



Celestion G12 Blue, Tone Tubby, Eminence Red Fang, Jensen P12N & Fane Axiom AXA12 **£138-£230**

With the number of retro-fit speakers currently available, we take a look at five alnico drivers that could dramatically improve your sound **by Dave Hunter**

Throughout the 1980s and early nineties an 'alnico speaker' was usually just the flimsy, blown Jensen you'd pulled from an old Fender amp in order to install some sturdy new Celestions. Slowly, however, the legend of alnico mojo leaked from its box and spread through the guitar community.

Many players wanted to tap into that magic again, and one manufacturer after another stepped forward to oblige. Today there are more quality alnico models available than at any time since the 1950s and early sixties.

The collection on review here includes five of the most respected

makers in the world today: Celestion, Eminence, Tone Tubby, Jensen and Fane. Power handling ranges from 15 to 100 watts.

While these speakers do all have alnico magnets in common, there are many other considerable differences in components, construction and specs.



Variables in cone material and weight, speaker sensitivity (efficiency), spider construction, voice coil design and so on can make two speakers with exactly the same size and composition of magnet sound completely unlike each other. So going out to buy an 'alnico speaker' is rather like going out to buy a piece of string. Like-for-like comparisons can rarely be made, but this round-up will give you an inside track on the sonic characters and pros and minuses of each. Swapping a dull,

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uninspiring speaker for one with improved tonal response and dynamics can be the simplest way to improve your tone, and it will often result in a greater change in your overall sound than any other single-component swap you can make.

Alnico speakers are generally more expensive than their ceramic-magnet brethren, so they can represent a sizeable investment for players. In the 1960s the cost of cobalt – an essential ingredient in the aluminium-nickel-

cobalt alloy that makes up these magnets – went sky-high, and these magnets remain much more expensive per ounce today. Alnico speakers have generally been units with lower power-handling ratings in the sub-30 watts region, although three of the review samples will handle more than that: the Fane – 100 watts; Jensen – 50 watts; Tone Tubby – 40 watts.

We tested the speakers over an extended period of time (and after a necessary break-in period for each) in a range of cabinets and with a variety of amps, including – among others – a tweed 1960 Fender Tremolux, a Dr Z Z-28 combo, and a Marshall DSL50. To test a single speaker with an amp of an output close to or higher than the speaker's rating, we patched the test unit together with a second, unheard speaker in an isolation box to split the power load 50/50 between them. ➔

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TONE TUBBY ALNICO RRP: £230

These relatively new hemp-cone drivers from renowned San Francisco speaker reconer John Harrison of A Brown Soun [sic] have seen a skyrocketing popularity since their arrival in the USA a mere four years ago. Harrison readily admits that he based his alnico speaker's design approximately on the original Celestion G12, but the hemp-fibre cone gives this driver considerably higher power-handling capabilities. Harrison also claims they yield a smooth, musical compression right out of the box, and that his hemp Tone Tubby avoids the ghost notes and harsh 'cone cry' emitted by some traditional guitar speakers when pushed hard. Eric Clapton, Buddy Guy, Sonny Landreth, Billy Gibbons and, perhaps most famously, Carlos Santana have all jumped on to the Tone Tubby wagon. This speaker is new to the UK; having found them the perfect match for his stellar Eric Amp, Denis Cornell of DC Developments has decided to market Tone Tubby speakers as replacement components this side of the pond.

The Tone Tubby Alnico is a great looking speaker: the Ferrari-red enamel paintwork on its pressed-steel basket and bell cover screams "Hey, I'm special!". The terminal card – where you connect the speaker leads – does seem just a bit 'vintage' (read 'home-made') but it functions fine, and should withstand usage short of genuine abuse.

TONE TUBBY ALNICO	TEST RESULTS
Build quality	★★★★★
Sound	★★★★★
Value for money	★★★★★
<ul style="list-style-type: none"> ■ WE LIKED Smooth, creamy and delectable tones ■ WE DISLIKED Flimsy terminal card 	

SOUNDS: We were impressed with the sound of this unit right out of the box. It expressed slightly different characters with

different amps, but at its core each time was a smoothness and addictive musicality. It is definitely a speaker that's on the warm side and, therefore, it might not suit some players who need extremely punchy, cutting drivers in live situations. But in other ways it's one of the richest, yummiest, most addictive speakers we have ever played. This Tone Tubby has plenty of compression with an edge of sizzle when cranked, coupled with chocolatey mids that really flatter classic rock and blues guitar styles. Highs are never harsh or spiky, while the lows have a lot of body and depth; it's not a particularly tight bottom end, we have to say, but one with a lot of presence. Our overall sonic impressions are that this alnico speaker is plummy, smooth and delectable.

