts on each foot to fix the feet in place and to stop any unwanted vibrations.

For Carpeted Floors

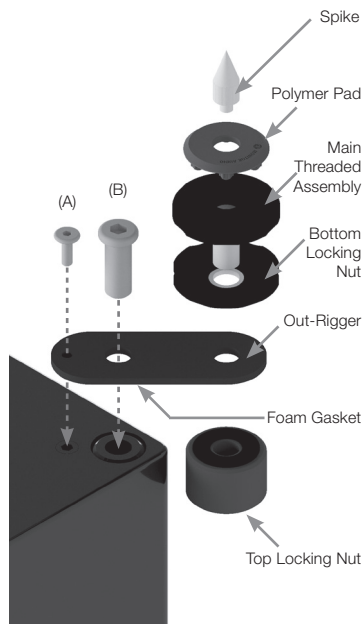
(Silver 200, 300 and 500 only)

If the speaker is being installed on a carpeted floor, screw the spike into the foot and 'out-rigger' assembly. Fix them to the speaker base using the supplied bolts (A & B).

You can check that the speaker is level on all sides by using the spirit level. If it's slightly off-level, unscrew the foot at the lowest point and check again. Continue this process until the cabinet is fully level. Use the locking nuts on each foot to fix the feet in place and to stop any unwanted vibrations.



Please ensure there are no hidden wires under the carpet that could be damaged by the spikes.



Setting Up

2 Channel Positioning

When arranging a 2 channel system, the listening position and the loudspeakers should form an equilateral triangle. The speakers should be positioned approximately 6 - 10 feet (1.8 - 3m) apart. The ideal distance from the rear wall varies depending on the speaker (see list below), however, they need to be a minimum of 3 feet (91cm) from the side walls.

- Silver 50 6 - 12 inches (15 - 30cm)
- Silver 100 & 200 8 - 14 inches (20 - 36cm)
- Silver 300 & Silver 500 12 - 24 inches (30 - 61cm)

NOTE: These are recommended distances for optimal performance. Actual results will vary dependant on room size and construction.

Experimentation is strongly advised when initially setting up the speakers, as environment and personal preference differ with every installation. If there is insufficient bass for example, try moving your speakers closer to a wall. The opposite approach is recommended if there is excess bass. Also see the information on page 7 referring to Port Bungs. If stereo imaging is being lost, try 'toeing' them in slightly. The sound should appear to originate from the centre point between the speakers, not the actual speakers themselves.

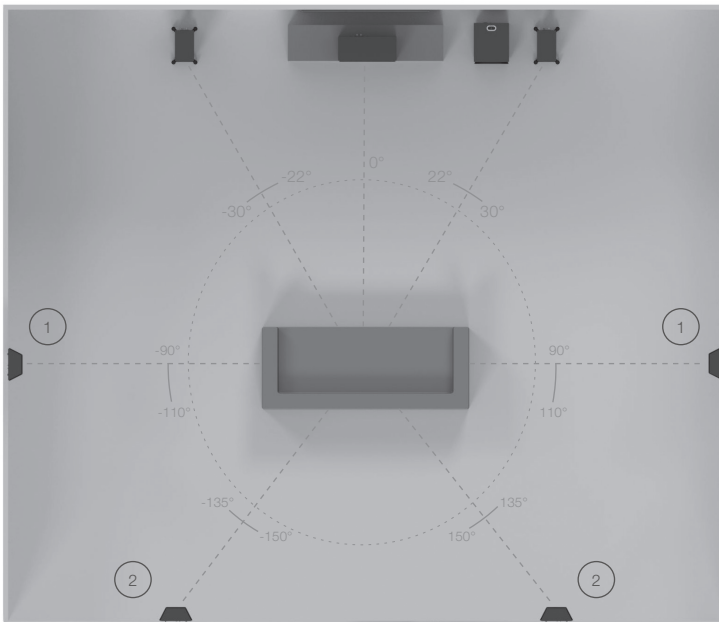
AV Positioning

Please refer to the illustrations below for the ideal angles and positions of each speaker in your surround system. The speakers should be distant from the wall according to the requirements of the speaker, which are listed in the 2-Channel Positioning section (page 3).

