

twenty





Introducing the **twenty** range

The **twenty** series is the next generation of simply elegant, handcrafted British loudspeakers that follow in the lineage of world-wide acclaimed PMC designs. With PMC's innovative **ATL™** technology they provide an effortlessly natural, rich, room filling sound that would suggest a cabinet far greater in stature, making the **twenty** series ideally suited to all styles and sizes of interior.

The holistic design philosophy is akin to the globally acclaimed **fact®** range, with the understanding that all the elements have a bearing on the sonic and dynamic form of a loudspeaker. Every component used is judged for sound quality and longevity; hence our confidence in knowing you won't find a higher performing product as well as offering our unparalleled 20 year warranty.

When you hear the **twenty** series, you will realise just how much you've been missing.

A message from Peter Thomas –
arguably the world's smartest loudspeaker designer and a
truly obsessive audiophile



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. Our unswerving passion for getting it right has made this goal possible.

Listen to any of our products and you will hear why our speakers are accepted as the world's studio reference and perfect partner for your system at home.”



“The music makers”

Music: Elbow, Sade, Elton John & Leon Russell, Prince, Stevie Wonder, Coldplay, Kraftwerk, Peter Gabriel, Robbie Williams, Brian May, Eleanor McEvoy, Francis Rossi - Status Quo, JVC, Robert Fripp, SONY Bryston, Tori Amos, Underworld, Tony Bennett, Rough Trade Records, BBC Radio, BBC TV, Capital Radio, Universal Music, RTL, Emil, Berliner/Deutsche Grammophon, NFL (National Football League), teldex Studios, Hospital HDTV Broadcast Studios, Siemens, EMI, Royal Shakespeare Company, DECCA, The Moving Picture Company, Damien Hirst, ORF, The University of Music – Düsseldorf, The Royal School of Music, The Royal Astronomical Society, Warner Music, Capitol records, Chesky records, N.Y. University



PMC has earned an unrivalled reputation for creating the world's finest professional loudspeakers. Our loudspeakers provide a reference for the world's highest profile productions. They are found at every stage of the creative process, from conception to recording and broadcast, mastering and, of course, in the home. Our client list reads like a who's who of the sonically aware among makers of music and movies.



Movies: WALL-E, Inception, Tron, The Dark Knight, Gran Torino, Kung Fu Panda 1 & 2, Monsters vs Aliens, The Day the Earth Stood Still, Watchmen, Californication, Day of the Dead, Halloween, Hancock, Independence Day, HitchHikers Guide to the Galaxy, Hulk, The Fugitive, One Fine Day, The Sixth Sense, Dinosaur, Elf, The Passion of the Christ, Die Another Day, Planet of the Apes, Rollerball, Finding Nemo, Chicago, Freaky Friday, 2 Fast 2 Furious, Lara Croft Tomb Raider: The Cradle of Life, Pirates of the Caribbean: At World's End, Spider-Man 3, Terminator 3, American Beauty, Love Actually



Behind the scenes

Product Manager Keith Tonge and Chief Designer/
Founder Peter Thomas give an insight into
technology and ideas that have gone into the
making of the **twenty** series

Why the twenty series?

We have taken the 2-way models of the *i* series to their maximum potential with the recent launch of the Signature versions. It has taken a total re-think to move the parameters further forward. A blank canvas was required to achieve the goals of a more contemporary design and higher sonic performance levels. **KT**

What's in the name?

This year PMC celebrates 20 years of making industry leading products. With the continued commitment to our high quality manufacturing process, we also introduced a 20 year warranty for all our passive speakers. It was fitting to celebrate these key milestones. **KT**

What's in the new look?

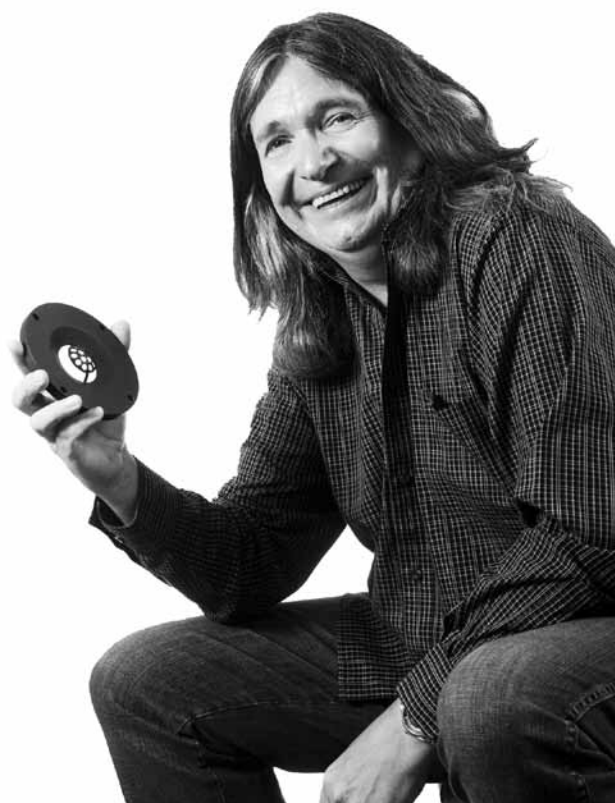
We wanted to offer something that was fresh, directional and dynamic with hints of the elegant design cues of the very successful **fact**® range. **KT**