Tone Tubby Alnico

Guitarist RATING



EMINENCE RED FANG RRP: £140

The Kentucky-based Eminence company was for many years an enormous OEM supplier with only minimal recognition for its speakers. However, its Legend series alnico and ceramic models have had many fans, and still do. Despite massive worldwide sales figures, they never had the guitar mag and chat room presence of a Celestion, or more recently, a Jensen or Tone Tubby. All that changed in a major way with the release of the Patriot and Red Coat series in the USA last year. At the time of writing, the two lines comprise 21 models between them, and do a great job of covering the vast sonic range of the major British and American classics of old, with some updates and modifications too. These two lines have just been released in the UK, and despite being imports, they are quite good value for money, too, given their quality construction and all-American manufacturing.

The Red Fang is the only alnico model, and one of the few with more vintage specs (meaning less industrial power-handling ratings as the others are generally over 75 watts). It's a nice looking speaker, with a red crinkle-finish basket and bell cover, and appears to be very solidly put together too. The suspension is pretty heavily doped, and the bell cover is held in place both by a screw under the label and a ring of epoxy between its edge and the back of the basket, which should also stop it from developing rattles.

EMINENCE RED FANG	TEST RESULTS
Build quality	★★★★★
Sound	★★★★★
Value for money	★★★★★
<ul style="list-style-type: none"> ■ WE LIKED Even, linear tone with plenty of growl on tap ■ WE DISLIKED No major flaws 	

SOUNDS: The Red Fang has decent, sparkling twang and chime when played clean, with an open presentation

overall. Played at the edge of break-up, the highs have a juicy sizzle that stays shy of any shrillness and really shines through the mix. When pushed hard, the speaker retains a punchy low end that tends toward the gnarly, but without getting too flappy if kept within its limits. At these levels, the mids are nicely balanced within a fairly linear-sounding low-to-high spectrum and not overly pronounced like some drivers of its ilk. That said, there's enough mid-range muscle and grit from the Red Fang to get a guitar heard in a band context, and it can really roar when you whack it. Overall, it's a very nice speaker. It doesn't sound to us quite as loud as its whopping 103dB efficiency rating, but it has plenty of balls.

Eminence Red Fang

Guitarist RATING



**JENSEN P12N RRP: £145**

The delectable blue-frame Jensen alnico speakers were the drivers in vintage Fender amps from the 1950s and early 1960s. They also appeared in a great many other American amps of the day, from Ampegs to Gibsons to Danelectros and Silvertones. It's hard for anyone playing today to know what an original late-fifties Jensen alnico speaker sounded like new. Existing vintage examples have been played to a buttery smoothness over the course of 45 years, and now ooze the kind of creamy tone pudding that will make a bourbon-scorched bluesman weep flammable tears of joy.

The Jensen Vintage Series reissue speakers introduced by the Recoton Audio Corporation of Italy six years ago aren't entirely a match for the originals, but they have acquired a pretty good reputation. The reissues' voice coil formers are kapton rather than paper, and power-handling ratings are higher throughout the range, which some players argue makes them a little less sensitive and responsive than a Chicago-made Jensen of old. But as a line that at least approximates the design, look and sound of a loved and long-lost speaker range, they are still a useful option for players seeking speaker swaps and upgrades. Aside from the P12N's hefty power-handling capabilities, it has an undoped suspension, which should help this driver to really get going when pushed.

