

# MAIN MONITORS MB3 & BB6



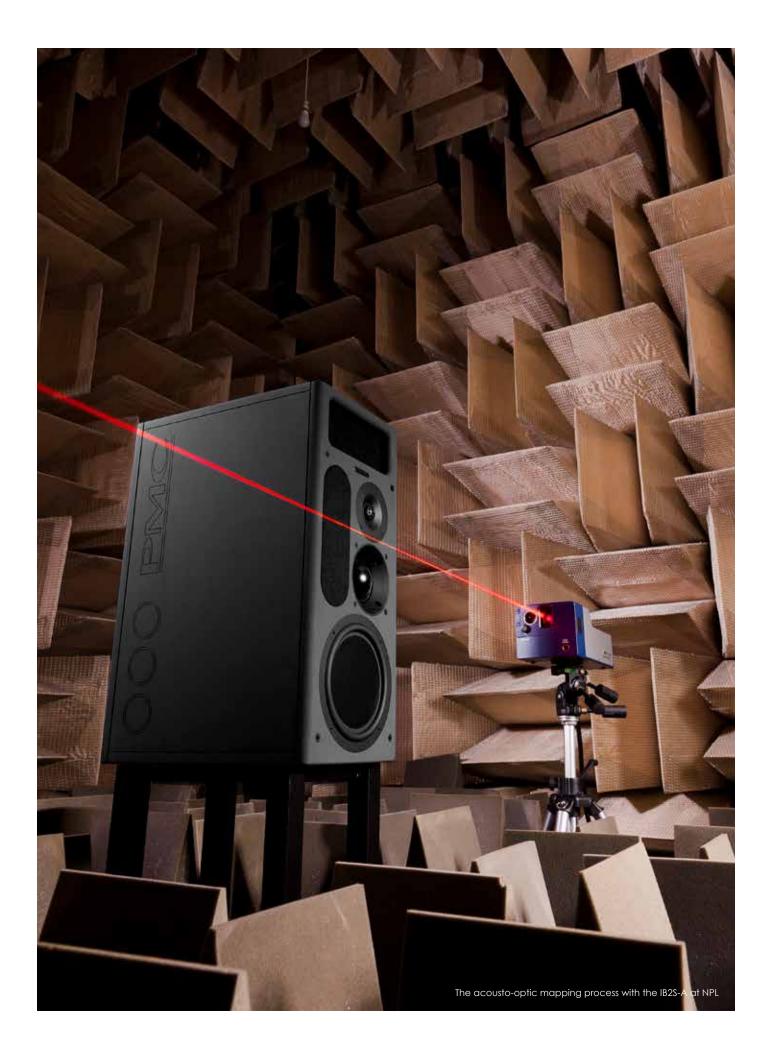


#### DRIVEN TO BE BETTER

From its foundation over 25 years ago, PMC has been driven by a passion for bringing engineering and emotion together, using precision in design to present music and sound as naturally as possible, as its creators intended. The company began with a belief that the reference monitoring of the day was simply not transparent enough for audio and broadcast engineers to do their jobs efficiently — and that PMC could improve on it. Today we understand, as we did then, that audio professionals need references that present them with the unvarnished truth. It's the only way to create lasting work that, in technical and emotional terms, really translates.

This approach, of employing advanced design to convey sound and feeling as accurately as possible, has underpinned every PMC design from the first, and it still keeps us awake at night. Like our products, we're forever driven to produce something better.

PMC Reference Monitoring. For accurate audio and music that moves you.



### IT'S A MATTER OF PRINCIPLE

Designing loudspeakers that work is relatively straightforward. The difficult part is ensuring that nothing distorts, flatters or otherwise colours your sound. We do this by combining designs that offer the highest possible sonic resolution with solid principles of engineering, construction and testing.

Sourcing components to build loudspeakers is also easier today than it's ever been — parts can be ordered in a matter of minutes with a couple of clicks of a mouse. But our designs can't be realised with off-the-shelf products; the only way we can guarantee the quality of what we do, and maintain our reputation, is to custom-design and build everything ourselves. So we consider every element and its audible effect on the overall design. We hand-select every component, hand-build every speaker, and test and listen to every finished product. Where appropriate, we apply innovations from other industries to push the boundaries of what was thought possible, forging partnerships with other pioneers.