If the sound is too bass heavy or there is bass boom from the room when playing music (without a subwoofer), try moving the loudspeakers slightly further away from the wall(s). If this is not possible, then try the supplied port bungs. In a system with a subwoofer try adjusting the crossover frequency settings for the speakers and/or sub or changing the subwoofer's position.

The Silver centre channel speaker should be positioned so that it is pointing at the viewing position and at approximate ear height.

NOTE: Images below are for illustrative purposes only. If using the Silver FX please refer to the next section for further information.



1. Side surround speakers
2. Rear surround speakers

A 7.1 surround system will make use of side (position 1) and rear speakers (position 2) to create a full 360° soundstage, if setting up a 5.1 system you can place your surrounds in position (1) or (2).

Setting up the Silver FX

The Silver FX features Di-Pole or Bi-Pole listening modes. In Bi-Pole mode, the driver and tweeters are all in phase. In Di-Pole mode one of the tweeters is out of phase to the other tweeter and main driver to create the diffused sound. The FX speakers should be wall mounted approximately 2 feet above ear height.

Di-Pole/ Bi-Pole switch: When part of 5.1 systems as a rear speaker, set the switch to Bi-Pole. Although there is nothing wrong with experimenting and trying the switch in the Di-Pole mode.

If part of a 7.1 system with 1 pair of FX's set the switch to Di-Pole. If using 2 pairs of FX's for side and rear effects, set them all to Di-Pole mode and swap the left and right handed side FX speakers over, keeping the rear FX speakers handed correctly (matching left and right with the front left and right channels) as illustrated on page 5.



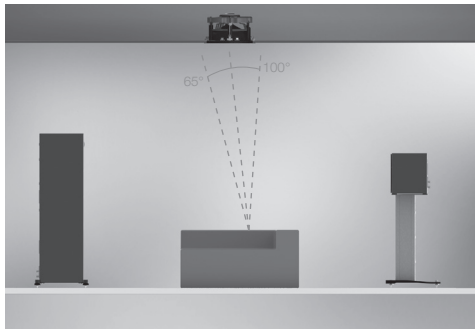
NOTE: Before adjusting any switches, please ensure that the amplifier is at the very least turned off. This will help to protect the amplifier.



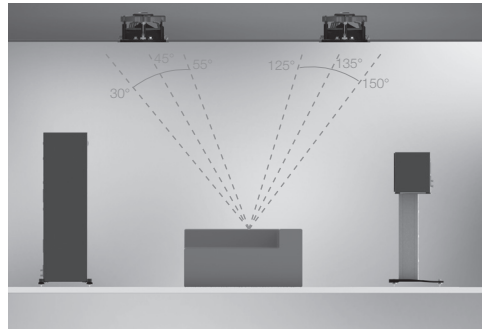
Atmos

When arranging an Atmos system, for the Atmos channels we would recommend using our C265-IDC or CPCT380-IDC. These speakers employ a unique pivoting IDC (Inverted Dual Concentric) midrange/ tweeter module which offers a wider dispersion characteristic, and is ideal for Atmos duties. More information on both the C265-IDC and CPCT380-IDC can be found on our website: monitoraudio.com

Please see below for ideal positioning of 2 or 4 speaker setups.



2 Atmos speakers (in line with front left and right)



4 Atmos Speakers (in line with front left and right)

Fixing the Silver FX to a wall



CAUTION: Always determine where the Silver FX will be fixed and the structure of the wall. For safety reasons, if unsure of your ability to provide a secure and safe fixing, do not attempt to fix these speakers to a wall. Instead, please obtain the services of a competent and qualified trades person.



CAUTION: Ensure that water pipes or electricity cables do not run behind where the wall plate is going to be secured. Work from secure steps and avoid trailing wires.



NOTE: We do not supply wall fixing screws and plugs with the Silver FX. Please only use suitable fixings for the type of wall construction the Silver FX's will be fixed to.

