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Welcome...



Yep, it's the debate that will divide families, break friendships and pit bandmate against bandmate. This month, **Total Guitar** tackles the thorny subject of the greatest riff of all time - but we're not going it alone! We've recruited the readers of guitarworld.com to assist us, asking the online community to vote for their favourite riffs in what's turned out to be TG's

biggest ever poll. In our 30+ page cover feature we take you through 50 of the finest riffs ever recorded. We'll relate some backstories and we hear from some of the guitarists who played on those iconic records. Hopefully you'll learn a few tricks of the riffing trade along the way, too.

Finally, readers of our print editions will have noticed the absence of a CD this month, and I'd like to explain our thinking. Earlier this year, we produced an issue without a CD (at that time due to logistical problems surrounding Brexit), and it seems most of you loved it! It was our best-selling issue in quite a while, and we heard from many of you saying that you didn't miss the CD, as all the content was available online (the weblink is just across the page), meaning you could use your phone, tablet or laptop to access it. Not having to spend the money on a CD means that we can afford to give other gifts, and those of you reading the UK print edition will see we have a bumper crop, with our Ultimate Acoustic Lesson and Signature Guitars supplements, plus a huge A1 Rage Against The Machine poster. I hope you enjoy the issue, and I'll see you next month!

Chris

Chris Bird Editor

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Guitar

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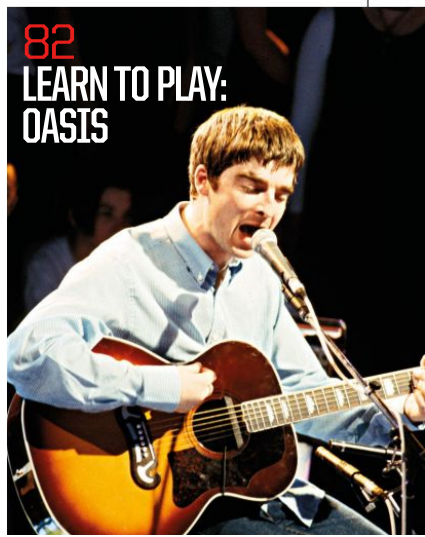
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ROYAL BLOOD



Words Jonathan Horsley Photo Joe Scarnici / Getty

NEW YORK GROOVE

Those who learned their first chords playing along to *Last Nite* might wince a little, but The Strokes' debut album, *Is This It*, is now 20 years old. In the following years, there has been such an unstoppable tide of popular culture that it's easy to forget the record's impact. *Is This It* was typical of The Strokes' Janus-faced sound. At once they were referencing the treble-forward jangle of classic American indie and garage rock, and yet they sounded so fresh – proving that it is hard to sound stale when you put so much treble in your guitar sound.

Musically, the biggest lesson to take from *Is This It* is that our jobs as guitar players is to get out of the way of the vocals. Nick Valensi favoured hollowbody electrics such as the Epiphone Riviera, while Albert Hammond Jr preferred a 1985 70s-reissue Fender Stratocaster in Olympic White. Occasionally there would be a Les Paul Jr in the mix, too. These went into a minimalist setup. Fender DeVille combos, played loud with a little breakup. Unaccompanied, such brightness would be pure ice pick, but as a complement to Julian Casablancas just-woke-up vocal delivery – slightly nasal, kinda over it – it was exquisite, captured perfectly by producer Gordon Raphael.

The album opens with the title track at a tempo that sounds as though the band were dosed with Mandrax an hour before the red light went on. The simple descending chord progression has an air of the fairy tale about it. Sometimes a low-key opener does all the work. It makes the audience lean in, making such times when The Strokes dial up the tempo all the more exhilarating. Bands such as The Killers, Arctic Monkeys and Kings Of Leon were surely paying attention. But then, in 2001, everyone was.



SCENE

YOUR NEWS IN GUITARS

ALBUM

"WE CUT THIS RECORD IN A DAY"

THE BLACK KEYS' DAN AUERBACH EXPLAINS HOW THE DUO'S NEW ALBUM OF BLUES STANDARDS WAS CREATED - WITH THE HELP OF ONE OF HIS GUITAR HEROES



F

or The Black Keys' 10th studio release, *Delta Kream*, guitarist Dan Auerbach and drummer Patrick Carney went to the source of Mississippi Hill Country blues, recording

songs by late cult heroes R.L. Burnside and Junior Kimbrough with help from musicians who performed with them on classic albums and throughout their heyday.

It's fair to say The Black Keys wouldn't exist without the songs on *Delta Kream*. The music of Burnside, Kimbrough and Fred McDowell was the inspiration for the grimy Rust Belt blues the duo recorded on early albums *The Big Come Up* [2002] and *Thickfreakness* [2003]. But whereas they paid homage to Burnside and Kimbrough with a handful of covers on those records, as well as on the 2006 EP *Chulahoma*, there is an added depth to *Delta Kream*, on which Auerbach and Carney were joined by two of R.L. Burnside's right-hand men, guitarist Kenny Brown and bassist Eric Deaton.

"We just started playing for fun," Auerbach says, "and we cut this record in a day." Most songs were first or second takes, with Auerbach and Brown swapping roles throughout as they worked to highlight the interplay between the instruments. Their stylistic differences are apparent — the former is often more reserved than the latter on these tracks — but Tchad Blake's mix posts Auerbach's guitar mostly center-right while Brown is panned center-left, giving the effect of being in the room while they both find pockets of their own in the swinging grooves Carney and Deaton carve for them.

Were the sessions for *Delta Kream* the first time you played with Kenny Brown?

That was the first time I'd really played with him. I'd seen him so much; he's so influential. Of course, any time I saw R.L. Burnside, Kenny was there by his side. Such a big part of those Junior Kimbrough and R.L. Records that I just obsessed over. So I felt like I knew him, I felt like I'd played with him a million times because I sort of had, playing along with the records. I love that particular type of music so much, that Hill Country blues. These guys really know that stuff and it's just an absolute joy getting to hang out and play those songs with them.

Patrick is quoted as saying, "Kenny Brown brings an organized chaos." What does that mean on this new record?

Kenny knows there are parts you have to play and you can't mess them up, but he also understands that you can't play those parts the same way twice. Not supposed to. Every time he solos, it's different. He just goes for it. That's just how he is. I think Patrick describes his guitar playing as eccentric, and I wholeheartedly agree with that.

What did playing with Kenny bring out of you? Did you adjust your role of what you normally play in the Black Keys?

I think some of that spirit in the Black Keys, that reckless abandon when we play, that was learned from people like Kenny Brown. You know what I mean? So I think that's why we can go and improvise a record together. I learned from watching him.

How did you come up with the song list for *Delta Kream*?

Just right off the back of the hand, and whatever popped to mind we would try it. And then we'd have the song in one or two takes.

On *Louise*, it sounds like you're doing a pretty close approximation of Fred McDowell's fingerstyle playing and how you let certain open strings drone.

That's definitely so hard to do. I used to try to figure it out, but that's the thing with this record — this is stuff I used to try to figure out when I was twenty, and I just haven't played it since then. Those things are so ingrained in my brain, and Eric too, he knows all those songs by heart.

What are the main stylistic differences between the R.L. and Junior stuff — and Fred for that matter — in how they play?

Well, R.L. is more part of a tradition. When you say Hill Country blues, I think R.L. is more part of that tradition. He comes out of Scotty McDowell and Wayne Burnett and people like that who are really rhythmic, with the open tuning. You've got that 'whack' thing going on with the thumb, it's very percussive. Junior Kimbrough was his own thing, absolutely. He definitely was a product of the Hill Country and his sound represents it, but he is so unique that maybe they all sounded like him.

You acquired Fred McDowell's Gibson Trini Lopez a while back. Did that play a role in the mix of instruments you and Kenny played?

Kenny did play it; I don't remember which song. A guitar that I got recently also is Hound Dog Taylor's Teisco [Kingston-branded SD-40]. Everybody played that one. Kenny Brown, we split them out and he played it some on the record. But Kenny had the Silvertone that I saw R.L. play every time I saw R.L. play, and it's on the records that I love. Those are Kenny's guitars. A black Strat that he always played. Those had a really amazing sound and I remember those things very vividly.

How far out did you get with amps and other gear, or did you plug straight in?

I had my tweed [Fender] Deluxe narrow panel and an [Ebo Customs] E-verb spring reverb. This guy [Eric Borash] in Nashville, makes this spring reverb that I really like. That's about it. I've got a fuzz that I'll have on sometimes, [an Analog.Man] germanium fuzz. I played my '60 Tele most of the time. Kenny may have been playing a tweed Deluxe also. I've got two of them and I think he was playing one. He had a fuzz pedal that was turned all the way down, but still kind of dirty. He would use that for some solos with the slide. It's such an awesome sound because he's got the lipstick pickups with the slide and it's just a very awesome, unique high end.

Jim Beaugez



ALBUM

"I'M POUNDING AND THRASHING TO GET THIS RHYTHMIC SOUND!"

HAILING FROM JIMI HENDRIX'S OLD NEIGHBOURHOOD IN SEATTLE, AYRON JONES IS MIXING GENRES ON HIS NEW ALBUM *CHILD OF THE STATE*

T

he new album shows off your knack for putting different genres together – how did that approach come about?

I grew up in the 80s and 90s, and if you grew up in that era, I think your musical taste isn't just one thing. There were so many things going on – from hip hop to grunge to R&B. I think my sound kind of embodies what was going on in that time, but it's also always been a conscious thing to want to mix these things together – to make a style of rock music that wasn't just for one person.

Your sound also channels some of the Seattle greats, from Hendrix to Cobain...

Like I say, I'm a product of my environment! I grew up in the same neighbourhood as Jimi when Michael Jackson and Kurt Cobain were huge. Being from that neighbourhood, there's a lot of guitar players that are doing similar things and Jimi's legacy is in the music.

He's a hometown hero – especially for the black community in Seattle. There's a black population of rockers that sound like Hendrix.

Could you talk us through the guitars you're using right now?

For me, it's all about workhorses. Right now I have two Mexican Strats: a 50th Anniversary Gold Strat and a Sunburst one. The one I'm using most right now is the Fender American Pro. It's my go-to because of its tone but also when you come from grinding in the clubs and doing that scene, you just have to have that guitar you can grab every single day and know it's going to do exactly what it does.

What's your amp of choice and how do you like to set it?

In my live set-up I'm going through two different amps: a Dr Z 38-watt Maz Senior, and a Fender Hotrod Deluxe. So I'm using those two tones in stereo.

What's always on your pedal board?

I have a DS-1 that goes into a TS9, and those are both coming out of the wah. Then I go through a Moab Boost pedal, which goes through a Leslie organ pedal – the Pigtronix Rototron – and from that I go into my tape echo delay, which goes into the PS-6 Harmonist. The Harmonist is probably the most used pedal on the record, it does so many different things – it's very experimental.

On the subject of experimentation, you've been known to play your guitar with a drumstick...

Yes! That's a trick I picked up from watching Buddy Guy actually. Buddy would do it where he kind of rubs the guitar string with the drumstick, but I'm pounding and thrashing to get this rhythmic sound. It's taken a while to perfect it because I used to just bust a string!

Ellie Rogers

ALBUM

"I LIKE VINTAGE. THE GUITARS FEEL LIKE THEY HAVE A STORY"

BLACKBERRY SMOKE'S FRONTMAN CHARLIE STARR DISCUSSES HIS LOVE FOR OLD GEAR AND WHY ONE PICKUP IS SOMETIMES ALL YOU NEED...

You have quite the guitar collection. Are there some that you just can't put down? I've had a real affinity for Les Paul Juniors since I was a young man. I bought a 1956 Junior back in 1993 and fell madly in love with it. It was the first 50s Gibson I ever owned and I was hooked. So I've scoured the earth looking for good ones. I've had a TV Yellow '58 for a couple of years which is the most recent. I have a new acquisition as well and it's not a Junior. It's a 1964 335 that belonged to an old man in Kentucky and the original case still has his receipt in it. He bought it from a music store there and paid \$350 for it. I paid considerably more...

What do you love about Juniors and single pickup guitars?

I got really accustomed to playing the old '56. It was the only guitar I owned for a long time

and forced me into searching for different types of sounds. You start to use the tone knob more. Where you pick the string - all that's relevant with a single pickup guitar. Also with Esquires, there's not another set of magnets involved to steal signal, ferocity and tone from that one pickup. I've had vintage Telecasters and Esquires and the Esquires always win!

Do you always buy vintage?

I like vintage. The guitars feel like they always have a story. The 1964 335 was completely covered in nicotine when I got it. It looked like it had been in a barn out of the case for decades. As it was being cleaned up, the smell of cigarettes was just pouring out of it! That was very romantic to me.

What about pedals?

I've got a Klon Clone, called an Aluminum Falcon, it's really fantastic. I have an old

Echoplex EP-3 which is one of the best I've ever heard. I only took it out on the road once - I didn't want it to get destroyed! Now I use a Belle Epoch Catalinbread and Wampler Faux Tape Echo. Real tape is the key but those come really close!

