

IB1S-AIII

User Guide



Model

Serial No.

Hand built by

ATLTM
Advanced Transmission Line

PMC[®]



IMPORTANT



Warranty

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. To gain your extended warranty your product must be registered with us within 10 days of purchase.

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

A message from Peter Thomas:



Peter Thomas
Owner & Chief Designer



Our sole aim while designing loudspeakers is to recreate the true essence of an artist's intention, combining the ultimate level of 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 unwavering passion for getting it right has made this goal possible.

Thank you for choosing PMC products. Please read this user guide and install your new **IB1S-AIII** activated reference monitors bearing in mind the advice given within.

A handwritten signature in grey ink that reads "P. Thomas". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Congratulations - You have joined the elite.

PMC: the authority for quality sound.

Stevie Wonder

ESPN

BBC

Tony Bennett

JVC Studios

EMI

SONY

Coldplay

elbow

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 Elbow, Stevie Wonder, Coldplay, Brian May, Universal, EMI, Sony, Pinewood Studios, Dreamworks, Deutsche Grammophon and the BBC among the makers of movies and music who use our products.

Our loudspeakers were also used in the production of Titanic, Spiderman III, James Bond's Skyfall and Spectre, Finding Nemo, Pirates of the Caribbean III, and during broadcasts of the London Olympics, 2012.

UNIVERSAL MUSIC GROUP

Thomas Newman

Arcjack

Kraftwerk

Royal College of Music

Warner Music

Pinewood Studios

Capitol Studios

Google

User Guide

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Important Safety Instructions

- 1 Read these instructions and keep them in a safe place for future reference.
- 2 Heed all electrical safety warnings, including any on the loudspeaker itself.
- 3 Do not use the loudspeaker near water.
- 4 Do not install the loudspeaker near heat sources such as radiators, ovens or other very hot equipment, or in unventilated soffits or enclosures.
- 5 Do not attempt to service the equipment. There are no user-serviceable parts inside. Please refer all servicing to PMC authorised personnel.
- 6 Servicing is required when the apparatus is damaged, exposed to moisture, or exhibits a distinct or sudden change of operation or audio performance.
- 7 Unplug this product from both signal source and power during electrical storms, or when unused for extended periods of time.
- 8 Packaging material can pose danger to the young and vulnerable. Ensure these items are stored or disposed of safely.
- 9 The **IB1S-AIII** activated monitor can produce high sound pressure levels. Exposure to high levels of sound has the potential to cause hearing damage. Use care when adjusting the system volume to ensure sound pressure levels remain within safe and comfortable limits.
- 10 Very powerful magnets are employed in the **IB1S-AIII** activated monitor which may have a detrimental effect on magnetically-sensitive items if placed too close, such as CRT (tube-style) televisions or monitors, and media such as cassettes and videotapes.
- 11 The loudspeaker cabinet should only be cleaned with a dry, lint-free, cloth. Do not use solvents, abrasives, waxes or liquids as they may be detrimental to the finish.
- 12 To avoid damage to flooring when using the **IB1S-AIII** studio stands the user should determine the suitability of either spikes or protective glides.
- 13 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.
- 14 The power switch is located on the rear of the speaker. The mains cord is used as a mains disconnect device and should remain accessible at all times.
- 15 Only use at altitudes not exceeding 2000m – Only use in non-tropical climate regions.

Introduction

Thank you for choosing the PMC **IB1S-AIII** activated monitor. This guide provides installation and operating instructions.

Reference plug & play monitoring

The **IB1S-AIII** offers reference level quality monitoring in a three-way plug and play design. It is the ideal monitoring solution for discerning and highly critical professionals in small to medium sized control rooms for all applications including recording, mixing, broadcast, post-production, and mastering applications. No matter the material, whether it is the subtleties of vocal harmonies, strings, or extreme bottom end, their signature transparency and accuracy means that all critical decisions can be made instantly with complete confidence.

Precision soft dome high- and mid-frequency drivers provide ultra-high definition and an extremely wide, natural dispersion to create a vivid soundstage over a vast listening area. PMC's ATL bass loading technology, teamed with its ten-inch carbon fibre LF piston driver, provides identical dynamics and deep, defined bass at all monitoring levels.