The Silver FX comes with keyhole brackets fixed to the cabinet. We do not supply wall fixing screws and plugs with the FX's. Please use suitable fixings for the type of wall construction the FX's will be fixed to.

To fix your FX's to the wall, we would recommend using the wall fixing template enclosed within the packaging carton.

It is perfectly acceptable to connect to the top, bottom terminals or even diagonally (experimentation is advisable to achieve the preferred results).

Wiring

Single Wiring

Single wiring is achieved via a single set of cables to the terminals on the back of the loudspeaker. Internally the loudspeaker crossover guides the frequencies to the appropriate driver/tweeter. Low frequencies to the bass drivers, mid frequencies to the mid/bass drivers and high frequencies to the tweeter.

It is perfectly acceptable to connect to the top, bottom terminals or even diagonally (experimentation is advisable to achieve the preferred results).



NOTE: When using this method you must keep the terminal links in place.

Bi-Wiring

Bi-wiring is accomplished by connecting separate pairs of speaker cables to the terminals on the loudspeaker from a single pair of connections on the amplifier. In the case of the Silver Series, the bottom terminals connect to the bass driver(s) and the top terminals connect to the tweeter in 2 way loudspeakers, or the mid and tweeter in 2.5 and 3 way loudspeakers.



NOTE: When using this method the terminal links MUST be removed.

Bi-Amping

Bi-amping is the same as bi-wiring except you are introducing a second amplifier into the equation.

In order to bi-amp you must connect a set of speaker cables to the top terminals on the loudspeaker from one amplifier and another set of speaker cables to the bottom terminals from the second amplifier.



NOTE: When wiring this method the terminal links MUST be removed.

The Effects of Bi-Wiring and Bi-Amping

Fundamentally a loudspeaker crossover varies the impedance seen by the speaker and by the power amplifier. The situation is such that when the full range musical signal is applied to the terminals of a full-range speaker system, the bass driver(s) will only receive low frequency signals, the mid driver receives the mid band frequency signals and the tweeter only gets sent high frequency signals. This means that if separate speaker cables are connected to the low and high frequency terminals, not only have the drive units had the frequency's directed and divided for them, but the two separate speaker cables will now also carry different signals, the bass cable mostly the lows, and the tweeter cable mostly the highs.

Once the high and low frequencies have been separated in this fashion, the strong current pulses and surges demanded by bass drivers when reproducing bass or drums, will not interact with the delicate sounds of a flute or cymbal.

In a single wired system, unwanted mechanical and electrical resonances manifest as distortion at both sets of speaker terminals. Due to the impedance of the speaker cables, these distortions will not be entirely cancelled by the amplifier. Instead, they modulate between the two crossovers, and degrade sound quality. When bi-wiring, this interaction is minimised as signal distortion is 'seen' at the amplifier's output where it can be more effectively cancelled. bi-wiring/ bi-amping therefore presents a 'cleaner' signal at both the low frequency and high frequency speaker terminals, and because the high and low frequencies have already been separated, each has a minimal effect on the other - in essence the bass does not overpower delicate treble.

In terms of the audible benefit, bi-wiring/ bi-amping, provides more clarity and detail to the midrange and high frequencies. Often the bass will become faster and tighter. Focus and staging will improve as well. In all, this is a very effective and desirable improvement and is highly recommended by Monitor Audio.

Port bungs



WARNING: Care must be taken not to insert the port bungs too far into the port, as this may result in the foam bung being lost inside the cabinet.

If the loudspeaker is to be installed in a small room, typically 9 sqM (80 sqFT), or a room known to reproduce accentuated bass response, it may be desirable to fit port bungs. However, experimentation is recommended with positioning of the loudspeaker in the room prior to fitting. To optimise performance from the loudspeaker it is important to ensure the loudspeaker is not positioned too close to a wall or near the corners of a room.

