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Alto Truesonic 115A

Active Loudspeaker

Alto's modestly priced all-rounder can serve as either a main PA speaker or a monitor. How does it fare on stage?

MIKE CROFTS

The portable, live sound equipment market seems to be on the up these days, and an increasing number of sound-reinforcement products make full use of the latest developments in amplifier design, lightweight speaker technology and digital signal processing.

Alto's Truesonic portable full-range speakers are just such advanced models, and the range includes both 12-inch and 15-inch two-way formats, each of which is available in a choice of three models. The model variants all share a similar (if not identical) external cabinet, offering a choice between passive and active, with



Alto Truesonic 115A £249 each

PROS

- Easy to operate.
- Produce a well-balanced clean sound.
- Good, wide coverage.
- Very competitive price.

CONS

- RCA inputs on the back would be handy.

SUMMARY

The Alto TS115A is a good all-round active speaker. It has an even, well-balanced sound with enough output level and flexibility to cope with a range of applications. It's also light and easy to handle, which is handy for taking powerful, portable sound to events. I like the simplicity of operation and control, and providing the speaker proves robust and reliable over time, I'd see it as a good prospect for dry hire. At this price, it's got to be worth considering.

two active options: the straightforward self-powered model and the more upmarket 'Pro' model, which incorporates on-board Alesis DSP technology.

Other speakers currently part of the Truesonic line are a 10-inch two-way active model (TS110A) and a choice of three subwoofers: 12-inch, 15-inch and 18-inch. Here we're looking at the powered 15-inch speaker, the TS115A, which enters a market populated by a reasonable selection of 15-inch, two-way, powered speakers from manufacturers old and new.

Construction

The first thing I noticed and appreciated about the TS115A was how easy it was to lift out of the shipping box. This was thanks to a sensible recess at the top of the cabinet and a good-sized pair of sturdy, cushioned handles at the sides. The speaker doesn't weigh very much compared to similar-sized models from only a short time ago, or even compared to some still currently on offer from other manufacturers. At a shade over 17.5kg,

it's among the lightest in this size and power class, and is very manageable.

The TS115A is designed to be a 'fit for all' unit, and can be used upright as a main PA speaker or on its side as a floor monitor. It can also be used as a fixed installation unit, as there are six integrated M10 rigging points for flying it above ground.

The enclosure is made from lightweight, injection-moulded polypropylene that has a smooth but slightly matt black finish. The cabinet styling blends modern-style curves with straight lines in an attractive manner. I like this design in a practical sense, too: the curves add strength and make the speaker easy to handle, while the straight sides make it a convenient shape to pack for transport. There are also two bass-port style holes on the front of the unit, which are purely cosmetic, but attractive enough.

The speaker is equipped with a full-face steel grille for protection. The grille is shaped to fit neatly inside the

edge contours on the front of the cabinet and seems to be strong enough to defend the drivers within, although it does sometimes 'ping' inward slightly if you perform a 'hug carry', with the front of the speaker against your body.

There's no acoustic foam or cloth inside the grille to guard against liquid, but the close mesh of the grille itself would offer a degree of protection against the odd spill. In any case, you wouldn't want to be using a powered unit anywhere near a moisture risk.

I didn't have an opportunity to take the TS115A apart and look at the internal workings, but according to the published specifications the 15-inch LF driver has a two-inch voice coil and (I'm assuming, because it doesn't say otherwise) a traditional magnet assembly. The compression driver is a one-inch exit format and benefits from the latest-generation neodymium construction, meaning that it's very light. The crossover frequency is 2.5kHz, which is fine for this type of speaker.

High-frequency coverage from the integrally-moulded waveguide is stated to be 80 to 100 degrees horizontal and 60-degrees vertical at -6dB, which is in the zone where

"From the moment the frontman said something along the lines of 'one two, hello, ooh I like these', I knew we were on track for a happy evening."

a general-purpose portable speaker needs to be. I found the coverage to be wide and even, when listening to a single stand-mounted cab, with good off-axis clarity well outside the 90-degree segment.