With PMC, nothing is standard, as standard is just not good enough.









# LISTEN:

Listening is the most important thing we do — to our customers and to our products. With input from our users, and through continual testing and refinement, we create products that satisfy our rigorous criteria:

PMC monitors are serious analytical tools, references you can trust, musical but with forensic accuracy;

Whether you work at high levels or whisper-quiet, the tonal balance of what you hear will remain consistent, for however long you choose to work:

You will be able to make judgements faster and with complete confidence, and work for long periods without the risk of fatigue;

When your work sounds right on PMCs, it will translate accurately to other playback systems and listening environments, no matter how sophisticated (or simple) they may be;

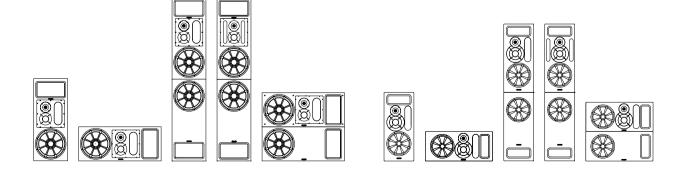
Whether you're composing, recording, mixing, or mastering, PMC will guarantee you the best-sounding results in the shortest possible time.



#### BUILDING THE NEXT GENERATION

With the launch of the MB3 and BB6, PMC is expanding its next-generation Main Monitor series of Advanced Transmission Line (ATL™) loudspeakers, first introduced with the QB1-A. The new designs are ultra-high-resolution free-standing or soffit-mounting active reference monitors with digital and analogue inputs, aimed at recording, mixing, mastering and outside broadcast applications. Available in single- or twin-cabinet (XBD) versions, both new models build on PMC's internationally respected MB2 and BB5, marrying the extended low-frequency response and dynamic range, nonfatiguing sound and extreme consistency and accuracy of PMC's groundbreaking ATL™ designs with the high power and headroom of the proprietary Control 1200 and Power 2400 Class-D amplification developed for the QB1-A.

Precision tools designed by engineers for engineers, the MB3 and BB6 combine all of these market-leading attributes with the latest generation of PMC's industry-leading drivers and intelligently applied cutting-edge DSP, in cabinets re-engineered to further improve imaging and dispersion. Instruments and vocals are reproduced more vividly and with greater presence and clarity than ever before.







#### THE MB3-A

Whether mounted in soffits or on stands, the MB3, with its distinctive 12-inch Radial™ bass driver, is ideal for medium-sized recording, mixing, mastering or outside broadcast facilities, or as rear surround speakers in larger multi-channel recording studios, film soundstages, or post-production houses. It produces an extremely smooth frequency response extending from 20Hz to 25kHz thanks to its **ATL™** technology, and is also capable of producing high SPLs, to a maximum of 126dB, but without the distortion and loss of definition that are frequently associated with a device of its size, and without becoming fatiguing when used for extended periods.

As with all PMC models, there is a matching low-profile centre channel (MB3-C-A) for use in surround configurations. Dedicated subwoofers are not a necessity, as the MB3-A cabinets already cover the 20-60Hz sub-bass frequency range with ease. For this reason, 'PointOne' channel inputs are included on the Control 1200 to accommodate the LFE or sub channel from multi-channel mixes.

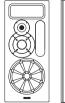
• Type: 3-way **ATL**™ active reference monitor

• Frequency response: 20Hz-25kHz

• Power per channel: 3225W (HF 275W, MF 550W, LF 2400W)

• Effective **ATL**<sup>™</sup> length: 3 metres

• Maximum SPL: 126dB









#### THE MB3 XBD-A

Featuring a second cabinet devoted exclusively to bass, with an additional single 12-inch Radial bass driver, the twin-cabinet MB3 XBD-A system offers still better dynamics than the MB3, with an additional 3dB of headroom below the bass crossover frequency of 380Hz, and allows larger rooms to be driven with an even smoother frequency response, producing a maximum SPL of 129dB. The twin XBD cabinets can be freestanding or soffit-mounted, and may be positioned vertically or side by side for greater flexibility. As with the MB3-A, a matching low-profile centre channel (MB3 XBD-C-A) is available for use in multi-channel arrays. Thanks to the wideranging frequency response of the twin-cabinet system, additional dedicated subwoofers are not a requirement.