JENSEN P12N	TEST RESULTS
Build quality	★★★★★
Sound	★★★★★
Value for money	★★★★★
<ul style="list-style-type: none"> WE LIKED Biting hard-twang sounds with plenty of edge WE DISLIKED Potentially harsh treble 	

SOUNDS: All speakers require some loosening up to achieve their potential, but when we first played the P12N its low end

was constipated, while its highs were harsh and 'beamy' (there was a significant directional treble spike from the centre of the cone). After pummelling it in an isolation cab for hours on end, its true voice began to show through. It has a springy, wiry sound with highs that are still pronounced (as with 1950s Jensens), but are balanced by a fairly tight, round bottom and slightly recessed mids. It's an open, ringing tonality that really spans out the twang and clean fingerpicking styles, and adds a cutting edge to cranked blues and rock 'n' roll tones. It's a sound that will undoubtedly be labelled as 'vintage Fender' as a result. On the whole, this reissue isn't quite as rich and thick as some functioning original examples we've played, but it evokes the vibe nevertheless.

Jensen P12N

Guitarist RATING

**FANE AXA12 ALNICO RRP: £138**

Fane has always been the sleeper of British speaker manufacturers, but players familiar with the company know it deserves greater recognition. Meaty HiWatt stacks of the late 1960s and seventies often contained Fane drivers. They also appeared in many post-JMI Voxes, Oranges, WEMs and others. The AXA12 has been with us in its present form for longer than any of the others in this review (an inquiry to the company received the response: "Well, I've been working here more than 20 years and I know they were making them when I started..."), but it doesn't seem to get around much, due perhaps to the fact that it was an extremely expensive speaker until recently.

A shift in pricing strategy has brought the British-made AXA12 down from over £200 to its UK RRP of £138. And at 100 watts, the AXA12 has the highest power-handling rating of any commonly available 12-inch alnico guitar speaker. It's a gorgeous speaker, too, in deep blue enamel, and even at first glance appears built to survive the road and stage. It carries solder-only connection terminals, and the terminal board itself feels solid and wobble-free.

FANE AXA12 ALNICO	TEST RESULTS
Build quality	★★★★★
Sound	★★★★★
Value for money	★★★★★
<ul style="list-style-type: none"> WE LIKED Muscular performance and excellent build quality WE DISLIKED Requires a powerful amp 	

SOUNDS: This speaker is an unlikely choice for a low-watt combo, unless you want an absolutely wrinkle-free

performance from a tight driver that will totally reproduce your amp's own sound (ie, preamp or output valve distortion) without introducing any distortion of its own. By itself, this speaker will start to belch a little fire when hit by a good 60 per cent or more of a 40-watt amp's output level, at which point it offers thick, warm tones with the thumpiest lows of the bunch, and a firm mid-range with just a hint of creaminess in its grind. This big-bodied performance is topped by fairly mellow highs that avoid harshness, but also aren't spectacularly sparkling or detailed (and are a little spiky before adequate break-in). Played clean, it's a good, snappy sounding speaker with a balanced overall performance, but it really wants to be driven to come into its own. A very nice speaker with an unlikely blend of muscle and sophistication that could enable a very appealing 100-watt/2 x 12 package for players who need an amplifier that's both loud and relatively portable.

Fane AXA12 Alnico

Guitarist RATING



There's enough mid-range muscle and grit from the Red Fang to get a guitar heard in a band context, and it can really roar when you whack it

JENSEN P12N

PRICE: £145 (£171 with bell cover)

ORIGIN: Italy

TYPE: 12-inch alnico driver

POWER RATING: 50W

IMPEDANCE: 8ohms/16ohms

MAGNET WEIGHT: 29oz

VOICE COIL: 1.5-inch

SENSITIVITY: 98.4dB

FREQUENCY RANGE: 60Hz-8kHz

Dixies Music

01484-512601

www.jensenvintage.com**FANE AXA12 ALNICO**

PRICE: £138

ORIGIN: UK

TYPE: 12-inch alnico driver

POWER RATING: 100W

IMPEDANCE: 8ohms/16ohms

MAGNET WEIGHT: 34oz

VOICE COIL: 1.75-inch

SENSITIVITY: 101dB

FREQUENCY RANGE: 70Hz-6kHz (estimated)

Fane Acoustics

0113-277-8600

www.faneacoustics.com

The Alnico Blue's highs are silky and appealing, making for good jangle in clean playing without annoying spikiness, and giving a rounded top to lead notes for distorted tones



