

Bare Knuckle Mule & Apache Pickups sets

£170 & £165



Can there really be room for another retrofit pickup manufacturer? We take our gloves off to some very special magnets and coils, hand-made the old way... in Devon!

by Neville Marten

Set up in Devon by Tim Mills with the aim of producing the finest pickups available today, the Bare Knuckle brand is finding favour with tone-hungry guitarists around the globe. Every pickup is made by hand, using materials as close to the originals as possible. And if components are no longer available, Tim simply makes them himself. But why enter such a fiercely contested market in the first place?

"I'd become frustrated with even the most expensive retrofits," explains Tim, "so I decided to make my own. There's nothing more rewarding than using a guitar with your own pickups powering it." Business is now booming, as is Mills' reputation as a pickup guru.

Using methods like scatter-winding, where the wire – usually plain enamel-coated, not the mixed enamel and polyester stuff more commonly used today – is randomly wound around the bobbin; offset coil design, where each bobbin in a humbucker has a different number of windings; and sourcing original-style unpolished Alnico magnets, have, says Mills, made all the difference. "Such small details may seem insignificant, but working guitarists notice."

Let's take a look at two of Bare Knuckle's most popular sets: a pair of calibrated PAF-style Mule humbuckers, and the Hank-voiced set of Apache single-coils.

The Mule

This is Tim's take on those musical pickups found on Les Pauls of the late 1950s, and while he admits that scatter-winding creates uniquely individual pickups, these are much more consistent than those wildly varying Gibbo units.

Using various Alnicos and voiced so the neck pickup is more open and less mushy than many Gibson units, the idea of these pickups is to have a vocal tone that's expressive and clear, while driving amps commandingly into overdrive when required.

The Mule (named after Warren Haynes' band Gov't Mule) uses unpolished, vintage-cut Alnico IV



Tonal thoroughbreds: these Mules are more than just workhorses

magnets, just like original PAFs. The coils are offset-wound by hand, using 42-gauge plain enamel wire – again, just like original PAFs. The baseplate is nickel silver, magnet spacers are hand-cut maple and the full-length adjustable pole screws are specially made from soft iron because they sound better and because... you guessed it... the originals were made that way too! "We offer Alnico II, III and V," explains Tim, "depending on the guitar and player, but Alnico IV is the most popular. Very few other manufacturers use it as it's not widely known about and costs almost double that of Alnico II."

Apache

The Apache single-coil set is for Strat players who hanker (yawn!) after that twangy but fat tone. The bridge pickup is wound hotter, for better overall balance and because contemporary players prefer it this way. Using Alnico III magnets with a 1956-style polepiece stagger, these are truly authentic. "Alnico III is the weakest of the alnicos," reveals Tim, "so you get better sustain, less string pull and less colouration." And, don't forget,

BARE KNUCKLE MULE	TEST RESULTS
Build quality	★★★★★
Features	★★★★★
Sound	★★★★★
Value for money	★★★★★
<p>■ WE LIKED Attention to detail; fabulous humbucking tones; customer support</p> <p>■ WE DISLIKED The fact that we haven't got them on all our guitars!</p>	

a weaker pickup lets you turn your amp's master volume up another notch.

