

American



Channa Vithana spends some happy days with American Acoustic Development's C-550 floorstanding loudspeaker...

AAD (American Acoustic Development) may not be a household name here in the UK, but when you consider that loudspeaker designer Phil Jones is behind it, then things start to get more interesting. Phil is probably most famous for designing the legendary AE1 mini monitor loudspeaker by Acoustic Energy (for an in-depth look at the AE1 past and present, see our April 2006 issue, p44.) After Acoustic Energy, Phil relocated to the US in 1990 and worked on and with various projects and companies including Boston Acoustics. In 1998, he founded AAD which is based in St. Lois, Missouri. AAD design, test and manufacture all their cabinets and drive units in-house. Latterly, Phil, who is a dedicated bass player, founded PJB (Phil Jones Bass) under the parent company of AAD. PJB makes some serious pro-audio equipment including a monstrous T-500 650W bass amplifier which is rather markedly described as "probably The most powerful tube bass amplifier Of all time"! For more information, see www.philjonesbass.com.

The compact C-550 floorstanding model for review here is described as a 2.5 way design and comes in Cherry, Black or Maple vinyl finishes. Build is excellent as was the flawless panel-fit and material finish. Dimensions are 940x222x282mm and weight 18.5kg. They are rear ported, and I preferred them 800mm from the brick/concrete rear wall for the best balance of bass articulation and spatiality. I replaced the metal links between the bi-wirable terminals with a matching set of wires to my speaker cable for better single-wired sound quality.

SOUND QUALITY

Even at their £900 price point, these loudspeakers have a distinct, and I think quite specialised, musical ability. On initial listening they sounded shut-in, but once acclimatised I found they never got flustered or overwhelmed by any of the different types of music used over the review period - this is what distinguishes the C-550s from any of their price rivals I've heard. It's this composure and couthness, allied to a powerful bass reproduction (as you might expect, considering who the designer is), and clear insight into instrumental and/or vocal quality which charac-

Dream?

terises them. Essentially then, they're like a pair of down-scaled studio monitors – they'll appeal to listeners who are highly critical of details, yet don't want to spend vast sums of money. As such, the AAD experience is similar to listening to music in a demanding recording studio environment where every nuance is revealed with refinement.

The innate sense of control and poise of the AAD loudspeakers was clear on the Jacqueline du Pré compilation, 'A Lasting Impression'. Here, everything was tightly ordered and reproduced – from the individual

timbre likewise was very good with well-rounded textures to the guitars and an expressive reproduction of the main vocals. Ann Wilson's outstanding vocals were superbly reproduced on 'What About Love' from the 'Greatest Hits' by Heart. The AADs handled her powerhouse singing superbly and communicated it with good expression and texture. Where the AADs could have been better was that the rest of the band sounded a little restricted and due to their innate sense of control, some of the ebb and flow of this music was lost.

"you get an extremely couth and composed sound at the price"

instruments to the overall recorded acoustic. Instrumental separation was very good, and the timbre of each instrument excellent, because there was finely detailed definition to du Pré's cello playing and the surrounding layering of the violins. Dynamic crescendos were handled with consummate control.

Level 42 sounded especially refined through the AADs. The complete frequency range from highest treble to lowest bass was tight, with bass sounding very well damped. Thus there was no harshness to 'Something About You' and even the mid-eighties style percussion parts sounded excellent - reproduced with resolution rather than rasp. Mark King's vocals were well handled and revealed; you could hear how he phrased certain parts of the song differently to convey a slight but differentiated emotional vocal intonation.

There was a controlled and measured response to the melodically sophisticated music and singing style of Shawn Colvin on 'Sunny Came Home', from her 1996 release of 'A Few Small Repairs'. Instrumental separation was excellent where every element was clearly revealed. Instrument and vocal

This last point is where I feel the AADs fall down slightly; they're less involving rhythmically than some other similarly priced designs, brilliant as they are in other respects. Compared to Crystal Audio's £600 T3s, there were some defining differences. The Crystals had a more free-flowing, effortless style of music making, while the AADs were more poised and controlled with superior instrumental and vocal separation and refinement. The AADs also had deeper bass extension, with slightly more power for impact and crescendos.

CONCLUSION

The AAD C-550s need to be carefully positioned and set up to get the best from them, plus plenty of running-in and a high-quality amplifier with decent driving ability to really sing. Properly fettled however, you get an extremely couth and composed sound at the price; this is what will win the C-550s many friends. However, they do lack a little 'animation' compared to some price rivals, and lovers of lively sounding speakers will need to look elsewhere. This is why an audition is essential – these extremely accomplished loudspeakers are well worth a listen.



BOXING CLEVER - Channa Vithana speaks to Phil Jones.

CV: WHAT'S THE PHILOSOPHY BEHIND YOUR SPEAKERS?

PJ: My main goal is to preserve the music signal in its purest form. We go for as natural sound as possible for a given price point and without any artificial effects added, for example sucked out midrange and boosted upper bass to give a novice speaker buyer a good thirty second impression that goes downhill from there. My reference sounds are real instruments, since I'm also an active musician. I believe greatly in spending the customer's money as wisely as I can - by which I mean the end user who takes his hard earned cash to buy a speaker. I am on a mission to end bad sound and help music!