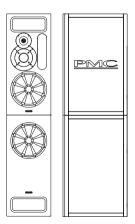
• Type: 3-way **ATL**™ active reference monitor

• Frequency response: 20Hz-25kHz

• Power per channel: 3225W (HF 275W, MF 550W, LF & LFX 2400W)

• Effective **ATL**<sup>™</sup> length: 2 x 3 metres

• Maximum SPL: 129dB









#### THE BB6-A

Building on the unique heritage and 25-year success of PMC's BB5, the BB6 offers the same wide dynamic range and frequency response, 15-inch Radial™ bass driver, unwavering tonal consistency at all output levels and high maximum SPL (up to 128dB) of its predecessor, but with the additional power and flexibility of PMC's proprietary Class-D amplification and DSP control. Flat down to a truly profound 17Hz and extending to beyond the limits of human hearing at 25kHz, the BB6-A may be used in larger recording, mixing, mastering or outside broadcast applications, and is equally at home in a tower configuration or mounted in soffits — although soffit-mounting is not essential, as the *ATL*™ bass response is sufficient without the LF gain achieved by soffit-mounting.

As with the smaller MB3-A, the BB6-A can form part of a multi-channel loudspeaker system, for which the separate BB6-C-A is available. Subwoofers are not a necessity, as the BB6-A speakers already cover the 20-60Hz sub-bass range with plenty of headroom. Dedicated 'PointOne' LFE inputs are therefore included on each Power 1200 amplifer for use with multi-channel content, including film soundtracks.

• Type: 3-way **ATL**™ active reference monitor

• Frequency response: 17Hz-25kHz

• Power per channel: 3225W (HF 275W, MF 550W, LF 2400W)

• Effective **ATL**™ length: 4 metres

Maximum SPL: 128dB











#### THE BB6 XBD-A

The twin-cabinet BB6 XBD-A extends the staggering performance specification of the BB6-A, taking distortion to new lows and pushing the maximum SPL output of this system to a powerful but tightly controlled 131dB thanks to its twin 15-inch Radial™ low-frequency drivers, and creating a smoother in-room response, even in the most expansive of listening environments. The BB6 XBD-C-A is available as the dedicated centre speaker for multi-channel systems, while the dedicated LFE inputs and effortlessly extended low-end response render stand-alone subwoofers unnecessary.

As with the MB3 XBD-A, the twin XBD cabinets can be freestanding or soffit-mounted, and positioned side by side or vertically. In the latter configuration, the BB6 XBD-A gives new meaning to the concept of the stand-alone tower speaker, reaching a height when floor-mounted of nearly seven feet.

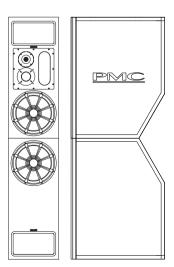
• Type: 3-way **ATL**™ active reference monitor

• Frequency response: 17Hz-25kHz

• Power per channel: 5625W (HF 275W, MF 550W, 2 x LF 2400W)

• Effective **ATL**<sup>™</sup> length: 2 x 4 metres

• Maximum SPL: 131dB





#### **Advanced Transmission Line**

# TECHNICALLY & SONICALLY SUPERIOR BASS

**ATL**™ bass-loading technology offers the following advantages over ported and sealed monitors:

- Exceptional LF extension with no colouration
- Identical tonal balance at all levels
- Higher SPLs without compression or listener fatigue
- More efficient
- A truly accurate response that translates

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.