Do you have any other secret weapons for getting that 'Southern' sound?

I have a '90s stock Fender B-Bender. I think they call it the Nashville B-Bender. They made a lot with the three-pickup configuration but this one has only two. I've used it on every record since our third. That's it on *Lonesome For A Livin'* on the new album. I'd seen those Merle Haggard Telecasters - the Tough Dogs - with binding on the top only. I thought it was cool, so I painted some on. If you see pictures of that guitar, it's not real!

Ellie Rogers

MONITOR

PEOPLE ★ NEWS ★ NOISE



Photography Dilly Curtis

UNIVERSALLY TWEAKING

Next-level pedals from the kings of studio processing


Y

ou most likely know Universal Audio from its OX Amp top box, or perhaps you use UA's excellent DSP-powered interfaces and meticulously modelled plugins. Well, now, Universal Audio has applied its sonic sorcery to

a trio of studio-level effects pedals.

The line-up consists of three pedals: the Golden Reverberator, Starlight Echo Station and Astra Modulation Machine, each with three different on-board effects types or modes. With the Golden Reverberator you get tube-drive Spring 65, Plate 140 from The Plant studio and Hall 244 (based on the classic algorithms of a revered studio digital reverb). The Starlight Echo station delivers the Tape EP-III tape echo, Analog DMM (inspired by bucket brigade analogue delays) and Precision, based on studio digital delays with modulation. Both pedals include three variations on each category, while there are additional bonus models (Chamber and Plate reverbs, plus the unusual Cooper Time Cube delay) available once your pedal is registered.

The Astra Modulation machine, meanwhile, gives you three modulation categories: Chorus Brigade (based on a famous Japanese analogue chorus from the 70s), Flanger/Doubler, which emulates an analogue 70s rackmount unit, and Trem '65, modelled after a classic guitar amp tremolo circuit. As with the other pedals, the Astra offers variations on its core modes, with additional Phaser X90 and Dharma Trem 61 effects available to download.

The three pedals retail at £355 each, and are available now.

UP CLOSE



Model behaviour

All three pedals make use of Universal Audio's excellent modelling technology, which is renowned for creating some of the greatest emulations of classic studio hardware



Reverb & Delay

The Golden Reverberator and Starlight both feature three types of reverb and delay respectively, with three variations for each sound plus additional models available to download for free



Astra Modulation Machine

The Astra covers Chorus, Flanger/Doubler and Tremolo straight out of the box, with a Phaser and bonus Trem model available once you've registered

HOW TO

WHAT YOU WILL LEARN

- ✓ Octave shapes
- ✓ Dorian mode riffing
- ✓ Slides



RIFF OF THE MONTH

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GAIN



BASS



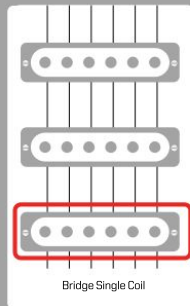
MID



TREBLE



REVERB



Bridge Single Coil

A single-coil-equipped guitar, coupled with a distortion pedal and a valve amp would be the best combination to get close to the alternative, indie sound here. The Wolf Alice setup comprises Fender Telecaster and Jaguar guitars with Fender Hot Rod or Vox AC30 amps for the core sound, plus a whole host of pedals. Joff's pedalboard includes the Empress Effects Distortion and Multidrive pedals, which give him a broad sonic palate.

WOLF ALICE

Smile

Smile is second single release from Wolf Alice's third studio album *Blue Weekend*. Having formed in 2010, the London based indie rockers have achieved worldwide recognition with a Mercury Prize winning 2017 album *Visions Of A Life* and a Grammy nomination for the song *Moaning Lisa Smile*.

The track opens with an in-your-face, heavy single-note riff. Ellie Rowsell and Joff Oddie are

on guitar duties and there are some synth and octave guitars blended into the mix to create a thicker sound. This means you can play the riff as a simple single-note affair using just one finger, or you can add an octave-up note.

Map out the single notes on the sixth string, then add the octaves once you can follow them. Our slowed-down performance in the video on your Guitar Skills CD will give you a clearer idea of how it is played.

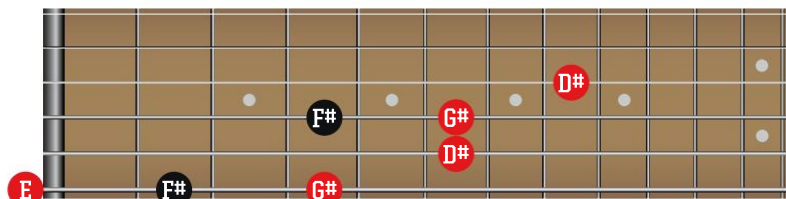
CHEAT SHEET...

Appears at: 0:13-0:33

Tempo: 94 bpm

Key/scale: F# Dorian mode

Main techniques: Slides, alternate picking, octaves



Smile's riff contains only four notes (F#, G#, D# and E), but you can infer from this and the sweet minor vibe of the song that we are based in the F# Dorian mode (F# G#

A B C# D# E). The major 6th D# is quite a feature of the riff, so this trademark Dorian quality is quite important to the sound. You can play the sixth- and fifth-string

notes with your first finger, and add the octaves with your fourth finger. Notice that the octave of each note is both two frets and two strings higher.

IT'S IN MY BLOOD

CHRISTIAN ANDREU
GOJIRA

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GETTING STARTED WITH...

PARTIAL BARRES

Play more notes with fewer fingers, and get to grips with essential rock 'n' roll, funk, and soul shapes

BARRE-GAINS!

Five classic tunes with partial barre shapes

1. THE POLICE - ROXANNE

The opening three bars are prime fodder for barre chord beginners.

2. CHIC - LE FREAK

Nile Rodgers' shtick is partial barre chords.

3. BOB MARLEY - BAD CARD

Chunky five-/six-string shapes sound wrong in reggae. Partial barres are the ace in the pack.

4. CREEDENCE CLEARWATER REVIVAL - UP AROUND THE BEND

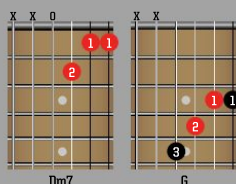
Though played one note at a time, Fogerty holds down three-string barres here.

5. ROLLING STONES - BROWN SUGAR

Keef rarely plays full six-string shapes. You'll be barring across four strings here.

BARRE CHORD BASICS...

Three shapes to get started with



Dm7

G



Gm

Dm7 is played in the open position. The other two shapes, however, are moveable, so keep the idle strings silent and practise moving the shapes up and down the neck, fret by fret.

Find your audio tracks at bit.ly/tg346audio



So far in this series of lessons we've only fretted one string at a time with each finger, but this month it's time for your digits to earn their keep. 'Barring' means pressing two or more strings with one finger. With just four fretting fingers, barring is essential for playing chords across all six strings at once, and it has many other uses. Partial barring shows up in the intro to *Johnny B. Goode* for example, and almost anywhere a lead guitarist plays two notes on adjacent strings.

When barring, you'll use the pad of your finger to fret two strings, and for three or more strings you'll need the rest of your finger. You won't have calluses there yet, so go carefully to avoid blisters. Once you get the hang of pressing two strings at once, you'll need to fret cleanly with your other fingers.

Barring changes the angle of your hand, so don't be surprised if you find yourself accidentally choking strings. Start by trying Dm7. With just two fingers, it's the simplest barre chord in standard tuning.

TECHNIQUE CHECK...

Get your fingers in prime position to make those barres easier



1 JUST A BARRE

Start of by getting comfortable with barring two strings with the pad of your first finger.



2 DM7 CHORD

Next, move down to the 2nd fret and add a finger to make Dm7. It's often more comfortable if you angle your first finger slightly.



3 MOVABLE MAJOR SHAPE

Adding your third finger gives you a major chord which you can move around the fretboard – no open strings!



4 MOVABLE MINOR SHAPE

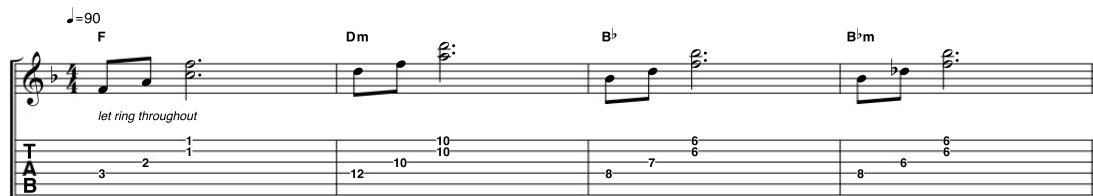
When barring three strings, make sure your knuckle isn't directly over a string - it's hard to apply any pressure when you bend your finger!

1 ROCK 'N' ROLL BARRES



This Chuck Berry-style lick is a great introduction to barring. Use the pad of your first finger to press down on the first two strings at the same time.

2 SIMPLE ARPEGGIOS



If you need more time to change chords, stop each chord a beat or two early to prepare the next.

Words: Ellie Rogers Portraits: Barbara FG

"I NEED TO MAKE SURE THAT EVERY NOTE COUNTS"

Armed with a new signature guitar and a monstrous pedalboard, **Emily Wolfe** is venturing beyond blues-rock on her experimental second album...

In recent years, Emily Wolfe has established herself as an electrifying blues-rock artist thanks to her incendiary live performances and fierce soloing capabilities. While gigging has been off the cards for the past year, she's directed her creative energy in new directions and to spectacular effect – with the release of her second studio album, the genre-blending *Outlier*, and the launch of her first signature guitar, the Epiphone Sheraton 'Stealth'.

The highest degree of recognition for a guitar player is surely to have their own signature instrument designed and made to their exacting specifications and it's an accolade which, in her modest way, Emily is still coming to terms with: "I don't think it's sunk in yet," she says. "And I don't know if it ever will, because it is something that I've dreamed of having since I was little. I didn't think that it would happen this early. It's mainly just exciting and kind of mindblowing!"

The project came about after Emily was approached by Epiphone at NAMM following a live performance she and her band gave at the Gibson stand back in 2018. "I guess it was a good one," she laughs.

"Usually you have to be this kind of monster – like, your career has been happening for a thousand years. But it's cool that Epiphone is starting to work with emerging artists for that kind of stuff."

The collaboration also indicates the long overdue shift towards creating female-inspired designs that do not use femininity as a marketing tool. Says Emily: "In the past, women have been really under-represented in the gear world. Or if they have been represented, it's been sexualised. So, to be able to be at the forefront of gear and showing what a woman can do with it – that says a lot about where we're going. Gear companies, run by men, are really starting to open up their minds to including women and putting them at the forefront, because what they've been doing has been a pattern for so many years, and it's time to try something different."

All style and all substance, there is no mistaking that the Stealth is a serious instrument, with the serious job of busting assumptions and cutting to the chase at the core of its design aesthetic: "I was trying to make something that spoke to what I'm trying to do as an artist," she explains. "Yeah, I'm a female guitar player. But just go listen to the music!"



Vintage and contemporary aesthetics collide beautifully in the Stealth in what Emily describes as a visual “mix between aggression and elegance.” It has a sleek, black aged gloss finish, lightly aged gold hardware and diamond-shaped F-holes – a first for any Epiphone hollowbody and a feature of which Emily is particularly proud. It features Epiphone Alnico Classic PRO humbuckers and strikingly, the bridge tone knob has been removed – as Emily’s personal preference is simply never to use it.

With heavy involvement in the design from start to finish, Emily explains how these features were honed to perfection, with a few challenges along the way: “After the road test, I was like, we need to fix these pickups. The first prototype had really high output pickups and then with the diamond F-holes, the feedback was insane, literally unplayable. It was crazy. And so they suggested low output pickups, and I was really bummed about it because I thought it would make it less aggressive. But it was a good call

because it doesn’t feedback anymore unless you want it to.”

The Stealth’s ’60s-style Kalamazoo headstock is adorned with a mother of pearl tree of life inlay on the front, while Emily’s wolf logo and gloss-black-on-matte-black “stealth” signature sit out of the spotlight on the rear – and not by oversight: “I wanted to be subtly proud of it because it is my signature, but I didn’t want it to be like, ‘This is mine!’. Whoever buys it, I want it to be theirs. I want it to feel like a part of them, the way that it feels like a part of me. I felt like the best way to do that would be to subtly only be able to see my signature on the back if you look at it in a certain light.”

Testament to how inseparable the Stealth and its owner have become, it’s just about the only guitar Emily used on the new record, which was produced by Queens Of The Stone Age bassist Michael Shuman, and which marries her rock roots with her love of pop.

The album marks a divergence from Emily’s self-titled first album as it steps intrepidly out of the blues-rock box into a less-travelled environment of synths, soaring choruses and self-restraint. She explains: “I think musicians who I really admire, kind of have this restraint. Especially with guitar solos. Live, I love to just go off, but on record it’s going to be out there forever and I need to make sure that whatever I play is concise and that every note matters.”

