



Thanks to Vintage & Rare Guitars in Bath for the loan of this Marshall Super Lead. Tel 01225 330888

# Captain Crunch

By the mid-sixties the JTM45 and new JTM100 were already starting to make waves all the way across the pond. When the flagship 'Plexi' model evolved in 1967, however, the big, black stack would swamp the rock world.

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When players talk about 'the Marshall sound' they essentially mean the sound of a Plexi of the vintage 1967 to 1969. And while this legendary amp-maker's models have evolved through the years, that seminal tone template remains at the core of what most Marshall players seek. It's a sound so ingrained in rock's sonic lexicon that most of us can hear it in our sleep (or is that just tinnitus?).

In 1962 Jim Marshall and Ken Bran built a homegrown amp patterned after the tough, toneful Fender Bassman, and the Marshall legend was conceived. But it was a long labour, and the true Marshall sound wasn't born until some four years later, when the JTM45 evolved into the JTM50, and finally the JMP50 – famously known ever after simply as the 'Plexi'.

Make no mistake: its predecessor was a great amplifier. The JTM45 is a juicy, raw, soulful performer. The fact is, though, it is very much like the bigger

late-fifties tweed Fenders as well. Marshall and Bran closely copied the 5F6A Bassman's circuit, even using the valve rectifier and US-made 5881 output valves (a heavy-duty variant of the 6L6) or, later, European KT66s – also an electronic equivalent of the 6L6, but with a sonic signature all their own. The amps do sound a little different from the legendary 4 x 10 open-backed tweed Bassman by virtue of their British components – and of course the closed-back, Celestion-equipped 4 x 12 speaker cabinet – but they are a bluesier, somewhat softer option than what we now think of as 'classic Marshall'.

Come the mid-sixties, however, KT66 valves were in short supply, and imported US-made 5881s or 6L6s were prohibitively expensive. The sturdy and powerful EL34 output valves – a cheaper UK-made alternative – got the nod, and Marshall equipped their amps with these taller bottles. Along with the output-valve swap they dropped the GZ34 valve rectifier for silicon diodes →



You'd be looking at a sizeable outlay to pick up a Marshall Super Lead from 1969 like this one

## Vintage values

■ Values can differ wildly for vintage Marshalls, often depending on the

originality of the components. Genuine 'Plexis' cost, but reissues are available.

Year	Selected Models	Original Retail Range	Current Value
1967-69	1987 JMP50 Lead	N/A	£1,200-2,500
	1959 JMP100 Super Lead	N/A	£1,200-2,500
	1986 JMP Bass	N/A	£1,000-2,200
	1992 JMP Super Bass	N/A	£1,000-2,200
	1985 JMP PA	N/A	£1,000-2,000
	1973 20W 2 x 12 combo	N/A	£1,400-3,000
	1958 20W 2 x 10 combo	N/A	£1,200-2,500
Present	2022 20W head	N/A	£800-1,800
	1960A Speaker Cab	N/A	£600-1,500
	1960B Speaker Cab	N/A	£500-1,200
1988	1987S JMP50 Lead Reissue	N/A	£550-800
	1959S JMP100 Super Lead Reissue	N/A	£550-800
Present	1987X Classic Reissue	£804	£350-550
	1959SLP Classic Reissue	£999	£400-600

Having defined the very limited era of this Marshall classic, it's worth noting that a number of models appeared within that brief span

and, eventually, redesigned the power supply stage. In the broad sense, the amps really hadn't evolved far. Examine the circuits of a tweed Bassman and a 'Plexi' from around the middle of that amp's heyday, say 1968, and you'll see that the preamp design, the positioning and values of the tone controls, and 90 per cent of the signal capacitors are all exactly the same (Marshall used .022uF signal caps in place of Fender's .02 caps, but it's not a change most ears can hear). The only truly noticeable differences are the aforementioned change to EL34s, the solid-state rectification, and much higher filtering in the power supply.

But what a difference in sound! The rectification and filtering changes firm up the low-end and tighten the overall attack respectively, for a muscular punch with plenty of thump in the bottom, while the output valve swap brings in a real crispy-cream tonality – lots of crackle in the highs, grinding lower mids, and a smoother onset of breakup throughout the frequency spectrum.

Another invisible change was the somewhat higher DC voltages on the valves – not a lot higher, but enough to make a difference. Most JMP Plexis' voltages are only up to around 500V DC from the Bassman/JTM45's 430V, but this makes a big difference given the power-conversion efficiency of the Mullard EL34s. On the JTM45, the '45' was just a model number – the average JTM45 only puts out about 30W-35W. The name given the JMP50 erred in the other direction, and most of these dual-EL34 heads actually put out close to 60W, while so-called 100-watters can top out at 150W.