DESCRIBE THE C-550'S CABINET

We use 25mm thick MDF on front baffle, 18mm on all other panels. Most important cabinet panel is the front baffle, which is why we make it thicker and less resonant. We put bracing strategically in position to avoid harmonic resonances, by which I mean that the braces are purposefully offset to avoid producing a harmonic on the panel resonance one octave above. The vent (port) is placed on (the) back to reduce midband bleed to an absolute minimum and can be acoustically (loaded) by wall/ corner positioning. This was calculated with computer analysis carefully controlling drive unit excursion with decreasing frequency and air vent velocity - in other words, reduced cone excursion and minimal vent noise without sacrificing bass output.

HOW DID YOU CHOOSE THE DRIVE UNITS?

The tweeter's diaphragm size is 25mm, fabricated from pure titanium. Titanium not only has a better Young's Modulus of Elasticity to Mass Ratio than Aluminium, it also has the advantage of high efficiency and high power handling. Woofers are 125mm diameter, the cones made from a laminated mineral fibre composite that's a trade secret. This lightweight material is able to maintain 'piston' operation up to the crossover point and beyond and has excellent self-damping. The drivers therefore have a very predictable and controlled flat frequency response that allows a crossover using the minimum of components necessary. We also use much larger magnets than our competitor speakers because this gives much

greater control of the bass and also increases translational efficiency. This makes a more dynamically accurate loudspeaker with greater power handling and reliability. We recommend two hundred and fifty hours of running in, but you'll get a major improvement in the first one hundred.

WHAT BANDS ARE YOU CURRENTLY PLAYING IN?

I'm working on forming two bands. One is blues/R&B where I am emulating bass lines similar to the old R&B master bass players such as James Jamerson. The other is more jazz-orientated, where I play double bass and multi string extended range bass guitars. I have good drummers and guitarists for both bands but we still need a good keyboard player. By good I mean someone who can play George Duke stuff!

WHICH MUSICIANS WHO USE PJB EQUIPMENT?

I have three great endorsers: (First) Chuck Rainey who played for: Steely Dan, Marvin Gaye, Quincy Jones, Ricky Lee Jones and Aretha Franklin. (Second) Bob Babbitt who is a Motown Funk Brother. He played on many Motown hits (for) Stevie Wonder, Diana Ross. Third is Nathan East. He plays for Eric Clapton, Phil Collins, Fourplay and Michael McDonald. I have also many famous customers such as Geezer Butler (Black Sabbath), Victor Wooten, Pino Palladino (Simon & Garfunkel, The Who, Jeff Beck, Hank B Marvin) and Verdine (White of Earth Wind and Fire) to name a few...

WHAT ARE YOUR FAVOURITE ALBUMS?

Oh boy, that's hard! I do have some albums that changed my life and some singles too. I guess the first single that affected me was The Four Tops - 'Reach Out'. I think that was 1966 and it was the first time I was aware of James Jamerson's bass playing. I did not know his name back then but it was him that got me started on learning how to play the bass. In my opinion he is God on the bass and nobody I know of can play like him, and I know a lot of really good bass players. As for prolific albums that is very difficult but I can say for sure the artists would be Jimi Hendrix, Earth Wind and Fire, Yes, Jeff Beck, Stevie Wonder, Isaac Hayes, Steely Dan. I could go on and on...!

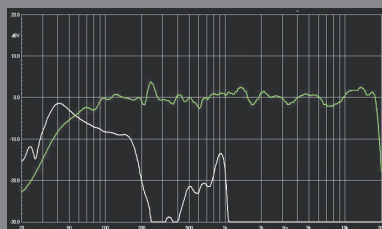
MEASURED PERFORMANCE

For a floorstander with no great pretensions, other than affordable quality, measured frequency response of the C-550 from American Acoustic Developments is about as flat as it gets from a conventional modern loudspeaker, ensuring a final sound that comes across as tonally balanced and natural, free from subjectively characterful emphases or dips. This also means there are fewer resonances to store energy and smear the time domain, which translates into a cleaner sound. Bass rolls off smoothly below 90Hz, measuring -6dB at 45Hz, a low enough figure considering cabinet size. The port works at 40Hz, damping the loudspeaker and providing output low down in the frequency scale to add weight to bass. The slightly over damped response means bass should be tight rather than sloppy, but it should rarely sound excessive, as there's absolutely no low frequency emphasis.

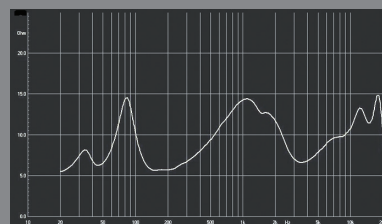
The impedance curve shows a bass unit not quite matched to the port, even though run in, the measured impedance value being 6.3ohms. At 86dB,

sensitivity is normal for a loudspeaker of the size and impedance. The C-550 is an easy load for an amplifier.

The C-550 measures well, although our bass unit didn't quite match the port. It is particularly accurate and should sound smoother and more composed than most. NK



Frequency response



Impedance

MUSIC

Jacqueline du Pré, 'A Lasting Impression' (1996)
Level 42, 'World Machine' (1985/2000)
Shawn Colvin, 'A Few Small Repairs' (1996)
Heart, 'Greatest Hits' (2000)

REFERENCE SYSTEM:

Unison Research Unico CD player (£1,250)
Moon Audio i-3 integrated amplifier (£1,595)

VERDICT

These highly polished and controlled floorstanders have a powerful studio monitor sound.

AAD C-550 £900
Synergy Distribution
☎ +44 (0)121 270 6485
www.aadsound.com

FOR

- powerful bass
- superb control and poise
- refined sound

AGAINST

- less engaging than some
- price competition