Album opener *No Man* presents a powerful introduction to the record’s aesthetic, as jagged synth and fierce guitar trade places in helping deliver the song’s message of female self-sufficiency. *LA/NY* provides one of the album’s most “traditionally” climactic solos, while *Death Row Kiss* boasts an opening riff reminiscent of Josh Homme or Jack White in its filthy grooviness. The album is an unpredictable ride.

As is the way with more and more of contemporary artists, Emily’s sound is freed by the increasing acceptance that genres are there to be played with rather than conformed to. She loves Judas Priest and Ariana Grande in equal measure, and the record is sonic proof that there’s absolutely nothing wrong with that. “I do think at this point in time it’s almost like we’re at this renaissance phase,” she says, “where to stay relevant you have to be irrelevant – you have to make-up your own sh*t. You gotta get out of boxes because they’ve been there so long and everybody’s heard it. I wanted to take all these different eras of music that I love – from the sixties to the nineties – and add on what’s going on today in the pop world and see what came out of it.”

This knack for mixing the classic and the contemporary – as with the aesthetics of the Stealth – seems to come naturally to Emily. The acceptance of synths, however, took a little more persuasion: “I had to take down my guard a bit”, she says, “because I had made this decision, before I met Michael, of ‘no synths in my band!’ I met him and he convinced me, because he found the right sound.”

Under the tutelage of Shuman, Emily eventually embraced synths so much that she started to

experiment with effects to make her guitar take on similar tonal qualities, and this is one of the defining characteristics of the album's sound. The trick to achieving such a tone, she explains, is the use of an Earthquaker Tentacle: "It's basically an octave pedal with no fuzz. I figured out that if you put this before a fuzz pedal and then you kick on the neck pickup and then play up around the 12th fret, it makes it sound really synth - it adds this kind of oscillation. In LA/NY, when you hear that choppy synth sound, it's actually that."

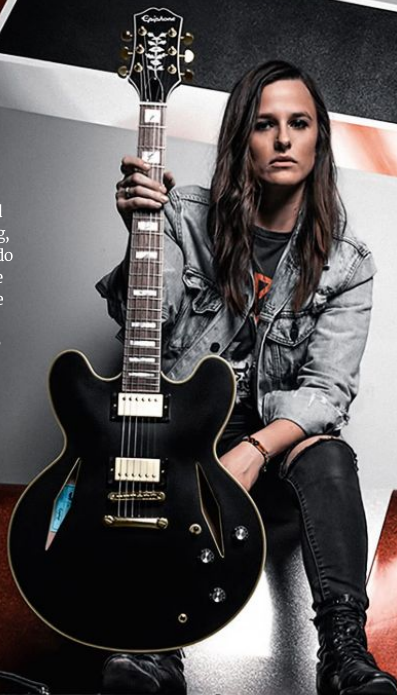
On taking this new, open-minded approach to tones and textures, Emily recalls: "It was really scary! I'd always taken the approach of thinking about how to do it live with three people. And I didn't realise but it was pretty limiting, because there's only so much you can do with drums, bass and guitar." With the new record, she explains, "It was a case of being as creative as possible in the studio and figuring out how to recreate it later." A self-confessed gear-head, Emily recently built an absolutely monstrous pedalboard in order to do just that.

In what she describes as "a labour of love and a labour of frustration," the new 'board has an RJM Mastermind PBC/10 as its integral feature - a switching unit that allows her to programme pedal presets by song. Emily also uses a Klon KTR overdrive, JHS Whitey Tighty compressor, Earthquaker Dirt Transmitter and,

of course, the Tentacle. As for replicating the vast, almost imposingly close-sounding dynamics of the record live with just a three-piece band, she hints,

"There's some tricks! There's SPD-S pads and then there's a stereo amp thing and a mimic pedal to create the stereo image of the guitars."

Armed with the Stealth, an open mind and some great new songs, Emily Wolfe is poised for a major breakthrough in 2021. "I know I'm taking a less-is-more approach" she says, "and putting more emphasis on the songs and how well I can craft them. But I'll always rope in all the influences that I love, and how much I love guitar."



"YEAH, I'M A FEMALE GUITAR PLAYER, BUT JUST GO LISTEN TO THE MUSIC!"

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THE 50 GREATEST RIFES OF ALL TIME



Illustration: Mags Finch

WHICH IS TRULY THE GREATEST RIFF OF ALL? WELL, THIS MONTH **TOTAL GUITAR** IS TACKLING THIS THORNY SUBJECT AND AIMING TO END THE DEBATE ONCE AND FOR ALL. TO DO SO, WE ASKED READERS OF **GUITARWORLD.COM** FOR THEIR HELP AS WE POSTED A POLL TO GAUGE THEIR COLLECTIVE OPINIONS.

TO BEGIN WITH, WE PREPARED A SHORTLIST OF OUR OWN FAVOURITE RIFFS. WELL, SHORT-ISH! EVEN FOLLOWING A STRICT SELF-IMPOSED 'ONE RIFF PER ARTIST' RULE WE WERE ONLY ABLE TO PARE OUR SELECTION DOWN TO 125 RIFFS. THAT MEANT NO *PARANOID*, NOR EVEN *HIGHWAY TO HELL*. ONE RIFF PER BAND. THAT WAS THE RULE.

AND, THOUGH IT WAS POSSIBLE TO OFFER UP ALTERNATIVE SUGGESTIONS, BY AND LARGE, IT SEEMS THE GOOD READERS OF **GUITAR WORLD** AGREED WITH OUR SELECTION.

SO, READ ON AS WE RUN YOU THROUGH 50 OF THE FINEST RIFFS EVER RECORDED. WE'LL TELL YOU THE STORIES AND HEAR FROM SOME OF THE GUITARISTS WHO PLAYED ON THE RECORDINGS.

YOU'LL EVEN LEARN A FEW TRICKS OF THE RIFFING TRADE ALONG THE WAY, TOO.

PLUG IN AND LET'S GET PLAYING!



50 HEIR APPARENT OPETH

(2008)

Prog metal majesty courtesy of Stockholm's finest

We begin our riff rundown with this cut from the Swedish group's death metal years. There's an abundance of mind-boggling riffs on offer, though it's the one that arrives two and a half minutes in which arguably presents Mikael Åkerfeldt's genius at its most sonically destructive. Kicking off with powerchords from the 1st fret to open position, it then alternates between quick-fire descending octave shapes higher up the neck and palm-muted chromatic notes down below – warring with each other in the most spectacular of ways. The solo, played by Fredrik Åkesson, then adds to the chaos, using a dramatic mix of bluesy bends and diminished runs to capitalise on its outside feel.

Photos: Getty Images / Kevin Maun

49 TICKET TO RIDE THE BEATLES

(1965)

Rickenbacker chime and Indian influence

Released as a single in April 1965, *Ticket To Ride* became the Beatles' seventh consecutive UK number one, and its instantly recognisable opening motif is played with two fingers on a 12-string. The chiming arpeggiated riff is underpinned by repeating A chords and, with the low A drone over the top, hints to the traditional Indian music that would become increasingly influential on the band. Played by Harrison on his Rickenbacker 360/12, the motif has an ethereal, slightly tinny sonic quality. Staggered phrasing – which employs a quarter note triplet at the end – adds to that free-and-easy 60s vibe.

48 ALL RIGHT NOW FREE

(1970)

Paul Kossoff in complete control

Consider us somewhat surprised that Free's 1970 mega-hit only just crept into the Top 50! The opening few seconds – with Paul Kossoff's cranked-up Les Paul keeping a steady pace with Simon Kirke's thumping beat – is one of the most recognisable intros of all time. Kossoff was playing one of his several Les Paul sunbursts on *All Right Now*, plugged into a Marshall stack. As singer Paul Rodgers said: "Koss had such an amazing sound on that opening chord and with his chord structure on the A chord. He had such a long reach and could actually hold the A note on the E string on the 5th fret. He could get a real ripping sound and it had a lot of depth to it."

47 G.O.A.T. POLYPHIA

(2018)

The dazzling sounds and techniques that redefined modern guitar

In recent years, Polyphia guitarists Tim Henson and Scott LePage have established themselves as leaders of the new pack – blending elements of fusion, tech-metal and trap beats into their own mind-melting cocktail of noise. 2018 track G.O.A.T. is one of their most popular to date, racking up 50 million plays on YouTube and Spotify combined – its main motif built on a bed of harmonics, 19th and 20th fret taps, bleeding open strings and B natural minor arpeggios. Both players used Ibanez guitars for the recordings, Henson plugged into "only the Fractal and a little bit of BIAS FX" while LePage opted for a more traditional Orange amp and cab.





46 OUTSHINED SOUNDGARDEN

(1991)

Grunge power in 7/4 time

In 1991, the year that Seattle rock ate the world, *Badmotorfinger* was Soundgarden's breakthrough album, and *Outshined* was its most accessible song. The groove of the opener and verse drop D riff is the stuff of stoner rockers' dreams, with single finger bends from guitarists Kim Thayil and Chris Cornell complementing its hook superbly. Quite simply, it's the definition of badass. But true to the band's left-field tendencies, it's in a 7/4 metre. And in grunge's most experimental and inventive band, Thayil's role was pivotal, melding Stooges-style aggression and psychedelic Sabbath slab through his 70s Guild SG-100.



45 NO ONE KNOWS QUEENS OF THE STONE AGE

(2002)

Stoner rock's finest hour

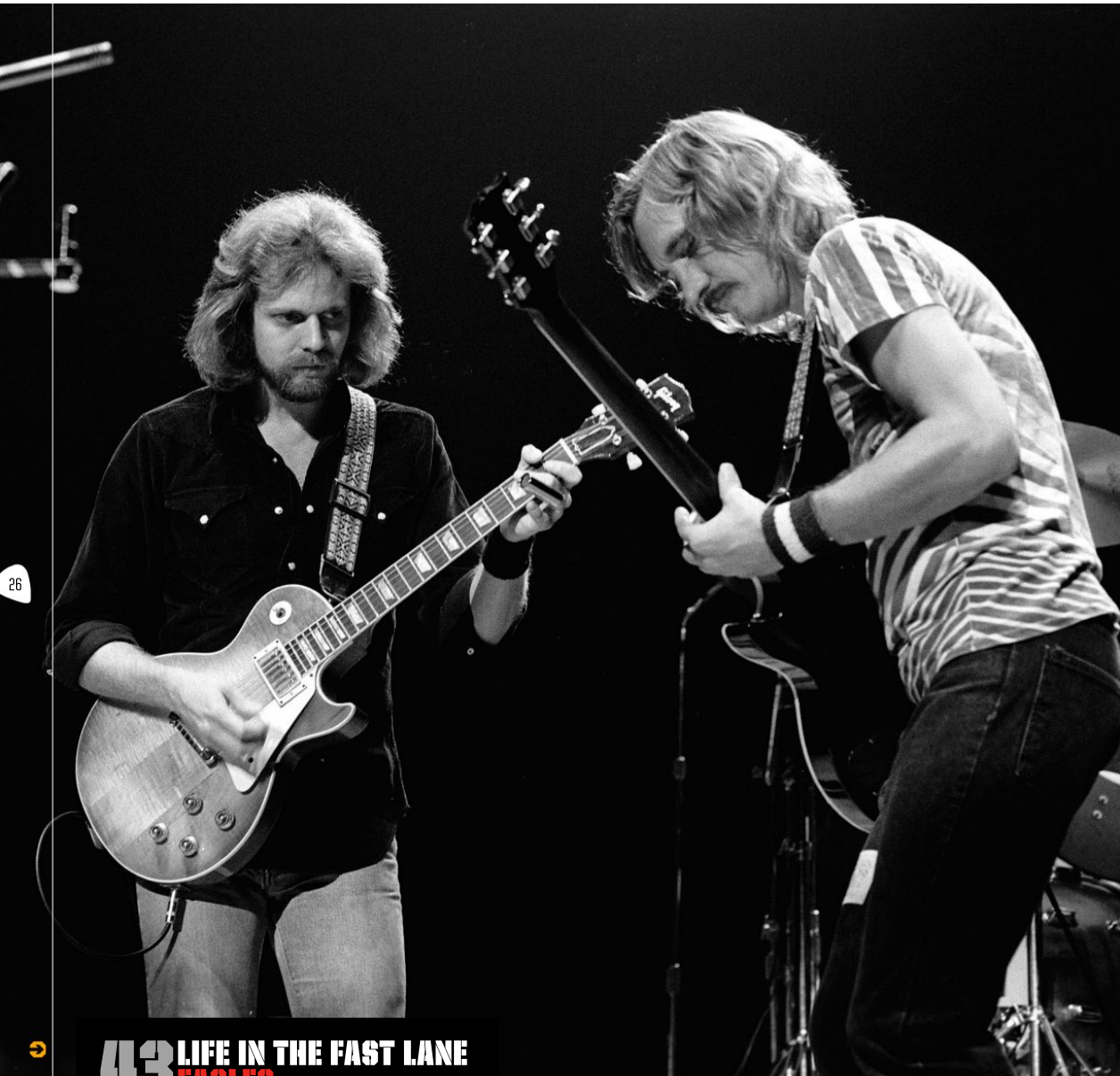
QOTSA's breakout hit has a riff so strong it serves as the de facto chorus. Sure, the "I realise you're mine" part repeats, but watch the crowd at any gig to see that the guitar riff is what everyone's waiting for. Josh Homme took a hipster approach to gear, refusing to touch Marshalls, Voxes, Fenders or Gibsons for the making of *Songs Of The Deaf*. *No One Knows* used three amps together: a solid state Peavey, an Ampeg VT40, and an old Tube Works head. The unique recorded tone was a careful blend of microphones from this idiosyncratic rig.

