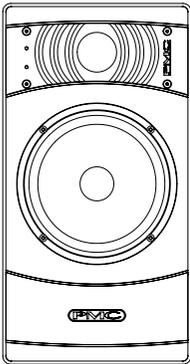


result6

User Guide



ATL™
Advanced Transmission Line

Model

Serial No.

Hand built by

PMC®



Important



Warranty Certificate

Please take a few moments to complete the warranty card at the back of this booklet (or register at www.pmc-speakers.com) as this not only records the purchase of your loudspeakers, but also provides you with an opportunity to make suggestions and provide feedback directly to PMC.

Product Support

For product support, accessories or servicing advice, please contact a PMC authorised dealer. See www.pmc-speakers.com.

Company Details

THE PROFESSIONAL MONITOR COMPANY LIMITED

Holme Court Biggleswade SG18 9ST UK

T +44 (0)1767 686300 F +44 (0)870 4441045

Reg No: 3328009

E sales@pmc-speakers.com W www.pmc-speakers.com

© 2017 PMC. All rights reserved.

Ref. no - 847 / stock code 15436

This document should not be construed as a commitment on the part of PMC. The information it contains is subject to change without notice. PMC assumes no responsibility for any errors within this document.

CE Conformity: PMC active loudspeakers conform to EC Directive LVD2006/95/EC and EMC 2004/108/EC. WEEE European directive: PMC is a member of a National Compliance scheme and has gained the associated certification of compliance from the Environment Agency with the registration WEEE/GJ0101WU.

WEEE EU Directive

This symbol on the product, and in or on its packaging, indicates that this product must not be disposed of with other household waste. It is the responsibility of the owner to dispose of waste equipment via a designated collection point for the recycling of waste electrical and electronic equipment. The recycling of waste equipment is an attempt to conserve natural resources and ensures that it is recycled in a manner that protects human health and the environment. For more information about where to dispose of waste equipment for recycling, please contact your local waste/recycling authority or the dealer from whom you purchased the product.



A message from Peter & Oliver Thomas



Our sole aim while designing loudspeakers is to recreate the true essence of an artist's intention, combining the maximum possible sonic resolution with solid engineering principles.

We believe that the same loudspeaker can be used throughout the entire audio chain, from composer to studio or film stage, post-production or mastering and then, finally, the consumer. We also think that a well designed loudspeaker should be able to excel regardless of the audio genre, and reproduce spoken word, rock, pop, or classical music with the same precision and accuracy. Our unswerving passion for getting our designs right has made this goal possible.

Thank you for choosing PMC products. Please read this user guide and install your new result6 monitors according to the advice you'll find in the following pages.

Congratulations - You have joined the elite

PMC: the authority for quality sound.

Stevie Wonder

Pinewood Studios

BBC

Tony Bennett

EMI

Warner Music

Coldplay

elbow

Metropolis Studios

Over more than two decades PMC has earned an unrivalled reputation for creating the world's finest professional loudspeakers. Simply put, our loudspeakers provide a reference for the world's highest profile productions and events. They are found at every stage of the creative process, from conception to recording and broadcast and, of course, in the home.

Our client list reads like a who's who of the sonically aware, with Stevie Wonder, Elbow, Coldplay, Brian May, Universal, EMI, Sony, Capitol Studios, Pinewood Studios, Dreamworks, Metropolis Studios and the BBC among the makers of movies and music who use our products.

Our loudspeakers were also used in the production of Titanic, The Bourne Supremacy, Game of Thrones, Skyfall, Finding Dory, the Pirates of the Caribbean franchise, and during broadcasts of the London Olympics, 2012.

UNIVERSAL MUSIC GROUP

Thomas Newman

Afrojack

Kraftwerk

JVC Studios

SONY

ESPN

Capitol Studios

Google

Contents

- 1 Important information
- 4 A message from Peter & Oliver Thomas
- 3 Congratulations – You have joined the elite
- 6 Contents
- 7 Important safety instructions
- 8 Introduction
- 9 Unpacking and care
- 10 Advanced Transmission Line (**ATL**) – How it works
- 11 System description
- 12 Connections
- 13 Running-in
- 14 Applications and accessories
- 15 Positioning
- 17 Positioning (Cont.)
- 18 Surround sound systems
- 19 Specifications
- 20 Service
- 21 The PMC range
- 22 Our meticulous care and attention
- 23 Warranty On-Line
- 24 Warranty Certificate – Part 1 – Your copy
- 25 Warranty Certificate – Part 2 – PMC's copy
- 26 Help us improve – Your Comments
- 27 Inspection certificate