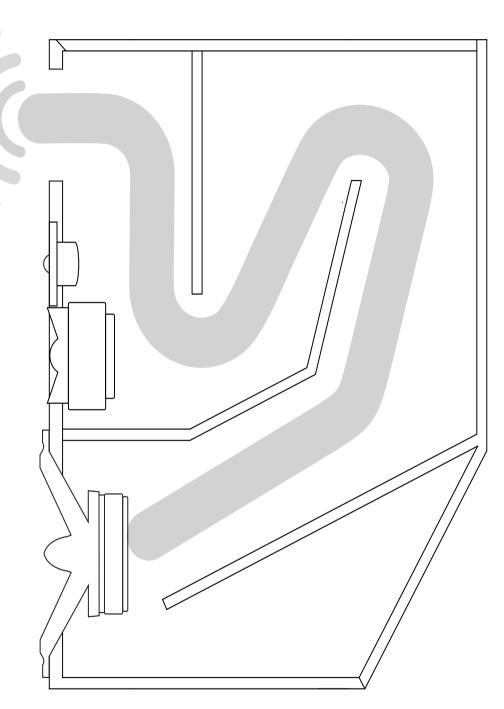
PMC's innovative approach places the bass driver near one end of a long cavity ATL™ (the Advanced Transmission Line). This cavity is heavily damped with acoustic material specified carefully to absorb the upper bass and higher frequencies radiating from the rear of the bass driver. The lowest frequencies 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 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 mid-range detail is not masked by harmonic distortion and the result is PMC's characteristically transparent mid-range, fast, dynamic 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 and driver specification.

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 the need for high replay volumes to achieve an optimal bass response. This tonal consistancy at all output levels is a unique and very valuable characteristic of PMC's Advanced Transmission Line.