44 CAN'T STOP RED HOT CHILI PEPPERS

(2002)

A funky masterclass in fret-hand muting

Rock guitarists don't get much funkier than the Chili Peppers' John Frusciante, and the third single from 2002's *By The Way* featured the smash album's most rhythm-heavy riff. A player of vintage Strats and Teles, Frusciante employs a sharp, ballsy single-coil-bridge-pickup tone. The verse's repeated two-note figure, D to E (G string, 5th and 7th fret) represent the flat 7th and root of the E minor key. Frusciante hits the root notes of the chords (Em, D, Bm, C), and keeps it clean with his deceptively complex fret-hand string muting technique. Add in his aggressive and funky right hand, and you've got all the makings of an unstoppable riff...



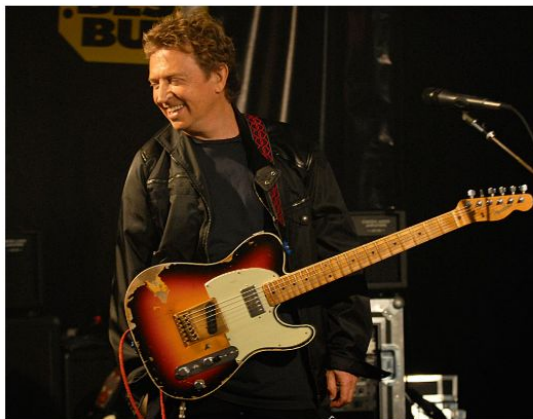
43 LIFE IN THE FAST LANE EAGLES

(1976)

Country-rockers dive headlong into hard rock

Another monster that started life as a warm-up, *Life In The Fast Lane* was just an exercise for Joe Walsh until it caught his bandmates' ears. The riff works by the sorcery of rhythmic displacement. It's essentially the same idea

played three times with slight variations, but the fourth repeat begins half a beat earlier, creating massive urgency. The Eagles' *Hotel California*-era tones were Fender-driven, and this track carries the raunch of Fender Tweed Deluxes and Champs driven hard. Walsh played a Strat, while Don Felder played his '59 Les Paul – the ultimate tag team of guitarists and instruments.



41 STARGAZER RAINBOW

(1976)

Ritchie Blackmore at his most unstoppable

In this epic track from Rainbow's classic second album *Rising*, there's a walking feel to the main riff thanks to the inclusion of passing tones within its pentatonic framework, with a three-note chromatic run starting on the fifth fret of the fifth string from the minor 7th to the major 7th and then finally the E octave. Around this period guitarist Ritchie Blackmore was mainly using an Olympic White '73 Strat and a sunburst '74, both with scalloped necks, going through a Marshall Major which had been modded for more power and distortion. "This extra output stage basically made the 200-watt into a 280-watt," he once revealed. "So I did have the loudest amp in the world."

42 MESSAGE IN A BOTTLE THE POLICE

(1979)

Their first number one, and to many, the best of The Police

Powered by Summers' signature hooky riff, *Message In A Bottle* distilled the trio's blend of post-punk and white reggae into what he called "a very different-sounding pop song". And while there was always tension between them, Summers knew that this band was the perfect vehicle for his playing. "It was a unique chemistry," he said, "between the guitar, the bassline, the high vocals that Sting had then, and Stewart (Copeland)'s unique drumming. Never to be repeated."



VIDEO LESSON

bit.ly/tg346audio

Summers based his riff on his trademark moveable add9 chord shape. Luckily, the shape stays the same throughout the sequence, so once you've mastered the initial stretch your hand shape stays the same as you move into each new position. The watery shimmer comes courtesy of an Electro-Harmonix Electric Mistress flanger and Summers' '63 humbucker-loaded Telecaster.

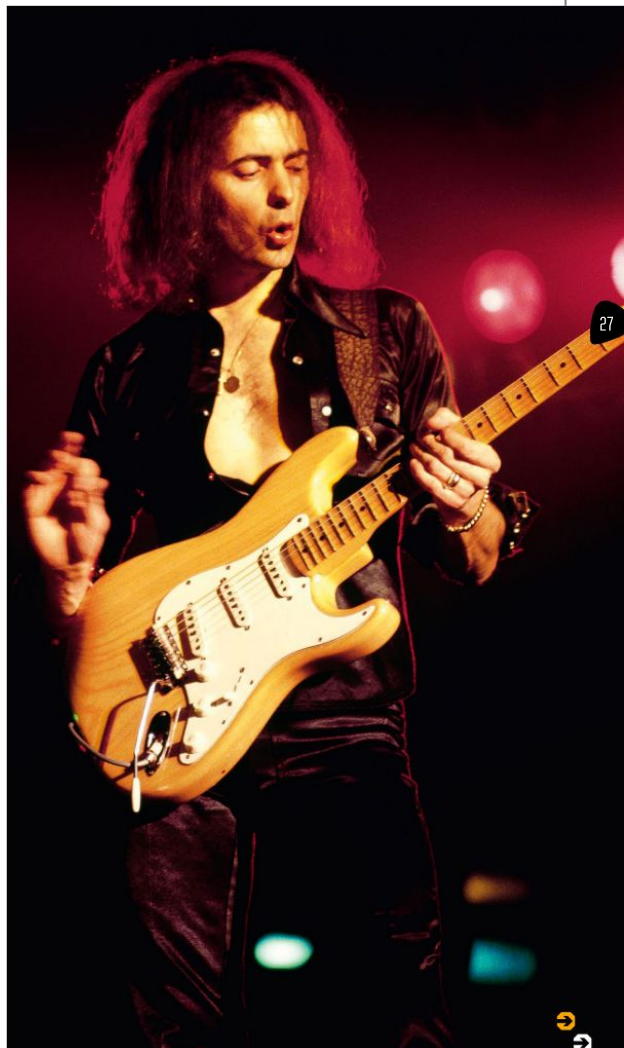
Appears at: 0:00-0:32

Tempo: 150 bpm

Key/scale: C# minor

Main techniques: Finger stretches, sus2 chords, arpeggios

TG TIP These chord shapes are fearsome! Practise higher up the fretboard until you feel comfy with 'em!



RIFFOLOGY THE ANATOMY OF

We analysed the makeup of 20 of our poll's riffs – what can we learn?

20 RIFFS FROM THE POLL (IN ALPHABETICAL ORDER): • *Back In Black* AC/DC • *Do I Wanna Know?* Arctic Monkeys • *Down Down* Status Quo • *Enter Sandman* Metallica • *Johnny B. Goode* Chuck Berry • *Layla* Derek And The Dominos • *Livin' On A Prayer* Bon Jovi • *Money* Pink Floyd • *Money For Nothing* Dire Straits • *Purple Haze* The Jimi Hendrix Experience • *Smells Like Teen Spirit* Nirvana • *Smoke On The Water* Deep Purple • *Sweet Child O' Mine* Guns N' Roses • *The Spirit Of Radio* Rush • *This Charming Man* The Smiths • *Walk This Way* Aerosmith • *Whole Lotta Love* Led Zeppelin • *You Really Got Me* The Kinks • *Rebel Rebel* David Bowie • *20th Century Boy* T. Rex



MELODIC & RHYTHMIC FEATURES

There seems to be a balance between rhythmic interest and melodic complexity in operation here. The most melodically active riffs here (*Sweet Child O' Mine* and *The Spirit Of Radio*) have generally even and simple rhythms. However, the majority of the riffs are less notey and rely on a rhythmic 'hook', such as pushing into a beat early by a quaver (*Down Down*), or incorporate a significant amount of offbeats (aka syncopation), for example, in the answering phrases in *Layla* and *Smoke On The Water*.

ARRANGEMENT & STRUCTURE The most common approach to delivering the epic riff is to just start the song with a solo guitar (maybe doubled or with simple background support) and then have the bass, drums and vocals enter strategically. This approach might be prefaced by an atmospheric (often rhythmically ambiguous) intro (*Livin' On A Prayer*, *Money For Nothing*, *Money*). The essence of most of these riffs is delivered in two bars (or less), and even when it's longer, it usually has a structure (such as A B A C) as in *Layla*, *Smoke On The Water* and *Back In Black*.



MELODIC & RHYTHMIC FEATURES

ARRANGEMENT & STRUCTURE

TEMPO / METER

GUITAR & EFFECTS

GUITARISTIC FEATURES

REGISTER / RANGE



GUITARISTIC FEATURES

All of the riffs exemplify phrasing traits of the guitar – and there's little sense they might've been written on other instruments.

Open strings, standard chord shapes, slides, slurs, bends and muted strings are all present. The guitar is allowed to be itself and is celebrated as such.

GUITARS & EFFECTS Les Pauls, and then Strats, are the kings of the riff. Other guitars are used (most notably Telecasters), but even in the 2013 Arctic Monkeys track, it's the classics that deliver. Effects are actually at a minimum – only *Livin' On A Prayer* (talkbox) and *The Spirit Of Radio* (flanger) use effects beyond a (moderate) distortion and modest reverb. Clarity is key, and effects should contribute to, rather than merely ornament, the riff.



THE PERFECT RIFF

TEMPO / METER With the exception of *Money* (7/4), all the riffs are in 4/4, but tempos range from a stately 84 to 85bpm (*Do I Wanna Know?*) to the region of a nifty 170bpm (*Down Down* and *Johnny B. Goode*), with a good portion around the 112bpm mark. The range may seem very wide, but consider that practically all the examples at 112bpm or slower include significant use of semiquavers, and there are hardly any semiquavers to be found above around 116bpm. So there's a sweet spot of rhythmic density – no ballads, no speed metal.



KEY / TUNING

It may come as no surprise that the most common key in the list is the guitar-friendly E. In fact E, E minor, 'neutral' E keys and capo'd keys based on an open E chord made up almost half of the cohort. What was a surprise is that 20 per cent of the riffs are in the not particularly guitar-friendly G minor, so it seems there's something satisfying to play and hear around that 3rd fret.



SCALE / MODE

KEY / TUNING



REGISTER / RANGE

Most of the riffs employ the lowest available root in the

scale, and many of them don't travel much further than an octave or so above that note and are centered around roots and 5ths (and pentatonic elements) of the scale, making them eminently singable (at least by a low-voiced male), which might contribute to their ear-worm status. There are exceptions: *Sweet Child O' Mine* and *The Spirit Of Radio* both have a catchiness that doesn't seem to rely on singability.

SCALE / MODE Unsurprisingly, minor pentatonic/blues are the most common scales, making up more than a third. However the more 'sophisticated' Mixolydian, Major and Aeolian collectively account for half, showing that these riffs are certainly not 'all blues'. The most complex scale is in *Enter Sandman*, which hints at both blues scale and Phrygian mode.



So what, if anything, can be learnt from an analysis of the riffs? Well, here are the five (breakable) rules...

RULE #1 Keep it simple and memorable – generally a handful of notes with the musical essence delivered in a couple of bars. If you can't sing it back easily (or at least keep it caught in your head) you've done something wrong.

RULE #2 Include just the right amount of rhythmic interest. Unless the riff is actively melodic (*Sweet Child O' Mine* and), you should recognise the riff from its rhythm alone. This means a use of space and a simple but effective rhythmic hook.

RULE #3 If you want a fast tempo, keep the riff at quavers or longer, and at slower tempos make significant use of semiquavers; neither frenzied, nor laboured.

RULE #4 Embrace the idiomatic nature of the guitar (open strings, muting, bends and an interplay of chords and single lines) and use effects sparingly, and only if they add a musical element to the track. Swamping your part with distortion, delays and reverbs can compromise the catchiness of a riff when a raw guitar sound might deliver it more effectively.

RULE #5 Feel free to break any of the rules (including this one). Innovation comes from intuition: learn from the past, but don't let it dictate all your choices. All these riffs are classics precisely because they broke a rule or two...



40 **ALIVE** **PEARL JAM**

(1991)

A must-know riff from the grunge era

Pearl Jam's 1991 album *Ten* quickly became defined as one of the holy tablets of the grunge era, and its monolithic first hit single set the tone. *Alive*'s unmistakable intro/verse riff was played by the song's writer, guitarist Stone Gossard, on a gain-saturated Les Paul, and it's mainly A- and D-string stuff – easy to play, but with real slacker feel. That first wide interval D to A gets texture from the A being hammered on, not picked, and the second measure's laconic bend from B to C adds a briefly minor bluesy, woozy vibe. Co-guitarist Mike McCready's A and Asus4 chords and Jeff Ament's bassline outline the Mixolydian tonality here.