If the positioning of the loudspeaker is predetermined by room aesthetics or layout, you find you have accentuated bass or in the case speakers are to be sited in close proximity (less than the minimum suggested distances of page 3) to a rear wall (such as on a bookshelf, positioned in a cabinet or on a stand close to a wall), we recommend fitting port bungs to the ports. This will reduce the bass 'boom' sometimes termed as overhang, and assist the loudspeakers to reproduce their best performance under these environmental conditions. 'Boom' is generally caused when bass energy from the loudspeaker 'excites' room modes and causes an accentuation at a particular frequency, or number of frequencies.

When fitting port bungs the overall bass extension will not be reduced, however bass energy/ output around the port tuning frequency will be reduced. This has the effect of reducing bass 'boom' while increasing bass clarity and apparent agility.

In all circumstances experimentation is highly recommended.

Running-In Your Speakers

Run your speakers in by playing normal music at low-mid listening levels for approximately 50-70 hours play time. You may find the sound will continue to improve even after the 70 hour mark.

This can be done naturally over time: like a fine wine the performance will improve with age.

Alternatively if you wish to run the speakers continuously on loop you can decrease the audible volume/presence by placing the speakers face-to-face so that the drivers/tweeters are directly aligned and as close as possible. Then connect the amplifier to your speakers so that one is as normal (in phase): positive to positive and negative to negative (red to red and black to black), and the other speaker out of phase: positive to negative and negative to positive inputs on the speaker.

Retention Bolt Adjustment

The new Silver Series has a bolt-through driver fixing to reduce cabinet colouration. Each bolt acts as a rigid brace, but also removes the need for conventional driver fixings as well, effectively decoupling the driver and front baffle to eliminate a further source of resonance.

NOTE: Should this bolt become loose over time, or has worked loose during transit, then please use the supplied hex key to tighten the bolt back up. This only needs to be a quarter turn after the strain has been taken by the bolt.

Guarantee

Both the craftsmanship and the performance of this product is guaranteed against manufacturing defects for the period of **five** years from the date of purchase (see conditions in the Important Safety Instructions booklet), provided that the product was supplied by an authorised Monitor Audio retailer under the consumer sale agreement.

To verify your manufacturer's warranty, please visit the online registration form at: **monitoraudio.com**

Owner Information

Product Details

Model: _____

Product Serial No: _____

Amp panel Serial No: _____

Date of Purchase: _____

Dealer Details

Dealer Name: _____

Address: _____

Post code: _____

E-mail address: _____

Monitor Audio reserves the right to alter specifications without notice.

