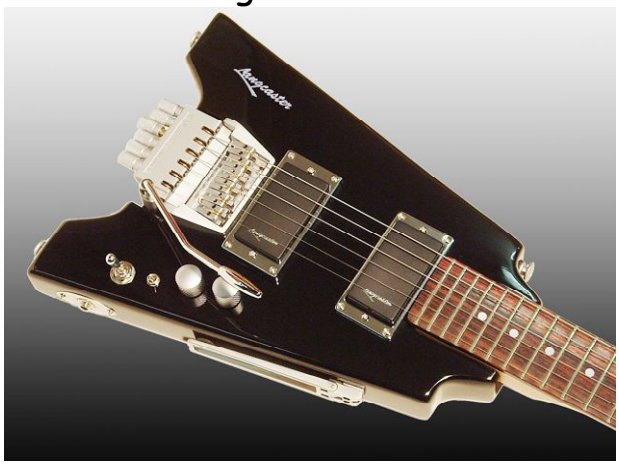
INTRODUCING THE LANGCASTER™ ULTRA-LOWBUCKER®

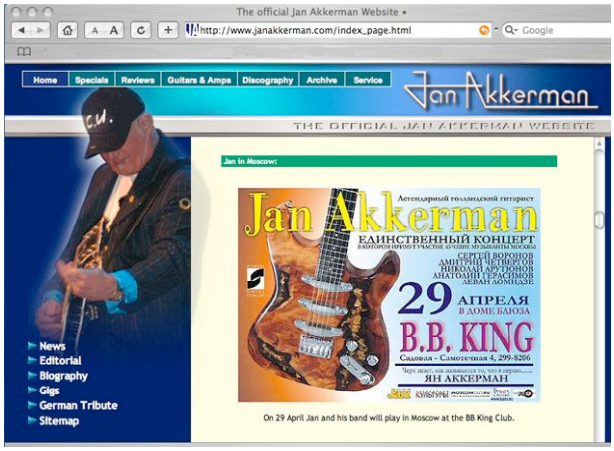
With integrated Ultra Drive© Overdrive for 6 and 7 string guitars

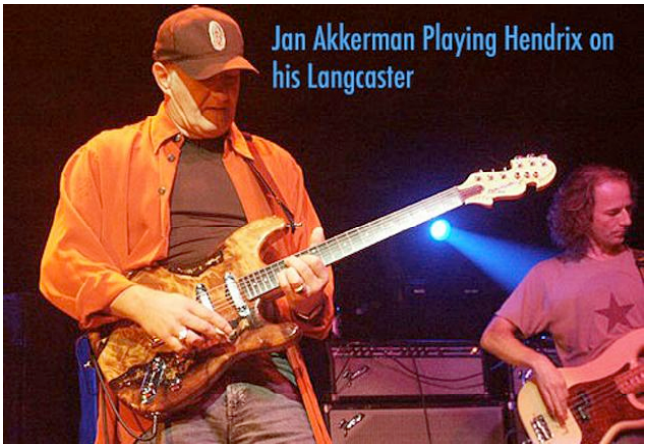


Luthier and inventor Joh Lang of Langcaster Ltd., New Zealand caused in 2003 a revolution in the international guitar world by introducing his unique Strat shaped Swamp Kauri guitars. The Langcaster guitars and basses received very favourable reviews in the 20th Century Guitar magazine, Harmony Central, German magazine Gitarre & Bass in the Dutch magazine GitaarPlus.

From 2004 the Langcaster guitars were equipped with his Ulimate Lo© impedance pickups and Ultra Drive © PCB. These high-end guitars were an instant success, especially in the U.S.A. because guitarists immediately reacted with favour on hearing their first chord played on a Langcaster guitar fitted with the Ultimate Lo pickups.

Guitar ace Jan Akkerman, voted in 1973 as the best guitar player in the world and who owns a pile of guitars, chose the Lanagaster guitar for his Jimi Hendrix tribute tour in Europe together with Steve Lukather and his recent Russian tour.





Allthough the 35000 prehistoric Swamp Kauri wood definitely adds to the unique Langcaster sound, the low impedance Ultimate Lo pickups and the coupled Ultra Drive© PCB forms the pouding heart of these guitars.

In 2005 Joh Lang decided to develop a pickup kit with Ultimate Lo pickups & build in overdrive! of which the price would be on par or even lower then EMG's, DiMarzio's, etc. whilst preforming much better.