What was the motivation for the angular cabinet?

The design inspiration came from both the aesthetic and technical side. The shape creates a more dynamic feel with a sense of progression that blends perfectly in both modern and traditional interiors. It also forms a tremendously strong low resonance structure ideal for a high performance **ATL**™ design. **KT**

Was anyone else involved in the product development process?

Yes, our worldwide customer base. We acknowledged the feedback from markets across the world and integrated these valid points into the new design. It was clear to us that we needed to advance some of the design elements in previous product ranges, and we certainly have. **KT**



Does the twenty series use existing drive units?

No, all elements are unique to the **twenty** series. The drive units are the next generation and offer increased performance levels in all areas. For example, in conjunction with SEAS of Norway we have produced a new 27mm SONOLEX soft dome tweeter. It has an incredibly smooth response and it also allows us to lower the crossover point similar to **fact**®, resulting in better image definition over a wider listening window. **PT**

What is new about the ATL™ transmission line in the twenty series?

All the cabinets in the range are manufactured using twin veneered HDF, of mostly 18mm Medite, making them significantly stiffer with a lower resonance. We found from **fact**® that the top of the cabinet incurs the greatest pressure in the transmission line design and adding heavy bracing to this panel, combined with the new radical shape significantly reduces cabinet colouration. This has a large positive effect on the entire bandwidth. **PT**

What has been done with the crossover design?

Again a totally new design was created, following the same philosophy of 24dB per octave slopes. The heavyweight fibreglass board has similar topology as **fact**®: using thick copper tracks to ensure high current handling. Solen capacitors are used in key sonic areas with hand wound laminate core inductors providing more transparency and greater bass definition. **PT**

ATL™

Advanced Transmission Line

Basically speaking

The world's leading professionals rely on the accuracy of PMC's designs every day to create much of the music and sound you hear. You can rest assured that what you hear from a PMC speaker is identical to the version approved by the artists themselves.

What they offer above a standard HiFi speaker

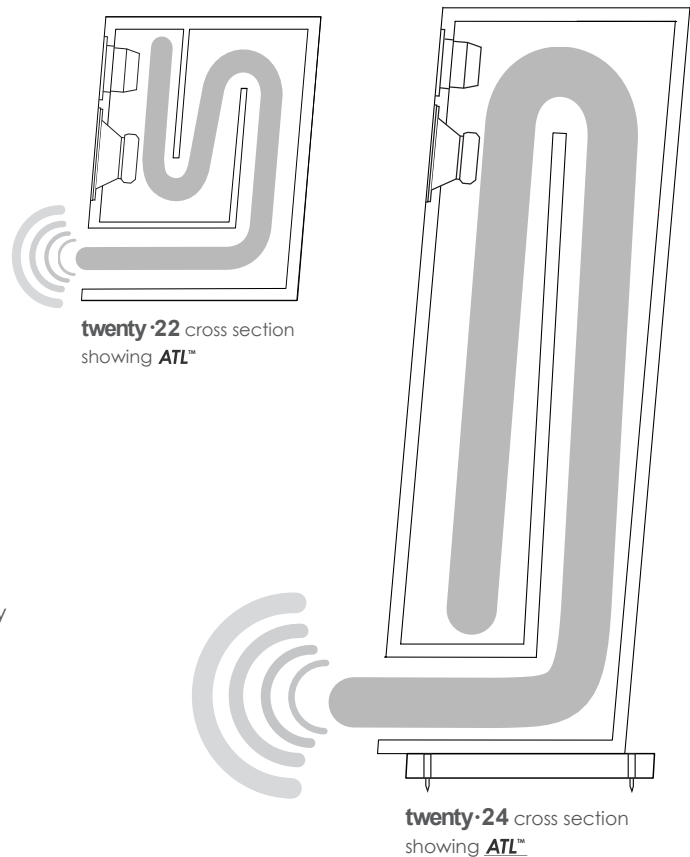
More detailed, more natural – They are extremely natural and achieve phenomenal levels of clarity - as if the musicians are with you in the room.