→ **CELESTION G12 ALNICO BLUE** RRP: £199

The original Celestion-made alnico G12, best known as the 'Vox Blue Bulldog', is acclaimed as the ultimate in speaker tone by more players than any other single model. Celestion answered countless prayers when it reissued the unit in 1992, and a very fine reproduction it is, too. This one's a sweetie to behold, and its beauty is more than skin deep. While the bulk of Celestion production has moved to China, the Blue continues to be manufactured in the Ipswich plant, along with the newer Heritage Series reissues of the Greenback and G12H-30. It has a famously light, responsive pulp paper cone, and a lightly doped suspension that helps to keep the speaker very articulate. This suspension, or 'surround', is the 'rippled' portion at the outer edge of the cone that is glued to the speaker basket, or frame. The Blue's low power handling rating and high sensitivity (15 watts and 100dB respectively) are inextricably tied to its dynamic, musical performance: it's said that this rating is conservative and the reissue speaker will actually handle considerably more than 15 watts, but with an RRP of \$199 you would have to decide for yourself whether you'd risk it.

CELESTION G12 ALNICO BLUE
PRICE: £199
ORIGIN: UK
TYPE: 12-inch alnico driver
POWER RATING: 15W
IMPEDANCE: 8ohms/16ohms
MAGNET WEIGHT: 33oz
VOICE COIL: 1.75-inch
SENSITIVITY: 100dB
FREQUENCY RANGE: 75Hz-5kHz
 Celestion
 01473 835300
www.celestion.com

CELESTION G12 ALNICO	TEST RESULTS
Build quality	★★★★★
Sound	★★★★★
Value for money	★★★★★
■ WE LIKED Sweet, sparkling, musical tone ■ WE DISLIKED Occasional bell-cover rattles unacceptable at this price	

SOUNDS: The Blue's charms shine in the way it throws out characteristics that might seem to be contradictory.

Anywhere short of full blast it has a crisp, defined edge (especially in the high-mids), yet is also extremely smooth and vocal when pushed; mids can be aggressive and pronounced when you hit chords hard, but never harsh.

The Blue has a slightly soft bottom, but not to the point of real mushiness, and it still pulls off a full, throaty performance all-round. The highs are silky and appealing, making for good jangle in clean playing without annoying spikiness, and giving a rounded top to lead notes for distorted tones. Compile its sonic ingredients and you have a very sweet, rich speaker with a lot of depth.

The only flaw we have found with some Blues is that the magnets' bell covers sometimes rattle at certain frequencies, and the mounting bolt doesn't provide enough bite to hold it tight. Sometimes it works to place a length of weather strip between the bell cover and frame to cure this, but that shouldn't be needed on a \$200 speaker.

Celestion G12 Alnico Blue

Guitarist RATING



Verdict

It's important to be aware that speakers – like any type of musical component – excel at different jobs, and what might be perfect for one player's tone or rig might be bottom of the pile for another's. By any standards, we found the Celestion Alnico Blue and Tone Tubby Alnico gorgeous sounding speakers, but they are very different in a number of ways, and a player who delighted in one might not get on at all with the other.

The TT is extremely smooth, round, plummy and moreish. It has a recessed high end that can take a little getting used to in this age of modern, high-definition treble, however, and up against some of the other speakers – and in the context of some bands – its smoothness can come across as a lack of punch and cutting power. Then again, played in isolation it offers some of the creamiest, most addictive tones of any speaker we've ever sampled. For pure delectability it was hard to deny it five stars for Sound.

The Celestion Blue simply lives up to its billing of being one of the sweetest, most dynamic rock 'n' roll speakers in history, and kept within its power rating it offers plenty of edge and note definition. Still a winner.

We were suitably impressed with the Eminence Red Fang, too, and it isn't far behind the Celestion and Tone Tubby in the superlative sonics stakes. This is a well-made speaker that offers a very mature, balanced performance on the vintage side of high-end.

In certain circumstances, either the Jensen P12N or Fane AXA12 could well be the driver of choice. Both offer elevated power handling, and are primed to roar with the right kind of power. Even so, neither has quite the dimension or overall musicality of the other three. But make no mistake, they are very good speakers. In the wrong rig they could sound a little tight and under-voiced, but given enough wattage these are both primed to wail.

But the Celestion and Tone Tubby are our joint favourites, both offering elevated tones depending on your own tastes. **G**



The Celestion G12's rippled surround acts as suspension for the cone