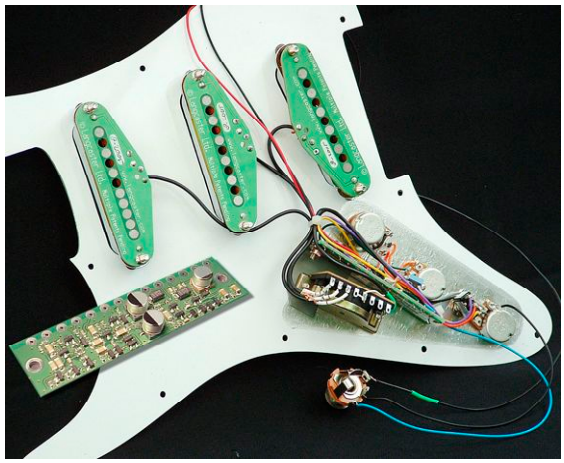
In 2006 Langcaster introduced the worlds first guitar with built-in digital delay, chorus and overdrive all to be controlled with pots on the guitar.

As The Stratocaster shape is the most used in whole world we chose for introducing the Langcaster Ultimate-Lo three-pickup Strat kit set with low impedance pickups and Overdrive.

This kit became an instant success all over the world. But as the guitar world is divided in Strat and Les Paul players we received numerous requests for Ultra Lo pickups, which would fit into a humbucker shape Les Paul type housings.

Initially Joh opted for an appropriate mounting plate but in the end Joh decided to develop a low impedance pickup with humbucker dimensions to fit Les Paul type guitars, whilst maintaining the unique specifications of the Ultra Lo pickups.

For those who are not familiar with these we give a review of these.



Langcaster invented the world's first real low impedance pickup being a mere 120 Ohms. This was obtained by use of a tenth of the number of turns compared to conventional pickups. This makes the inductance at least a 50th that of a conventional pickup. Self-resonance is as high as 56KHz - way beyond the range of human hearing. As a bonus the pickup are much more resistant to corrosion and damage and like all Langcaster pickups these are wax sealed.

How can we use a pickup with so few turns? Well, of course we now have seen active pickup preamplifiers powered by a 9 Volt battery for some years now but Langcaster developed their own low noise preamplifier, + overdrive matching the pickups to the guitar amplifier and eliminating the effect of even the longest guitar cable. By designing a tone control that works independently of pickup parameters, a consistent and smooth working range can be obtained. Loading and resonance can be selected and controlled to achieve a response that is just stunning. The preamp is designed with discrete transistors so that an extremely low current is drawn from the battery. Long battery life is then assured so that the battery lasts almost as long as its shelf life. No compromise has been made in the output capability either. The buffer stage has a capability of driving the volume pot to 2.5 Volts RMS which is hardly ever likely to be required in normal playing.

THE LANGCASTER ULTRA DRIVE © Overdrive System

Following the preamp stage is an overdrive circuit that has been years in development. A switch selects the overdrive or clean function. The overdrive stage consists of a balanced long-tailed pair and a PNP output transistor using feedback. The clipping produced by this circuit does not require any device to go into saturation, which means that battery voltage does not influence the resulting signal. There is no level shifting at the input so the signal is centred at zero at all times resulting in a consistent and smooth overdrive.

Many other stomp box types of overdrive using transistors or FETs do not have this feature.
Low order harmonics are produced which are musical and sound like a good valve amplifier. No harshness at all. No more stomp boxes to trip over; it's all at the fingertips. No rush to the amplifier to adjust the overdrive volume either. It can all be controlled from the guitar. What can be handier than that?
What can be said about the qualities of this overdrive? It has been compared favourably with very expensive boutique valve overdrive units. Truly, it has to be heard to be believed.
A low impedance buffer amplifier follows the tone and overdrive stages so that very long guitar leads can be used without treble loss. Keeping this in mind Joh developed the Ultra-Lowbucker which are a perfect fit for all Les Paul/humbucker type guitars. The housing is made of sturdy ABS with a chromed embossed Langcaster logo and integrated brass bushes for the height adjusting screws. Underneath are two stacked coils with extra long magnet poles, which make these pickups super sensitive.
In contrary to other pickups there is no necessity to raise the pickups as much as possible to obtain the maximal output/volume. (EMG 2mm) Ultra-Lowbuckers don't need that, these are so sensitive that these can be used at any pickup height, so avoiding the unwanted noise by touching the pickup. The coils are waxed and are protected by copper shielding.
The neck pickup has another Langcaster first: it is provided with 8 pole pieces in order to avoid volume differences at heavy string bending. It has also a capacitor to make the tone even clearer.
Both Ultra-Lowbuckers are ruled by a 3-position pickup selector switch, a master volume control and a passive tone control.
The Ultradrive circuit is operated by a mini toggle switch and an intensity gain control. The controls replace the existing controls of the Les Paul type guitars. But as long as the control cavity is big enough to accommodate the three control pots an overdrive switch & battery The electronics are switch on and off by the jack plug of your guitar lead. But even when you forget to take your lead out, causes no problems; the power consumption is so little that an Alkaline 9 Volts block battery lasts 1000 hours of continuous playing!