Important safety instructions

- 1 Read and keep these instructions.
- 2 Heed all warnings and follow all instructions.
- 3 Do not use this apparatus near water.
- 4 Clean only with dry cloth.
- 5 Do not use solvents, abrasives, waxes or liquids as they may be detrimental to the finish.
- 6 Free flow of air behind the loudspeaker is necessary to maintain sufficient cooling. Do not inhibit airflow around the unit.
- 7 Do not install near any heat sources ie: direct sunlight, radiators or other apparatus that produce heat.
- 8 Do not use the loudspeaker with an unearthed mains cable or an unearthed mains connection as this may compromise electrical safety.
- 9 The amplifier is not disconnected from the mains supply unless the power cord is removed from the unit or the mains outlet.
- 10 Protect the power cord from being walked on or pinched particularly at plugs, sockets, inlets and outlets.
- 11 Unplug this unit during lightning storms or when unused for long periods.
- 12 There are no user serviceable parts inside. Refer all servicing to qualified personnel.
- 13 Servicing is required when the unit has been damaged in any way, produces abnormal odours, has been exposed to liquids, rain or moisture, does not operate normally, or has been dropped.
- 14 Only use with accessories, stands or brackets specified by PMC and they are securely fixed. Ensure they do not tip/fall and cause injury or damage.
- 15 Packaging can pose danger to the young and vulnerable. Ensure these items are stored or disposed of safely, and in accordance to your local legislation.
- 16 The result6 loudspeaker can produce high sound pressure levels (SPL's). Exposure to high SPL's has the potential to cause hearing damage. Adjust the system's sound pressure level so it remains within safe and comfortable limits.
- 17 Powerful magnets are employed in the result6 which may have a detrimental effect on magnetically-sensitive items if placed too close, such as CRT televisions, audio/video tape and cassettes.
- 18 Only clean with a dry lint free cloth. Do not use solvents, abrasives, waxes or liquids as they may be detrimental to the finish.
- 19 PMC has made efforts to provide accurate installation information and good quality fixings. However, PMC will not be held responsible or liable for injuries or property damage (direct, indirect or consequential) arising out of use or inability to use this product safely and properly.
- 20 NOTE: This product contains nuts.

Introduction

Thank you for choosing PMC active reference monitors. This guide provides installation and operating instructions for the result6 nearfield loudspeakers.

These monitors build upon PMC's world-class design pedigree, combining the finest drivers available with the unique **ATL™** (Advanced Transmission Line) bass-loading principle, sophisticated Class-D amplification and a pure analogue, active crossover.

PMC's unique **ATL™** technology uses contemporary materials to provide optimised absorption of unwanted mid-range energy within the cabinet, while extending bass output significantly with negligible harmonic distortion.

The drivers employed in the result6 monitors are bespoke PMC designs using natural materials. The 27mm precision soft-dome tweeter delivers ultra-high resolution and a neutral balance, and its perforated acoustic lens extends the response beyond 20kHz and controls dispersion, ensuring perfect integration through the crossover region. Meanwhile, the distinctive Diffraction Fins, developed especially for the result6, block edge reflections, focusing dispersion and further widening the already generous sweet spot PMC products can offer, giving a smoother HF response and even better off-axis response over a wider area. The bass driver uses an ultra-light and ultra-stiff doped-natural fibre cone to deliver unparalleled transient response and untainted mid-range.

The electronics built into each cabinet provide two channels of ultra-low distortion Class-D power amplification, with a pure analogue 24dB per octave crossover providing perfect driver optimisation and integration. A non-aggressive limiter-based protection system is also included in the result6. When switched on, the monitors' power LED is lit white; if it turns red, this indicates a fault. There is a second red LED which indicates if the limiter is functioning.

'Our loudspeakers are designed & hand-built in Britain by people who love audio & care about quality.'

Unpacking and care

The **result6** monitors are heavy for their size. Please take care when lifting them from the cartons, being particularly careful not to touch the bass unit or tweeter dispersion grilles.

PMC's **result6** active monitors are packed in heavy-duty protective cartons. Please retain these to ensure that the loudspeakers can be transported safely if the need arises in the future. If you dispose of the packaging please do so in an environmentally responsible and safe way.

