



# KEF's smaller, smarter sub

AT AROUND 25CM ON EACH SIDE, THE LATEST KEF ACTIVE SUBWOOFER IS TRULY TINY, BUT MARTIN COLLOMS DISCOVERS THAT ITS COMPACT DIMENSIONS CONTAIN SOMETHING REALLY RATHER SPECIAL

**Without question, at £1399 KEF's attractively compact KC62 subwoofer is a most clever box of tricks, but is it just too small for its own good? Are two reaction-cancelled 6.5in/14cm bass units enough, whether they be long throw high excursion types or not? An indication of just how hard they might need to labour is the provision of 500 watts for each driver of necessarily efficient D Class amplification. Such massive available power poses all kinds of questions, including just how intelligently this design manages programme demands, in respect of its own natural physical limits for acoustic output over frequency. Certainly, physics will not help it get from a mid-bass frequency of 50Hz at a steady sound level down to a genuinely low 25 Hz. This seemingly simple requirement actually requires that the two pistonic bass driver elements move four times as much by 25Hz.**

It is worth noting that this seemingly small lowering in numeric frequency comprises a complete, potentially informative musical octave, and should not be dismissed as just '25Hz extension' of a nominal 20,000Hz audible spectrum. And helpfully, that theoretically required increase in cone movement will be tempered by a measure of room power gain, the latter generally increasing with reducing frequency, thus ameliorating that

otherwise daunting theoretical acoustic power demand which is defined for 'free space' operation – no room and thus no boundaries.

At this point we raise a question about purpose: do you want a floor-shaking kick-in-the-chest 'thumper' to rock your boat for home theatre, or something more subtle and sophisticated, aiming to improve the overall sound quality of your system, perhaps to include classic stereo? For a home