

Silver Series 7G

Owners Manual



<u>Contents</u>

Spikes and Feet	2
For Wooden/Hard Floors	_2
For Carpeted Floors	2
Setting Up	2
2 Channel Positioning	_2
AV Positioning	3
Setting up the Silver FX	3
Silver AMS Dolby Atmos [®] Enabled Speakers	_4
Fixing Silver FX & Silver AMS to a Wall	4
Wiring	5
Single Wiring	5
Bi-Wiring	5
Bi-Amping	5
The Effects of Bi-Wiring and Bi-Amping	6
Port bungs	6
Running-In Your Speakers	_6
Retention Bolt Adjustment	7
Warranty	7
Owner Information	7
Specifications	8

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 noncarpeted, wooden/ hard floors or where spikes are inappropriate. All that is required is to fix them to the speaker base using the supplied bolts and hex keys.

You can check that the speaker is level on all sides by using a spirit level (not supplied). 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 and hex keys.

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. Ideally the speakers should be positioned approximately 6 - 10 feet (1.8 - 3m) apart and a minimum of 3 feet (91cm) from the side walls. The ideal distance from the rear wall varies depending on the speaker (see list below).

- 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 setting up the speakers, as environment and personal preference will differ with every installation.

If there is insufficient bass for example, try moving your speakers closer

to the rear wall. The opposite approach is recommended if there is excess bass. Also see the information on page 6 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.





English

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 distanced from the wall according to the requirements of the speaker, which are listed in the 2-Channel Positioning section (page 2). However due to AV receiver crossover filter settings, they may be positioned closer to the wall. Experimentation is advised.

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 C250 centre channel speaker should be positioned so that it is pointing at the viewing position and at approximate ear height.

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

- A. Side surround speakers
- B. Rear surround speakers

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

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 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 Bi-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.



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

In-Ceiling

When arranging the overhead channels in an Atmos system we would recommend using our three-way in-ceiling speakers. These employ a unique pivoting midrange/ tweeter module which offers a wider dispersion characteristic, and are ideal for Atmos duties. More information can be found on our website: monitoraudio.com

Please see below for ideal positioning of 2 or 4 Atmos speaker setups. Typically these would be in line with the front left and right speakers.





Silver AMS Dolby Atmos® Enabled Speakers

Our new Silver AMS speakers offer a dedicated solution and alternative to in-ceiling Atmos installations. They can be positioned directly on top of the front and/or rear speakers in a 2 or 4 Atmos speaker setup. Additionally and alternatively, the Silver AMS can also be wall mounted for use as surround or height speakers.



■●■Dolby Atmos

Fixing Silver FX & Silver AMS to a Wall

CAUTION: Always determine where the Silver FX or Silver AMS 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 speakers are 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 or Silver AMS. Please only use suitable fixings for the type of wall construction the speakers will be fixed to.

The Silver FX and Silver AMS comes with keyhole inserts. To fix the speakers to the wall, we would recommend using the wall fixing template enclosed within the packaging carton.

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.





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 a port bung in the affected speaker. 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 2) to a rear wall (such as on a bookshelf, positioned in a cabinet or on a stand close to a wall), we recommend fitting the supplied port bungs to the ports. With speakers that have 2 ports, such as the Silver 200, only one port bung should still be used per speaker.

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.

Warranty

Both the craftsmanship and the performance of this product is covered by the manufacturer's warranty against manufacturing defects provided that the product was supplied by an authorised Monitor Audio retailer under the consumer sale agreement. For the period of cover please refer to the product page on our website: monitoraudio.com for the product you have purchased.

When purchasing Monitor Audio products, please keep your receipt of purchase safe, as this validates your warranty.

Owner Information

Product Details

Model:	
Product 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.

