STUDIO Owners Manual



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Introduction

Studio is a high-performance loudspeaker system for music enthusiasts looking for absolute performance in a compact, affordable package. The uncompromising design ethos primarily embraces trickle down driver technology from the flagship Platinum II series.

Every detail of the signal chain has been considered to achieve neutrality, which required our design team to think in a very uncompromising fashion. The grille-less design, for example, ensures the speaker always performs at its optimum level and without concession. Bespoke floor stands have been created for the best possible foundation, matching design and performance impeccably.

Featured Technology

MPD High Frequency Transducer

An MPD (Micro Pleated Diaphragm) high frequency transducer has been designed in to provide incredible articulation due to the low mass diaphragm. The MPD transducer works by rapidly squeezing the pleats to produce a smooth, wide, naturally fast response way into the ultra-sonic band. As a result, the sound is more lifelike, releasing the high harmonic spectrum of every note without the distortion that blurs definition.

C-CAM (Ceramic Coated Aluminium/Magnesium)

C-CAM is an innovative alloy material originally developed by the aerospace industry. It exhibits ideal qualities for use as loudspeaker cones, being extremely rigid, yet light enough to yield high overall efficiency. C-CAM is formed from an alloy of aluminium and magnesium, which undergoes stress-relieving processes in manufacturing to avoid surface deformation and molecular weakness. A layer of pure ceramic (alumina) is deposited onto the surfaces to produce a completely rigid exterior. C-CAM cones are designed to have high resistance to bending stress. When formed into a cone, C-CAM material provides increased clarity and reduced distortion compared to conventional cone materials.

RDT II (Rigid Diaphragm Technology 2nd Generation)

RDT II is a composite 'sandwich' structure made from ultra-thin low-mass skins, bonded to a honeycomb NomexR core material. The overall thickness of the RDT II diaphragm is only 2mm, yet it exhibits 150 times the strength of a conventional loudspeaker cone. RDT II is a unique, innovative development conceived by Monitor Audio engineers for the new Platinum II series. It uses two skin materials with dissimilar mechanical properties. C-CAM is used for the front skin, while the rear skin is made from a woven carbon fibre. This combination is able to reduce distortion by over 8dB above 300Hz, which equates to a 60% reduction in the energy of harmonic components, making RDT II the lowest distortion cone technology in Monitor Audio's history.

The dual 4" RDT II drivers used in Studio are developed from the PL500 II, modified in this case to produce bass, as well as mid-range. The DCF 'Dynamic Coupling Filter' technology is also incorporated to optimise and reduce high-frequency cone break-up and increase the critical voice coil circumferential rigidity. As with Platinum II, Studio drivers are designed to be incredibly low in distortion and use the same magnetic design principles.

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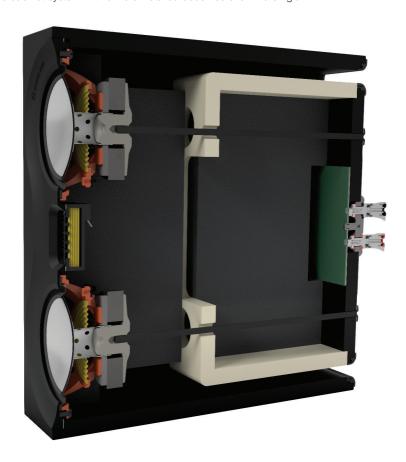
HiVe II (High Velocity, Low Noise Reflex Port)

Monitor Audio's port technology uses a straight rifled design to accelerate air flow and reduce turbulence. HiVe II technology has the ability to move air in and out much quicker than a conventional port, the result is fast powerful bass coupled with superior transient response.

The super slim Studio cabinet is tuned using two rear mounted HiVe II ports mounted at the top and bottom of the cabinet, this is to ensure the pressure inside the cabinet is balanced symmetrically. The large port surface area also ensures there is no turbulence and resulting air noise, which can be a problem in small cabinets.