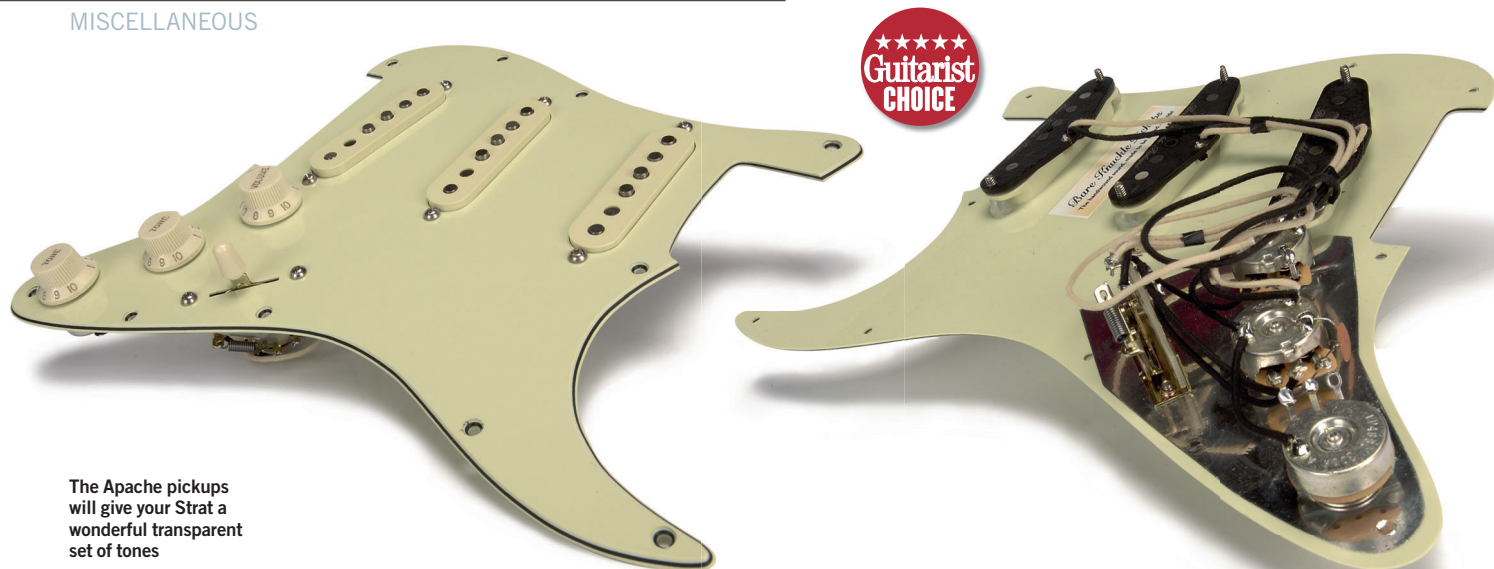
Scatter-wound with 42-gauge heavy Formvar wire, overall these pickups are beefier than those on vintage Strats. A lower output version is available, and if you don't like the reverse-wound/reverse polarity middle pickup Tim will happily supply one in true vintage style. "The difference in the in-between sounds is incredible if you do it the original way," asserts Tim. If you're a real anorak (aren't we all?), you'll delight in the knowledge that Bare Knuckle has even sourced the original waxed cloth hook-up wire from Fender's old suppliers.

SOUNDS: Our Les Paul was duly loaded with open, zebra-coiled Mules and plugged into a Matchless Lighting

BARE KNUCKLE MULE

PRICE: £90 each, £170 per set
ORIGIN: UK
TYPE: Vintage-style humbucker
MAGNETS: Alnico II, III or IV
WIRE: Plain enamel, scatter-wound
CONDUCTORS: Two
POLE-PIECES: Six adjustable, six fixed
DC RESISTANCE: 8.9K ohms approx
BASEPLATE: Nickel silver
POTTED: Paraffin and beeswax double-potted
POSITION: Bridge or neck (or calibrated set)
OPTIONS: Four-conductor wiring for series/parallel operation; gold or nickel covers (£99 each, £190 a set), open-coil zebra or black; Gibson (50mm) or Fender (52mm) string spacing
GUARANTEE: Lifetime
Bare Knuckle
01598 763666
www.bareknucklepickups.co.uk

MISCELLANEOUS



The Apache pickups will give your Strat a wonderful transparent set of tones

BARE KNUCKLE APACHE SINGLE-COIL SET

PRICE: £165 (calibrated sets only)

ORIGIN: UK

TYPE: Fifties-style single-coil

MAGNETS: Alnico III

WIRE: Heavy Formvar, scatter-wound

CONDUCTORS: Two

POLE-PIECES: Vintage bevelled

RESISTANCE: (Set) 6.65/5.95/9.5K Ohms approx

BASEPLATE: Forbon

POTTED: Paraffin and beeswax double-potted

POSITION: Neck/middle/bridge (middle reverse wired)

OPTIONS: Black or white covers, non-reverse-wound middle pickup, lower output bridge pickup

GUARANTEE: Lifetime

BARE KNUCKLE APACHE TEST RESULTS

Build quality	★★★★★
Features	★★★★★
Sound	★★★★★
Value for money	★★★★★

■ **WE LIKED** Fantastic balance across the set; plummy tones; open, twanging power

■ **WE DISLIKED** The intrinsic single-coil design inevitably means some noise

→ combo. The instant impression was one of openness and clarity with warm, punchy mids, but without the annoying flabbiness that so often afflicts the Gibson's lower frequencies. Dynamics abounded, and there was no immediate desire to crank the amp's gain – though when it was time to wind up the wick, pickups and amp responded dutifully. 'Open' is a word that recurs when describing Bare Knuckle pickups, and even on our notoriously nasal LP this was evident, translating into articulate distortion and lending huge variation in drive, using just the guitar's volume controls. Pickup-to-pickup balance was perfect, with no loss of power when switching from neck to bridge.