MODEL	Silver 50	Silver 100	Silver 200	Silver 300	Silver 500	Silver C150	Silver C350	Silver FX
System Format	2 - way	2 - way	2 ½ way	3 - way	3 - way	2 ½ way	3 - way	2 - way
Frequency Response (-6dB)	52Hz - 35kHz	40Hz - 35kHz	38Hz - 35kHz	32Hz - 35kHz	30Hz - 35kHz	52Hz - 35kHz	40Hz - 35kHz	60Hz - 35kHz
Sensitivity (1W@1M)	87dB	88dB	89dB	90dB	90dB	90dB	90dB	87dB
Nominal Impedance	8 Ohms	8 Ohms	8 Ohms	8 Ohms	8 Ohms	8 Ohms	8 Ohms	8 Ohms
Minimum Impedance	4.1 Ohms @ 220Hz	4.5 Ohms @ 167Hz	4.7 Ohms @ 182Hz	3.5 Ohms @ 146Hz	3.1 Ohms @ 2.45kHz	3.7 Ohms @ 193Hz	3.2 Ohms @ 176Hz	4.0 Ohms @ 229Hz
Maximum S.P.L	110 dBA (pair)	112 dBA (pair)	114 dBA (pair)	116 dBA (pair)	117 dBA (pair)	112 dBA	113 dBA	110 dBA (pair)
Power Handling (R.M.S) Watts	100W	120W	150W	200W	250W	150W	200W	85W
Recommended Amplifier Requirements (R.M.S)	40 – 100W	40 – 120W	60 – 150W	80 – 200W	80 – 250W	60-150W	80 – 200W	30-85W
Bass Alignment	Bass reflex. HiVe II port system	Bass reflex: HiVe II port system	Dual chamber bass reflex with differential tuning. Twin HiVe port system	Bass reflex. Twin HiVe II port system	Bass reflex. Twin HiVe II port system	Sealed cabinet	Sealed cabinet	Sealed cabinet
Crossover Frequency	3.0kHz	2.8kHz	L.F.: 700Hz M.F./H.F.: 2.9kHz	L.F./M.F.: 570Hz M.F./H.F.: 3.5kHz	L.F./M.F.: 625Hz M.F./H.F.: 3.1kHz	L.F. 650Hz M.F./H.F.: 3.1kHz	L.F./M.F.: 830Hz M.F./H.F.: 3.2kHz	2.5kHz
Drive Unit Complement	1 x 5. 1/4" RST bass/mid driver 1 x 1" (25 mm) gold dome C-CAM tweeter	1 x 8" RST bass/mid driver 1 x 1" (25 mm) gold dome C-CAM tweeter	1 x 5. 1/4" RST bass/mid driver 1 x 1" (25 mm) gold dome C-CAM tweeter	2x 6" RST bass driver 1 x 4" RST mid-range driver 1 x 1" (25 mm) gold dome C-CAM tweeter	2x 8" RST bass driver 1 x 4" RST mid-range driver 1 x 1" (25 mm) gold dome C-CAM tweeter	2 x 5. 1/4" RST bass/mid driver 1 x 1" (25 mm) gold dome C-CAM tweeter	2x 6" RST bass driver 1 x 4" RST mid-range driver 1 x 1" (25 mm) gold dome C-CAM tweeter	1 x 6" RST bass/mid driver 2 x 1" (25 mm) gold dome C-CAM tweeter
Cabinet Dimensions (Excluding grille, terminals & out-rigger plates) (H x W x D)	270 x 165 x 240mm 10.58 x 6.12 x 9.716" (H x W x D)	375 x 230 x 300mm 14.34 x 9.176 x 11.1316" (H x W x D)	885 x 165 x 240mm 34.1316 x 6.12 x 9.716" (H x W x D)	1000 x 185 x 300mm 39.38 x 7.516 x 11.1316" (H x W x D)	1050 x 230 x 300mm 41.516 x 9.176 x 11.776" (H x W x D)	165 x 450 x 200mm 6.12 x 17.1116 x 7.78" (H x W x D)	235 x 560 x 240mm 9.14 x 22.116 x 9.716" (H x W x D)	250 x 310 x 130mm 9.1316 x 12.116 x 5.1316" (H x W x D)
External Dimensions (Including grille & terminals) (H x W x D)	270 x 165 x 269mm 10.58 x 6.12 x 10.516" (H x W x D)	375 x 230 x 329mm 14.34 x 9.176 x 12.516" (H x W x D)	885 x 165 x 269mm 34.1316 x 6.12 x 10.516" (H x W x D)	1000 x 185 x 329mm 39.38 x 7.516 x 12.516" (H x W x D)	1050 x 230 x 329mm 41.516 x 9.176 x 12.516" (H x W x D)	165 x 450 x 229mm 6.12 x 17.1116 x 9" (H x W x D)	235 x 560 x 270mm 9.14 x 22.116 x 10.58" (H x W x D)	250 x 322 x 147mm 9.1316 x 12.116 x 5.1316" (H x W x D)
External Dimensions (Including out-rigger plates and feet+spikes) (H x W x D)	N/A	N/A	918 x 232 x 307mm 36.116 x 9.16 x 12.116" (H x W x D)	1034 x 252 x 367mm 40.1116 x 9.1516 x 14.776" (H x W x D)	1083 x 297 x 367mm 42.58 x 11.116 x 14.776" (H x W x D)	N/A	N/A	N/A
Weight (each)	6kg	9.9kg	14.6kg	20kg	22.8kg	9.1kg	14.9kg	4.3kg



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Made In China**

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