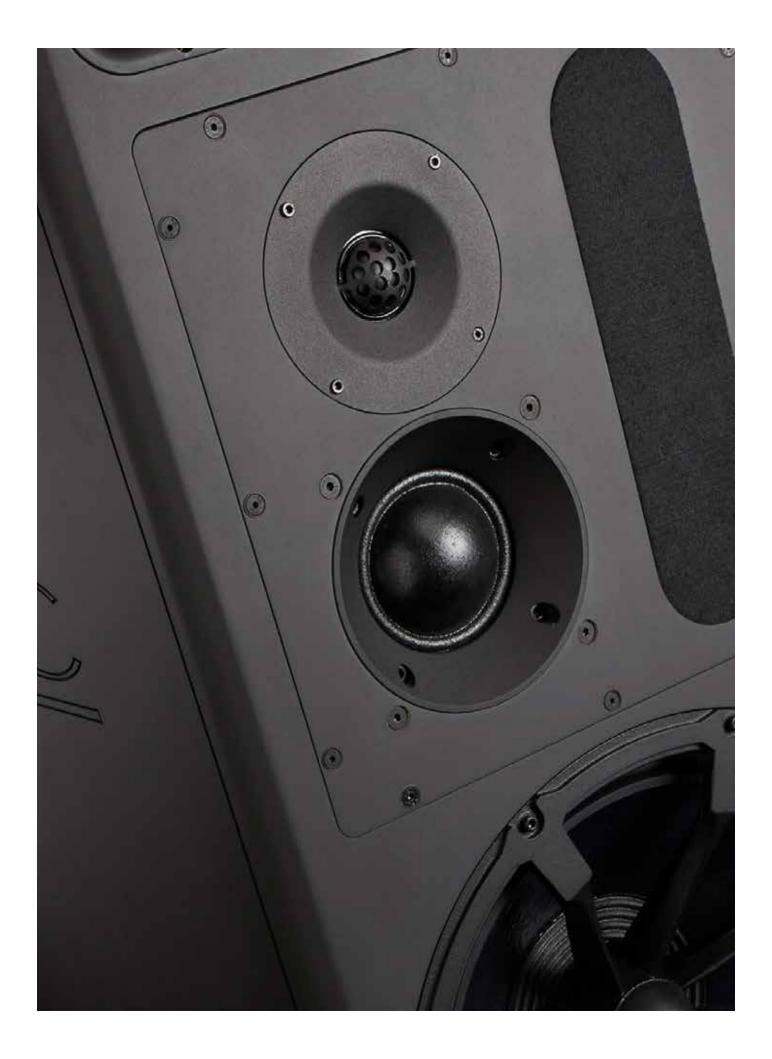


BB6 in cross-section showing  $\mathbf{ATL}^{\mathsf{TM}}$ 



#### SILENT CABINETS

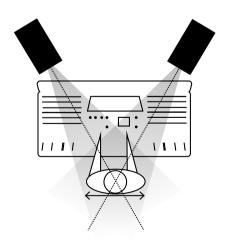
The highly engineered MB3 and BB6 cabinets play an integral role in the overall superb performance of the loudspeakers. Aside from incorporating the Advanced Transmission Line itself, the enclosure has to be of a high standard to eradicate colouration and audible cabinet talk. Highly braced, resonance-damped Medite® is used with offset HF and MF drivers, radiused edges and acoustically absorbent StealthBaffles™ at the boundaries, as deployed in the QB1-A design, to minimise edge diffraction effects. These details were formulated with the aid of pioneering acoustic research and measurements undertaken by PMC in anechoic environments at the UK's National Physical Laboratory, using opto-acoustic laser interferometry to map the soundfield and acoustic dispersion.



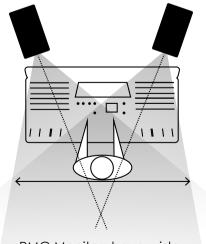
#### SUBLIME HIGHS & MIDS

The MB3 and BB6 both feature PMC's hand-built, precision-matched 34mm soft-dome HF driver and legendary 75mm fabric soft-dome mid-range driver, renowned for their natural, transparent sound and ultra-low distortion. The perforated acoustic lens on the high-frequency driver extends the treble response to well beyond the upper limit of human hearing, and controls dispersion to ensure close integration with the mid-range; the output of both drivers is meticulously combined to create an ultra-wide, stable image and entirely natural in-room response.

When designing the 75mm soft-dome, PMC's aim was to create a driver capable of reproducing vocals, in particular, with unparallelled authenticity and transparency — but to high SPLs when required. Each handcrafted unit takes seven days to produce, and has to pass exceptionally tight matching and testing criteria. The result is an extremely clean, neutral and natural-sounding mid-range driver, which means it can be used for long periods without inducing fatigue.



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



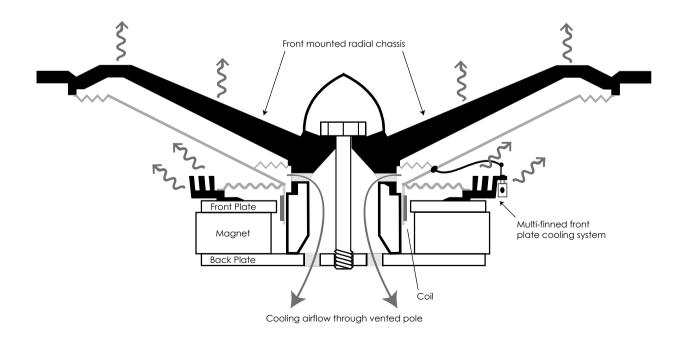
PMC Monitors have wide dispersion to provide accurate sound across the widest possible listening area



#### DEEP... AND MEANINGFUL

High-performance bass drivers present serious engineering challenges. The power requirements, especially at higher SPLs, produce a rapid build-up of heat in poor designs. Heat is itself damaging to performance, causing power compression effects: rapid loss of efficiency, lower output levels and higher distortion.

The Radial™ drivers employed in the PMC MB3 and BB6 are uniquely specified to drive  $ATL^{TM}$  loudspeakers, using PMC's own ultra-rigid, low-mass cone in a custom-built Radial basket. Not only is the chassis carefully constructed to conduct heat away from the driver's voice coil, the design also vents hot air through the back of the driver assembly. In this way, heat is efficiently dissipated even when the speakers are operating at high level, ensuring that distortion is negligible, reliability stays high, and frequency response and performance remain consistent at all output levels — irrespective of how long the speakers have been in use.





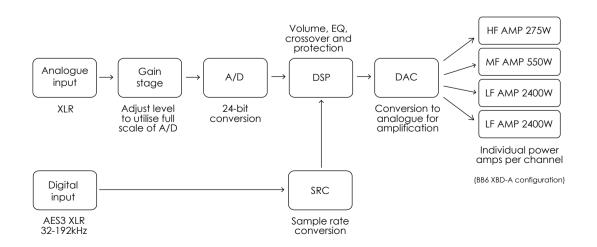
## ABSOLUTE POWER, UNCORRUPTED

Like the QB1-A, the new additions to the Main Monitor range are powered by PMC's own cutting-edge DSP-controlled Class-D amplification, which is designed, like the loudspeaker drivers themselves, for maximum transparency, resolution and fidelity with ultra-low distortion and a high damping factor. The DSP control of the amplifiers is employed minimally; it merely fine-tunes what are already high-specification precision designs to extract an even better performance from them.

