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UKD Opera Seconda loudspeaker Keith Howard

In this era of hi-tech composite materials based on strong synthetic fibres like Kevlar, graphite (carbon fibre) and Dyneema, it's easy to lose sight of the fact that nature developed composite technology long before homo sapiens ever dreamt of it. Skin, bone and cartilage are all sophisticated composite materials; so too are their invertebrate equivalents. But nowhere is nature in the guise of composites engineer more impressive than in trees, which would not exist but for the extraordinary mechanical properties of cellulose.

It's not normal to think of wood as a composite, and most hi-fi users would be understandably surprised to hear wooden loudspeaker cabinets referred to in such terms. Once you accept the description, though, the realization inevitably follows that the ubiquitous chipboard and MDF, for all their consistency and convenience as loudspeaker cabinet materials, actually throw away some of the parent wood's inherent structural qualities. The strongest, stiffest composites all rely on long, continuous strands of whatever fibre they are based on. Chop those strands into shorter lengths and

the composite's physical properties are degraded. Which of course is precisely what happens in processing wood to make chipboard and MDF.

Virgin wood is, in theory at least, a superior (i.e. stiffer) loudspeaker cabinet material, although there are numerous impracticalities involved in its use. It has to be seasoned correctly if it is not to warp or crack; it is more difficult to machine; it has inherent imperfections; and it possesses very different physical properties along and across the grain, as you would expect of a composite material which is essentially unidirectional in its fibre alignment. Some of which factors also make it unavoidably expensive. Unsurprisingly, then, loudspeaker enclosures constructed from solid wood are rare; and where the material does find favour, it's usually at least as much for its visual attraction as any acoustic advantage. [An exception was the range first introduced by Radford 25 years ago which had one-inch thick solid afformosia cabinets. However, cost, availability and splitting problems forced a return to veneered plywood by 1980. This latter material enjoyed considerable popularity but eventually the man-made particle boards took over — GH]

The aesthetic factor certainly helps explain why solid wood cabinets are today particularly associated with Italian hi-fi manufacturers, for whom styling flair is no less important than in the indigenous clothing and car industries. Sonus Faber established the trend, deploying sculpted hardwood to carve itself a distinctive presence in the specialist loudspeaker market. UKD, which also manufactures its loudspeakers in Italy, is following SF's lead.

UKD (UK Distribution) began commercial life as an Italian importer of British hi-fi, before crossing the watershed into hi-fi manufacture. Nick Green, who ran the Italian operation for 12 years from its foundation in 1979, has now returned to these shores, where in addition to selling the company's own loudspeaker products he imports equally distinctive looking valve amplifiers from Italian manufacturers Unison Research and Graaf. The Opera ha—referred to as the Seconda — is an update of the original model to carry the name, and slots in towards the lower end of the UKD range, selling at a suggested retail price of £595.

The Seconda's cabinet is constructed of almost one-inch thick (23.5mm after machining) solid mahogany panels, seasoned by UKD for many months before use and joined using cabinetry techniques rather than the V-groove and wrap method generally employed for chipboard and MDF. Occupying this substantial, low-resonance cabinet are two drive units, both hailing from SEAS in Norway: a nominally 160mm diameter plastics cone bass/midrange unit, reflex-loaded by a rear-firing port, and a 19mm soft dome tweeter. The crossover, which is a much simpler network than previously with just one reactance in series with each driver, operates around 3kHz. Inductors are high saturation types with self-cementing windings to suppress vibration; the close-tolerance non-polarized capacitors are manufactured to UKD's own specification. High quality internal cabling is used throughout.

So as not to weaken the rear panel, the solid brass, 24ct goldplated terminal posts — manufactured by UKD — are not recessed in any way. A single pair of terminals is provided: split crossovers, offering the option of bi-wiring or bi-amping, are not featured until further up the range. Nominal impedance is 8 ohms, with a specified 7 ohms minimum, and the rated sensitivity is 87dB for 2.83 volts input at 1 metre — a lowish figure these days, reflecting the Seconda's compact dimensions (350 x 235 x 335mm) and those thick cabinet walls, which reduce the internal volume to about 12.5 litres. UKD recommends the use of valve amplifiers of 12 watts or higher output capability, or solidstate designs with rated outputs of 20 to 80 watts.

Performance

UKD provided one of Unison Research's valve amplifiers — the Simply Four integrated — for the review, which I duly used for part of the listening. The 'soft' sound quality of its EL34 output devices — the attribute which apparently attracts most of its customers — and a tendency to harden in the midrange when extended were not to my taste, however, so the bulk of the assessment was made using Audiolab's popular 8000A. My ageing but still worthy 21-inch Foundation stands undertook the support work, although not in concert with the usual trio of aluminium support cones in deference to the Seconda's fine cabinet. Following UKD's own advice, I used small blobs of Blu-Tack twixt stand and loudspeaker instead.

Initial listening reactions, after an extended run-in using pink noise, were of a substantially neutral tonal balance, lacking any artificial midrange prominence — that exaggerated sense of presence and projection which gets a loudspeaker noticed among a crowd but generally proves wearing on longer acquaintance. Experimentation with the rather crude MDF grille frames, which have no filleting or chamfering of their cutout, produced a clear preference for the sound with them removed — which is how most buyers will want to use them anyway, I suspect, so as to savour the cabinetry. Even with the grille removed, however, there remained a slight nasality on male voice which I was unable to banish by moving the loudspeakers to different room locations, and a lingering mild lispiness in the treble — the characteristic sonic fingerprint of a soft-dome tweeter. Though the Seconda distinguishes itself by maintaining control and refusing to harden prematurely when played loud — a legacy of that solid cabinet — I also found its overall sound slightly closed-in and clouded: less dynamically and spatially expansive, less 'open window', than the best competitors at the price.

In terms of bald sonic performance, then, the Seconda is not a product to enthuse Jilly Gooldenly about: competent, certainly, but not a premier crzi among £600 loudspeakers. The attractive solid wood cabinet is what will clinch its sale, making it a niche product for a particular, discerning class of customer with strong views on decor a Drive units 160mm plastics cone bass/midrange; 25mm soft-dome tweeter Crossover second-order acoustic, centred on 3kHz Frequency range 60Hz-20kHz (no limits specified) Sensitivity 87dB for 1 watt at 1 metre Nominal impedance 8 ohms (7 ohms minimum) Recommended amplifier 12-80 watts per channel into 8 ohms Dimensions (H x W x D) 350 x 235 x 335mm Weight 16kg each Manufacturer UK Distiloution, 23 Richings Way, Kier, Bucks SLO 9DA Telephone 01753 652669 Fax 01753 654531 UK retail price £595

Gramophone June 1997 153