Single Bolt Though Driver

Studio features our unique single bolt-through driver system, coupled from the rear of the cabinet. Tightened to a specific torque setting, it serves to provide the driver with an equal clamping force around the periphery, whilst ensuring the motor system is braced. Since this is effectively an additional form of bracing, the cabinet system with drivers installed becomes even more rigid.



Unpacking

Please ensure to allow sufficient clear floor area, and follow all pictorial guides on the product carton. Cut the tape sealing the carton, taking care not to cut deeper than the tape, fold back the top folds of the cardboard to expose the polystyrene and remove any accessories, but leaving the polystyrene in place. With the carton the right way up and opened, turn it over so the polystyrene end cap is now in contact with the floor. Lift carton up to reveal speaker/s, then lift speaker clear of packaging and remove protective bag.

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 tastes and room acoustics, however, the speakers need to be a minimum of 3 feet (91cm) from the side walls. They should be sited 8 - 18" from the rear wall depending on how the bass reacts to the room and your personal tastes.

When setting up the speakers, experimentation is strongly advised, as environmental acoustics and personal preference differ with every installation. If there is insufficient bass present for example, try moving your speakers closer to a wall. The opposite approach is recommended if there is excessive bass. If stereo imaging is being lost, try 'toeing-in' the speakers slightly. The sound should appear to originate from the centre point between the speakers, not the speakers themselves.



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Connecting Speaker Cables

Bare Wire Connection

Unscrew each binding post, and pass the bare wire through the exposed hole, and re-tighten.

Banana Plugs

Remove the red and black plastic plugs from the terminals, using pliers as necessary, and insert the banana plugs into the standard 4mm holes exposed.

Spade Connectors

Unscrew each binding post, and place the spade connector around the exposed thread, and re-tighten.

Running-In Your Loudspeakers

Run your speakers in by playing normal music or a running-in CD at low-mid listening levels for approximately 50-70 hours play time. Sound quality may improve further still after 70 hours. 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.

Upkeep of Cabinets

The finish of the cabinet can be maintained by regular dusting using a soft micro fibre cloth. The drive units should only be cleaned with a damp cloth if more than normal dusting is required.

Never use solvents or aggressive cleaning/polishing agents on your Studio Loudspeakers. When in doubt, test the cleaning product on an inconspicuous area on the cabinet and let it sit for several days before committing to its use on visible portions of the cabinet.

Retention Bolt Adjustment

The Studio loudspeaker 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.

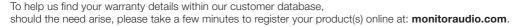
NOTE: Should this bolt become loose over time, or has worked loose during transit, then please use the supplied hex key to tighten the bolt back up. This only needs to be a quarter turn after the strain has been taken by the bolt.

Stands

New dedicated stands are available, to perfectly compliment both aesthetically and acoustically with the Studio loudspeakers. They feature sturdy 'no ring' construction to add safe support and isolate the speakers from resonant frequencies. The new stands' height has again been optimised for listening, aligning the speakers tweeters at ideal ear height within a seated listening position. For more information please visit our website: www.monitoraudio.com

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.



Owner Information

<u> </u>
Product Details
Product Serial No:
Date of Purchase:
Dealer Details
Dealer Name:
Address:
Post code:
E-mail address:

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Specifications

	Studio
System Configuration	2 Way – 3 driver
Frequency Response.	48Hz - 60KHz
Sensitivity (1W@1M).	86dB
Nominal Impedance	4 Ohm (2.9 Ohm Min @ 3.5kHz)
Maximum SPL (per pair, in room)	110dBA
Power Handling (RMS)	120W
Recommended amplifier power into 4 Ohms (RMS)	40-120W
System Alignments	Dual slot bass reflex - HiVe II port system
Mid - H.F Crossover Frequency	2.7kHz
Drive Unit Complement	2 x 4" RDT II bass/mid- range driver 1 x MPD high frequency transducer
External Dimensions (Including Terminals) (H x W x D)	340 x 156.2 x 361mm 13 ^{3/8} x 6 ^{1/8} x 141 ^{3/16} inch
Product Weight	7.58Kg (16lb 9oz)
Finishes Available	Satin lacquer finish in black, white and grey

Monitor Audio reserves the right to alter specifications without notice.



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