



## PRESS RELEASE

### FOR IMMEDIATE RELEASE MONITOR AUDIO LAUNCHES PLATINUM SERIES LOUDSPEAKERS

A union of radical technology, design and sublime craftsmanship propels Monitor Audio's new flagship range into the loudspeaker super-league

Summary: Platinum is Monitor Audio's new flagship range. The culmination of many years' R&D by Dean Hartley and his team, the Platinum range is the result of 'blue-sky' thinking in driver and cabinet construction involving radical new materials, processes and designs. Supremely esoteric in nature, the range sets new standards of aesthetic quality and performance in its class.

Platinum's innovatively shaped and braced cabinets are finished in exotic Santos Rosewood and Ebony natural wood veneers which are hand-selected, matched and coated with eleven layers of clear gloss piano lacquer. A luxurious high-gloss piano black finish is also available. The front baffles are hand-upholstered in Strathspey leather and loaded with new custom-developed drive units including, in a departure from tradition, a Ceramic Coated Aluminium/Magnesium (C-CAM<sup>®</sup>) ribbon high frequency transducer.

The initial four model Platinum line-up comprises a compact two-way speaker, the PL100, featuring one 6.5" Rigid Diaphragm Technology (RDT<sup>®</sup>) bass-mid driver and C-CAM high frequency ribbon transducer; a three-way floor standing loudspeaker, the PL300, comprising two 8" RDT bass drivers, one 4" RDT mid-range driver and a C-CAM ribbon transducer; the PL350C, a large three-way, four driver centre channel speaker utilizing the same driver complement as the PL300; and the PLW-15, a 1000 watt Class D active subwoofer with a 15" C-CAM driver. Custom-designed floor stands are available for the PL100 and PL350C.

Approximate prices (inc. VAT): PL100, £2300pr; PL300, £5000pr; PL350C, £2300ea; PLW-15, £2500 ea. Floor stands: PL100 stands, £350pr; PL350C stand, £250ea.

**Availability: September 2007**



## Introduction

For Platinum, the challenge was to introduce genuinely esoteric yet affordable performance and quality to the loudspeaker market; and to achieve the most natural sound possible by focusing on each and every design detail. Our ambition demanded an utterly purist mentality, the development of new materials and proprietary structures, exhaustive anechoic testing and plenty of good old-fashioned listening. Every component part is produced to exacting standards and each speaker is carefully hand assembled in England by our small team of technicians. The new Platinum series represents the epitome of British craftsmanship and quality, and demonstrates Monitor Audio's devotion to music and film sound reproduction.

## Technologies

All driver radiating surfaces are of Ceramic Coated Aluminium/Magnesium (C-CAM), an innovative alloy material, which is extremely rigid and yet remains light enough to yield high overall efficiency. Bass and mid-range driver cones employ Rigid Diaphragm Technology (RDT), designed to reduce mass and increase cone stiffness. A core of honeycomb Nomex material is sandwiched by ultra-thin skins of C-CAM, creating a structure which is extremely light but more rigid than a steel plate when formed as a laminate type construction. The new concave cone geometry has been refined by FEA analysis to provide a smooth frequency response and eradicate break-up. Front baffles, plinths, and the mid-range housings are cast from Anti-Resonance Composite (ARC®) material. This is a cast thermo-set polymer loaded with minerals to provide very inert, optimally damped components. ARC material is cast to form a Tapered Line Enclosure (TLE) for Platinum's mid-range driver. The TLE is a special tapered parabolic-shaped enclosure designed to prevent the propagation of standing waves and modal resonance. All models use HiVe2 port technology, a straight rifled port design which accelerates air flow and reduces turbulence.

## Drive units

C-CAM high frequency ribbon transducer.

A departure from Monitor Audio's traditional C-CAM tweeter domes, the ribbon design developed for the Platinum series uses an ultra-thin sandwich of C-CAM alloy suspended in a powerful transverse magnetic field of high energy NeFeB rare-earth magnets. The ribbon serves as both voice coil and radiating diaphragm, with every part of the ribbon driven directly and simultaneously without energy storage. With a mass of just 18mg, the ribbon diaphragm has a very fast transient response and exhibits extremely low inter-modulation and harmonic distortion. These characteristics coupled with a useable frequency range to 100 kHz allow the transducer to capture the leading edges and natural decay of the most complex musical sounds and their harmonics.



