



## *E positive*

First rule of reviewing loudspeakers: Read the instructions before anything! On opening the packaging to the new Epos ES11, I discovered that the grilles were packed separately within the box. I then noticed that said "grilles" were made of thick plastic. Knowing that Epos Acoustics have a reputation for innovative design, I was about to ring the designer to ask him about his acoustically - transparent plastic, when I glanced in the manual which said, "Your ES11 loudspeakers are supplied with protective covers which can be fitted when the loudspeakers are not in use".

Second rule of reviewing loudspeakers: Never admit to making a stupid mistake.

Having broken all the rules, we return to the new Epos Acoustics ES11 loudspeaker, the brainchild of Robin Marshall, designer behind many other loudspeakers for the TGI (Tannoy Goodmans International) group. His most well-known design is the Epos ES14. There are strong family resemblances between the two models, both visually and sonically.

### *simple*

Essentially a simple design, the ES11s tap into existing technology in drive units and crossovers to produce a compact, balanced loudspeaker. This does not infer that the ES11 is a conservative design, but it does suggest that Epos are more concerned with producing a good sound from current equipment than attempting to produce a poor sounding loudspeaker purely for the sake of innovation. Research and development have not been entirely forsaken, however. Both drive units have been manufactured specifically for the ES11 and the cabinet itself has features not normally associated with mid-price loudspeakers.

Unlike its bigger brother, this model is bi-wireable. I believe that this is because Epos have eliminated most of the cross-over circuitry, reducing it to a single capacitor in the tweeter's signal path. In the bass driver, the upper frequency roll-off is determined by the mechanics of the driver itself, rather than any electronics.

Looking every bit the baby ES14, the ES11 cabinet features injection moulded front and rear baffles, held together by steel rods, with the MDF cabinet wrap sandwiched between them. The box itself

stands 375mm (H) x 200mm (W) x 250mm (D) and weighs 8kg. The stands are very similar to the ES14 models, only smaller. I encountered my first problem here (the only other problem occurred when I cut my hand on a top spike). The stands bolt together easily, giving one a choice of top spikes (ouch!) or not, coming complete with allen keys that should be used to tighten the stands to knuckle-skinning levels. Unfortunately, one of the holes for the base spikes was too small to fit any of the spikes included. Now, this may have been some sort of intelligence test for reviewers, in which case I failed, but I feel that it was probably poor quality

control. Aside from this the ES11s came well packed and well documented with a brief but useful set of instructions.

### *cooked*

Once the stands were bolted together, and I staunched the blood flow from my hand, the speakers were set to warm up. Epos recommend eight hours to let them really sound at their best and I see no reason to disagree with them. Even from cold, however, the ES11s showed great promise. Once fully cooked, they produced a big, powerful sound that belies the size of the box. To use a gastronomic analogy, the ES11s were like a bowl of French Onion soup; warm, rich and filling (especially with croutons) - but I can't see the hi-fi angle here!

Track after track was used to assess the ES11s. I would begin by playing the first track of a recording and find the portrayal of the music so pleasing that most of the album would stay playing. In their literature, Epos describe the ES11's sound quality using such words as "revealing", and "involving". I am not sure that the loudspeakers are especially revealing, although I agree with the second word without reservation, as I felt that there is a great deal of involvement between listener and music, regardless of genre. While I feel



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In general this Epos times well, indeed exceptionally so in the mid-treble, but some wide-range rock occasionally catches it out, revealing a little tardiness in the bass. The overall verdict on rhythm was that it was more than good enough – in fact well above the average. The speaker’s remarkable clarity was highly revealing of recorded acoustics; and the ES11 produced exceptional stereo images – well focused and finely structured, with the speaker reinforcing the soundstage quality through its remarkable transparency. Overall colouration was felt to be very low, and the modest price was only subjectively evident in the mildly boxy extension into the lower mid-range of the reinforcement emanating from the large port.

#### lab report

Epos indicated a sensitivity of 87dB/W, but this was not met on test, with my figure showing a below-average 85dB. A minimum power input of 20W per channel was indicated, while the maximum recommended is 75W, resulting in satisfactory maximum levels of 101dBA in a typical room. If disco use is required, the ES11 would be ill-advised. Pair-matching was very good, with  $\pm 0.5$ dB up to 10kHz, though with another 0.4dB deviation in the last treble octave. No grille deviation was shown, since there was no grille! The axial response meets  $\pm 2.5$ dB limits from 70Hz to 20kHz, with a mild prominence in the broad mid-treble, just enough to lighten the tonal quality and balance the relatively strong upper bass. Small changes in angling can provide considerable control of response, with the relatively high crossover point giving a greater loss at 45° than usual for a box of this small size. In the vertical plane the output is more critical but the overall acoustic design has conferred good phase symmetry at the 5kHz crossover. The speaker’s median vertical axis should line up with the listener’s head for the best results, indicating a typical 55cm height of stand.

Bass-reflex tuned to 52Hz, the output falls quickly below 50Hz, the -6dB point but an in-room extension to 45Hz was obtained. The ‘glitch’ at 150Hz was real, being the result of some mild harmonic cancellation from the reflex port. In the listening room, this combined with the floor cancellation to give a deeper notch than usual, while the port output is healthy enough to rise 2dB or more above the main response. The latter is a little mid-forward, but is commendably broad and well-integrated, particularly in the cross-over region. An easy amplifier load, the impedance doesn’t fall below 70 ohms and is typically 10 ohms – helpful in view of the modest sensitivity.

The ETC results were most promising, showing little spurious when measured unwindowed, with 35dB of decay in 1.2ms. Windowed, there is a fine continuation to -60dB in 2ms. In the waterfall mode, a 59dB/0.1ms plot shows a first-rate performance, with remarkably clean presentation and a rapid energy decay over a wide frequency range. The speaker’s natural sounding transients and transparency strongly correlate with this result, while digging deeper over a longer decay period gives a result still very good by speaker standards, particularly for this class – indeed, the results were more like those for highly rated performers at two or three times the price.

#### conclusion

This outstanding loudspeaker has reached a number of fundamental targets in audio engineering, resulting in a system of exceptional communicative power, detail, transparency, and drive. Essentially well balanced with a sweet, kind treble, it suited all kinds of music and was wholly enjoyable to listen to despite

some soft excess in the bass. It could do justice to a wide range of systems up to the £2000 level, and achieves a very strong recommendation in its size and price class. An obvious ‘best buy’ if ever I heard one.

#### TEST RESULTS

Size (height x width x depth, cm)	37.5 x 20 x 25
Recommended amplifier power per channel	20-75W
Recommended placement	On Epos stands, free-space
Frequency response within $\pm 3$ dB	65Hz-20kHz
LF rolloff (-6dB) at 1m	50Hz
Bass frequency extension (typical in-room)	45Hz
Voltage sensitivity (ref 2.83V) at 1m	85dB/W
Approximate maximum sound level (pair at 2m)	101dBA
Impedance characteristics (ease of drive)	Easy
Forward response uniformity	Good
Subsequent to the review, the suggested price per pair (inc VAT) is now	£330