Alto's Adoring Fans

The active part of the TS115A consists of a simple two-channel line-input mixer feeding a power amplifier. This amp is capable of providing 400W RMS (335W RMS for the LF amp and 65W RMS for the HF side) or an 800W peak, as proclaimed by a big peel-off sticker on the front.

The amp is a class-D design, which means that it's efficient, runs relatively cool for the power rating and contains no heavy transformer. Being an active speaker, the maximum possible amount of available amplifier

power is delivered directly to the drivers, the end result being

»



The Truesound 115A's amplifier is fan cooled, which is relatively uncommon. The fans are very quiet, and allow the cabinet to be free from the sharp heat-sink fins that would otherwise be required.

» a quoted 123dB SPL continuous output, with 126dB peak capability.

The amp unit itself is fan-cooled, so there are no external heat-sink fins to snag on your clothes or inflict damage on neighbouring equipment. The fan itself appears to be under some sort of automatic control, as it changes speed when necessary. It's remarkably quiet and smooth, being almost silent under idle or light work, and thus the speaker is great for audio-visual applications.

Provided the fan motor and control circuit are up to the job, as they appear to be, the fan is a good feature, bringing peace of mind when the speaker is running hard. Note that there are no filters on either the fan hole or the ventilation slots above, so it would be a good idea to keep an eye on them and make sure neither become obstructed.

Input & Output

The input section of the speaker is very straightforward: an uncomplicated rear panel hosts a pair of 'combi' sockets that conveniently accept XLR input as well as balanced or unbalanced jacks. Each input has its own level control, and there's an XLR line output that carries a mix of the two input channels to another cab or house relay, for example. The only thing missing is a pair of RCA inputs, which would be handy for some situations.

There are two switches on the rear for controlling ground lift and 'contour', the latter boosting the low and high frequencies by a few dB. Contour is especially effective when the speaker is operating at low volumes or playing back pre-recorded audio.

Out of interest I carried out a quick test to see what effect this contour control was having in a live room, rather than an



The rear panel of the speaker hosts a simple mixer, with two combined mic and line inputs and a line output for feeding other gear.

acoustically 'ideal' space. I ran pink noise (noise with an equal level in every octave) through the speaker at a modest volume, in a reflective environment. As you can see in the Spectral Plot screen shot, the Contour control appears to do exactly what it says: boosts the low and high frequencies by a few decibels.

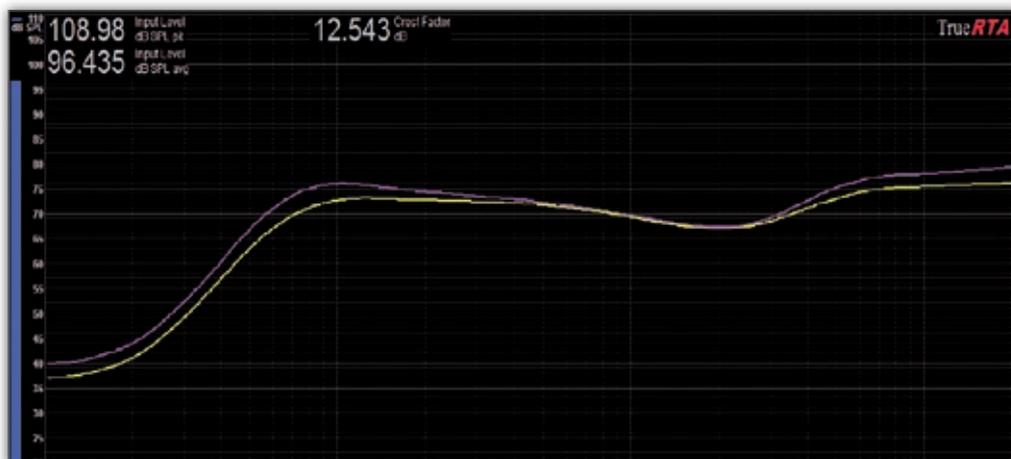
A positive aspect of the TS115A that really caught my attention was the almost complete absence of switching pops and thumps. Upon power-up, there's a barely noticeable click after the soft switching delay, and the contour button can be switched in and out with no noise at all. This may seem like a small point, but the most annoying trait of another very well-known active speaker I use is a very loud bang when I press 'contour', which makes me cringe and fear for my drivers. The fact that Alto have gone to the trouble of designing this circuit properly