Room-filling - The sound they produce covers a massive area. So wherever you sit, you and other members of your family still hear everything.

Full, rich sound at any volume - You can listen at low volume levels and enjoy all the detail - ideal for late night listening.

Full, rich sound from a smaller cabinet - PMC's **ATL™** design maximises the cabinet volume by creating a long 'tunnel', rather than an empty box. This allows for a far fuller sound from a smaller cabinet.

Ease of drive - They are efficient and therefore can be driven by the vast majority of good quality amplifiers, which allows partnering to the widest range of electronics possible.



Ideal for surround - They all have an identical tonal balance and can be mixed and matched to create the ultimate surround sound system.

Easy to position – Front vented **ATL™** for easier room placement and wide dispersion.

Feel good - They are made in England by hand, by nice people who care, and love music.

Boast - You have joined the long list of world famous music makers and recording studios using PMC technology - see www.pmc-speakers.com and click on key clients.

Technically speaking

PMC's (Advanced Transmission Line) enclosures have taken loudspeaker design to the highest level.

A PMC transmission line design utilises sophisticated cabinet construction, PMC designed drive units and patented absorption materials and techniques.

The benefits are enormous compared to the relatively simple sealed and ported models available elsewhere.

The bass driver is placed at one end of a long tunnel (the transmission line), which is heavily damped with absorbent acoustic material. This material is specified to absorb the upper bass and higher frequencies that radiate from the rear of the bass driver. The lowest frequencies, which remain in phase, then emerge from the large vent at the end of the line, which essentially acts as a second driver. One advantage to this approach is that the air pressure loading the main driver is maintained, thus controlling the driver over a wide frequency range, which in turn significantly reduces distortion. A spin-off from the lack of distortion is that the upper bass and midrange detail is not masked by harmonic distortion residing in the very low frequencies.

The result is PMC's characteristic transparent midrange and fast attacking bass notes, all reproduced with outstanding clarity.

A further advantage of the transmission line approach is a cabinet that produces a higher volume and greater bass extension than a ported or sealed design of a similar size, even if identical drivers are used. Moreover, as the loading on the main driver is maintained at all volumes, the frequency response also remains consistent regardless of listening level.

Casual late night listening or analytical studio sessions can be conducted without the need for high volumes to achieve maximum bass response - a characteristic that is especially suited to both the home enthusiast and recording professional alike.

'No other technology provides such a huge, rich room filling sound'

The drive units

For 20 years, PMC has been manufacturing drive units for the most analytical and critical professional clients, for whom quality and reliability are of paramount importance. The **twenty** series models raise the bar yet further, through an intensive research and design process resulting in an even higher standard of performance.



The bass unit

The lessons learned from the successful **fact**® bass unit, which raised the bar significantly in both dynamics and subtle musical nuances, have been applied to the new **twenty** units. The natural fibre cone and hand-applied lightweight doping produces a drive unit capable of deep, rich, fulfilling bass as well as delicate vocal expression.

Due to the highly demanding and revealing nature of transmission line, the use of off the shelf bass units is not viable. Working with such high pressures, only a specifically designed, handmade unit can cope.

The tweeter

The relationship forged with the Norwegian acoustic engineers, SEAS, has allowed a cooperative development of a new 27mm soft dome SONOLEX™ tweeter. This new unit, with the inclusion of a dispersion grille provides a near holographic soundstage that encompasses a vast area - making the experience perfect for both stereo and surround sound systems.

The crossover

The purpose of a crossover is to divide the incoming signal from an amplifier into the frequencies best suited for each of the drive units within a loudspeaker; a key design element that demands the utmost precision, if the performance of the speaker is to be optimised.

The **twenty** series feature very sophisticated hand-built and matched crossovers. Combined with the handmade drive units they achieve 24dB per octave slopes, which is necessary to ensure each drive unit is used within its optimum frequency range, with the benefit of high power handling and excellent smooth response throughout the room.

Their construction starts with a military-grade glass-fibre board, upon which ultra-thick, pure copper tracks are added that provide unrestricted current flow.