Herewith a review of main characteristics of the Ultra-Lowbuckers®:

- Unsurpassed clear and even output over the total frequency spectrum.
- Output signal levels that outclass every other single pickup, even the 'big name' ones
- A really low output impedance of only +/- 100 Ohms so you can use cables up to 100 metres
- Noise and hum free signal, better than any other pickup on the market today.
- Eight pole magnets in the neck pickup for an even response with heavy string bending
- Rigid construction with full electrostatic screening.
- ABS pickup housings, sealed pickup coils and brass bushes for the screws.
- Glass epoxy SMD PC board incorporating a superior tube-like warm overdrive
- Long battery life. One 9 Volt alkaline battery gives you 1,000 hours of continuous playing.

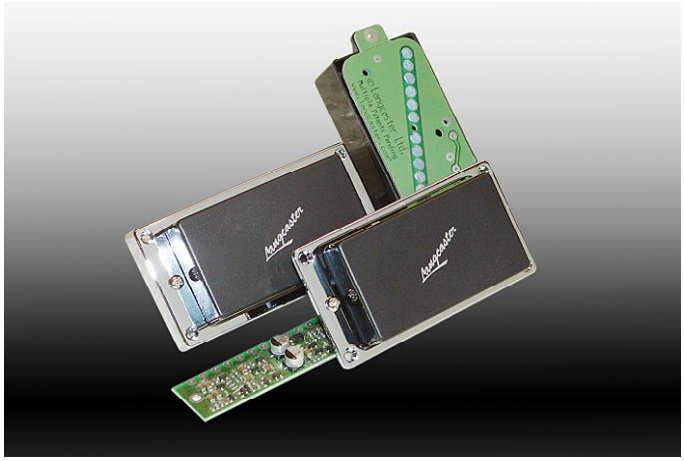
Plug your guitar into any guitar amplifier, into a sound mixer or even into your home stereo auxiliary input with fantastic results! These pickups are the perfect sound tool for any style of guitar playing.
If you want to hear the Langcaster Ultra-Lowbuckers® please have a look at:
http://www.youtube.com/LangcasterPlayer *See Sean Clancy playing on the black Langcaster explorer.*

The Langcaster Ultra-Lowbucker® kit is very complete and consists of the following parts:

1 .Langcaster Ultra-Lowbucker® – neck model, recognisable by 8 pickup poles.
2 .Langcaster Ultra-Lowbucker® – bridge model, recognisable by 6 pickup poles.
Both pickups come prefixed, which means these are installed in its own chromed mounting rims by spring-loaded bolts. The low rim is for the neck pickup and the higher one is for the bridge pickup.
3 .Four small wood screws for mounting the neck pickup rim.

4 .Four longer wood screws for mounting the bridge pickup rim.
5 .The prewired electronic harness consisting of:
A. Ultra-Lo© PC board.
B. Volume control 25 K_ with a lose long black earth core.
C. Tone control 25 K_ with a 10 nF capacitor.
D.Mini switch for overdrive selection.
E.Overdrive gain control 10 K_.
F. Stereo phone output jack.
G.Battery connector.
6 .Three way pickup selector switch.
7 . block battery 9 Volt.
8 . One piece of foam for the battery.
9 .Two extra cable binders.
10.Extra chrome selector switch knob on LP switch.
11.Contents sheet.
12.Hands on installation guide.
13.Step by step installation manual.

The Langcaster Ultra-Lowbucker 12P® for 7 string.



has the same outside dimensions, but it has 12 pole pieces, which makes it perfectly suited for 7 string guitars or 4 string bass guitar. The magnetic window of this model is 56 mm instead of 52 mm and in angled position even 60 mm.

Prices
Considering the exceptional sound, materials quality, high craftsmanship and completeness of this Ultra-Lowbucker® kit the prices are very moderate, especially when you compare these with other 'brand' pickups.
And you save money because you don't have to buy a separate overdrive stomp box!

Treat yourself and your Les Paul or any other humbucker type guitar with this ultimate upgrade and exchange your excisting humbuckers for Langcaster Ultra-Lowbuckers®; even installed in the real thing will sound far more better. And as a bonus you receive am integrated smooth tube-like overdrive for free!

Langcaster Ltd ™, P.O. Box 20, 226 Glen Eden Auckland, New Zealand,
www.langcaster.com E-mail: sales@langcaster.com

By Kees Baker writer for GuitarPLUS magazine