RAM LOUDSPEAKERS

Compact Design Series

Incorporating many of the Domestic Series' features, the Compact Design series offers above average sensitivity, outstanding transient performance and broad and stable imaging characteristics without in any way compromising the basic principle of achieving low colouration levels.

Model CD-10

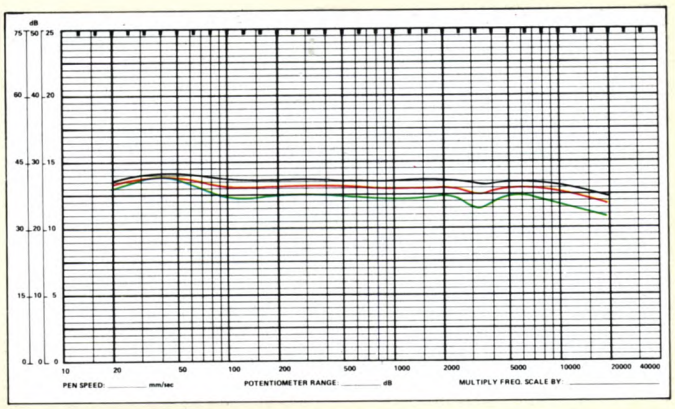
Based on our highly acclaimed RAM Compact, the CD-10 incorporates the same 19mm Dome high frequency unit that we use in the Domestic Monitor Series, whilst retaining our excellent die-cast 165mm doped, pulp-fibre low frequency/mid-range unit.

Model CD-20

Offers an even more extended and analytical low frequency response by virtue of its larger cubic volume and resistive reflex loading. High frequency performance is notable for its smoothness and its capacity to resolve fine detail thanks to the use of our sophisticated ARCC network.

New features of the Domestic range

* New low mass 19mm Polyamide Dome high frequency unit. This has been specifically modified with dispersion/diffraction ring and extra damping.
* Improved coil/former assembly on all bextrene low frequency/mid-range units. Giving greater reliability, improved power handling, and more linear response characteristic.
* New filter networks. These employ ultra low loss, high stability capacitors throughout, plus high power, air-cored inductors.
* Unique ARCC (Anti-Resonance Co-Equalisation Circuit) configuration on high frequency section of filter network.
* Multi-stranded (62 strand) low loss internal wiring.
* Chamfered grille construction for minimum diffraction products.

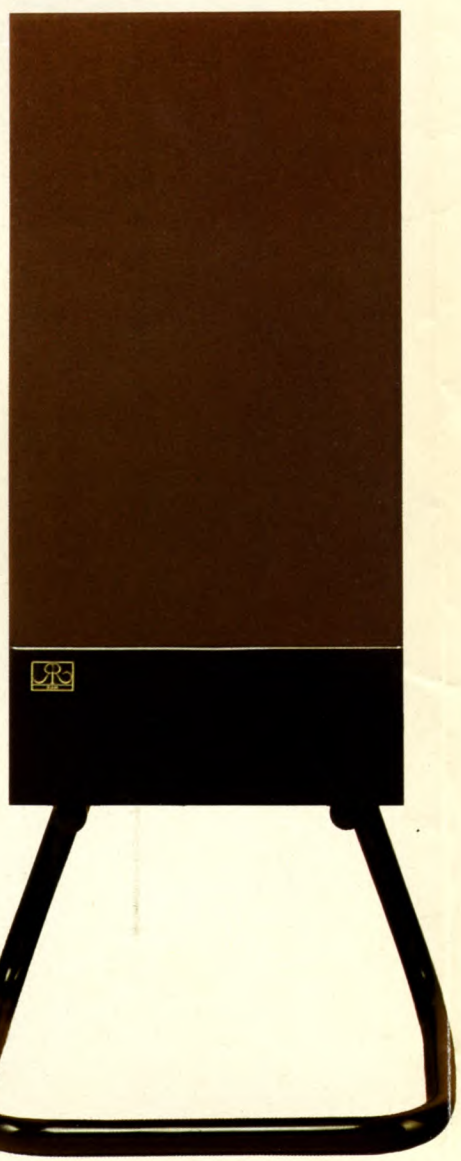


Top line shows input signal. Red line shows small loss at end of Ram cable. Green line shows losses at end of conventional cable.