What's in the box?

1x **result6** monitor
1x AC mains power cable
1x User Guide



This unit must be earthed.

Do not attempt to use these speakers if the packaging has been water-damaged.

Care and service

In normal usage PMC speakers should provide many years of trouble-free operation, but in the unlikely event that you suspect damage or failure has occurred do not attempt to repair the unit yourself. There are no user-serviceable parts inside. Contact your dealer for advice and a service return address.

Clean the cabinets only with a dry and lint-free cloth, and avoid the use of solvents as they may damage the finish of the unit.

ATL™

Advanced Transmission Line

How it works

PMC's unique **ATL™** (Advanced Transmission Line) enclosures have taken loudspeaker design to the highest level, using sophisticated cabinet construction, proprietary drive units, and patented absorption materials and techniques. The benefits are enormous compared to the relatively simple sealed and ported designs currently available elsewhere.

PMC's innovative approach places the bass driver near one end of a long cavity (the Advanced Transmission Line). This cavity is heavily damped with acoustic material specified carefully to absorb the upper bass and higher frequencies radiating from the rear of the bass driver. The lowest frequencies are allowed to pass down the line and emerge from the large frontal vent in the same polarity as the driver's direct radiation, the vent acting essentially as a second bass driver.

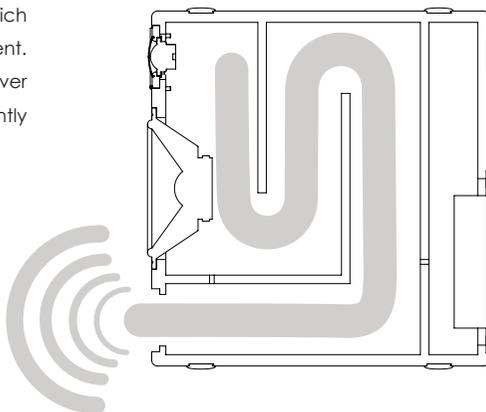
An important benefit of the **ATL™** approach is that the air pressure inside the cabinet, which loads the bass driver, remains consistent. This helps to maintain control of the driver over a wide frequency range and significantly

reduces LF distortion. Consequently, the upper bass and midrange detail is not masked by harmonic distortion and the result is PMC's characteristically transparent mid-range, fast, attacking bass, and outstanding clarity.

A further advantage of the **ATL™** design approach is greater bass extension and higher SPL capability compared to typical ported or sealed designs of a similar size – even if similar drivers were used.

Moreover, the very consistent bass driver loading brings the welcome benefit that the frequency response remains consistent regardless of listening level, and analytical auditioning can be conducted without needing high replay volumes just to achieve an optimal bass response. This is a unique and very valuable characteristic of PMC's Advanced Transmission Line.

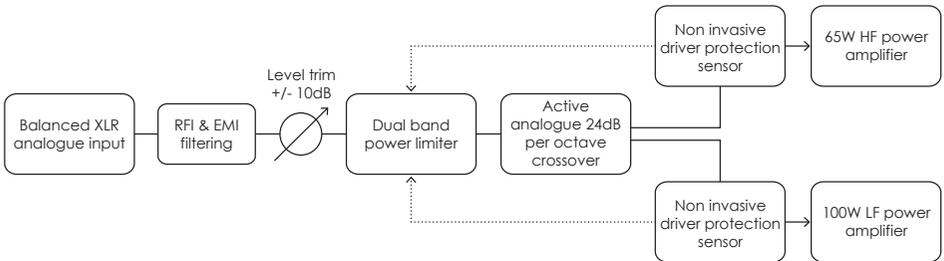
'No other 'bass loading' technology provides such resolution & tonal accuracy at all volume levels'



System description

Audio enters the result6 via a balanced, low-noise, low-distortion analogue input, and the signal path through the loudspeaker and independent power amplifier has been designed to be as short as possible to maintain these qualities throughout.

A total of 165W of high-efficiency amplification is provided, with 65W for the high-frequency driver and 100W for the bass unit. The amplifier design ensures that driver impedance variations with frequency are fully compensated to maintain a uniform frequency response.



Connections

Caution

To avoid potential damage, please ensure that the signal source is turned off before connecting or disconnecting your result6 active loudspeakers.

Connections

The rear panel of the result6 carries the connectors for audio and mains power.

