



AUDIO SYSTEMS

CREEK CLS20

This is Creek Electronics' first venture into the loudspeaker market and the CLS20 is a two-way model intended for stand mounting. It's a fair size, promising a good combination of sensitivity, power-handling and bass extension. It is cleanly finished in black-ash vinyl, and may be used with the grille removed if so desired, a good appearance still being maintained.

The 19 litre volume is reflex-loaded by a 5cm diameter ducted-port, nicely tuned to 42Hz and promising a useful bandwidth to below 40Hz. Low and mid frequencies are handled by a new version of the established Mordaunt Short DS208 steel-framed driver, which features a heavy-duty flared pulp cone with a substantial degree of visco-elastic surface damping. Both this and the treble driver are rebated in the 18mm MDF baffle, and high frequencies are covered by a 19mm ferro-fluid-cooled soft-fabric dome unit.

The enclosure is built of 18mm particle board, the interior filled with an optimal (*ie* sufficiently generous) quantity of absorbent polyester fibre. Hard-wired to the driver, the crossover is a classic 2nd-order type with commercial quality components. Protection circuitry has been omitted for sound quality.

Sound quality

Located in free-space, 0.6m from the rear wall (to the front of the baffle) and positioned on the supplied, knock-down steel-frame stands, the CLS20 gave encouraging first impressions. The sound was lively, open, articulate and well balanced, showing good response extension at both frequency extremes. No lumps, booms or serious colorations were present. It was essentially neutral and natural, presented good levels of musical detail, and got on with the job in a thoroughly competent and workmanlike manner. Its even-handed temperament suited both rock and classical material.

It sounded clear and well focused (particularly with the grille detached) but did not throw exceptional stereo depth. Certainly a fair degree of ambience was recovered from appropriate recordings, but the result was not truly transparent. More depth was available from the Rogers LS4 or Tannoy Eclipse EII, for example. However, the Creek did possess a tuneful, extended bass for its size, and although it was judged a little forward and bright, this only resulted in additional crispness and did not give rise to any significant harshness or glare. Its generally high definition and expressive dynamics remain in one's



memory, while the rendition of pace and rhythm were significantly above average.

Lab report

Sensitivity measured at an average level of 88dB/W, and the axial 1 metre response was impressively uniform (Fig 5a), confirming the first listening impressions. The LF -8dB point was good for the class at 50Hz, with room extension to 40Hz. Smoothing in the 3rd-octave mode suggested a slight lift in the mid-treble (Fig 5

b/c), but it would not be fair to argue with the smooth, well-balance overall response. In the vertical plane (Fig 5b) the sub-axis plot shows a 6dB loss in the crossover range, so the ideal stand would place the tweeter at the listener's ear level. Good uniformity is seen in the lateral off-axis responses (Fig 5c), and the grille had less effect on the response than most. Room-averaged (Fig 5d), the response shows a fine overall balance, slightly bass-shy but well tuned. The mid

is uniform and integrates well with the correctly decaying treble range, which fitted in well with listening impressions.



Analysed for energy-*v*-time (Fig 5f), the decay floor was not particularly deep, but the initial 1m slope is fast and tidy. This is clearly reflected in the waterfall decay (Fig 5g), where the output clears rapidly across virtually the whole frequency range in the first 0.6m, correlating well with the good detail and clean 'open' sound heard. But more energy clutter arises further forward along the time scale, centred on the mid-range, and this probably relates to the lack of absolute depth and transparency noted.

Conclusion

This compact, free-space loudspeaker has been carefully and skilfully engineered to provide an accurate sound. Open and lively, it had an extended frequency response for its class, with moderate distortion, good power-handling and a good sensitivity. Offering an easy amplifier load, it gave a well balanced performance from both engineering and sound quality viewpoints. As such, it is easy to recommend, and offers a worthy partner for the Creek electronics range.



CREEK CLS20

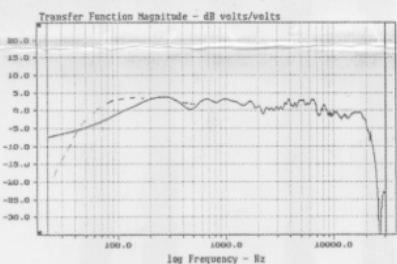


Fig 5a. Creek CLS20: on-axis 1m response, with LF correction shown dashed

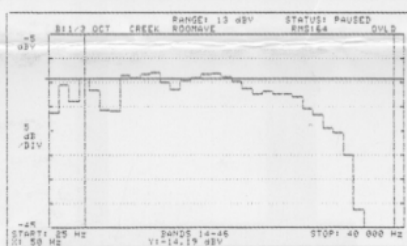


Fig 5d. Creek CLS20: room-averaged response (RAR)

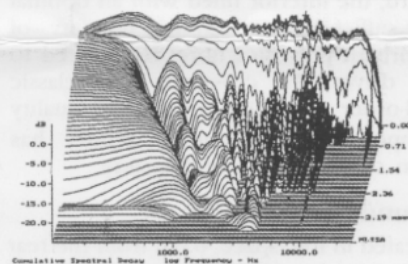


Fig 5g. Creek CLS20: MLSSA waterfall response

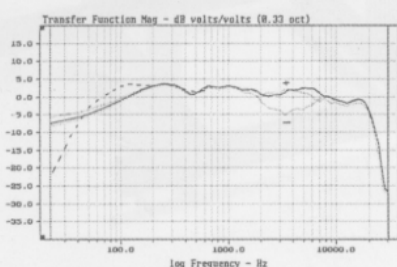


Fig 5b. Creek CLS20: one-third octave 2m responses at 15° above and below axis

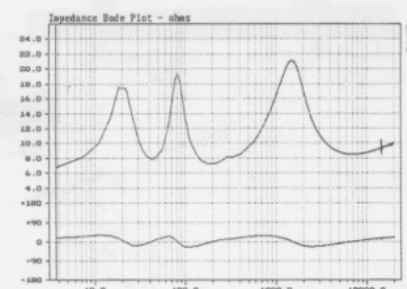


Fig 5e. Creek CLS20: modulus of impedance, with phase plot below

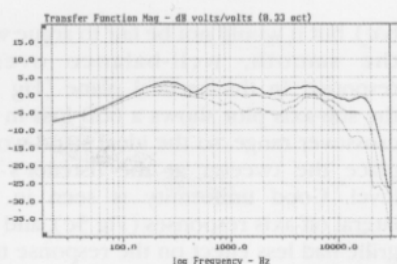


Fig 5c. Creek CLS20: one-third octave 2m lateral response family (axis/30°/45°)

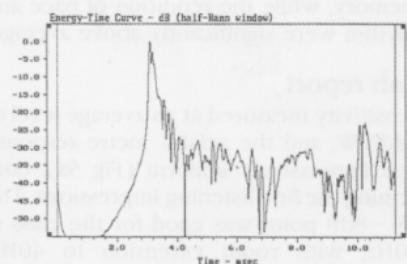


Fig 5f. Creek CLS20: ETC energy decay plot

Test results

Size (height × width × depth, cm)	49.5 × 24.5 × 24
Recommended amplifier power per channel	15-100W
Recommended placement	45cm stand, free-space
Frequency response within ± 3dB (2m)	80Hz-19kHz
LF rolloff (-6dB) at 1m	50Hz
Bass frequency extension (typical in-room)	40Hz
Voltage sensitivity (ref 2.83V) at 1m	88dB/W
Approximate maximum sound level (pair at 2m)	103dBA
Impedance characteristics (ease of drive)	Easy
Forward response uniformity	Very good

Supplier:

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