39 **BORN TO BE WILD** **STEPPENWOLF**

(1968)

"Heavy metal thunder", indeed!

Famously the first song to feature the phrase 'heavy metal' in its lyrics, *Born To Be Wild* was the biker rock anthem that became a classic of the counter-culture via its inclusion in 60s cult movie *Easy Rider*. Written by the enigmatic Mars Bonfire (Dennis to his mum), the track was originally intended to be a folk ballad about life on the open road, but as it was developed with the band, the tempo and gain were increased and a million-selling smash hit was born. Played in E with scratchy distortion, the riff set the tone for a whole genre.

38 **PSYCHOSOCIAL** **SLIPKNOT**

(2008)

The Nine taking their death metal influences to new limits

Tuned down all the way to drop A, decorated with palm-mutings, pauses, pinched harmonics and slides, this single from 2008's *All Hope Is Gone* has earned its place among Slipknot's finest. On its final cycle, the chromatic line at the end doubles in speed, climaxing in tension before the less-syncoated and more direct-hitting verse brings relief.

It's interesting how guitarists Jim Root and Mick Thomson find different ways of playing the same idea, doubling up in places and then switching to harmonies to add weight and dimension, respectively. Root was using his signature Telecasters, fitted with EMG 81/60 pickups, into Orange Rockerverb 100 and a Diezel Herbert, while Thomson relied on his own signature Ibanez guitars and Rivera amps.

37 **SCUTTLE BUTTIN'** **STEVIE RAY VAUGHAN & DOUBLE TROUBLE**

(1984)

Chicken pickin' good...

Inspired by the Lonnie Mack number *Chicken Pickin'*, speed and stamina are key to this iconic Texas blues riff. It's built around a first position blues scale lick in E₆ (which Stevie would always tune down to). Lightning-fast runs are made humanly possible with lots of pull-offs, plucked open strings and fleet-fingered slides. The repeating lick is sandwiched between stabbing I, IV and V chords, and – played on a Strat through a Fender amp – the tone is characteristically twangy and bright. Testament to the riff's ability to make people sit down and shut up, SRV frequently opened his live sets with *Scuttle Buttin'*.

36 **MISSISSIPPI QUEEN** **MOUNTAIN**

(1970)

Iconic tone from the man who inspired Slash

Pete Townshend, Slash, Joe Satriani and Joe Bonamassa are just a few of the guitar heroes who hailed the genius of Mountain's Leslie West. And there was no finer example of West's power than *Mississippi Queen*, the opening track on Mountain's debut album *Climbing!* on which he delivered explosive high-octane riffage and sweet vibrato soloing. Gear-wise, he plugged his trusty sunburst Les Paul Junior into his famous Sunn Coliseum amplifier, which had been designed as a PA system. "I didn't put the volume way up," he said. "I distorted the preamp and put the master volume at four or five, because you wanted to get the tone rather than the volume in the studio."

35 SWEET CHILD O' MINE GUNS N' ROSES

(1987)

From a "cool little riff", a rock classic was born

Every decade has its rock anthem. While the 1970s had *Stairway To Heaven* and the 90s had *Smells Like Teen Spirit*, the most memorable riffathon of the 80s has to be *Sweet Child O' Mine*. It was the US number one hit that confirmed Guns N' Roses as the greatest hard rock act of a generation, propelling debut album *Appetite For Destruction* to multi-platinum status. And while it was rumoured for years that lead guitarist Slash was dismissive of his own ultra-iconic opening riff, that's not the whole story.

As he told TG: "In passing, I did say that it was sort of a joke or something, but initially it was just a cool, neat little riff that I'd come up with. It was an interesting pattern and it was really melodic, but I don't think I would have presented it to the band and said, 'Hey, I've got this idea!' because I just happened to come up with it while we were all hanging around together. Izzy [Stradlin, GN'R's rhythm guitarist] was the first one to start playing behind it, and once that happened Axl [Rose, the band's singer] started making up words, and it took off that way."

As for the guitar Slash played, it could only ever have been a Les Paul – but perhaps not the Les Paul that you'd expect. "I was lucky even to have a guitar for the *Appetite* album," he said. "Originally, when I got to the studio, I had somehow, in a fit of desperation, pawned most of my guitars, so all I had was a BC Rich Warlock and two Jacksons. I'd been playing those guitars live, and they sounded OK in a room full of people, but when I actually went and heard them in the cans they sounded f*ckin' horrible!"

Fortunately, fate intervened in the form of GN'R manager Alan Niven. Slash recalled, "Right before we went in to do the guitar overdubs, Alan gave me a handmade copy of a 1959 Les Paul made by a guy called Kris Derrig. He built a run of between fifty and a hundred immaculate '59 reissues, and that was the guitar that I used for the whole record. You could never tell that they weren't Gibsons."



VIDEO LESSON

bit.ly/tg346audio

Only the first note of each bar changes here, but *SCDM*'s riff remains a notoriously tricky little finger twister. We recommend learning bar 1 in full before taking a view on your preferred fingering pattern in bars 3 and 5 where the changes occur. Picking-wise, we recommend a pure alternating down-up approach. You won't always be picking in the direction of the next note, but we'd argue it'll help keep your timing in check.

Appears at: 0:00-0:46

Tempo: 112 bpm

Key/scale: D Mixolydian

Main techniques: Alternate picking, arpeggios

TG TIP TG Tip: Keep your eyes/ears on the first note of each bar. It's the only note that changes until the variation in the very last bar of the intro.

34 IAN IN THE BOX ALICE IN CHAINS

(1990)

The Talkbox gets reinvented for the 90s

The big hit from Alice In Chains' debut album *Facelift* could very well be the finest grunge anthem of them all. Guitarist Jerry Cantrell was pairing his 1984 G&L 'Blue Dress' Rampage, fitted with a single JB pickup in the bridge, with a Reinhold Bogner-modded Marshall JCM800 via his Dunlop Heil Talkbox, and dialling in more throaty and metallic sounds than the majority of his Seattle peers – and with stunning results. The main riff, played half a step down as per most of their recordings, sees him chugging on his low E, and a minor 7th up on the next string, layered with a Hendrix-y lead line that's doubled by original singer Layne Staley.

33 YOU REALLY GOT ME THE KINKS

(1964)

Ingredients: Two chords and one vandalised amp

A blueprint for countless rock and heavy metal riffs to come, the opener of the Kinks' *You Really Got Me* ricochets ceaselessly between F5 & G5 powerchords. Having slashed the speaker of his little green Elpico amp in a fit of angst, guitarist Dave Davies happened upon the track's signature distorted sound, and in doing so changed the course of rock history. The unforgettably raw riff propelled the track to the top of the UK charts in 1964 and – legend has it – inspired Pete Townsend to write The Who's *I Can't Explain* the following year. Van Halen notably covered it (with added squealies) on their 1978 self-titled debut.

32 THE BOYS ARE BACK IN TOWN THIN LIZZY

(1976)

Twin Les Pauls at full throttle

The greatest Lizzy guitar line-up, Scott Gorham and Brian Robertson, hit their zenith on 1976 album *Jailbreak*. *The Boys Are Back In Town* was one of 15 songs considered for the album, and hadn't even made the band's shortlist, so no one was more surprised than them when it produced their US breakthrough hit. The intro riff is just three powerchords, punctuated by Phil Lynott's thundering bass fill, doubled by Scott Gorham. The signature ascending harmonies were added by Robertson, who'd learned theory from his musician parents. The guitar tone is perhaps the definitive Les Paul & Marshall combination, with Gorham employing a mini-humbucker Deluxe.



VIDEO LESSON

bit.ly/tg346audio

The iconic harmony lead lines kick in after the first chorus. Take a close listen and you'll hear Robertson and Gorham sync'ing tightly on both vibrato and the precise length of each note – essential tricks of the twin-lead trade. Much of the line boils down to a six-note phrase: a single note that leads into a triplet, followed by a wide vibrato line and a staccato finishing note. Get this phrase down and you'll have the whole riff together in no time.

Appears at: 1:05-1:18

Tempo: 162 bpm

Key/scale: A major

Main techniques: Harmonised twin-lead, vibrato

TG TIP Keep the note length and vibrato of both guitars the same and the harmony guitars will sound tight.



31 LATERALUS TOOL

(2001)

What happens when alt-rock and advanced mathematics collide

The title track from Tool's 2001 masterpiece perfectly demonstrates why they are the masters of time, using alternating metres to add pushes and pulls where least expected. The song has ties to the Fibonacci sequence or 'Golden Ratio' found in sacred geometry, from singer

Maynard James Keenan's rhythmic syllables in the verses to the shifts in the signatures themselves. As guitarist Adam Jones explained to TG, the song's main riff came from bassist Justin Chancellor via drummer Danny Carey. "Justin brought in a riff, and Danny saw it had a connection to the Fibonacci, so he started trying to work in elements of it," Jones said. "Then Maynard came in and we started telling him about the sequence." For a heavy song, a heavy subject. "It came from trying to relate to those things in life or nature we all have in common," Jones elaborated. "It's something that people have been studying since the beginning of time... That's why we got more into the idea behind science, metaphysics and the myth of communication." For the recordings, Jones was using his 1979 silverburst Gibson Les Paul Custom and an array of amps including his modded 1976 Marshall JMP Super Bass, a 'blue face' Diezel VH4, and a Sunn Beta Lead through Mesa/Boogie cabinets.





30 SEVEN NATION ARMY THE WHITE STRIPES

(2003)

Garage rock riffing goes stadium-sized

Four albums into The White Stripes' career, Jack White already had considerable form as a blues revivalist with a raw approach to production. But even by his standards, *Seven Nation Army* was minimalist. The song didn't even have a chorus as such. Instead, that now-immortal E minor guitar line (all seven notes of it) was the chorus. A novice could play it on guitar, and many have done. Not that White ever considered *Seven Nation Army* a mere throwaway. As he once revealed: "I thought: 'If I ever got asked to write the next James Bond theme, that would be the riff for it.'" Turn to p80 to learn the riff.



29 THE SPIRIT OF RADIO RUSH

(1980)

Alex Lifeson tunes in and turns up the widdle...

Drawing on hard rock, blues-rock and reggae, this hit single from 1980's *Permanent Waves* is one of the more accessible and broadly-appealing tracks in the Canadian trio's catalogue. Alex Lifeson's fast, fiddly intro riff is picked, hammered and pulled on the high E and B strings, an E7 figure with an almost Celtic flavour with which he wanted to illustrate radio waves themselves. (The verse's E major chord progression – E, B, G#m, A, B – is altogether more conventional, and playable). Hints for tone: Lifeson was an ES335/355 player back then, with an Electro-Harmonix 'Electric Mistress' flanger and Boss CE-1 Chorus Ensemble on his board.

28 (DON'T FEAR) THE REAPER BLUE OYSTER CULT

(1976)

Death, cowbell and nifty arpeggios. What else do you need?

Blue Öyster Cult's signature hit was a meditation on the acceptance of death (a subject rather undercut 24 years later by Will Ferrell's meme-mungous 'more cowbell' skit on *Saturday Night Live*). Vocalist, songwriter and guitarist Buck Dharma recorded *Reaper*'s main riff in one take on a Gibson ES-175 through a Music Man 410 amp. The repeated A minor arpeggiated figure (A5, G, F6add9, G) is played in first position, that G string ringing open throughout as a high pedal tone. Dharma picks it with alternating up and down strokes, but it can work well fingerstyle or, at a push, downstrokes only. Cowbell optional...

27 BARRACUDA HEART

(1977)

Ancestor of the Iron Maiden gallop

In 1976, Heart supported Nazareth on tour, where they heard Nazareth cover Joni Mitchell's *This Flight Tonight* with a galloping riff. They stole the gallop and added two powerchord stabs to make *Barracuda*. Later, Iron Maiden would make this rhythm essential to 80s metal. Nancy Wilson supplied acoustic guitar. Roger Fisher played the intro on a Strat into a Music Man head, with the song's distinctive flanger effect. When the band kicks in, Howard Leese joined him on a '66 Tele into a Fender Bassman. Both guitarists played loud so they could get sustain with relatively clean guitar sounds.



26 BREAKING THE LAW JUDAS PRIEST

(1980)

A minor offence

Culled from *British Steel*, the definitive Priest album, *Breaking The Law* is a song of hopelessness, a *cri de coeur* at finding oneself discarded by society, out of work and broke. But it also makes an excellent case study in the practical application of the A minor scale. The riff is simply a meditation on that. Guitarists KK Downing and Glenn Tipton used Gibson SGs, Flying Vs and Strats back then, which would be going through a non-master volume Marshall head – most likely a late-70s JMP 50-watt head – with a treble booster in front to give it more bite.