Specifications

	Silver 50	Silver 100	Silver 200	Silver 300	Silver 500	Silver C250	Silver FX	Silver AMS
System Format	2 - way	2 - way	2 ^{1/2} way	3 - way	3-way	3 - way	2 - way	2 - way
, Frequency Response, In-Room (-6dB)	47Hz - 35kHz	35Hz - 35kHz	34 Hz - 35kHz	31Hz - 35kHz	27Hz - 35kHz	65Hz - 35kHz	Dipole/ Bipole 81 Hz - 35kHz	76 Hz - 35kHz
Sensitivity (2.83v @ 1m)	86dB	87.5dB	87.5dB	87.5dB	90.5dB	88.5dB	87.5dB	87dB
Nominal Impedance	8 Ohms	8 Ohms	8 Ohms	8 Ohms	8 Ohms	8 Ohms	8 Ohms	8 Ohms
Minimum Impedance	3.9 Ohms @ 250 Hz	4.9 Ohm @ 170Hz	5.0 Ohms @ 240Hz	4.0 Ohms @ 160Hz	4.1 Ohms @ 150Hz	3.9 Ohms @ 170Hz	4.1 Ohms @ 240Hz	4.0 Ohms @ 230Hz
Maximum SPL (single, free-field)	104dB	106dB	108dB	110dB	111dB	110dB	104dB	102 dB
Power Handling	100W	120W	150W	200W	250W	200W	85W	60W
Recommended Amp Requirements	40-100W	40-120W	60-150W	80 - 200W	80 - 250W	80 - 200W	30 - 85W	30 - 60W
Crossover Frequency	2.6kHz	2.3kHz	2.7kHz	L.F: 750Hz M.F/ H.F: 2.8kHz	L.F: 800Hz M.F/ H.F: 2.7kHz	L.F: 650Hz M.F/ H.F: 3.3kHz	2kHz	2kHz
Port Tuning Frequency	58Hz	42Hz	49Hz	40Hz	36Hz	N/A	N/A	N/A
Bass Alignment	Bass reflex. HiVe II port system	Bass reflex. HiVe II port system	Bass reflex Dual HiVe II port system	Bass reflex Dual HiVe II port system	Bass reflex Dual HiVe II port system	Sealed cabinet	Sealed cabinet	Sealed cabinet
Drive Unit Complement	l x 5 ^{1/4} " C-CAM RST Il mid-bass driver l x l" (25 mm) C-CAM Gold Dome tweeter with UD Waveguide II	1 x 8" C-CAM RST II mid- bass driver 1 x 1" (25 mm) C-CAM Gold Dome tweeter with UD Waveguide II	2 x 5 ^{1/4} " C-CAM RST Il mid-bass driver 1 x 1" (25 mm) C-CAM Gold Dome tweeter with UD Waveguide II	2 x 6" C-CAM RST II bass driver 1 x 3" C-CAM RST II mid-range driver 1 x 1" (25 mm) C-CAM Gold Dome tweeter with UD Waveguide II	2 x 8" C-CAM RST II bass driver 1 x 3" C-CAM RST II mid-range driver 1 x 1" (25 mm) C-CAM Gold Dome tweeter with UD Waveguide II	2 x 5 ^{1/4} " C-CAM RST II bass driver 1 x 3" C-CAM RST II mid-range driver 1 x 1" (25 mm) C-CAM Gold Dome tweeter with UD Waveguide II	l x 6" C-CAM RST II mid-bass driver 2 x 1" (25 mm) C-CAM Gold Dome tweeter with UD Waveguide II	l x 5 ^{1/4"} C-CAM RST Il mid-bass driver l x 1" (25 mm) C-CAM Gold Dome tweeter with optimised Waveguide*
External Dimensions including Grille and Terminals (H x W x D)	282 x 165 x 272 mm 11 ^{1/8} x 6 ^{1/2} x 10 ^{3/8} "	375 x 230 x 332 mm 14 ^{3/4} x 9 ^{1/16} x 13 ^{5/64} "	885 x 165 x 272 mm 33 ^{13/16} x 6 ^{1/2} x 10 ^{3/8} "	1000 x 185 x 332 mm 39 ^{3/8} x 7 ^{5/16} x 13 ^{5/64} "	1050 x 230 x 332 mm 41 ^{5/16} x 9 ^{1/6} x 13 ^{5/64} "	206 x 481 x 272 mm 8 ^{7/64} x 18 ^{15/64} x 10 ^{45/64} "	250 x 312 x 147 mm 9 ^{13/16} x 13 ^{5/64} x 5 ^{13/16} "	185 x 185 x 313 mm 7 ^{5/16} x 7 ^{5/16} x 12 ^{21/64} "
External Dimensions including Outrigger Feet and Spikes (H x W x D)	N/A	N/A	930 x 254 x 329 mm 36 ^{39/64} x 10 x 12 ^{61/64} "	1045 x 274 x 389 mm 41 ^{9/64} x 10 ^{25/32} x 15 ^{5/16} "	1095 x 319 x 389 mm 43 ^{7/64} x 12 ^{9/16} x 15 ^{5/16} "	N/A	N/A	N/A
Product Weight	5.6 kg 12 lb 6 oz	9.4 kg 20 lb 12 oz	13.7 kg 30 lb 3 oz	19.3 kg 42 lb 9 oz	22.5 kg 49 lb 9 oz	10.6 kg 23 lb 6 oz	4.5 Kg 9 lb 15 oz	4.0 kg 8 lb 12 oz

*waveguide optimised to comply with Dolby Atmos directivity targets.

Monitor Audio reserves the right to alter specifications without notice.

Manufactured under license from Dolby Laboratories.

Dolby, Dolby Atmos, and the double-D symbol are trademarks of Dolby Laboratories.



Monitor Audio Ltd. 24 Brook Road Rayleigh, Essex SS6 7XJ England Tel: +44 (0)1268 740580 Email: info@monitoraudio.com monitoraudio.com

©Monitor Audio Ltd. V1-2021

Read me, keep me or recycle me

