

ATC EL 150 SLA (£43,400)

ATC's flagship domestic loudspeaker, the passive EL 150 SLP, costs £29,125. But hold on to your hats: now there's an actively-driven version too...

Review: **John Bamford** Lab: **Keith Howard**

Do you fancy listening to a recording of a live concert in your living room? If you live in a detached house, or at least are able to wind the wick up without disturbing neighbours, then how about *really* creating a feeling of 'being there'?

Wait. Let's pause for a moment. I've sat in the front row at a few rock concerts during my lifetime. And when the drummer kicks his foot pedal, or the bassist twangs an open E-string, the shock of the initial sound pressure impacting your body takes the wind out of you. Rapidly you discover you require extra effort to breathe. These '150s, won't *quite* recreate such a forceful sonic impact. But if you think your present system will go pretty loud, chances are you've heard nothing quite like these ATCs.

Loudspeaker Technology Ltd, the manufacturer of the well-known ATC brand of speakers and electronics for some 40 years, is renowned for its studio monitors used the world over. Last year [*HFN* Dec '09] we visited its Gloucestershire workshops, where around 20 craftspeople make everything by hand.

Naturally the EL 150 employs the basic DNA and key components used in all ATC's monitors, such as its proprietary soft dome midrange unit and bomb-proof bass drivers: a fearsome 375mm woofer in this instance. The folks at ATC

are the first to admit that their studio monitors are designed to do a job, plain and simple, with form following functioning. While a passionate audio enthusiast with a 'sound den' might be satisfied with an agricultural looking behemoth of a speaker enclosure, most people who can afford something truly fabulous wouldn't dream of ruining their interior-designed living room's aesthetics with coffin-sized black boxes resembling cabinets from a rock concert!

Hence the development of this 'domestic' flagship model, intended for the living rooms of the well-heeled. The ellipsoidal cabinet, produced by a local furniture maker to ATC's specifications, remains precisely 150 litres in volume, the same as the SCM 150 studio model. While they might suit a room resplendent in Rococo or perhaps Art Deco furnishings, our review pair looked rather garish in their burr magnolia veneer, but of course any wood or piano lacquer finish can be requested when commissioning such a costly model.

Apart from its gargantuan 200 and 300 litre cabinet speakers, intended for large studios preferring to have amplifiers in a room remote from control monitoring, ATC's active models usually have the powered crossovers and power amps built in. Again, if you can afford something rather special, chances are you'd rather show it off, so it was a conscious decision by



RIGHT: The EL 150 features ATC's famous 75mm SM-150S soft dome midrange unit, a massive 375mm bass driver and 25mm tweeter

A HIGH-END SHOPPING SPREE

'We've had to take on extra staff recently,' ATC's operations director, Bob Polley told me when I phoned to quiz him about the background to these EL 150s, which are quite unlike other speakers in the company's range. 'We're experiencing unprecedented sales growth at the moment, especially sales of our expensive models. The

EL 150 has been a great success for us since we introduced the passive version at the Hong Kong audio fair in November 2007. Sales are good in the UK and we're overwhelmed by the volume of sales coming from the high-end hi-fi market in territories such as Russia and China.' Aren't we supposed to be in a financial recession? Bob's

never shy of telling it like it is, so this couldn't be PR puff. Anyway, it tallies with what other hi-fi manufacturers have been saying during recent months. Consumers wealthy enough to afford the best things in life are buying them now, since keeping money in the bank is presently of little benefit due to uncommonly low interest rates.

ATC to design the active version of this EL 150 as a 'remote active' model.

MATCHING ELLIPTICAL AMP

Enter the huge P6 multichannel amplifier with its chassis formed from a billet of aircraft grade aluminium, shaped in an ellipse to complement the speakers. It contains 3-way active crossovers with phase equalisation and six discrete mono power amps (one for each speaker's three drive units), delivering a claimed 350W per stereo channel. Resembling nautical hawsers, substantial multicore cables link up the P6 to each speaker using fabulous – and fabulously expensive! – Swiss-made Lemo multipin connectors with gold-plated pins.