25 WALK THIS WAY AEROSMITH

(1975)

The world's rockiest funk riff

Joe Perry's favourite band were New Orleans funksters The Meters, and Aerosmith covered James Brown's *Mother Popcorn* in concert. But Perry suggested they write their own funk tune so they wouldn't have to rely on covers, and then produced this instant classic at a soundcheck. The original was Aerosmith's second US top 10 hit. It was played on a double-cutaway Les Paul Junior into an Ampeg V2 amp. The career-saving Run DMC remake featured Joe's Strat-style Schecter Traditional. *Walk This Way* is based on a repeating five-note figure. On the repeat, it's played one 16th note later, creating the funk magic.

24 2 MINUTES TO MIDNIGHT IRON MAIDEN

(1984)

Heavy metal's quintessential nuclear protest anthem

Written by singer Bruce Dickinson and guitarist Adrian Smith, the first single from Maiden's fifth album *Powerslave* is undoubtedly one of the band's catchiest songs. The main riff is played using open A-string pedal tones against diads on the D and G strings – taking Ritchie Blackmore's *Smoke On The Water* concept to newer, faster and more metallic extremes. Smith and fellow guitarist Dave Murray were experimenting with Ibanez Roadstars around this time, so it's likely that these were the instruments used for the sessions, fed through the Boss and MXR pedals and Marshall JMP amps seen on the World Slavery Tour of the same year.



23 BEAT IT MICHAEL JACKSON

(1982)

It was Eddie's solo – but Steve Lukather played the riff...

The self-appointed King Of Pop wrote *Beat It* to break into the rock market, with a riff inspired by The Knack's *My Sharona*. For added rock cred, he called in Eddie Van Halen for the solo. But to get that riff just so, Jackson and producer Quincy Jones turned to two seasoned session players, both members of soft rock titans Toto – guitarist Steve Lukather and drummer Jeff Porcaro. As Lukather recalled: "I got together with Michael, working on the riff, getting it in the pocket. From his body language, I could tell he wanted it to feel a certain way."

"I played all the guitar parts on that track except for the solo, and all the bass parts, and Jeff is on drums. Quincy Jones had Michael's pristine lead vocal and Eddie's pristine lead solo on the master track, so all that Jeff and I had to play to was headphone leakage and Michael Jackson playing two and four on a drum case. But Jeff – being the genius that he was – was able to find the pocket and play it. He put the drums down first, in a couple of takes, and I ran with it from there. I put down all the guitar riffs through Marshalls, quadruple-tracked, but when Quincy heard it he said, 'It's great, but it's too heavy, too much. I can't get that on pop radio. You gotta tone it down, use smaller amps.' So I did that."

**"QUINCY JONES TOLD ME
THE RIFF WAS GREAT,
BUT THE ORIGINAL
RECORDING WAS TOO
HEAVY FOR RADIO"**

22 ACE OF SPADES MOTORHEAD

(1980)

Play the hand you're dealt

Motörhead's calling card is performed at the visceral tempo of a car chase, its signature riff barreling towards the helter-skelter open-G5 abandon of the verse with a sense of devil may care fatalism. Scarcely has a bona-fide hit sounded so hostile. *Ace Of Spades* is all syncopated dissonance and tension. Of course, the riff is played at 140 bpm, but it sounds as though it is accelerating. 'Fast' Eddie Clarke tunes down a half-step, dimes a Marshall and uses the extra clarity from his Gibson Les Paul Deluxe's mini-humbuckers to spike the riff with something piquant.





21 **MONEY** **PINK FLOYD**

(1973)

Seven beats and six notes - it's a gas!

Rock history is not brimming with odd-time riffs, and *Money* is the most successful 7/4 effort of all time. It's more accessible than most because you're never left in any doubt where beat 1 falls. Nick Mason's drum groove seems designed to trick you into thinking you're hearing a standard 4/4 pattern: it follows a typical kick-snare pattern for the first six beats, with an extra kick on beat seven that sounds more natural each time it repeats. *Money's* riff is just one bar long and is played the same every time, which keeps it from confusing listeners who aren't steeped in prog.

Roger Waters wrote the riff, and his bass dominates the introduction with Gilmour's guitar double playing second fiddle. The guitar was his legendary black Strat on the bridge pickup, which at the time of recording was still unmodified. Gilmour plugged into an Arbiter Fuzz Face but backed off his volume control for a nearly clean sound - you can hear the grit as he digs into the quarter-tone bend on beat 7 of each riff. His towering Hiwatt amp rig kicked out enough volume that chief engineer Alan Parsons mic'ed the cabinets from a foot and a half away.

Although there isn't much variation in the riff, it builds in excitement thanks to layers of guitar and keyboard overdubs. After four times, Gilmour's tremolo chord stabs kick in, recorded with a Kepex tremolo unit. There's a distorted chord stab on beat 2, helped by a Colorsound Power Boost. Then there are Steve Cropper-style hits in sync with the snare drum on beats 4 and 6. These add to the illusion you're hearing a riff in 4/4, because they sound like a classic soul backbeat part. With all that rhythmic complexity, Waters wisely kept it harmonically simple, sticking to B minor pentatonic. If it were in 4/4, *Money* would be considered a blues song, which shows the blues format's massive potential for innovation.

Money became Floyd's first US hit on release, helping to propel *Dark Side Of The Moon* to its gargantuan success. It dominated the top 10 for so long that US chart compilers Billboard eventually created a separate catalog [sic] chart for older albums so that *Dark Side* would stop eclipsing newer releases. *Money's* enduring success proves that odd time signatures can be accessible and that bass riffs can be just as important as guitar riffs.



VIDEO LESSON

bit.ly/tg346audio

This Waters-penned bass riff boils down to just eight notes, all from the B minor pentatonic scale (B D E F# A) and doubled by Gilmour's Strat bridge pickup running through a Colorsound Power Boost. Watch the video to pick up the sequence of notes (the whole thing stays between the 2nd and 5th frets) and take care to keep a steady seven-count to outline the 7/4 rhythm.

Appears at: 0:12-0:40

Tempo: 125 bpm

Key/scale: B minor pentatonic

Main techniques: Pentatonic phrasing, quarter-tone bends, odd time signature

TG TIP The riff is seven beats long, so remember to keep your internal metronome counting from one to seven.



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FIVE WAYS TO... WRITE A CLASSIC RIFF

The chords and composing tricks that built rock's greatest riffs

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Our Top 50 riff list reads like a who's who of the history of rock, with classic acts hitting the heady heights of, well, pretty much the entire Top 50 if we're honest. Newer acts received far fewer votes by comparison. Perhaps it's just a matter of renown; it's just harder for younger bands to

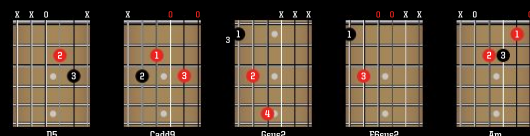
be as well-known as acts who may have been around for 40 or 50 years. Here we're looking how those classic riffs were written. These aren't exactly songwriting secrets. More, common themes and threads. Techniques and musical devices that can be recycled and reimagined when you write your own riffs. You get the idea, so let's get started...



1 THE ARPEGGIO METHOD

As Heard In: *Ain't Talkin' 'Bout Love*, *Sweet Home Alabama*, *Don't Fear The Reaper*, *Message In A Bottle*

Arpeggios feature highly in our top 50, and they're a simple idea: just play a chord one note at a time. Try 'em with a clean sound (as heard in Lynyrd Skynyrd's *Sweet Home Alabama*), or heavy things up with a higher gain tone (as on Van Halen's *Ain't Talkin' 'Bout Love*). Palm-muting is a handy way to keep those ringing chord tones under control when you're using distortion.



These shapes are classic fare. We'd say they're pretty easy, but watch out for that Summers style sus2 stretch shape. Sus chords are oft-used in classic rock, so look to find new versions built around these other shapes.

THESE TECHNIQUES AND MUSICAL DEVICES CAN BE RECYCLED AND REIMAGINED WHEN YOU WRITE YOUR OWN RIFFS...

SWEET REAPER

♩ = 120

D⁵ Cadd⁹ G D⁵ Cadd⁹ Gsus² Csus² B^b sus² Play 4 times

PM = - - - - - let ring = - - - - -

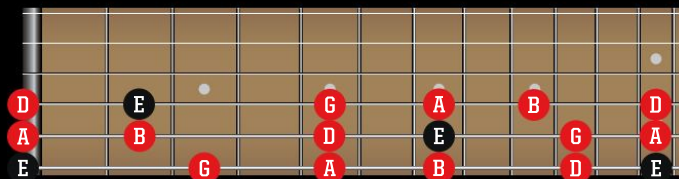
TAB: 0 2 3 0 3 0 0 3 3 0 0 2 0 2 3 0 3 5 7 7 12 10 8 6 8 10

The idea here in our example arpeggio riff is to form the chord shapes with your fretting hand and use your pick to articulate the notes as directed. The notes should ring out together in a sonorous, piano-like effect.

2 THE MINOR PENTATONIC METHOD

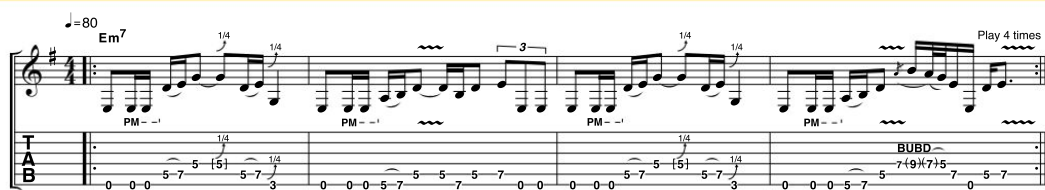
As Heard In: *Whole Lotta Love*, *Killing In The Name*, *Life In The Fast Lane*

Guaranteed to rock, the E minor pentatonic scale allows you to make plentiful use of the guitar's heaviest note – the bottom E! Of course, pentatonic riffs, unison bassline and heavy drum backbeat was a winning formula as far back as late 60s Cream and Led Zeppelin, but it's still relevant today, with bands like Greta Van Fleet and Royal Blood making it their core creative approach.



We've mapped out the notes of the E minor pentatonic scale for you here. Only on the bass strings, of course! Riffs are in and middle is out, remember, so keep it low and mean when you write your own riffs.

WHOLE LOTTA RIFF

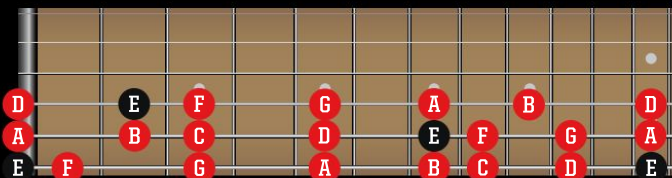


Our idea here should give you a feel for some typical E minor pentatonic phrasing. The 3rd, 5th and 7th frets figure highly, as does the open sixth string. Also look out for those quarter-tone bends.

3. OPEN STRING PEDAL TONES

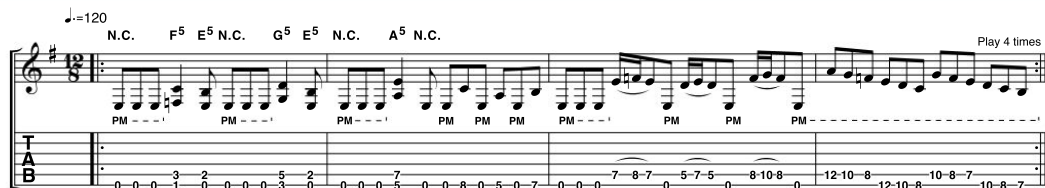
As Heard In: *Symphony Of Destruction*, *Walk*, *Angel Of Death*, *Enter Sandman*, *2 Minutes to Midnight*

The open E pedal note is a core thrash metal sound. Megadeth's Dave Mustaine and Metallica's James Hetfield were at the forefront of developing the 80s British heavy metal sound into new territory with more technicality and speed. Slayer took the ideas to greater extremes and still today, the boundaries of heavy open-string riffs are being pushed, with bands like Meshuggah utilising eight-string guitars to allow for more open string pedal note options and more adventurous sounds.



In music, a pedal is a note which is played repeatedly throughout a musical phrase and a lot of riffs rely on using the open E or A string as an anchor point, particularly in heavy metal. The Phrygian mode shown here will help you get in a metal mood.

THRASH IT OUT

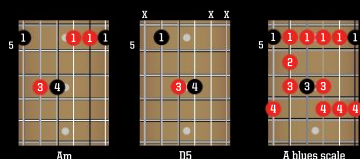


In this example, we start with a Dimebag-meets-Dave Mustaine powerchord riff, followed by some Jeff Hanneman trills and finally some Iron Maiden-inspired scale sequences. All typical riff tricks found in TG's Top 50.