Ram 70

Although similar in drive unit complement to the Ram 60, this model is significant for its extended and highly controlled low frequency performance. This is achieved through the inclusion of our unique 200mm bextrene ABR.

As with both the Ram 60 and the Ram 80, matching stands are available for this model. These are to be strongly recommended in order to avoid excitation of undersirable room resonances.



Ram 60

Based on our 1.2 Tesla bextrene LF/MR unit, which has now been further improved by the use of a new coil/former assembly, the Ram 60 incorporates our ARCC network, plus 62 strand low loss cable and our new 19mm Polyamide Soft Dome HF unit.

The result is a speaker that offers an extremely extended bass response and quite startling imaging properties.

An unusually resonant-free enclosure is achieved by using high density structural materials — i.e. 6mm bituminous linings, internal bracing and sound absorbent damping.

ARCC NETWORK & GRAPHS

Although the RAM 200 was consistently acclaimed for its neutral and detailed high frequency performance, we have been able to improve on that standard in the new Domestic Series (and model CD-20.) This has been principally achieved by devising a new form of high-pass filter network, which we describe as 'Anti-Resonance Co-Equalisation Circuit'.

The ARCC network incorporated in the new models offers superior transient response and significantly reduces colouration compared to conventional 3rd order filters.

The graph shows the new H202 tweeter equalised by a conventional 3rd order Butterworth network. Amongst other things, it can clearly be seen that the theoretical network possesses too sharp a 'knee' at 3khz. That the rate of filter attenuation is too extreme below 1-1.5khz. And that the filter characteristic above 3.5khz exhibits a mild trough, followed by a rising broadband response.

The consequence of these features of theoretical networks is the introduction of colouration modes in the 1-4khz region, impaired transient performance, phase anomalies and generally unstable imagery.

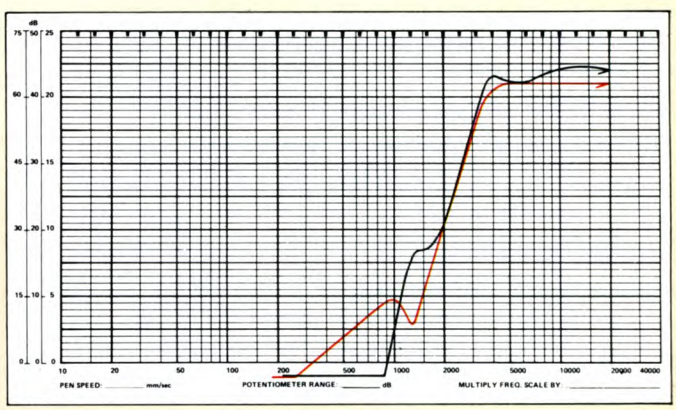
But:

The graph also illustrates the H202 equalised with our ARCC circuit. It clearly demonstrates that the problems referred to with the theoretical circuit have been overcome. In addition, the ARCC network achieves the following functions:

a) Q and Impedence of the H202 are exactly compensated for at resonance point, with over 10dB reduction in output at resonance.

b) Acoustic response falls off at 18dB/octave for two octaves below crossover frequency, with optimum phase and transient response preserved.

c) Rising response in the terminal voltage characteristic is eliminated through ARCC compensation of voice coil inductance.



Black line: tweeter without ARCC network.
Red line: tweeter plus ARCC network.

Ram 80

Evolved from our critically acclaimed ABR-based RAM 200, the Ram 80 features our completely new bextrene LF/MR unit. This, because of its 1¼" voice coil, gives lower distortion in conjunction with higher power handling.

To listen to, there is no doubt that the combination of our new unit together with the new 19mm Polyamide Soft Dome HF unit — itself carefully equalised with respect to phase, impedence, voice coil inductance and unit resonance, ensures a smooth, detailed and totally non-fatiguing sound quality.

A Statement of Commitment

As RAM moves into its second decade, our quest for perfection intensifies.

From the begining we have been commited to continually researching and investigating the phenomena of sound reproduction. A substantial proportion of our funds have always been re-invested in the design and development of better loudspeakers.

The result has been a series of reviews that state the merits of our speakers far more eloquently than we could hope to do ourselves.

And, with the opening of our second research and measurement chamber, we have finally been able to perfect two new series of loudspeakers — the Compact Design Series and the Domestic Monitor Series.