At A Glance

- 3-way, plug & play reference monitor
- PMC's unique ATL™ (Advanced Transmission Line) bass loading technology
- 27mm HF, 75mm MF (soft dome), 10-inch carbon fibre and Nomex™ piston driver
- High resolution, ultra-low distortion
- Low fatigue with a flat response at all levels
- Vivid soundstage over a vast listening area
- Abundant headroom – PMC 600W Class-D Amplification
- Balanced XLR input with level control (17dB - 37dB)

Unpacking and Care



The PMC **IB1S-AIII** activated reference monitors are packed in heavy-duty protective cartons. Please retain the carton to ensure that the loudspeaker 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 **IB1S-AIII** activated monitor speaker
- 1x AC mains power cable
- 1x User guide



The IB1S-AIII reference monitors are heavy. Please take care when lifting from the carton. Do not attempt to use the loudspeaker if the packaging has been water-damaged. Please Note: These units must be earthed

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 as there are no user-serviceable parts inside. Contact an authorised dealer for advice. Only clean the cabinets with a dry and lint-free cloth as solvents may cause damage the finish of the unit.

Advanced Transmission Line

How it works



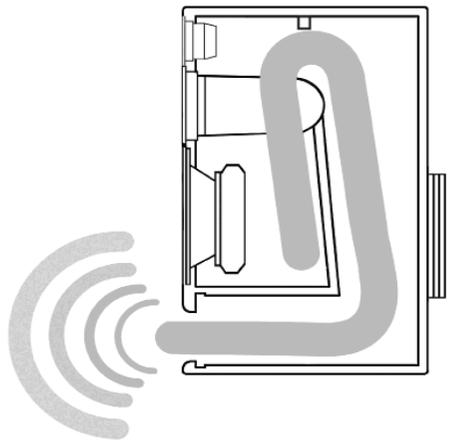
PMC's unique **ATL™** (Advanced Transmission Line) enclosures have taken loudspeaker design to the highest level, using sophisticated cabinet construction, proprietary drive units, and patented absorption materials and techniques. The benefits are enormous compared to the relatively simple sealed and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

PMC's innovative approach places the bass drivers 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 front vent which acts essentially as an extra 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 detail is not masked by harmonic distortion and the result is PMC's characteristically 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.

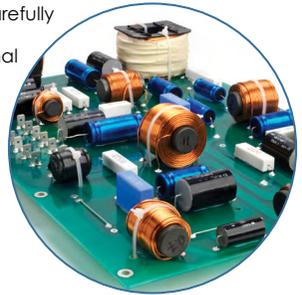


'No other bass loading technology provides such resolution and tonal accuracy at all volume levels'

System Description

The **IB1S-AIII** activated reference monitor features a very high-quality passive crossover coupled with PMC's own cutting edge 600W, Class-D amplification module built-in to the rear of the cabinet. This bespoke module is a development of the amplifiers used in PMC's active monitor and subwoofer products, and is designed for maximum fidelity, ultra-low distortion, and high damping that results in near-instantaneous stop/start control over the entire driver complement.

A precision, hand built, 24dB per octave crossover network employs 31 carefully specified and orientated components to divide the amplifier's output signal into three separate frequency bands for the individual drivers. This ensures each drive unit is working within its optimal range, both in frequency and dispersion, making for a highly natural, neutral balance.



When a sub-woofer is required to provide the .1/LFE channel within an IB-based multi-channel monitoring system, then **twotwo sub2** active subwoofer makes the perfect partner. This model employs an identical 10-inch long-throw low-frequency carbon fibre and Nomex™ piston driver providing identical characteristics.



Connections



Caution

To avoid potential damage, please ensure that the signal source is turned off before connecting or disconnecting your **IB1S-A/II** activated reference monitor loudspeaker.

Audio Connections

The electronically-balanced analogue line input accepts 3-pin male XLR connectors, wired with **Pin-1** screen (ground), **Pin-2** signal positive (hot), and **Pin-3** signal negative (cold). Unbalanced sources should be connected with the signal on pin 2, reference ground on pin 3, and the cable screen connected to pin 1. (**N.B.** The cable screen should not be connected at the unbalanced source end.)