scores them a number of 'choose me' points in my book.

One huge advantage of active speakers is built-in protection circuitry, which makes them more or less idiot-proof under normal circumstances. The TS115A has automatic limiting to protect against clipping, excess heat and over-excitation of the woofer. When running a pink-noise test to see where the limiter would activate, I managed to make the HF section shut down temporarily after a couple of minutes of flat-out operation. The speaker resumed normal service as soon as I reduced the input level to something more sensible, performing exactly as required.

Rigged & Ready

For my subjective listening tests, I play favourite recorded tracks in the test area — sometimes making an A/B comparison with a set of my own similar, but tried and trusted speakers — then I take them out on a live job for a real road test. Finally, I listen in the test area again to confirm what I've been thinking, and check anything that's raised a question mark. In this case,



Spectral Plot: This plot shows the response of the speakers in 'contour' mode in purple, and the response when running flat in yellow. Note the increased high- and low-frequency output of contour mode.

I liked the balance of the speakers right from the outset.

My current favourite testing CD is *Captivated*, by the British jazz-soul artist Zena James, and the Altos didn't disappoint with this material. At first, I thought they had a bit of a soft, overly warm sound, but then I remembered the contour switch was still on, which accounted for the extra low end! The flat output sounded very even, with plenty of warm bass from the 15-inch woofer, and I wasn't aware of any obvious or obtrusive peaking or harshness.

A couple of days later, I took the Altos out to a pub-rock gig and rigged them above a couple of small subs. I ran only kick drum, bass DI, keyboard and vocals through the system, though I assured the guitarist that he was fully miked up, of course. This particular band have an enthusiastic approach to performing rock covers, and the overall level of the PA always has to try and match the loud acoustic drum kit and backline, something that can prove a challenge in a small venue.

The Altos helped with a quick, easy

Alternatives

Alternatives to the Alto 115A include other models in the Alto range, as described in the main text, as well as plenty of similar 15-inch active models from rival manufacturers. These include the **StuDiomaster VPX15 Active**, **Behringer's Eurolive VP1220D** and the **Mackie Thump TH15A** powered loudspeaker, which are all worth a look.

and trouble-free sound check, and I was very happy with the vocal clarity and smooth piano sound. The TS115A speakers didn't need any serious desk work to come up with a relatively big vocal sound, which was just right for this band. From the moment the frontman Chris said something along the lines of "one two, hello, ooh I like these", I knew we were on track for a happy evening. When the band got going, the PA kept up with the band nicely, putting out plenty of clear volume.

The 115As were very easy to rig, and sat securely on standard mounting poles. Another nice touch was the quality of the pole-mount socket, which meant that

I didn't need to hammer the cabs into place, nor did I need to call upon the local tug-of-war team to get them off again afterwards. Back at base, I set up the Altos again for a bit more listening and playing around, could have sold them to a very impressed visitor who called by, and came to the view that the Alto TS115A is a friendly, very usable all-rounder.

On The Money

After all the live testing and listening was finished, I finally got around to checking availability and pricing. These active Altos are widely available (there's a map of Alto Professional dealers on the website), but what really struck me most was the price: a pair of these retails at a recommended price of £498. As I write this, I can click a few times and own a pair, which is seriously tempting. **///**

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