Along with the changes, some other factors left well enough alone are equally significant in 'the Marshall sound'. Whereas Fender had gone to new preamp and EQ circuits for its brownface and blackface amps of the early and mid-sixties in a bid to eke out more clean headroom, Marshall had wisely retained the extremely tactile, touch-sensitive 'cathode follower' tone stack, beloved of countless rock and blues players. They also kept the Presence control, useful for dialling in a little more cut and bite in the highs but without inducing the kind of trebly harshness of many 'bright' switches. Add together the few stages that changed and the few that stayed the same, and you've got a magical combination of a touch-sensitive playing machine with crackling, cutting highs, great low-end oomph, and a gorgeous, open-throated growl when you hit it hard.

Speakers and the cabinet they are housed in play a big part in forming the sonic signature of any amplifier, and

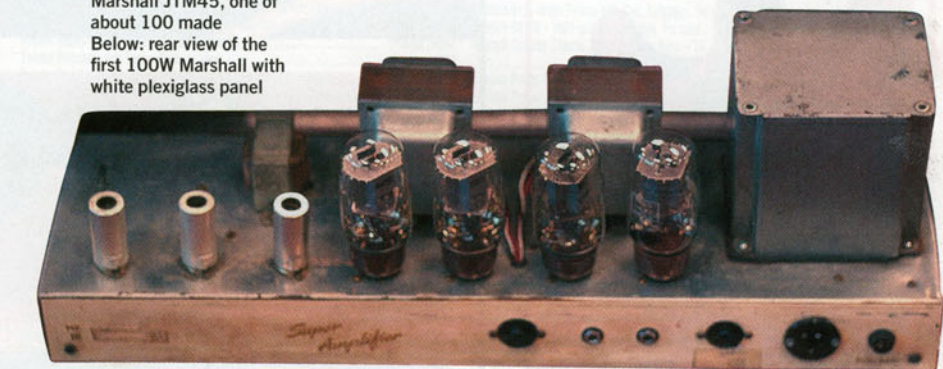
these were evolving throughout the mid- to late sixties right along with the electronics of the amps. Marshall had been using Celestion G12M Greenbacks before the 'Plexi' arrived, but by this time the drivers were upgraded from 20W to 25W units, and were approaching the sound for which they have ever remained renowned. The closed-back plywood cabs themselves changed through the course of 1966 as well, their dimensions slimming down somewhat, while their construction employed sturdier finger joints at the corners. Towards the late sixties, Marshall also employed sturdier 30W Celestion G12H drivers in many cabs. The 'H' in the name stands for 'heavy magnet'; a rule of thumb for speakers says the heavier the magnet, the better the low-end response, and although these were first introduced to help handle bass reproduction, plenty of guitarists came to prefer their power and girth, including one Jimi Hendrix.

Cosmetics changed only slightly throughout the years of the 'Plexi', but details that bracket the era, such as the move from the gold-embossed plastic logos on the last of the JTM45s to the small white plastic script logos, the arrival of the JMP designation along with the gold-backed plexiglass control panels in 1967, the switch to aluminium control panels in 1969, and the uniformity of widebody head cabs by around 1970 are easily distinguished by any Marshall aficionado. It is worth noting that the term 'Plexi' is something of a misnomer. You can buy a Marshall with a plexiglass panel that is nothing like what you might think a 'Plexi' should sound like, as during 1965 Marshall began putting these new gold-backed control panels on the JTM45 models, which still carried KT66 output valves and a GZ34 rectifier. In 1966 the transition happened gradually, but the true 'Plexi' hadn't really settled into its form until 1967, when the EL34s, solid-state rectification, steel (versus aluminium) chassis, plexiglass control panel and JMP model designations all came together to define this classic.

The aforementioned change of control panel from plexiglass to brushed, gold-anodized aluminium was really just another minor alteration of cosmetics in the broad sense, but came to mark another main transition point in the early years of vintage Marshalls. In itself, this would trigger no sonic changes whatsoever, but while the amp's circuit remained the same through the early metal-panel years, the inevitable variances in component supplies and somewhat higher voltages found in many examples meant that many units off the assembly line soon began to sound



Above: an early 1963 Marshall JTM45, one of about 100 made  
Below: rear view of the first 100W Marshall with white plexiglass panel



The rectification and filtering changes firm up the low-end and tighten the overall attack respectively, for a muscular punch with plenty of thump in the bottom

## Buying a vintage Marshall

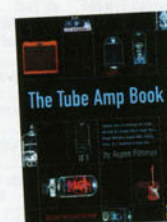
■ Going vintage amp shopping is very different from buying an old guitar