As ATC's senior design engineer Ben Lilly explains when extolling the benefits of active drive, 'We pride ourselves on the consistency of our drive units and endeavour to work within tolerances of plus or minus 0.5dB when pair-matching drivers for our passive models. But of course for our active systems we can trim the gain of each power amp module to even finer tolerances, matching each amplifier to its individual drive unit.' (Consequently I was given strict instructions to observe the 'L' and 'R' labelling on the rear panels during setup.)

For the loan period ATC also supplied one of its purposeful SCA-2 preamplifiers, currently its top line model (£4860) with a suite of balanced and single-ended inputs and a balanced output pair of XLRs for marrying up with the P6's balanced inputs.

EXPLOSIVE DYNAMICS

When playing the audiophile demonstration track 'Gone Battlefishin'' from the album *James Newton Howard & Friends* [Sheffield Lab CD-23] I thought these ATC '150s must come as close to being classed a military

weapon as any loudspeaker ever to have graced my basement listening room. Originally a 1984 direct-to-disc LP recording, this Sheffield Lab album is filed in the 'sonic fireworks' section of most audio enthusiasts' collections.

Indeed, 'fireworks' comes pretty close to describing the intimidating force of sound pressure these monitors will produce when they're turned up a notch, the ricocheting crack of the drums seeming like gunfire interspersing the earth-shaking bass synth riff in the recording. The kick drum delivered knockout punches with startling realism.

Have I used the adjective 'frightening' yet? Because I can tell you, as numerous visitors passed through the listening room during the few weeks that the

EL 150As were in residence, I managed to frighten most of them in the course of some insane moments of showing off. 'Nice of you to share the music with neighbours in the

'Nice of you to share the music with neighbours in the next street'

next street,' commented one friend as I demonstrated that these monitors were capable of causing permanent hearing damage for the reckless. And I kid you not, this could be achieved by turning the gain up on the preamp's volume dial barely half way...

Playing natural-sounding recordings of live concerts is made a thrilling experience when you've a pair of these EL 150As sitting at the far end of your listening room. With the DTS Entertainment label's 2003 DVD-Audio release of Frank Zappa's *Halloween* [DTS-1101], an analogue recording of a 1978 performance, transferred to 24-bit/96kHz packed PCM, the tremendous power and headroom of this active ATC system afforded a sensational feeling of 'being there', halfway back in the stalls of the auditorium. That familiar gut-wrenching 'thwak' of the kick drum through the band's PA system was ever present, the



LOUDSPEAKER

LAB REPORT

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ABOVE: The accompanying P6 'drive engine' weighs a hefty 50kg. With just one pair of balanced inputs on XLRs, it houses active crossovers and six power amplifiers

speakers effortlessly delivering the fierce bass alongside searing guitar and crashing percussion without appearing to even break into a mild sweat. As I was measuring peaks in excess of 110dB, holding an SPL meter in my lap, my listening seat nearly 20ft from the speakers, I thought 'With a pair of these you could fill a very, very large room with music – but you wouldn't want to be sitting too close'.

Despite showing signs of its age, my vinyl pressing of Led Zeppelin's live soundtrack to the concert film *The Song Remains the Same* [Swan Song SSK 89402] – played at high level purely for investigative purposes, you understand – similarly sent shivers down the spine as John Paul Jones' bass pedals produced prodigious waves that were sent reverberating down the length of the listening room. Jimmy Page's guttural, urgent assault of his Les Paul during the solo in 'No Quarter' verged on manic as it cut through the wall of sound; only the sound engineer's pointless riding of a 'phase effect' slide control shattering the realism of the musical event.

SIMPLY EFFORTLESS

There was absolutely no evidence of strain, regardless of what I threw at them. The EL 150As sounded relaxed and effortless, with a delicate touch when

playing piano and acoustic instruments that had been recorded in a natural perspective. They certainly possess an ability to bring such music to life, especially simply-miked recordings where the air and space around the instruments and voices permits the sound to breathe.

