

Dellichord

Dellichord/Stereotech Phone 0418772434 Address 7/20 Rivergate Place Murarrie Qld 4172



Dellichord 70S Model Loudspeaker

Key Design Goals
Research & Development



Key Design Goals

No bling necessary.

Exceptional design, construction & sound

The **primary aim** was to design, engineer, and manufacture an affordable, Australian-made loudspeaker with a focus on performance. Costs that have little to no effect on performance were minimised or excluded, such as fancy connection terminals, expensive timber veneers, grilles, high-gloss finishes etc. This unnecessary bling in loudspeakers often only serves to help justify high prices and distract from poor quality build and/or sound.

Emphasis on sound and style. Instead, the emphasis was placed on premium cabinet and crossover materials, as well as high-quality drive units that offer exceptional sound quality and reliability. The result is a cabinet design and construction of premium quality, delivering superb sound quality at a reasonable price.

Research and Development

History and experience show the way.

This model is a brand-new, clean-sheet design for Dellichord, building upon two previous designs involving years of research and experimentation. The first was an early wide-baffle design employing larger drive units and cabinet size, not in production. The second was the M6, Dellichord's first production model. The valuable insights gained from the M6's birch ply cabinet and what works and what doesn't with this material were instrumental in creating a highly inert design for the 70S Model Model.

The same bass-mid drive unit used in the M6, known for its extraordinarily smooth and detailed response even before the crossover circuits kick in, is also employed in the 70S Model Model.

The wide-baffle 10" two-way design, which was refined over nearly a year, provided valuable insights into the benefits of a wide baffle in taming diffraction issues and manipulating baffle-related frequency response challenges. At the time, the team felt that such a large, DeVore Audio-style enclosure might not be acceptable. However, the work done by Andrew Hutchison in completing this design and the previous M6, set him up well to resolve the design of the 70S Model, confident of excellent results.



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Dellichord 70S Model Loudspeaker **PRICES FROM \$1,699** Direct from the manufacturer

OPTION 1 – \$1,699

** pair + optional 70S Model custom stands

No Soldering, Flat Pack Cabinet Kit – assemble and add your finish.

You construct the simply designed cabinet, install drivers, plug in the crossover and finish your way.

Note - All the same pro level parts used in the fully finished version – No DIY grade cheap downgrades.

All the tricky work is done - design, crossover assembly, cable loom making and CNC matching of birch ply timber parts.

OPTIONAL CUSTOM 70S Model stands – Flat Pack Kit. You assemble and finish your way. Supplied raw birch ply. AUD \$299 inc gst.

Total price with stands AUD \$1,998 inc gst.

OPTION 2 – \$2,299

** pair + optional 70S Model custom stands

Fully assembled and functioning loudspeakers – just add your finish.

You paint, stain, wax or oil the cabinets. Supplied fully assembled & functioning with raw birch ply cabinets.

Simple to disassemble and reassemble with just a handful of screws.

Note - All the same pro level parts used in the fully finished version – No DIY grade cheap downgrades.

All the tricky work is done - design, crossover assembly, cable loom making and CNC matching of birch ply timber parts.

OPTIONAL CUSTOM 70S Model stands – Flat Pack Kit. You assemble and finish your way. Supplied raw birch ply. AUD \$299 inc gst.

Total price with stands AUD \$2,598 inc gst.

OPTION 3 – \$2,999

** pair + optional 70S Model custom stands

Pro level, Clear coated, Fully assembled, finished and functioning loudspeakers. Nothing to do.

High quality clear coated fully finished pair.

OPTIONAL CUSTOM 70S Model stands – Pro level, Clear coated, Fully assembled, finished AUD \$999 inc gst.

Total price with stands AUD \$3,998 inc gst



** Prices inc gst. ** Prices do not include shipping & handling. ** Prices shown in AUD. ** Through Dellichord direct only

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Dellichord 70S Model Loudspeaker

Technical Notes
In Home Auditions

Technical Notes

Old Fashioned Prices.

At these price points the vast majority of loudspeaker products are assembled in China from the cheapest of materials and parts. The 70S Model offers an alternative Australian manufactured product that opts for longevity in construction and pure joy through sound over unnecessary bling.