4 BLUES SCALE METHOD

As Heard In: *Purple Haze, Layla, Johnny B. Goode, La Grange*

The blues scale is the basis of classic riffs like *Purple Haze*, *Scuttle Buttin'* and *Johnny B. Goode*, which are all examples of melodic riffs. This one scale shape seems to contain an endless supply of riff ideas. In classic rock and blues, riffs are often based around the I and IV chord change – Am to D5 in the key of A for example. Both of these chords can be found within the A blues scale and it is helpful to view them as one and the same.



Look at the blues scale shape shown here. You can trace Am and D5 chords within it and indeed many more; try creating your own chord shapes from the scale and using the shape to write riffs which you can combine with them.



PURPLY BLUES

♩ = 90

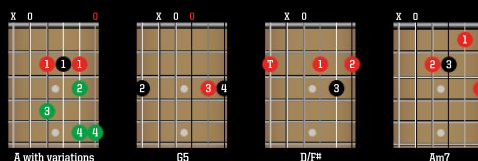
Am D⁵ C⁵ (Play 4 times)

In this example, we start with a Hendrix-inspired string-bending lick, followed by some Billy Gibbons *La Grange* doublestops. After repeating the opening lick, we change the to IV chord (D5), then finish with a flurry of notes a la Clapton or Stevie Ray Vaughan. All played within the confines of the A blues scale.

5 RHYTHMIC CHORDS

As Heard In: *Smoke on the Water, All Right Now, [I Can't Get No] Satisfaction, No One Knows, Crazy Train*

The rhythm of a riff can be just as, if not more important than the chords themselves. Try clapping the rhythm of *Smoke On The Water*, *Back In Black* or *You Really Got Me* and the chances are people will know the song without any melodic information. Combining a strong rhythm, with some rocking chords is a recipe for an effective riff.



Here we have four chords which act as the basis for our example riff. Blast them out for straight ahead rock or experiment with adapting the shapes by moving one or two fingers around. This works particularly well with the open A. We've shown some variations in green.

STRUMMER LOVIN'

A⁵ D/A A G⁵ D/F# Am⁷ A⁷sus⁴ Am⁷ A⁵ C D G D (Play 4 times)

This riff starts in A, and uses some variations on the open A shape, before using some Angus Young-inspired changes G to D/F#. In bar 3 we switch to A minor with some Josh Homme-style chords and finally we have some Rolling Stones-style triads, played on the treble strings.



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20 THE ROLLING STONES (I CAN'T GET NO) SATISFACTION

(1965)

Enter the fuzz box...

We begin our top 20 with the man famed as the 'Human Riff'... Keith Richards famously did not have great expectations for *Satisfaction*. In his mind, the riff was a horn part, one idea among many. But often ideas require a little kismet before they blossom. Finding a tone in the studio was not happening, but Ian Stewart, the Stones' pianist at the time, presented Richards with a Maestro FZ-1 Fuzz-Tone, and the riff came alive. Of course, listening to Otis Redding's cover proved that Richards was right all along – it did make an excellent horn part – but *Satisfaction* consecrated the fuzz pedal on record, forever changing rock guitar tone.

19 SWEET HOME ALABAMA LYNYRD SKYNYRD

(1974)

Three chords and two fingers to Neil Young

Neil Young had challenged Alabama values in *Southern Man*, and since pistols at dawn were no longer acceptable, Skynyrd replied with this deathless radio-botherer. Even beginners can get their hands round the basic shapes, which has only helped its popularity. The track opens with the distinctive sound of a Strat's bridge and middle pickups (with a non-humcancelling middle pickup, if you're being picky), played by Ed King on a 1973 model, running into a Fender Twin cranked almost to full blast.



VIDEO LESSON

bit.ly/tg346audio

It's easy to bluff your way through a roughly similar version of Ed King's classic clean Strat riff. You'll be playing open D5, Cadd9 and G5 chords (easy!) and a simple major pentatonic line (again, not too hard!). These parts are easy to adapt to make them easier to play. For a more authentic rendition, you'll need to focus on picking the exact strings, so as to mirror King's part.

Appears at: 0:03-0:13

Tempo: 95 bpm

Key/scale: D Mixolydian

Main techniques: Open chords, arpeggios, accurate picking

TG TIP: You can lose track of your picking accuracy, as long as you keep those chord changes nailed down!



18 ANGEL OF DEATH SLAYER

(1986)

Thrash metal's peak

“We were not schooled musicians,” said Slayer guitarist Jeff Hanneman. “But we knew what sounded dark. All you do is go a step up or down till you get it right, and it sounds huge. I recognised that when I hit certain notes I’d get a certain feeling. This is the way I played it in my head: if it sounds like I’m standing over a body that’s just been stabbed to death, then it’s perfect.”

The darkness and brutality in Slayer’s music was most vividly illustrated in the band’s third album *Reign In Blood*, and in particular its opening track, *Angel Of Death*. Widely recognized as one of the greatest metal albums of all time, *Reign In Blood* is also, for many, the definitive thrash metal album. And what Jeff Hanneman created in *Angel Of Death* was a song as brilliant as it was controversial. The lyrics detailed the atrocities performed by Nazi war criminal Josef Mengele. The music was a high-speed riff onslaught in which Hanneman and fellow guitarist Kerry King were locked in tight.

The equipment the pair used was the classic 1980s metal arsenal, with both men turning to Marshall JCM800s for amplification. The former was

playing a black Jackson Soloist with retrofitted EMG pickups, while King had recently begun an endorsement with BC Rich that lasts to this day. His Warlock and Hanneman’s Soloist were both run through MXR distortion and Dunlop Cry Baby pedals, with onboard effects, such as reverb, added by Rubin at the desk. The song was recorded in E₃, the same as all of *Reign In Blood*’s 10 tracks, with the guitarists performing mesmerisingly fast tremolo picking on all the riffs apart from the iconic groove that anchors the midsection. That particular riff has been hailed as an all-time classic and it’s based on razor-edged downstrokes. “That’s the riff that people get wrong, if they’re gonna get any of them wrong!” King said. “It’s not tricky, it’s just odd notes. It’s not a scale as such, it’s just what Jeff threw together then liked the way it sounded.”

There are actually two riffs to learn in this section, as King explained: “When that riff comes in, it’s one guitar, then when the second guitar comes in we play the same riff. Then, during the second section, we’re playing something different.”

And if *Angel Of Death* feels hard to play, don’t be put off. King had some words of encouragement. “All the riffs are fairly doable,” he confirmed, “especially the one that begins the song. We just go for it. It’s at ‘go-for-it’ speed, ha ha!”

“IF IT SOUNDS LIKE I’M STANDING OVER A BODY THAT’S JUST BEEN STABBED TO DEATH THEN IT’S PERFECT” JEFF HANNEMAN



17 SMELLS LIKE TEEN SPIRIT NIRVANA

Punk angst in a radio-rock disguise defines an era

Gearing up to record *Nevermind*, Kurt picked a rig of a MESA/Boogie Studio Preamp, a solid-state Crown Power Base 2 power amp, and a wall of Marshall cabinets. It was the humble Boss DS-1 Distortion, though, that Kurt considered the core of his sound. The moment he stomps on it, eight seconds into *Teen Spirit*, encapsulates Nirvana's whiplash dynamics and their ability to summon a tornado. The sudden volume shifts came via the Pixies, but the riff has been called *More Than A Feeling* for alienated Gen X-ers. The chords are different, but Nirvana's and Boston's biggest hits both use progressions with four chords and similar rhythmic accents. Where */More Than A Feeling/* is pure feelgood, *Teen Spirit* radiates teenage frustration. Kurt's chord choices (F5-B3-5-A3-D3) are standard, all coming from the key of F minor, but there weren't a lot of pre-Nirvana rock songs to feature those chords in that order. More importantly, he employs the guitarist's trick of briefly strumming the open strings to smooth the transition between chords. That's normally unremarkable because in typical guitar keys like E or A minor all the notes are in tune.

Because *Teen Spirit* is in F minor, those notes are completely discordant, adding a blast of conflict to every bar. Cobain took three guitars into the studio to make *Nevermind*: a Jaguar, a Mustang, and a Strat, all modified with humbuckers. He usually chose the Strat for contemporary live performances of this song, so that's the best guess at what he used to record it. Kurt's vision for *Nevermind* was a raw, punky album and he later described the final production as "far too slick". To achieve the massive tones on record, producer Butch Vig sometimes tricked Cobain into double-tracking parts by pretending earlier takes were lost or not good enough. Nirvana reportedly chose mix engineer Andy Wallace in part because his name appeared bottom of the record company's suggested list. The band assumed this meant he was less corporate than the others, but it was Wallace's earthshaking sonics that made *Teen Spirit* a radio smash. Kurt moaned that the result was closer to Mötley Crüe than punk rock. While rock history records that Nirvana slayed hair metal, in 1991 *Teen Spirit* sat comfortably on MTV alongside the Crüe's current single *Primal Scream*. Kurt may have felt conflicted, but he had undoubtedly created the defining guitar riff of the 90s.

KURT MAY HAVE FELT CONFLICTED ABOUT *TEEN SPIRIT*, BUT HE HAD UNDOUBTEDLY CREATED THE DEFINING RIFF OF THE 90S...

16 KILLING IN THE NAME RAGE AGAINST THE MACHINE

(1991)

The most iconic drop-D riff of them all?

It's still astonishing, even after all these years, just how little gain Tom Morello was using on RATM's debut. His tones, though slightly overdriven, were clear and punchy – relying more on the melodic and rhythmic content within the music itself to define the overall heaviness. Still to this day, their debut single is among the first anyone will learn in drop-D, typifying how the third and fifth frets on the A-string can be used for minor seventh and octave notes against the low string root. A walking chromatic blues run is thrown in halfway through the second verse, embellishing the idea further. It was Morello's 1982 'Sendero Luminoso' Telecaster handling the bulk of the work and a hot sauce-coloured Gibson Les Paul for overdubs, going through his faithful Marshall JCM 800 and Peavey cab, plus modulation on the opening chords from an Ibanez DFL Flanger.

15 SYMPHONY OF DESTRUCTION MEGADETH

(1992)

Dave Mustaine at his most direct

It may be one of his simplest creations, but the powerful main riff on this 1992 single is one of Dave Mustaine's very best. Adding to the dissonance of the half-step interval between its two opening chords are the silences that follow, and then a palm-muted closing line to further outline its Phrygian feel. A custom-built silver sparkle Jackson King V was Mustaine's 'Number One' during these years, fed into a VHT power amp and either a Bogner or Custom Audio Electronics pre amp. Lead guitarist Marty Friedman, who left the band eight years later, was also using Jackson guitars through the same rackmount gear, as well as a hot-rodded Marshall 50-watt.

14 SUNSHINE OF YOUR LOVE CREAM

(1967)

Woman tone and a tribute to Hendrix

Sunshine was actually bassist Jack Bruce's riff, inspired by seeing a Jimi Hendrix gig. Clapton simply doubled Bruce's part, adding 7th chord strums on the repeats. It's the ideal riff for learning the blues scale because it hits each note almost in sequence. Clapton used his psychedelic SG known as The Fool, turning off the tone on the neck pickup for the most famous example of his Woman Tone. Given the myth around Clapton, hard info on his amp choice is thin on the ground, but at this time he favoured Marshall JTM-100s, massive KT66 powered amps he ran (naturally) on 10.

13 MONEY FOR NOTHING DIRE STRAITS

(1985)

One of rock's happiest accidents

Aiming for a Billy Gibbons tone on his MTV-breakout hit, Mark Knopfler chose a Les Paul Jr into a Laney 2x12 and rocked back his Morley wah pedal in increments until he found the sweet spot. Producer Neil Dorfsman mic'ed it with a single SM57, but as they were about to record, he noticed the mic had fallen out of position and was pointing at the floor. Thus was born the inimitable *Money For Nothing* tone. The notes are fairly standard, fitting largely around G minor pentatonic, but the wah overtones and Knopfler's fingerstyle technique make it completely unique.