A 1980s Japanese Fender Strat was the happy recipient of this calibrated Apache set with reverse-wound centre pickup. While the Strat's original pickups never lacked twang, the transformation was marked. It's that open, woody thing again. Tim Mills' scatter-windings and Alnico III magnets leave you feeling expressive and dynamic, with a set of transparent tones that sing sweetly when played clean but which dirty up magically. There's not only great balance from pickup to pickup, but huge space between each string as well. Even though Tim reckons his non-reverse-wound middle pickup set sounds better on those Knopfler and Rea positions, we couldn't hear much wrong with them, and their humbucking operation certainly made for a quieter guitar. Edgy, fruity, spiteful, sweet, clanging and huge are all words that try, but don't quite manage, to describe this excellent set of pickups.

Verdict

Of his work Tim Mills says: "Although I try not to leave any stone unturned when it comes to authenticity, I hope it's never at the expense of the sound. At the end of the day it's about getting guitarists the tone they hear in their heads." It was all too easy to presume that this was just more rhetoric, and that these British-made lumps of copper, aluminium, nickel, cobalt and iron would simply blend into the pack.

But if we expected semi-skimmed, what we got was full Devonshire cream. We can't wait to try the rest of Tim's range: in our estimation he's leapt to the top of the pickup pack and we can't recommend his products too highly. **G**

Bare Knuckle The Mule

Guitarist RATING ★★★★★

Bare Knuckle Apache

Guitarist RATING ★★★★★

The rivals

DiMarzio PAF Pro £69.99

Seymour Duncan JB £79.95

Lindy Fralin Vintage Hot set £169

DiMarzio's PAF Pro apes Gibson's famous Patent Applied For humbuckers of 1957-62 and is still a safe bet for sweetening up a brash or tonally wanting guitar. Duncan's JB is perhaps the best-selling replacement humbucker ever, offering boosted mids and overall oomph and ideal in the bridge position. Lindy Fralin revels in making authentic sounding pickups. His Vintage Hot set is a cranked-up single-coil set but boasts the big, open tone of those earliest Strats

A FISTFUL OF TONE

Here is just a sample of Bare Knuckle's excellent and extensive pickup range...

GEOFF WHITEHORN CRAWLER £99

Designed for Les Paul or Strat-style guitars, the Crawler's tonality is vintage, but with warmth and power aplenty. Using Alnico V magnets and 43-gauge plain enamel wire, choose bridge, neck or a calibrated set with four-conductor wiring for all your sonic permutations.

STORMY MONDAY £99

This humbucker evokes the golden revival days of British and American blues. Based on patent number pickups from the 1960s, with two-conductor wiring and double wax-potted for squeal-free operation, the Stormy Monday loves to drive valve amps into the red.

THE SULTAN £165

With vintage staggered Alnico II polepieces "hand-bevelled to focus the power of each magnet under the strings" and calibrated for balance between each pickup, these wax-potted singles give authentic versions of those most famous in-between tones.

SLOW HAND £165

Voiced to create that classic 'Blackie' tone – with extra mids and greater power – this set features hand-bevelled, staggered Alnico V magnets and "special" gauge plain enamel wire. Scatter-wound and potted, and with original style cloth cable.

Modern radius and original middle pickup polarity are also available.

COUNTRY BOY £125

This calibrated Tele set features a cord-wrapped, scatter-wound bridge pickup with either nickel silver or brass grounding plate. Forbon bobbins and non-staggered Alnico V magnets are hand-wound with plain enamel wire. The bridge pickup offers typical upper-mid articulation, while the neck unit is sweet and fruity.

BROWN SUGAR £125

Custom-stagger Alnico V magnets, nickel silver or brass bridge grounding plate and an open neck pickup offer a more laid-back sound. Over-wound with plain enamel wire, this Stonesy set is balanced and powerful. Microphony is eliminated due to wax potting, and pickups are available singly and with various covers.

BKP-90, BKP-91, & BKP-92 £70 EACH, £135 PAIR

These P-90-style pickups come in soapbar (LP-style) and dog-ear (ES-330) versions. BKP-90: Alnico II magnets with medium output – rich, full with smooth mid-range. BKP-91: Alnico V magnets, hotter windings – heavier mid-range and top-end definition. BKP-92: Alnico V magnets, even hotter wound with special enamelled wire – big, gutsy and articulate.