A Control 1200 and Power 2400 amplfier is dedicated to each channel on the MB3-A, MB3 XBD-A and BB6-A, with an extra Power 2400 on the BB6 XBD-A, and each amplifier module has its own stable, linear and highly filtered power supply. The result is highly dynamic, near-instantaneous stop/start control over the drivers, a flat frequency response and immense headroom, no matter what the output level and frequency.







#### INTELLIGENT USE OF DSP

As already noted, the advanced DSP in the MB3 and BB6 is employed merely to finesse what are already extremely well-engineered designs. In addition to improving the performance of the amplifiers and facilitating the high-resolution 24-bit, 192kHz digital inputs, the DSP also optimises the response of the drivers, maximising their dispersion, guarantees a flawless 24dB-per-octave crossover, and provides non-invasive protection using modelled excursion limiting. Shelving EQ is also available via the DSP functions for in-room integration, along with four presets; these are ideal if custom balances are required. In a multiple-user system, they allow different users to have their own personal system settings.

The presets can be accessed via the wired RJ45 desktop remote control, which is supplied as standard with all four models, and features a backlit display and jog wheel. The remote also allows input switching, loudspeaker setup and fine-tuning to be carried out in real time from the listening position without the need to constantly refer to the rear panel of the monitors.



# MB3-A MB3 XBD-A BB6-A BB6 XBD-A







MB3-A MB3 XBD-A BB6-A BB6 XBD-A

#### MB3-A

**Type** Active 3-way, single-cabinet reference monitor

Usable frequency response20Hz - 25kHzMaximum SPL126dB @1metre

**Effective ATL**\*\*length 3m (10ft)

Crossover frequencies 380Hz & 3.8kHz

**Drive unit complement LF** PMC 310mm (12-inch) Radial<sup>™</sup> driver

MF PMC hand-built 75mm soft-dome driver

 $\ensuremath{\mathbf{HF}}$  PMC 34mm soft-dome tweeter with acoustic radiator

Amplifier power LF 1 x 2400Wrms, MF 1 x 550Wrms, HF 1 x 275Wrmsl/O

I/O Balanced analogue input, digital AES3 input

**Digital input** AES3, 24-bit, 192kHz

Analogue input sensitivity

Adjustable +4dB to +20dBu

EQ

LF shelf +/-8dB, HF shelf +/-8dB

**Remote control** Wired via RJ45, rotary volume -48.5dB to +15dB

Operational voltage 115V/230V

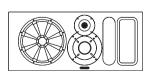
Cabinet dimensions H 870mm (34.2 inches) W 380mm (15 inches) D 535mm (21 inches)

Weight 49kg (108lbs) each

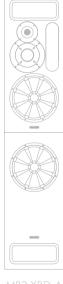
Available finishes Studio black



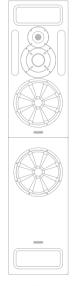
MB3-A



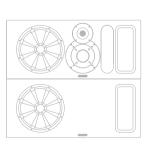
MB3-C-A (Horizontal centre)



MB3 XBD-.



MB3 XBD-C-A
(Vertical centre



MB3 XBD-C (Horizontal centre

#### MB3 XBD-A

Type Active 3-way, twin-cabinet reference monitor

20Hz - 25kHz Usable frequency response 129dB@1metre Maximum SPL Effective ATL™ length 2 x 3m (10ft) **Crossover frequencies** 380Hz & 3.8kHz

**Drive unit complement** LF 2 x PMC 310mm (12-inch) Radial™ driver

MF PMC hand-built 75mm soft-dome driver

HF PMC 34mm soft-dome tweeter with acoustic radiator

**Amplifier** power **LF** 2 x 2400Wrms, **MF** 1 x 550Wrms, **HF** 1 x 275Wrms

I/O Balanced analogue input, digital AES3 input

Digital input AES3, 24-bit, 192kHz

Analogue input sensitivity Adjustable +4dB to +20dBu EQ LF shelf +/-8dB, HF shelf +/-8dB