Modern Vintage Look. The 70S Model was designed with a clear 1970's influence. In the 1970's, wider baffles, paper cone drivers, and simple crossover circuits resulted in an easy-listening sound that our designer, Andrew Hutchison, personally favours. *"My goal is fatigue-free listening with a generous dose of resolution, speed, and excitement,"* says Andrew. *"plywood cabinets that were shallower than they were wide were the norm back then, as was the relaxed, nature of the sound".* It was with these vintage design principles in mind, and years of R&D on wider baffles and plywood enclosures, that Andrew set out to create with the 70S Model.



Birch ply vs MDF. When it comes to loudspeaker construction, the vast majority of speakers under \$10,000 per pair are made from particle board or medium-density fibreboard (MDF). MDF is a popular choice because it is easy to machine and assemble, relatively inexpensive, and readily available. However, MDF has a significant drawback - it is made from wood dust and resin, making it heavy with an inherent "lead" and unmusical sound when excited by the pressure inside a speaker enclosure.

In contrast, premium quality birch plywood, when properly damped, has almost no sound of its own. This is because plywood is quite light and stiff. Even when vibrated by music, plywood's lack of mass allows it to dissipate energy very quickly. This makes it an ideal material for premium HiFi loudspeakers and is far superior to MDF.

Chinese made loves cheap & easy. Dellichord, Australian made loves quality. While MDF and particle board are readily available, easy to machine, and inexpensive, birch plywood is quite the opposite. In fact, it is incredibly difficult to obtain in large quantities at the moment, mostly due to supply issues from Russia & surrounds where much of the world's birch is grown. Additionally, birch plywood is approximately 4 to 5 times more expensive per sheet than MDF of the same thickness. It also requires very careful machining with a well-maintained CNC router which Dellichord has in our own Stereotech cabinet factory. These factors make birch plywood mostly unviable except for smaller, bespoke manufacturers.

Drive unit choices. This product features carefully selected drive units with specialised capabilities. The bass-mid range driver has an internally damped paper cone with negligible break-up modes outside its operating range, resulting in a clean, effortless sound. The 25mm soft dome tweeter with a short, narrow wave guide, helps control dispersion and better match the bass-mid range at lower frequencies. Additional design elements, such as asymmetrical driver positioning and a slightly recessed tweeter mounting on the front baffle, help manage diffraction and dispersion, culminating in a smooth, fatigue-free listening experience.

.../2 Technical Notes cont

Bling not welcome. Veneer, fancy terminals and grilles. *Grilles* are a pest in every way. They ruin the sound quality creating diffraction issues on the front baffle. They ruin the modern vintage aesthetic. Half of new owners never fit them and they unnecessarily add to the cost of the product. We don't offer grilles on the 70S Model only for these reasons. *Fancy terminals* have their place as they sometimes can make a small improvement in sound quality. The 70S sounds great without them and saves nearly 10% on the price. *Veneer* does nothing for the sound but does look nice. Veneers in Australia are incredibly expensive making MDF with veneer pressed onto it even more expensive than our choice of birch plywood. We opt for quality sound and keeping prices reasonable over fancy cabinet finishes in the 70S Model.

Crucial to quality. Crossovers, cable and foam. No skimping here, this is all important stuff. Our 70S Model crossover employs the same high quality circuit board material and premium inductors, resistors and capacitors as our other models. Designed and made in-house by Andrew Hutchison, this crossover releases the full potential of our very high quality drive units and enclosures. Our internal wire and acoustic foam is Australian made quality.

In Home Audition

In home Audition. The fully finished and clear coated option – See Prices page Option 3 - is available to purchase with a 15 day return policy if you don't love it. A restocking and return freight fee applies of \$250 with all of the usual T's & C's. We strongly believe in 'in-home' demonstrations and feel this a great way to compare a new loudspeaker to what you are used to in your usual listening space.

Specifications

Frequency response – 38Hz to 25KHz \pm 3dB (the vast majority of the audible frequency range is \pm 1.25dB)

Power handling – For use with amplifiers of all types from 20 – 200 watts RMS

Sensitivity – 86dB at 1 watt at 1 metre

Impedance – 8 ohms nominal (minimum 6.8 ohms, see graph elsewhere on this document)

Design – 2 way bass reflex.

Box construction – birch ply

Drivers – 25mm soft dome tweeter with integral wave guide. 165mm mid bass driver with non resonant paper cone.

Finish -Various, see price list

Dimensions – 500mm high x 290mm wide x 225mm deep

Weight – 7.5 kgs each

See On Axis Response Chart and Impedance Chart



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Dellichord 70S Model Loudspeaker Charts

On Axis Response Chart



Impedance Chart