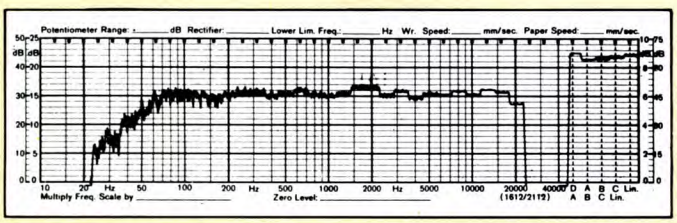
Eschewing change for the sake of change they both represent what we believe to be relevent and fundamental developments towards our over-riding ambition — namely to reproduce music in an ever more realistic and satisfying way.

Both have been designed to fulfill different objectives, yet we are confident that both the Compact Design Series and the Domestic Monitor Series will consolidate and expand upon the existing international reputation of our previous models.

A fact that you will discover for yourself now that you have the opportunity to hear them at your dealer.

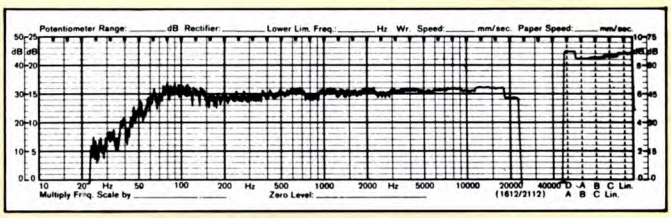
After all, we're simply doing what we do best.

Specifications



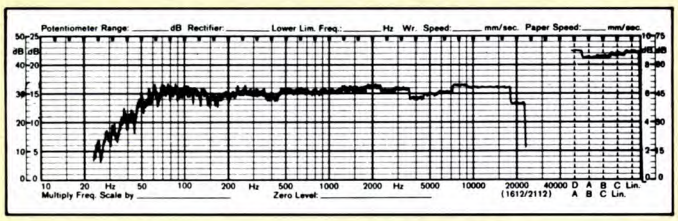
CD10

Amplifier Matching	8-35 watts r.m.s.
Nominal Impedance	4-8 ohms
Frequency Response	65Hz-20Khz ± 3db
Dimensions	332 (h) x 230 (w) x 185 (d) mm
Weight	9 kilos per pair



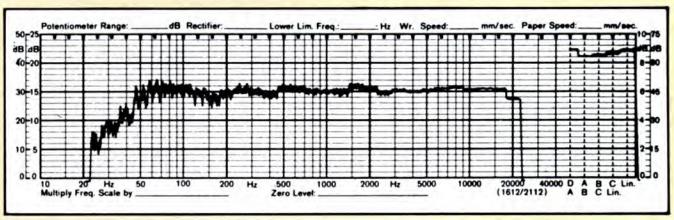
CD20

Amplifier Matching	12-50 watts r.m.s.
Nominal Impedance	4-8 ohms
Frequency Response	60Hz-20Khz ± 3db
Dimensions	419 (h) x 249 (w) x 230 (d) mm
Weight	13.5 kilos per pair



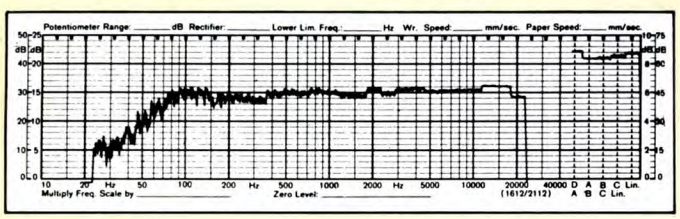
Ram60

Amplifier Matching	15-65 watts r.m.s.
Nominal Impedance	4-8 ohms
Frequency Response	55Hz-20Khz ± 3db
Dimensions	495 (h) x 254 (w) x 279 (d) mm
Weight	11.3 kilos each



Ram70

Amplifier Matching	15-70 watts r.m.s.
Nominal Impedance	4-8 ohms
Frequency Response	50Hz-20Khz ± 3db
Dimensions	584 (h) x 254 (w) x 292 (d) mm
Weight	13.3 Kilos each



Ram80

Amplifier Matching	15-75 watts r.m.s.
Nominal Impedance	4-8 ohms
Frequency Response	48Hz-20Khz ± 3db
Dimensions	660 (h) x 267 (w) x 318 (d) mm
Weight	16.5 kilos each

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