The input sensitivity is adjustable with the adjacent rotary attenuator.

Power

An IEC (C14) mains socket is provided with adjacent power switch. There is no AC voltage selector; the **IB1S-A/II** accepts AC mains voltages between 100 and 240V.



NOTE: THIS UNIT MUST BE EARTHED

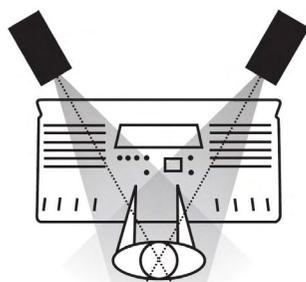
Positioning & Alignment

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.

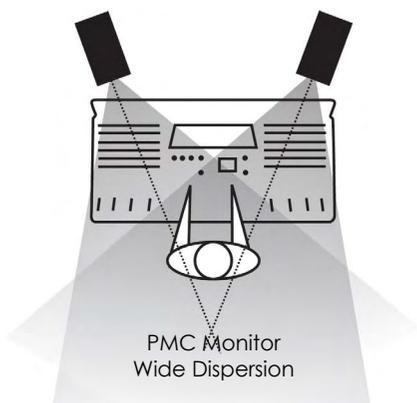
When initially positioning the loudspeakers, they should ideally be located at two of the three corners of an equilateral triangle, with the listener slightly inside the third corner. If the monitors are spaced too far apart the stereo image will be wide but central definition will be impaired. Use a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

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 this toe-in angle will subtly affect the vividness of the audio soundstage. A good music track with vivid vocals will help to determine the best position.



Conventional Monitor
Narrow Dispersion



PMC Monitor
Wide Dispersion

Positioning & Alignment

Attention should be paid to the effect of reflective surfaces such as side walls and objects in close proximity to the loudspeakers, as excessive nearfield reflections will blur the stereo imaging significantly and may introduce unwelcome colouration of the sound. 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 vertical placement, the acoustic axis of the **IB1S-AIII** is midway between the HF and MF drivers. This axis should be level with the listener's ears.

The highly flexible **IB1S-AIII** is also available in a horizontal format identified as the **IB1S-C-AIII**. This version is ideal when low-profile solutions are required, either as a centre channel in 5.1 or 7.1 surround systems, or in other height-restricted locations.

Optional, custom 33-inch (840mm) stands are available to raise the **IB1S-AIII** above a mixing console or work desk (pictured).

Bass Response

IB1S-AIII monitor loudspeakers 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 listening room's boundaries when placing the monitors.

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 become 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.

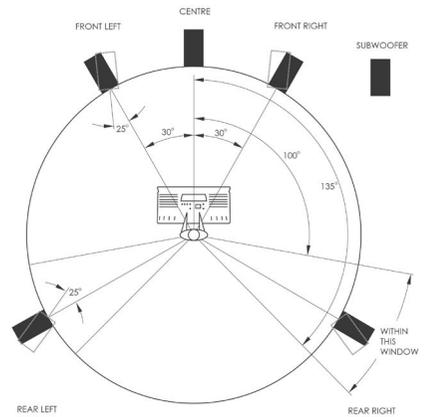


Positioning & Alignment

5.1 Systems

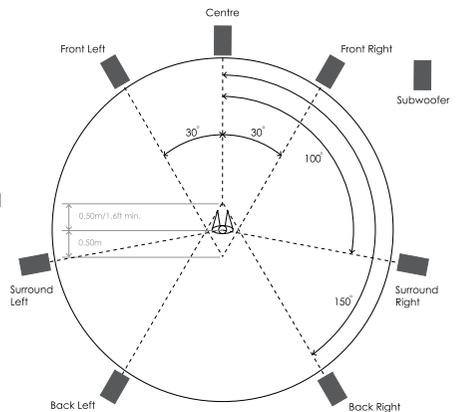
The **IB1S-AIII** monitor has been designed for perfect multi-channel music or movie playback, and the following diagrams indicate the ideal layout for the speakers.

- 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.
- The subwoofer carries the LFE signal as well as the low bass from some, or all, of the main monitors when bass management is being used. The subwoofer should be placed at the front of the room, the optimal position providing the smoothest low bass without boomy or weak notes.