Audio

The electronically balanced analogue input accepts 3-pin male XLR connectors, wired with Pin-1 screen (ground), Pin-2 signal positive (hot), and Pin-3 signal negative (cold).

Power

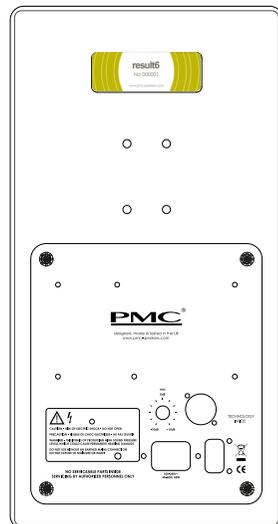
The IEC (C14) mains socket is provided with adjacent power switch. There is no AC voltage selector; the result6 monitor can accept any AC mains voltage between 90-132 and 180-264V.

Led indicators

As already noted, a warning LED on the front panel of the result6 lights red if the excursion limiting protection system is activated. If this happens, reduce the input level.



THIS UNIT MUST BE EARTHED



Running-in



When brand new, PMC loudspeakers will take a short period of use before they reach their full potential.

This is because the mechanical and acoustical characteristics of the bass driver and tweeter alter slightly after manufacture as the flexible elements in their construction relax and reach their optimum compliancy. The **ATL™** cabinet parameters are critically designed to load the bass driver accurately only when it has reached its long-term, optimal compliancy.

Consequently, during the initial running-in period of about 50 hours, the performance of the **result6** active monitor will change and improve. You will notice the bass tonality becoming fuller, more accurate and neutral, and the bass extension will increase significantly. As the tweeter relaxes the treble tonality also sweetens and integrates perfectly with the bass unit, and the sound staging improves.

50+ hours to run-in

Applications and accessories

Applications

The ultra-high resolution response of the **result6** monitors makes them ideal for the critical evaluation of any audio. Typically, they are used for nearfield monitoring of music, speech recording and mixing, in OB vehicles, radio on-air studios and TV sound control galleries, home theatre, high-end hi-fi, project studios, post-production, editing suites, music mastering, and for A&R evaluations.

Accessories

It is ideal if monitors are positioned with the acoustic axis at ear height, and kept stable during operation. The structure and materials used to support the monitor will have a bearing on how it performs. PMC offers purpose-designed high mass 'tube104 stands' for this purpose. Dedicated tilting wall brackets are also available to support the **result6** if required.

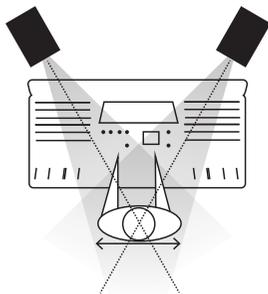


Positioning

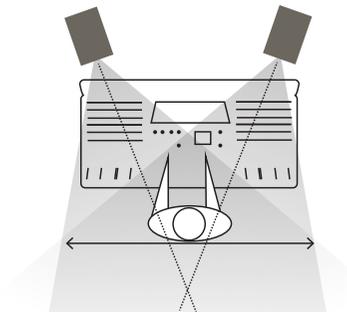
With their unique **ATL™** cabinet design, wide dispersion, ultra-low distortion, and smooth bass roll-off, PMC loudspeakers are more forgiving of difficult room conditions and placement constraints than conventional designs – you will be able to achieve a superb sound throughout the room with little effort. However, we encourage you to spend some time experimenting in your own room to achieve the very best results, remembering that small changes in location can often influence system performance significantly. The following guidelines are suggestions for a starting point to locate your new loudspeakers. Fine-tuning of their positioning can start from there.

Dispersion and Toeing-in

Most loudspeakers have a relatively narrow dispersion and are designed to be aimed directly at the listening position, as shown in the left-hand image below. However, the excellent stereo imaging which PMC monitors are known for is due, in part, to their wide dispersion characteristic, as shown on the right-hand image. To optimise the stereo imaging, PMC monitors should be angled so that their axes cross about 0.5 metres (2ft) behind the listening position (as illustrated below). Varying the 'toe-in' angle to adjust the actual point at which the speaker axes crossover will subtly affect the vividness of the audio soundstage.



Conventional monitors have narrow dispersion which restricts the width of the accurate listening area



PMC Monitors have wide dispersion to provide accurate sound across the widest possible listening area

Positioning (cont.)