As they were only manufactured for less than three years between 1967 and 1969 any true original 'Plexi' in decent condition is going to cost, but at least there are a range of ways to get there. The metal-panel amps of the early 1970s are really very similar sounding and go for somewhat less money, but they are still getting seriously expensive by workingman standards. A handful of Marshall reissues offer a plausible glimpse of that tone, while many 'boutique' builders in the UK and USA do very good contemporary 'Plexi'-based models that might be less of a risk to take on the road. To top these, we're waiting for a 'Plexi' model in Marshall's own range of new hand-wired reissues. This mini range was launched earlier this year but as we write the 'Plexi' is 'on hold'.

As for the real thing, the dual factors of condition and seller will help determine widely varying price ranges. There is still the occasional lucky find of a private seller who isn't hip to the vintage market and simply thinks he's got 'an old Marshall to sell that might be worth a couple hundred quid', but those days are largely gone. If you're buying, however, the private ads are still likely to offer the best value on the rare occasion when

a genuine 'Plexi' comes up at all; for sellers, 'Plexis' offered in the USA are usually fetching the best money these days, although the exchange rate has recently put a dent in the profit margin to be had Stateside, and you have to get the amp over there in the first place.

Keep in mind, too, that the prospect of investing in a vintage amplifier is somewhat different than putting your money into a vintage guitar. A classic valve amp might look in good condition externally and make all the right sounds when you plug into it, but retain very little originality when you open it up – and that's something you will usually need an expert to determine. Furthermore, while a well cared-for electric guitar can last beyond a lifetime (with possibly the need for a refret every so often if played regularly), the passing of time alone will require the replacement of electrolytic capacitors, and even average use necessitates renewing other components such as valves and often resistors and signal caps too. A vintage amp intended to be played will rarely survive in original condition, while a collector's piece is best left without a single solder joint touched, even if its performance falls far below its potential as a result. If you are dipping a toe in these waters, you'll need to decide first if you are a player or a collector, and with amps, too often the twain don't meet.



Extra photos courtesy of Backbeat Books. The Tube Amp Book is out now, RRP £35

Power to the Super Lead, supplied by a Bulgin cable, a precursor to the modern day 'kettle' lead



These old Marshall amps featured a manual impedance selector

→ slightly different from those of just months before. The 'Plexi', both literally and in spirit, was no more.

**HAVING DEFINED THE** very limited era of this Marshall classic, it's worth noting that a number of models appeared within that brief span. The real headliners in the day were the 50W model 1987 JMP50 Lead and 100W 1959 JMP100 Super Lead heads, but there were also tremolo options, Bass and PA heads with very similar specs, the very different – and overwhelming – 200W Marshall 200 and a range of combos. (NB: Marshall model numbers may look like year designations, but they are nothing of the sort.)

In the late sixties, when stone-aged PA systems laboured to fill cavernous venues for the seriously loud business of rock, the 100W 'Plexis' were the stacks of the stars. Stood on top of a straight-front 1960B 4 x 12 'bottom cab' and angled-front 1960A 'top cab', these 4 x EL34 beasts moved serious air, and when cranked toward max still offered the gorgeous touch sensitivity and creamy playability of the smaller half-stacks. Jimi Hendrix evolved from his early use of JTM100s to JMP100 Super Lead stacks, and Eric Clapton used the same with Cream. In the real world, however, few guitarists have the opportunity to make the most of this

100W-plus maelstrom, and the 50W Plexi has therefore become the more desirable of these Marshalls, able as it is to achieve that lush rock splendour at less foundation-demolishing volume.

Taking the 'less is more' thinking even further, the much loved little 1 x 12, 2 x 12 and 2 x 10 18W Marshall combos evolved into the 20W combos of the 'Plexi' series, gaining a couple of watts by dropping the EZ81 valve rectifier for silicon diodes. These don't have the drool factor of their 18W predecessors, but – despite the stripped-down control layout of a single volume and tone knob per channel – they do offer a surprisingly similar dose of that crispy, creamy, crunchy 'Plexi' roar, at far lesser volume levels, something appreciated by more and more players today. The very rare 2 x 12 model 1973 is particularly prized. For players in the know, the 1985 JMP PA and 1986 JMP Bass and Super Bass are the bargains of the family, and take only minor modification to reach model 1987 or 1959 specs. As for the awesome KT88-powered Marshall 200 – the 'Plexi' predecessor to the 200W Marshall Major used by Mick Ronson, Ritchie Blackmore and others – it's just too much amp for most players to handle. And for that liquid-gold 'Plexi' performance, it has to be EL34s. ■