Remote control Wired via RJ45, rotary volume -48.5dB to +15dB

Operational voltage

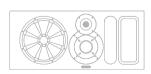
**Cabinet dimensions** H 1740mm (68.5 inches) W 380mm (15 inches) D 535mm (21 inches)

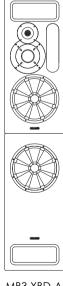
Weight 88kg (194lbs) each

**Available finishes** Studio black

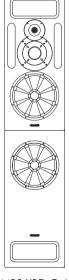




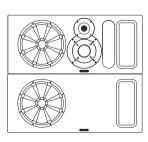




MB3 XBD-A



MB3 XBD-C-A (Vertical centre)



MB3 XBD-C-A (Horizontal centre)

#### BB6-A

**Type** Active 3-way, single-cabinet reference monitor

Usable frequency response17Hz - 25kHzMaximum SPL128dB @1metre

Effective ATL\*\*length 4m (13ft)

Crossover frequencies 380Hz & 3.8kHz

**Drive unit complement LF** PMC 380mm (15-inch) Radial™ driver

MF PMC hand-built 75mm soft-dome driver

 $\ensuremath{\mathsf{HF}}$  PMC 34mm soft-dome tweeter with acoustic radiator

 $\textbf{Amplifier power} \hspace{1cm} \textbf{LF 1 x 2400Wrms, MF 1 x 550Wrms, HF 1 x 275Wrmsl/O}$ 

I/O Balanced analogue input, digital AES3 input

**Digital input** AES3, 24-bit, 192kHz

Analogue input sensitivity

Adjustable +4dB to +20dBu

EQ

LF shelf +/-8dB, HF shelf +/-8dB

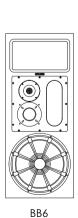
**Remote control** Wired via RJ45, rotary volume -48.5dB to +15dB

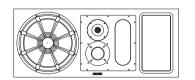
Operational voltage 115V/230V

Cabinet dimensions H 1040mm (40.9 inches) W 432mm (17 inches) D 790mm (31.1 inches)

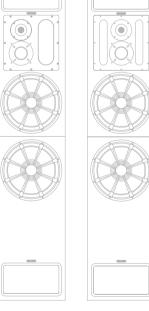
Weight 73kg (161lbs) each

Available finishes Studio black

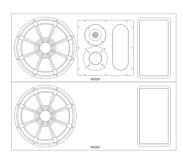




BB6-C (Horizontal centre)



BB6 XBD-C
(Vertical centre



BB6 XBD-C (Horizontal centre

#### BB6 XBD-A

**Type** Active 3-way, twin-cabinet reference monitor

Usable frequency response17Hz - 25kHzMaximum SPL131dB @1metreEffective ATL\*\*length2 x 4m (13ft)Crossover frequencies380Hz & 3.8kHz

**Drive unit complement LF** 2 x PMC 380mm (15-inch) Radial™ driver

MF PMC hand-built 75mm soft-dome driver

**HF** PMC 34mm soft-dome tweeter with acoustic radiator

Amplifier powerLF 2 x 2400Wrms, MF 1 x 550Wrms, HF 1 x 275Wrms

I/O Balanced analogue input, digital AES3 input

**Digital input** AES3, 24-bit, 192kHz

Analogue input sensitivity

Adjustable +4dB to +20dBu

EQ

LF shelf +/-8dB, HF shelf +/-8dB

**Remote control** Wired via RJ45, rotary volume -48.5dB to +15dB

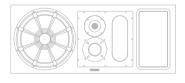
Operational voltage 115V/230V

Cabinet dimensions H 2080mm (81.8 inches) W 432mm (17 inches) D 790mm (31.1 inches)

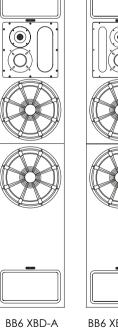
Weight 136kg (300lbs) each

Available finishes Studio black

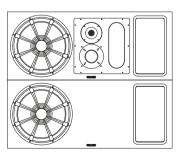












BB6 XBD-C-A (Horizontal centre)





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