All components are chosen after having passed thorough listening tests. Fine tuning is achieved further by careful placement and orientation on the board, which eliminates any electromagnetic interaction between components - the perfect frequency division and supply of the purest musical signal.



The terminals

Direct coupling to proven British high grade binding posts, gives the shortest possible signal path.

The cabinet

The ideal cabinet provides the stable platform for the drive units to operate perfectly, without adding its own sonic signature, integrating into and enhancing any home environment aesthetically.

ATL™ attempts to defy the laws of physics by providing bass extension that would normally be associated with reflex or sealed box cabinets of a much larger size. In order to do this the PMC cabinets experience considerably greater pressure levels and demands, resulting in a more complex, better engineered and more costly construction.

The **twenty** series cabinets achieve the impossible: combining a structurally rigid and stable platform, which allows the handmade components to work optimally, in a beautifully designed shape that rivals the finest design icons in the world.

A keen eye has been kept on global design trends and finishes, which has guided the selection of real-wood veneers and high lustrous finish options that are offered with the **twenty** series. The sole objective was to offer a dynamic modern look that is the perfect accompaniment to traditional and contemporary homes.



The grilles

Hidden powerful rare earth magnets within the cabinet fasten the warm black textured grilles to the cabinet, leaving the front baffle unblemished by unsightly fixings and a matt finished precision formed metal vent grille completes the elegant design.

“An understanding of proportion ensures a timeless elegance.”

The detail

It's the hidden details that are often forgotten but which play a crucial part in the overall performance of a product.

Every PMC model uses **ATL™** technology.

Unlike relatively simple sealed box and ported designs, the acoustic dampening material used in a transmission line speaker needs to be considerably more advanced. The level of understanding needed to ensure the correct acoustic absorbent foam is formulated takes a near rocket scientist. The PMC R&D team are leading specialists in the design and implementation of this technology.

There are many critical factors for the function of this element in an **ATL™** cabinet, which include the number of pores per square inch, the profile/shape, the position within the line, and the quantity.

To add further variables, each PMC loudspeaker can feature up to four differing formulas and profiles depending on cabinet size and bass response required.



“No other technology provides such a huge, rich, room filling sound.”





twenty·21



Due to its complex **ATL™** the **twenty·21** has significantly more dynamic grip and depth of bass than any other speaker of this size.

It is a very effective musical communicator, with fine warmth through the mid range and a sweet and extended treble. It all adds up to a dynamite design, capable of dominating the compact loudspeaker market by reproducing all genres of music with ease.



twenty•22



Oak

An astonishingly natural balance and high dynamic capability are the hallmarks of this speaker. The **twenty•22** conveys music in its purest form by utilising **ATL™** technology, which provides a high degree of control over an extensive frequency range. It creates a precise sound stage and profound bass performance from a stand-mount cabinet and thanks to its effortless nature can be enjoyed for long periods at high or low level.



twenty·23

Certainly the first and overwhelming impression of the **twenty·23** is an open, engaging and communicative loudspeaker. Its size defies both the depth of bass and scale of presentation by taking any music or film material in its stride. The sound is vivid and dynamic and delivered with authoritative bass. Close your eyes and their location dissolves.



Amarone



The plinth

Isolated stabilising plinths de-couple the cabinet allowing greater stereo focus and tighter defined bass.

twenty•24

There is no doubting the ability of the **twenty•24** to project the full scale of the recording in a larger room with complete authority and accuracy. The extended **ATL™** technology housed within these slender elegant towers delivers deep articulate bass and is a clear step up in performance with improved resolution in all areas.



Amarone



Reversible stainless steel spikes feature both points and ball-ended tips for use on carpeted or more sensitive hard flooring.





twenty years ago
Deep Purple



Specifications

twenty·21

Freq response	50Hz – 25kHz		
Sensitivity	87dB 1w 1m		
Effective ATL™	1.72m	5.6ft	
Impedance	8 Ohm		
Drive units	LF PMC twenty series, lightweight doped 5.5"/140mm cone with cast alloy chassis HF PMC/SEAS®, 27mm twenty series, SONOLEX™ Soft dome, Ferrofluid cooled		
Crossover freq	1.8kHz		
Input connectors	2 pairs 4mm sockets (Bi-amp or Bi-wire)		
Dimensions	H 325mm	12.8"	
	W 152mm	6.0"	
	D 277mm	11.0"	(+6mm grille)
Weight	5kg	11 lbs	

