



Classic Audio Design Pty Ltd  
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## Cross Reference Audio Monitor

In recent years, a high proportion of audio product (systems and devices) has been developed and produced with a focus on the hobbyist sector. This market is indeed larger in volume than the professional/industrial market and inherently price sensitive; therefore these products are often designed to a price point and manufactured accordingly. More often than not, these products are feature-rich (to attract instant and broad appeal), but performance poor. However they do find their way into the professional/ industrial sector and on occasions can fulfil a need. Due to the disposable nature of this type of product the question of ongoing support is often a concern to the professional/ industrial client.

The **GROVER NOTTING®** Cross Reference Audio Monitor series has been developed for professional/industrial application. Their purpose is to replicate the typical sonic performance of domestic appliances such as television, radio, car radio and the various portable and stationary entertainment systems currently available.

This product enables engineers and producers to cross reference their studio mix to the performance that would be experienced in a typical domestic environment, therefore providing the vital alternative listening source, or second opinion, an invaluable aid in the assessment and decision making process.

These audio monitors will appeal to all those involved in music recording, mixing, mastering/editing, TV/film post production and broadcasting. They will also be used in recreational applications where space is a premium. In other words, anywhere that audio program is being produced.

### IN SUMMARY

These speaker systems have been designed combining careful component evaluation, complimented by no compromise enclosure architecture and critical damping techniques. By very nature of the system design and the fact that all frequencies are transmitted by paper, and in the case of the CR-1 and 2 from one transducer, reproduction is virtually free of harmonic distortion and practically eliminates the potential for phase complications. This provides the engineer with accurate reproduction of the typical sonic performance of domestic appliances and at minimal listening fatigue potential. Whilst the small infinite baffle enclosure design doesn't provide the opportunity for extending low frequency response, it certainly delivers a tight, indeed transparent bass performance, exactly what is required in assessing and making decisions with music program. The CR-11 has been designed for those wishing to see how their mix will translate to a more sophisticated 2 way system as such they offer a more extended frequency response than either the CR-1 or 2. The CR11 contains a second order filter manufactured in Australia utilising the finest heavy duty components suitable for this type of design.

The research and development work has culminated, in the realisation of an impressively coherent cross reference audio monitor range.



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## The Range

Currently consists of 3 models, the CR-1, CR-2 & CR-11



CR-1



CR-11



CR-2



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## Performance Specifications

Parameter	CR-1	CR-2	CR-11
Maximum SPL (2.83V/1m at Zmin)	85.5dB	88.3dB	100dB
Sensitivity (1W / 1m)	85.8dB	87dB	87dB
Freq. Response (+/-6dB)	100Hz-18kHz	85Hz-12kHz	60Hz-19kHz
Power Handling (Short Term Maximum Power IEC 18.2)	100W	110W	110W

## Technical Specifications

Parameter	CR-1	CR-2	CR-11
Enclosure Type	Infinite Baffle	Infinite Baffle	Infinite Baffle
Enclosure Shape	Perfect Cube	Perfect Cube	Rectangular
Enclosure Size (cm)	11 x 11 x 11	18 x 18 x 18	19 x 25 x 29
Enclosure Construction Material	12mm MDF	18mm MDF	18mm MDF
Finish	Black Satin	Black Satin	Black Satin
Connectors	Spring Terminal	Spring Terminal	Spring Terminal
Transducer	1xBroad Range	1xBroad Range	1xBroad Range
Size	100mm	148mm	148mm
Effective Cone Diameter	68mm	102mm	102mm
Voice Coil Diameter	20mm	26mm	26mm
Ferro Fluid Cooled	Yes	Yes	
Access	The Baffle	The Baffle	
	X	X	1x HF dome
Nominal Impedance	8 ohms	8 ohms	8 ohms
Weight (unpacked)	83 kg	3.16 kg	4.5 kg

**Powering the Monitors: We suggest an amplifier capable of delivering clean power per channel in the order of (less if driven by a valve amplifier); CR-1= 50-120W, CR-2 & 11 = 50-200W**

### A note on loudspeaker specifications:

It is a fact that while technical specifications are definitive; performance specifications are not. A speaker will perform differently subject to the constraints of its acoustic environment. When producing performance specifications, we believe they must represent the "real world". We also suggest they be used as a guide only to the potential of a specific system. Therefore our performance specifications are produced, as a result of "real world" testing, conservative and with the goal of publishing useful data as opposed to marketing hyperbole.



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### Installing The Audio Monitors

Both the CR-1 and CR-2 can be used as a mono or stereo source. Whether in mono or stereo mode, they should ideally be situated on a solid and stable surface. An unstable surface could result in a loss of low frequency definition. A stable surface will provide better transient response, ensure bass reproduction remains tight, and could even provide some low frequency extension.

Both models have wide dispersion characteristics (not beamy). When using them in stereo mode ensure they are not positioned in the same plane.

The CR-11 are more suited to stereo or 5.1 applications and can be used in most DAW type setups where the listening position is around 1 metre from the front baffle.

### Guarantee

The CR-1, CR-2 & CR-11 audio monitors are guaranteed against defects in parts and labour for a period of one year from the date of purchase. This excludes damage from accident, abusive operation or any modification or repair by unauthorised parties.

### Who is GROVER NOTTING®

**GROVER NOTTING®** is a brand produced by Australian company Classic Audio Designs Pty Ltd., 452 Gaffney St., Pascoe Vale, Vic., 3044 Australia.

### Options Available for the Traveller

Both soft and hard cases are made for the CR-1 & 2. The soft case is made from heavy duty DuPont fabric with stainless steel zip and webbing tote strap. The hard case is a proper flight case suitable for the cargo hold on the roughest air line.



*The CR1SB (above) accommodates a pair of CR-1's.*



*The CR-1TC (above) accommodates a pair of CR-1's*