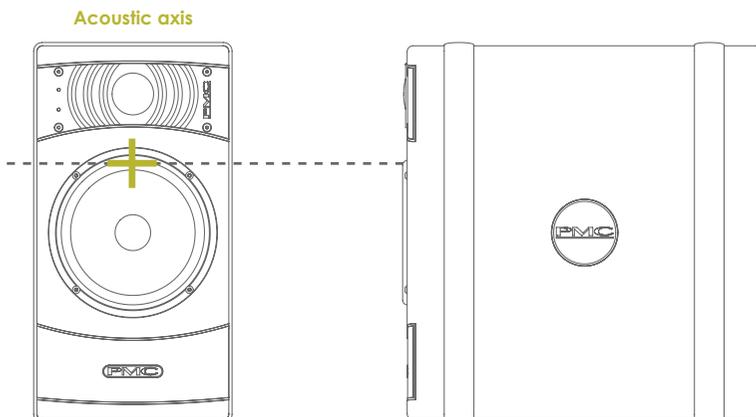
When initially positioning the loudspeakers, ideally they should be located at two of the three points of an equilateral triangle, with the listener at the third. If the monitors are spaced too far apart the stereo image will be wide but central definition will be impaired. Use a well recorded vocal track to judge the ideal placement.

Attention should be paid to the effect of reflective surfaces such as side walls and objects in close proximity to the loudspeakers, such as computer screens. Excessive nearfield reflections from these kinds of objects will blur the stereo imaging significantly, and may introduce unwelcome colouration of the sound.

TIP Place the speakers so that their front baffles are well forward of any objects placed between them, such as computer display screens.

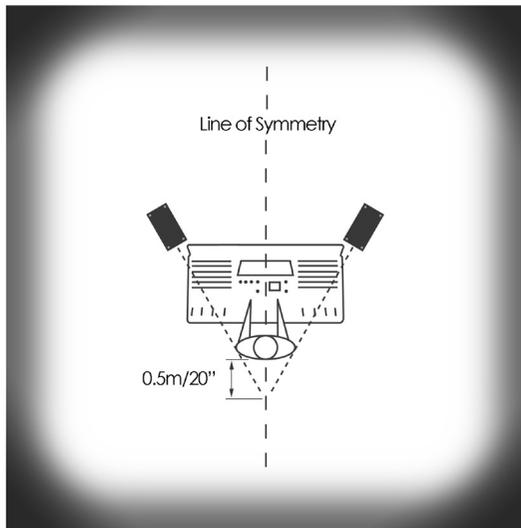
With regard to optimising the speaker height, the acoustic axis of all your **result6** cabinet is midway between the HF and LF drivers. This axis should be level with the listener's ears.

TIP To prevent vertical room modes from causing boominess, do not position the speaker such that the bass driver is at an even proportion of the room height, such as a half or a quarter.



Bass response

result6 active monitors can produce significant bass energy below the frequencies at which they become omnidirectional. As a consequence, it is important to consider the effect of the boundaries of the listening room when placing the monitors.



+ Bass Gain -

TIP

Ideally, the monitors should be placed more than 0.5 metres from the side and rear walls of the room so that reinforcement and cancellation (peaks and dips) of the bass output caused by wall reflections will be moved higher in frequency and thus less influential. This reduces the incidence of 'lumpy' or 'boomy' bass. Small changes in position can have profound effects on the bass response, so experiment to find the optimal position.

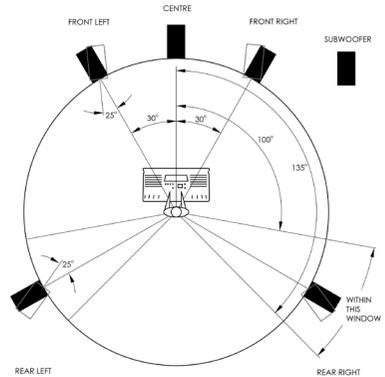
Surround sound systems

5.1 Systems

result6 monitors have been designed for perfect multi-channel music or movie playback. The following diagrams indicate the ideal speaker layouts.

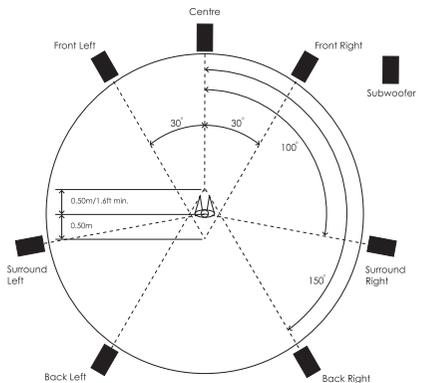
TIP The constraints of room size and shape will often force some loudspeakers to be placed closer or further from the listening position than is ideal. In such situations the time-alignment facilities of the surround processor or monitor controller should be employed to compensate.