## Bass/mid-range drivers

The new die-cast alloy driver chassis features a vented rear section with an increased open area for low reflection. Using FEA, Monitor Audio has developed motor systems in which a focused magnetic gap and copper eddy rings work together to produce a higher level of linearity and lower distortion than was previously possible. Magnet plates and poles are CNC machined to very precise standards in order to provide ultimate consistency.

The dedicated mid-range driver used on the PL300 and PL350C utilises an ‘under-hung’ voice coil design to further optimise linearity and reduce distortion. High energy NeFeB rare earth magnets are used to provide high efficiency, and a large 2” (50mm) voice coil is specified to handle huge power input and dynamic impulses. This driver uses the direct drive RDT cone to provide a seamless mid-range and a natural integration with the bass and high frequency drivers.

The bass drivers used in the PL100, PL300 and PL350C use long-throw voice coil windings to provide large excursions at high power levels. The 8” bass drivers used in the PL300 and PL350C employ dual spider arrangements to provide stability at high excursions. Their RDT cones are directly driven by the voice coil and have no dust cap or joints to interfere with the driver response over the working band.

## Crossovers

All components are arranged to provide the shortest signal path and selected for the best possible sound quality after many hours of listening and evaluation by our engineers. Capacitors are metalised polypropylene film types, specially made by ICW ClarityCap. High power, low tolerance film resistors are used because they have no residual inductive effect. Special flat copper foil air-core inductors are selected to provide low internal resistance and add no discernable distortion to the input signal.

## Cabinet Design

All cabinets comprise multiple laminations of wood veneer in a rigid ply-wood construction shaped to form a one piece shell. Internally, the sides are non-regular, preventing the formation of standing waves. Monitor Audio has developed a unique ‘pin-hole’ internal bracing structure for the Platinum series, positioned to provide rigidity and integrity. Cabinet bracing is further enhanced by steel bolts that tie front and back panels to the ‘pin-hole’ brace and are tightened to a specific torque in order to tune out undesirable resonances. Bitumastic internal damping material is applied to all internal cabinet walls to provide a further level of resonance damping.



## Cabinet Finishes

Exotic natural wood veneers in Santos Rosewood and Ebony are hand-selected, matched and coated with eleven layers of clear gloss piano lacquer. The lacquer serves to enhance the exquisite grain definition and rich variety of colour within the veneer, which is applied by hand after the cabinet is made, to ensure that grain matching is precise and that no joints are visible. A lustrous high-gloss piano black finish is also available for all Platinum models and treated with the requisite multiple lacquer coatings to produce a deep, flawless shine.

All front baffles are hand-upholstered using Strathspey leather supplied by Andrew Muirhead. Strathspey is the best quality natural leather available and is associated with many high quality British brands from the furniture, automotive and marine industries. Strathspey leather conveys a distinct sense of luxury which blends with the beauty of Platinum's lacquered veneer finishes to provide an immediate impression of sheer quality in any room, however lavish the décor,

## Speaker Terminals and Feet

WBT Platinum signature terminals are considered to be of the highest quality available. Precision-machined and plated with pure platinum, they provide very low contact resistance and the best possible contact reliability. They feature accurate fine-pitch adjustment and are suitable for heavy duty cables with spade, 4mm plug or bare wire connection.

Adjustable spiked feet are used on the PL300, and PL100/PL350C floor stands. Machined to the finest tolerances from high-grade alloy and anodized to the most exacting standards, the feet accept 'bullet' spikes of high-tensile steel, chrome-plated to a mirror finish. For hard or solid wood flooring, a non-slip rubber pad is integrated with the foot design.

## PL100 Overview

A compact two-way speaker featuring one 6.5" RDT bass-mid driver and C-CAM high frequency ribbon transducer. The PL100 has been designed for a superior wide-band response with a dynamic and extended bass definition together with excellent high frequency resolution. Its ultra-inert cabinet provides an extremely articulate and expressive mid-range and lifelike neutrality. The extraordinarily agile RDT bass driver is capable of producing a transient response to match the ribbon high frequency transducer, providing consistent phase characteristics across the entire frequency band. Optional, dedicated floor stands are available, which can be bolted directly to the PL100 cabinet for increased stability and performance. The PL100 stand allows an increased level of tilt to enable optimum set up and positioning. Height is 600mm.