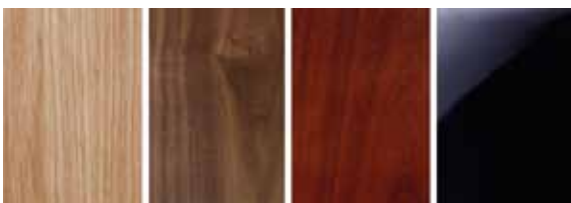


twenty·22

Freq response	40Hz – 25kHz		
Sensitivity	90dB 1w 1m		
Effective ATL™	2.0m	6.5ft	
Impedance	8 Ohm		
Drive units	LF PMC twenty series, lightweight doped 6.5"/170mm cone with cast alloy chassis HF PMC/SEAS®, 27mm twenty series, SONOLEX™ Soft dome, Ferrofluid cooled		
Crossover freq	1.8kHz		
Input connectors	2 pairs 4mm sockets (Bi-amp or Bi-wire)		
Dimensions	H 410mm	16.14"	
	W 184mm	7.25"	
	D 367mm	14.45"	(+6mm grille)
Weight	8kg	17.6 lbs	



Available finishes



Oak Walnut Amarone Diamond Black

twenty·23

Freq response	29Hz – 25kHz		
Sensitivity	87dB 1w 1m		
Effective ATL™	2.4m	7.8ft	
Impedance	8 Ohm		
Drive units	LF PMC twenty series, lightweight doped 5.5"/140mm cone with cast alloy chassis HF PMC/SEAS®, 27mm twenty series, SONOLEX™ Soft dome, Ferrofluid cooled		
Crossover freq	1.8kHz		
Input connectors	2 pairs 4mm sockets (Bi-amp or Bi-wire)		
Dimensions	H 918mm	36.14"	(+25mm spikes)
	W 152mm	6.0"	
	D 330mm	13.0"	(+6mm grille)
Weight	13.2kg	29 lbs	



twenty·24

Freq response	28Hz – 25kHz		
Sensitivity	90dB 1w 1m		
Effective ATL™	3.0m	9.8ft	
Impedance	8 Ohm		
Drive units	LF PMC twenty series, lightweight doped 6.5"/170mm cone with cast alloy chassis HF PMC/SEAS®, 27mm twenty series, SONOLEX™ Soft dome, Ferrofluid cooled		
Crossover freq	1.8kHz		
Input connectors	2 pairs 4mm sockets (Bi-amp or Bi-wire)		
Dimensions	H 1028mm	40.47"	(+25mm spikes)
	W 184mm	7.25"	
	D 419mm	16.5"	(+6mm grille)
Weight	21kg	46.2 lbs	







A series of thin, dark grey wavy lines that originate from the left and right edges of the page and converge towards the center, creating a sense of depth and movement. The lines are more densely packed in the center and spread out towards the edges.

Platinum

Twenty Year Warranty

To mark the 20th anniversary of the founding of the company, PMC offers a 20 year warranty on all passive consumer speakers. Designing and assembling all its loudspeakers in its own facility in the UK enables the company to keep complete control over quality procedures. Every single component, from the smallest resistor through to the loudspeaker cabinets are individually measured, graded and recorded to ensure absolute component value and performance. The records kept for each and every pair of speakers built ensures that in the rare event of failure replacement parts of an identical value can be supplied. It is this passionate attention to detail that has brought PMC the successes and recognition it has gained over the last 20 years.

The PMC family

All PMC loudspeakers are hand-built in the UK by people with passion who really care.

A computer generated frequency response sweep ensures that the design meets the company's exacting performance criteria. Listening tests confirm they match the reference model by using a wide variety of material, from a benchmark BBC speech test to classical music, pop and rock, then, and only then will the product be shipped accompanied with a unique test certificate which bares the builder's individual mark.

"We listen to every single product we build"



Ryan

RC



Maria

MP



Jane

JB



Phil

AM



Wayne

W



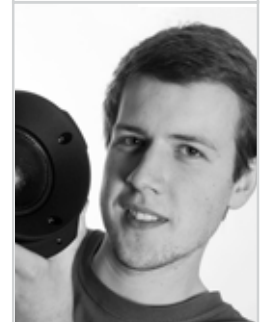
Marguerite

MR



Akeem

AA



Mike

Mike



Morris

MF



Geoff

GF

Award winning pedigree



1996-1997 Emmy Award
Adrian Loader/ PMC
Awarding winning achievement
for 'Sound Mixing - Special Class'



2004 What HiFi?
OB1 - ULTIMATE GUIDE
"Superb bass allied to a sweet,
precise treble and wide open
midband"



2006 HiFi Choice
wafer2 - BEST BUY
"The sound is comparable with
PMC's conventional speakers,
and that makes the wafer2 a very
impressive achievement"



2004 HiFi Choice
GB1 - BEST BUY -
ULTIMATE GROUP TEST
"Beautifully articulate with a
delicate top end - thoroughly
recommended"



2003 What HiFi?
IB1 - BEST FOR BASS
"An involving speaker, comfortable
with all types of music, and they
don't ignore the subtleties"



2004 HiFi News
DB1+ - AWARD WINNER
"A warm, rich vocal register, with
plenty of sparkle...and will go as
loud as anyone could want."