These imposing ATCs deliver up-front detail, a tight and punchy bass, with seemingly endless headroom that allows you to listen-in to recordings as if analysing them under a magnifying glass. While ruthlessly revealing of inadequacies in poor recordings (the presentation soon becoming hard, forward and aggressive), with high quality source material they will have you riveted to your seat, captivated.

HI-FI NEWS VERDICT

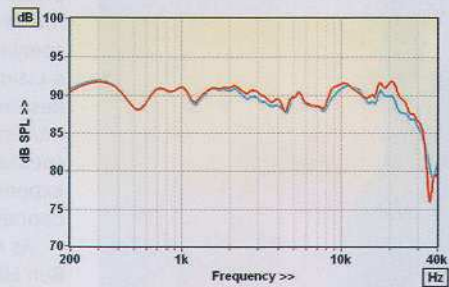
ATC's EL 150As are uncompromising, ruthlessly revealing of poor quality recordings. But what else would you expect from such a powerful and revealing monitor? They can fill a huge acoustic space with high quality sound at high SPLs, moreover they come with a lifetime warranty. For those able to afford them, they should definitely be high on the list of speakers to be auditioned.

Sound Quality: 80%

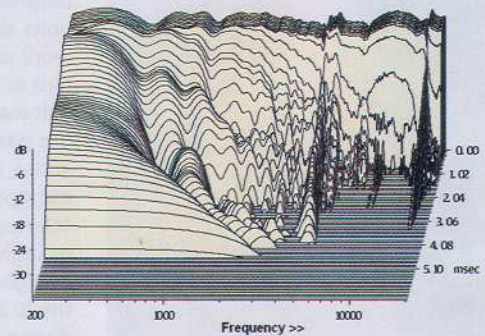


Because the EL 150 SLA is an active speaker, no conventional sensitivity measurement could be performed. But as ATC takes the unusual step of specifying the EL 150's 'underlying sensitivity' as 91dB, the on-axis frequency response traces [see Graph 1, below] have been normalised with the left channel at 91dB/1kHz. As always with ATC designs, the frequency response trend is essentially flat, and ripples in the response are mild, giving rise to unusually low response errors of just ± 1.9 dB and ± 2.1 dB respectively for the two speakers. Pair matching is also good at ± 1.0 dB, although not in the very highest echelon, the largest disparities occurring between 2kHz and 4kHz and above 8kHz. Note that the lower frequency limit for both these measurements is 300Hz rather than the usual 200Hz, since the heavy EL 150s could not be raised up off the floor to increase the measurement time window.

Bass extension (-6dB ref 200Hz) is excellent at 27Hz, although near-field measurement shows the response beginning a gentle decline at around 50Hz. The large woofer's THD is low at 0.3% at 100Hz for 90dB SPL, and its reflex loading will help suppress distortion at lower bass frequencies. A little disconcertingly, the two speakers of the review pair did not generate closely matched cumulative spectral decay waterfalls. The worst of the two [see Graph 2, below] shows a distinct resonant ridge associated with the frequency response 'wobble' at around 5kHz, which in the other speaker is much better suppressed. It is also unusual these days to see a distinct tweeter resonance at about 17kHz, even if this is probably entirely inaudible. KH



ABOVE: A well-engineered and essentially flat forward response with L/R pair matching better than ± 1 dB



ABOVE: One cabinet showed a 5kHz ridge that marries up with a 'wobble' on the response (the other was better suppressed) and a tweeter resonance at 17kHz

HI-FI NEWS SPECIFICATIONS

Sensitivity (SPL/1m/2.83Vrms – Mean/IEC/Music)	N/A (Active speaker)
Frequency response error (300Hz–20kHz)	± 1.9 dB / ± 2.1 dB
Pair matching (300Hz–20kHz)	± 1.0 dB
LF extension (-6dB ref 200Hz)	27Hz
HF extension (-6dB ref 10kHz)	31.4kHz / 31.6kHz
THD 100Hz/1kHz/10kHz (for 90dB SPL/1m)	0.3% / 0.2% / 0.2%
Dimensions (HWD)	1315x650x290mm