TIP When bass management is being used the subwoofer carries not only the LFE signal, but also the low bass from some, or all, of the main monitors as well. The subwoofer should be placed at the front of the room, and the optimal position provides the smoothest low bass without boomy or weak notes.



7.1 Systems

In a system capable of 7.1 Dolby® Digital Surround EX™, DTS® ES™ or Blu-ray™ playback there will be two sets of surround speakers. The first pair (surround or side channels) should be positioned at 100°, and the second set (rear or back channels) at 150°. (The front centre axis is 0° while directly to the rear of the room is 180°).



Specifications*

Usable frequency response	45Hz - 22kHz
Maximum SPL	112dB @1metre
Effective ATL length	1.5m (4.9ft)
Crossover frequency	2kHz
Drive units	LF 170mm (6.5 inch), doped natural fibre HF 27mm Soft Dome
Cabinet dimensions	H 380 x W 199 x D 360 (mm)
Weight	8kg (17.6lbs)
Input connectors	Balanced analogue XLR, wired Pin-1 screen, Pin-2 hot, Pin-3 cold
Mains power	IEC connector, 90-260V
Amplifier section	LF 100Wrms, HF 65Wrms
Gain trim	-10dB to +10dB
Input impedance	> 8k Ω

Service

We are confident that your **result6** loudspeakers will afford many years of trouble-free listening of the highest order. However, in the unlikely event that they should require repair, all replacement parts will exactly match the performance of those originally installed, because for every loudspeaker we produce, we record the precise value of each component, along with the system response as a whole.

For any issues that might arise, or for advice and service requirements, the primary point of contact should be your authorised PMC dealer/distributor. If you do not have a local representative see www.pmc-speakers.com and click on 'where to buy' to locate them.

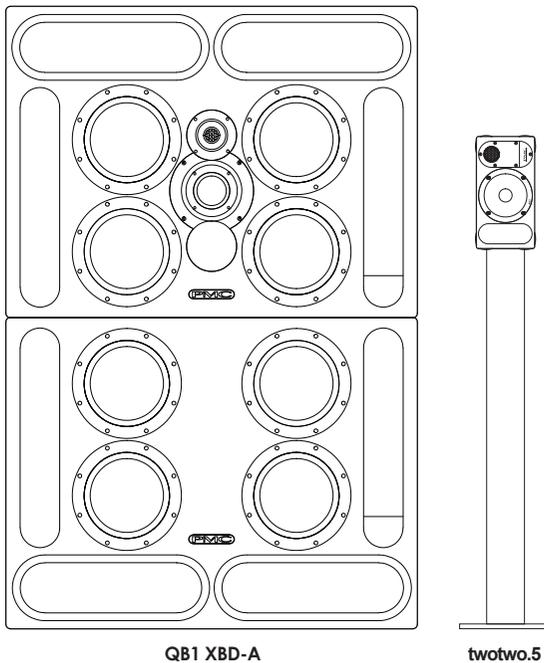
Important Note:

Please do not return any products to PMC directly without first contacting our service department by email at service@pmc-speakers.com



The PMC range

The PMC range of professional monitors currently spans 27 different models, from the enormous QB1 XBD-A flagship system down to the diminutive **twotwo.5** active speaker. However, every monitor is designed with the same care and attention, using shared families of drive units, crossover designs and amplifiers. As a direct consequence they all enjoy the same family characteristics of wide dispersion, low distortion, consistent voicing, and an even bass response regardless of listening level. This feature allows different sizes of monitors to be used in concert to create effective multichannel systems where space is at a premium.



QB1 XBD-A

twotwo.5

Our meticulous care and attention

All PMC loudspeakers are hand-built in the UK using components that are individually matched to our reference model. This includes the structural integrity of every cabinet, and the testing and recording of each individual component to guarantee adherence to our strict tolerances. In this way we can ensure your purchase sounds identical to the original design.

Each completed loudspeaker then undergoes a set of objective and subjective measurements. For example, frequency response sweeps ensure that the unit meets our exacting performance criteria, and critical listening tests are conducted against the reference model using a wide variety of audio material, from a benchmark BBC speech recording to carefully selected classical music, pop and rock tracks.