2004 HiFi News
OB1 - EDITORS CHOICE
"I would urge anyone looking
for a new speaker around this
price to consider auditioning
the OB1"



2006 What HiFi?
GB1, DB1+ AND TLE1 5.1 -
MULTICHANNEL SYSTEM
"They're a top choice if you enjoy
multi-channel music as well as
movie thrills and spills"



2007 HiFi Choice
EB1 - THE AWARDS -
BEST SPEAKER OVER £5,000
"Remarkably entertaining and
a capable loudspeaker."



2003 WhatHiFi?
FB1+ - SOUND & VISION
ULTIMATE GUIDE
"Exciting, controlled, yet a total riot"



2004 HiFi News
DB1+ - INDUSTRY AWARD
"Unburstable with room-filling
sound that belies its size. A class
winner..."



2003 Gramophone
OB1 - AUDIO EDITORS CHOICE
"I have found my new
reference, the OB1"



2006 HiFi Choice
TB2+ - BEST BUY -
ULTIMATE GROUP TEST
"Superior mid band
transparency"



2007 HiFi Choice
EB1 - BEST BUY
"Effortless quality"



2003 What HiFi?
OB1 - BEST BUY OVER £2000
"The impact of instruments
and depth of character
causes jaws to drop"



2001 HiFi Choice
FB1+ - RECOMMENDED
"This is an expensive speaker, no
question, but also an extraordinarily
capable one"



2007 What HiFi?
DB5.1+, WITH TLE1
MULTICHANNEL SYSTEM
"This is a system capable of
enormous clout and power,
combined with the kind of
detail you'd expect from a
extensive studio heritage."



2004 Gramophone
EDITORS CHOICE GB1
"The GB1 is difficult to fault"



2007-2008 What HiFi?
OB1, FB1+, CB6 & TLE1
REFERENCE SURROUND SYSTEM



HiFi Choice
FB1+ GOLD AWARD 2004
"Supremely transparent & free
from colouration, bass is solid &
controlled, the top ends sings
with open, vibrant energy"



2005 HiFi Choice
FB1+ - AWARDS 2005
"Silver award for the best
loudspeaker between £1000 - £2000"



2004 What HiFi?
STEREO - GB1
"Expressive and invigorating"



2003-2004 HiFi Choice
DB1+ - PRODUCT OF THE YEAR
"It's difficult to believe that a
speakers as small as the DB1 can
sound so big, lively and capable."



2003 HiFi Choice
OB1 - BEST STEREO SPEAKERS -
READERS AWARDS
"The OB1 pulling the majority of
the votes, in a landslide victory!"



DB1+
"If you are looking for speakers
that draw you into the music and
entertain, these are the ones!"



2011 SVI Trade Awards
fact.3 - 2011 Winner
Best Bookshelf Speakers



Hi-Fi Choice
Fact.8 - Best Loudspeaker Award
"This is then presented in one of
the most handsome cabinets we
have seen in a while. Virtues that
take it to the top of the class."



2006 HiFi World
IB1 - "Awesome"



Future Music
DB1S-AJ1 - Platinum Award 2010
"These should be at the top of
your shopping list"



2011 SVI Trade Awards
fact.8 - 2011 Winner
Best Floor-standing Speaker



Hi-Fi Choice
IB2i - Product of the year 2009
"The Pair swiftly reveal themselves
to be the latest in a succession of
illustrious reference speakers by
which rivals will be judged"



Hi-Fi Choice
GB1i - Recommended Compact
UK Floorstander 2011
"A fine all-round performer with
superior bass delivery"



2010 SVI Trade Awards
fact.8 - 2010 Winner
Best Floor-standing Speaker



2011 SVI Trade Awards
DS-001 - 2011 Winner
Best Amplifier



Hi-Fi News
PB1i Highly Commended 2011
"The PB1i Signature delivers an
infectious combination of power
and passion that cuts straight to
the heart of the music"



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