## **PL300 Overview**

Standing at nearly 1.2M tall, the PL300 is a beautiful three-way floor-standing loudspeaker with a driver configuration comprising two 8" RDT bass drivers, one 4" RDT mid-range driver and a C-CAM high frequency ribbon transducer. This reference loudspeaker possesses the ability to create the power and scale required to fill a larger room with impressively lifelike sound characterised by excellent dynamics and fine detail retrieval. The PL300 is a true wide-bandwidth speaker system, capable of reproducing a frequency spectrum ranging from 28Hz to 100 kHz.

The RDT mid-range driver is dedicated to producing frequencies between 550Hz and 4 kHz. Its ultra-light RDT cone is able to stop and start with remarkable precision to provide a supremely natural transient response. The proprietary Tapered Line Enclosure (TLE) for the mid-range driver is cast from Anti-Resonance Composite (ARC) material to form an inert chamber whose shape is designed to prevent the formation of standing waves. The TLE chamber is decoupled from the main cabinet housing by rubber isolation materials to eliminate the transfer of small-scale residual energy. The twin 8" RDT bass drivers are built to produce high excursions with extremely low signal distortion. This has been achieved by using specially shaped and optimised motor system arrangements involving the application of copper eddy rings to greatly improve linearity. Even at high power outputs the PL300 is designed to remain composed and free from any signs of distortion or fatigue.

The PL300 features a unique pin-hole bracing system, tie-bolt bracing and bitumastic damping pads applied to all surfaces. The heavy construction has been developed specifically to negate cabinet resonance and provide the ideal level of damping.

The PL300's crossover is mounted in the cast ARC plinth to eliminate magnetic interference and provide acoustic de-coupling from the speaker itself. It can therefore be regarded as 'outboard'. The ARC plinth also houses the bi-wire WBT terminals and provides convenient floor level access.

## **PL350C Overview**

PL350C is large three-way, four driver centre-channel speaker utilising the same driver complement as the PL300. It has the ability to reproduce frequencies from 32Hz to 100 kHz, making it potentially the widest bandwidth centre speaker available. Endowed with a neutral tonal balance and an accurate, dynamic sound, the PL350C's performance characteristics are matched with those of the PL300 to create a seamless front sound stage for a very high quality multi-channel audio/video system. Given that at least sixty per cent of the information generated by a home theatre system is reproduced by the centre-channel speaker, the virtue of having as accomplished a design as the PL350C in the role cannot be overstated. A dedicated two pillar stand for the PL350C is available to provide straight or tilted positioning for optimised set-up. PL350C height is 330mm.

## **PLW-15 Overview**

Underpinning the musical vitality of a Platinum multi-channel speaker system is the PLW-15, a range-matching sub-bass engine capable of releasing the deepest frequencies recorded on disc. Its 15" long-throw C-CAM driver is triple-suspended in a rigid die-cast alloy chassis and is endowed with a massive double-stack magnet motor system and 4-inch voice-coil. Powered by an integral 1000 watt (continuous) Class D amplifier, the driver has the speed and integrity to complement the performance of its range counterparts, creating the foundation for a seamless wide-band sound field, rich in natural dynamism, texture and tonality.

With the convenience of remote control, the PLW-15's subterranean potency can be fine-tuned to the loudspeaker system using sophisticated digital filters, and to room acoustics with a range of advanced DSP adjustments, including a ten-band parametric EQ and no fewer than four pre-set EQ positions. Its response can be optimised to meet the specific demands of music and film sound through individual input settings.

The PLW-15's talent for room-matching is also expressed by the lustre of its beautifully compact curvaceous cabinet, resplendent in a choice of Platinum veneers and radially braced and damped to enhance structural integrity.

**Monitor Audio Platinum series**

**PL100, £2300 pr**

**PL300, £5000 pr**

**PL350C, £2300 ea**

**PLW-15 £2,500**

**Floor stands: PL100 stand, £350pr; PL350C stand, £250ea**

**Availability: September 2007**

Monitor Audio designs and manufactures British loudspeakers of the highest quality. Since 1972 Monitor Audio has been at the forefront of loudspeaker technology, perfecting the implementation of metal drivers. It is renowned for exemplary speaker cabinet construction and finish. For more information on the complete range of Monitor Audio loudspeakers, contact Monitor Audio Ltd, 24 Brook Road, Rayleigh, Essex. SS6 7XL. Tel: +44 (0) 1268 740580, Fax: +44 (0) 1268 740589 E-mail: [info@monitoraudio.co.uk](mailto:info@monitoraudio.co.uk) , [www.platinumseries.co.uk](http://www.platinumseries.co.uk), [www.monitoraudio.co.uk](http://www.monitoraudio.co.uk)