7.1 Systems

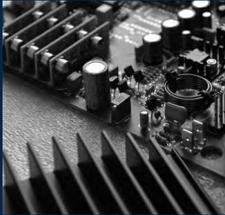
In a system capable of 7.1 Dolby® Digital Surround EX™, DTS® ES™ or Blu-ray™ playback, there will be two sets of surround speakers. The first pair (surround or side channels) should be positioned at 100°, and the second set (rear or back channels) at 150°. (The front centre axis is referenced as 0°,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



Dolby® Digital Surround EX™ is a registered trademark of Dolby® Laboratories. DTS® ES™ are registered trademarks of DTS® Inc. Blu-ray™ is a trademark of the Blu-ray™ Disc Association.

IB1S-AIII Specifications*

Type	Activated – Integrated single-channel amplification with passive, three-way precision crossover.
Useable frequency response	25Hz to 25kHz
Peak SPL @ 1M	116dB
Effective line length	2.4m (8ft)
Crossover frequencies	380Hz & 3.8kHz
Drive units	LF PMC 250mm/10-inch Carbon Fibre/Nomex™ piston driver MF 75mm doped fabric soft dome HF 27mm fabric soft dome
Finish	Studio black
Amplifier Power	600W rms
Amplifier Distortion	<0.05% (20Hz - 20kHz)
Input Sensitivity	Variable 17dB to 37dB
Amplifier Input impedance	16.5k Ω
Input connector	Balanced XLR
Mains input	IEC connector, 100V - 240V AC
IB1S-AIII Dimensions	330 x 740 x 510 mm WHD (12.9 x 29.1 x 20.0 inches)
IB1S-C-AIII Dimensions	740 x 330 x 510mm WHD (29.1 x 12.9 x 20.0 inches)
Weight (each)	45kg (99.2lbs)



Service

We are confident that your **IB1S-AIII** activated reference monitor will afford many years of trouble-free listening of the highest order. However, in the unlikely event of requiring repair all replacement parts will exactly match the performance of those originally installed because we record the precise value of each component along with the system response as a whole for every loudspeaker we produce.

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 please see www.pmc-speakers.com and click on 'Where to Buy.'

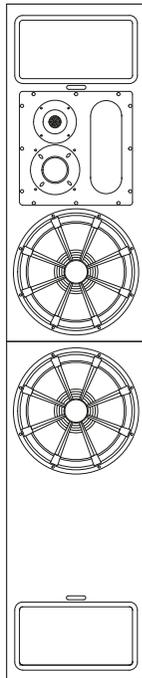


Important Note: Do not return any products to PMC directly without first contacting our service department by email on: service@pmc-speakers.com

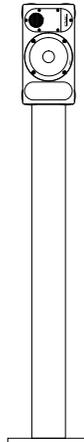
If the product is to be returned you will be supplied with an authorisation code.

The PMC Range

The PMC range of professional monitors currently spans 25 different models, from the enormous BB6 XBD-A flagship system down to the diminutive **twotwo.5** active monitor. However, every monitor system 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.



BB6 XBD-A



twotwo.5

Our Meticulous Care and Attention

All PMC loudspeakers are hand-built in the U.K. 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.

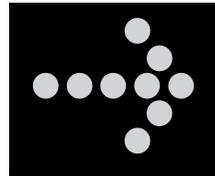
Each completed loudspeaker then undergoes a set of objective and subjective measurements. For example, frequency response sweeps ensure that the unit meets our exacting performance criteria, and critical listening tests are conducted against the reference model using a wide variety of audio material,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



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
- Listening test 1
- Listening test 2
- Final inspection
- Accessory pack
- User Guide



These have all been carefully checked by the builder of your monitor loudspeaker

Warranty On-Line

PLEASE ACTIVATE YOUR 5-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 and feedback forms on pages 23 and 24, 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 distribution 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 five 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

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



Help us Improve. Your Comments?

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

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'

Notes

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Notes

A series of horizontal dotted lines for writing notes.

IBIS-AIII 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.

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.

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www.pmc-speakers.com

PMC Stock Code: 14849

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