Warranty on-line

PLEASE ACTIVATE YOUR 2-YEAR
WARRANTY ON-LINE

GO TO WWW.PMC-SPEAKERS.COM AND CLICK ON REGISTER PRODUCT



If you do not have access to the Internet, please fill in the Warranty form on pages 25 and 26, and return to PMC.

WARRANTY CERTIFICATE - PART 1

Your copy to keep

Please complete and retain this page for your own records

Product

Serial No's

Date of purchase

Dealer's name

Dealer's address

Town

County

Postcode

Dealer's Telephone No.

Servicing and warranty issues – Please read the following carefully.

Non-UK clients

Contact your local dealer/distributor for the details of warranty repairs – see www.pmc-speakers.com and click on 'where to buy' for their details.

UK clients

In the unlikely event of a fault occurring with your PMC product please contact your dealer where the product was purchased.

Do not return a product to PMC without firstly contacting our technical department. If the product needs to be returned for service you will be issued with a Returns Authorisation number.

If a product is returned to PMC and subsequently is found to have no fault or a non-warranty fault there will be minimum charge of £50.00 plus the carriage for its return.

Proof of purchase is required for any claim covered by this warranty.

This product is warranted for a period of two years from the date of purchase or valid warranty registration which is either by receipt of the 'Our Copy' card or an on-line registration which must be made within ten days of purchase or receipt.

The warranty covers defects due to faulty materials or workmanship but does not cover defects arising from accidental damage, misuse or wear and tear. The warranty is void if any attempt has been made by persons not authorised by PMC to dismantle, repair or modify any part of the product.

Products must be returned using original packing material. This warranty does not cover damage in transit.

Note that the cost of the carriage to PMC is not covered by the warranty.

Returned products that are defective but no longer covered by warranty will be repaired or replaced at the discretion of PMC.

Please allow a minimum of 14 working days for return of warranty repairs.

This warranty does not affect your consumer rights under statutory law. This warranty certificate is only valid in the United Kingdom.

THE PROFESSIONAL MONITOR COMPANY LIMITED Holme Court Biggleswade SG18 9ST UK T +44 (0)1767 686300 F +44 (0)870 4441045

WARRANTY CERTIFICATE - PART 2

PMC's copy

Please complete and return this section – or simply complete the on-line registration at www.pmc-speakers.com and click on 'register product.'

Help us to improve
our products.
See over



Your comments — help us improve

We value all of our clients' comments. Please take a moment to help us improve:

If there is one thing we should change, what would it be?

Please tell us how your new PMC loudspeakers perform. Your comments may appear on the customer quotes section for this product on our website – but don't worry, the comments will be anonymous and your personal details will not be published.

Which magazines do you read?

HiFi

HiFi Choice

What HiFi

Stereophile

HiFi World

HiFi Critic

HiFi News

HiFi+

Gramophone

Pro

Future Music

Sound On Sound

Audio Media

Pro Sound News

Resolution

Audio Fanzine

IBE

Tape Op

Lifestyle

T3

Stuff

GQ

Mens Health

FHM

Loaded

Maxim

Esquire

On-Line

mixonline.com

gearslutz.com

avreview.co.uk

avforums.com

HiFi WigWam.com

What HiFi.com

SoundonSound.com

SoundonSound/forum

'We hope you enjoy your latest purchase as much as we enjoyed designing and building them – Thank you'

Inspection certificate

Every component employed within a PMC product is measured, tested, matched and recorded by hand. This analysis also applies to the final product to ensure you receive an identical replica of the original reference model.

- Enclosure finish
- Assembly & Wiring
- Driver installation
- Enclosure seal
- Level – Frequency
- Pair matching
- Listening test 1
- Listening test 2
- Final inspection
- Accessory pack
- User Guide



These have all been carefully checked by the builder of your **result6** series monitors



result6 is a trademark of The Professional Monitor Company Limited.

This document should not be construed as a commitment on the part of The Professional Monitor Company Limited. The Professional Monitor Company Limited will not assume responsibility for errors that may appear in this document. Information may be subject to change.

Copyright © 2017. All rights reserved.



T + 44 (0) 1767 686300
sales@pmc-speakers.com
www.pmc-speakers.com

PMC Stock Code: 15436
Ref No. 847 July 17