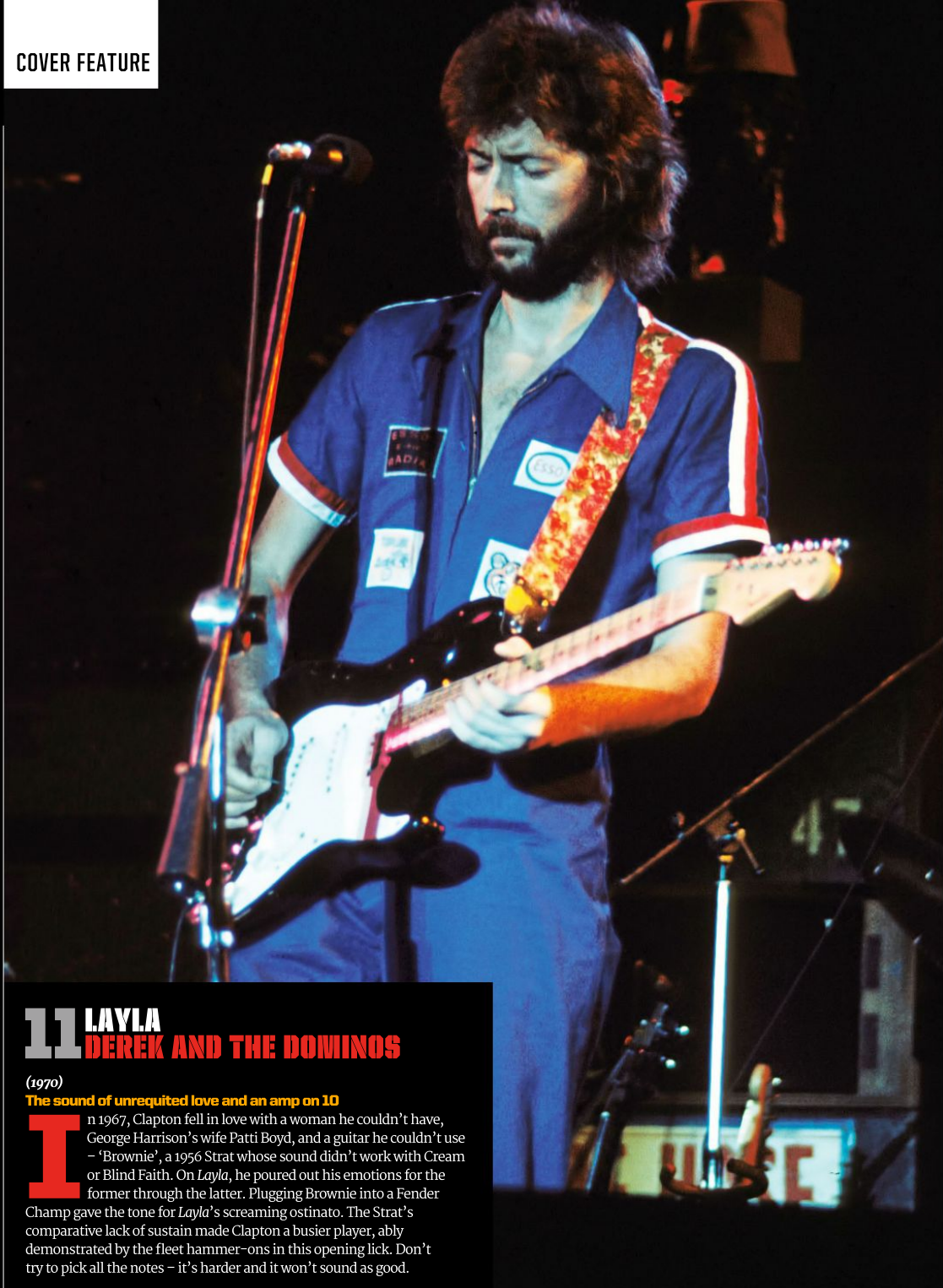


12 JOHNNY B. GOODE CHUCK BERRY

(1958)

Rock's fine tradition of plagiarism starts here

Rock 'n' roll had long existed out of sight of white America until Chuck Berry exploded into the mainstream. In fact, Berry's intro to *Johnny B. Goode* was pinched note-for-note from 1946's *Ain't That Just Like A Woman* by Louis Jordan and His Tympany Five. But while Berry may have stolen guitarist Carl Hogan's notes, he played them with such ferocity, adding his signature sliding double-stops, that it became an entirely new sound. Much as Jimmy Page would later utilize blues riffs to invent heavy metal, Berry wrung jump blues into a different beast. Then the Beach Boys stole it again, for *Fun Fun Fun*.



11 LAYLA DEREK AND THE DOMINOS

(1970)

The sound of unrequited love and an amp on 10

In 1967, Clapton fell in love with a woman he couldn't have, George Harrison's wife Patti Boyd, and a guitar he couldn't use – 'Brownie', a 1956 Strat whose sound didn't work with Cream or Blind Faith. On *Layla*, he poured out his emotions for the former through the latter. Plugging Brownie into a Fender Champ gave the tone for *Layla*'s screaming ostinato. The Strat's comparative lack of sustain made Clapton a busier player, ably demonstrated by the fleet hammer-ons in this opening lick. Don't try to pick all the notes – it's harder and it won't sound as good.



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10 PURPLE HAZE THE JIMI HENDRIX EXPERIENCE

(1967)

Hendrix adds a new chord to the lexicon

Before *Purple Haze*, E7#9 was strictly a jazz chord. Only a visionary would consider using it as the tonal centre; conventionally, it was considered too dissonant for mainstream listeners. The Hendrix chord is a cliché now, but then it was a revolution. Hendrix's fearless embrace of dissonance opens the song, with bass and guitar stamping out the devil's interval. The intro sees Jimi finding exciting new lines in the well-worn framework of the minor pentatonic. Then comes *that* chord. His strumming is impossibly funky and the fuzz obscures exactly what he's doing, so almost no one has replicated it. By using his thumb to play the root notes of the G and A barres, he leaves his finger free to add the major 6th to those chords. The gear? Definitely Marshall and Fuzz Face, but there's a persistent legend that Jimi had knackered his only Strat and had to borrow Noel Redding's Telecaster.



VIDEO LESSON

bit.ly/tg346audio

After setting the scene with the Devil's interval intro, Hendrix unleashes a fuzz-laden riff that's delivered with such flair and such precision, it went on to inspire just about every guitarist on the planet. Though not *too* difficult to play, it's tricky to learn, running through four pentatonic shapes from the open position to the 9th fret. Still, those bluesy phrases have a definite earworm effect.

Appears at: 0:00-0:23

Tempo: 107 bpm

Key/scale: E minor pentatonic scale

Main techniques: Pentatonic phrasing, quarter-tone bends, vibrato

TG TIP: Target the lowest fret with your first finger, and the highest with your third. Everything in between should feel comfortable.

09 LA GRANGE ZZ TOP

(1973)

The little finger is the key, says Billy G...

The Texan trio's hit album *Tres Hombres* featured this perennial tune. *La Grange* was inspired by Edna's Fashionable Ranch Boarding House, a brothel on the outskirts of that titular Texas town. For the suitably lowdown 'n' dirty riff, Billy Gibbons took a hoary, John Lee Hooker-style I-,III-IV vamp in A (A-C-D), and poured his trademark tone all over it. "That's a 1955 Fender Strat," Gibbons tells TG, "maple neck with a hardtail [fixed bridge], running through a 2x10 Fender Tremolux – a little blonde piggyback amp that happened to be in the studio at the time. The riff's in the key of A, but don't forget to use the little finger on the G string [C note, 5th fret] and pull it slightly up to pitch." Bend that up just shy of C# to get yourself some of the song's bluesy, raunchy feel...



08 WALK PANTERA (1992)

The riff that ushered in a bold new era for metal

Pantera were soundchecking on the *Cowboys From Hell* tour when guitarist Dimebag Darrell started playing what would soon become the most definitive track of their career. His brother Vinnie Paul quickly joined in on drums, later recalling how it had a shuffle rhythm unlike anything they'd written up to that point and nodded back to the siblings' Southern roots, growing up around the music of ZZ Top and Lynyrd Skynyrd 50 kilometres south of Dallas. It was ultimately less thrashy and saw their band embracing more groove-driven doctrines of heaviness – inspiring a whole new wave of sonic aggression. The riff, as simple as it sounds, could easily be one of metal's most misconstrued, often incorrectly tabbed without those crucial first fret bends. And though it doesn't sound hugely wrong when played 'straight', there's a certain magic to how Dimebag wrote it – the slurred increases and decreases in pitch giving the music an almost rubbery and mechanical kind of feel. The descending diads that get thrown in as the idea evolves bring further discordance, rooted around harsher-sounding intervals like the minor sixth and



VIDEO LESSON

bit.ly/tg346audio

Often mistakenly played in drop D tuning, *Walk* is actually in D standard (DGCFA D). The riff is closest to the notes of the D Super Locrian or 'altered' scale (D E $\flat$ F G, A $\flat$ B $\flat$ C). Though often considered to be an advanced jazz scale, it works well in metal, too, thanks to all those menacing minor intervals. The opening section utilises the open sixth string and a semitone bend at the 1st fret. The rests are just as important as the notes, so keep the strings silent by lightly touching them with all four fingers and the side of your pick hand.

Appears at: 0:00-0:36

Tempo: 115 bpm

Key/scale: Super Locrian / chromatic

Main techniques: String bending, powerchords, palm-muting

TG TIP: Keep your signal silent by using a noise gate with a healthy threshold and quick attack and release

tritone, before concluding with some faster palm-muted chugging on the lower frets. At this stage in his career, the guitarist was mainly playing his 1981 Dean ML, instantly recognisable for its lightning bolt paint job and Kiss stickers on the upper fin, and equipped with a high-output Bill Lawrence L 500 XL pickup in the bridge. Dubbed the 'Dean From Hell', he'd actually won the instrument in a guitar contest as a 16 year-old before selling it "to raise money for some wheels" and was later gifted the same ML back, customised with a new custom paint job, Floyd Rose tremolo system and ceramic bridge pickup. The instrument can be seen in the *Walk* video, as well as a brown tobacco-burst ML that was also in the studio for the *Vulgar Display Of Power* sessions. In place of the Randall RG100H heard on *Cowboys From Hell*, and brought back later on 1996's *The Great Southern Trendkill*, Dimebag was plugged into a Randall Century 200 head – again achieving his own signature sound by cranking the gain and scooping the mids on a solid-state amp, rather than anything valve-driven. Solid-state felt more in your face, he once reasoned, noting how his Randalls had no shortage of warmth but also "the chunk and the f*ckin' grind".

THE WALK RIFF, AS SIMPLE AS IT SOUNDS, COULD EASILY BE ONE OF METAL'S MOST MISCONSTRUED...



07 IRON MAN BLACK SABBATH

(1970)

The biggest hook in a legacy littered with them

Tony Iommi's influence on heavy metal and rock in general is one that cannot be overstated. Most players would be proud to have written just one classic riff – the left-handed Black Sabbath six-stringer has penned countless, sometimes several within the same song. Indeed, *Iron Man* has a few of its own to offer, though it's the slow doomy blues of its main riff that singlehandedly delivers on their themes of armageddon and revenge, narrating the plight of a time-travelling robot man forsaken by those he's trying to help. Iommi has often spoken of how his most famous ideas came to him in the moment and on the spot – this American single from their second album *Paranoid* being no different. "I was in a rehearsal room, and Bill started playing this boom, boom, boom," Iommi recently revealed, noting how "in my head I could hear it as a monster" or "someone creeping up on you". The opening drones were played using a behind the nut bends on the open low E, giving his guitar a machine-like growl as Ozzy announces the immortal words 'I am Iron Man' from behind a metal fan. The main riff is in B minor, using powerchords that follow up the pentatonic scale before more dissonant-sounding slides

from the minor 6th to the 5th – all fretted on the thicker strings for a fuller sound and further intensified by drummer Bill Ward's snare hits. It's this juxtaposition, the lethargic opening segment against its busier second half, that demonstrates Sabbath at their most memorable, mutating familiar bluesy roots into something darker and doomier. Like most tracks on *Paranoid*, it was performed on Iommi's left-handed 'Monkey' 1965 Gibson SG Special, which was swapped for the right-handed SG Special heard on Sabbath's debut – the backup guitar that served him well after his Strat gave in. Just before recording album number two in June 1970, now armed with a guitar he didn't have to play upside down, Iommi went to see luthier John Birch for some upgrades, including a new P90-style Simlux neck pickup and a rewind bridge pickup for more power. The signal then went through a modded Dallas Rangemaster treble-booster and into his single-channel Laney LA 100 BL head and matching cabinet. When TG interviewed the Black Sabbath hero in 2010 he explained how the pedal was engaged to "give my sound a bit more oomph" and push the signal going into his Laney, thus attaining the kind of "overdrive I was looking for, which amps in the early days didn't have."

MOST PLAYERS WOULD BE PROUD TO HAVE WRITTEN JUST ONE CLASSIC RIFF. IOMMI HAS PENNED COUNTLESS...

06 ENTER SANDMAN METALLICA

(1991)

A watershed moment in heavy metal history

Some years are watershed moments in musical history, and 1991 was one of them. It was the year that grunge broke and that hair metal was given a shove out of the mainstream. It was also the year that Metallica's self-titled fifth album was released. Forever known as 'The Black Album', it was the record that established the San Francisco quartet as the biggest metal band in the world. And while it yielded five hit singles – *Nothing Else Matters*, *The Unforgiven*, *Sad But True*, *Wherever I May Roam* and *Enter Sandman* – it was the latter that really caught the public's imagination, reaching No 5 in the UK chart.

With its doomy, clean-picked minor key riff, haunting lyrics and massive sound, it was the track that set the template for the rest of *The Black Album*, both in sound and in atmosphere. It was also the first song written for the album, born from a riff that lead guitarist Kirk Hammett brought in. But as drummer Lars Ulrich explained in a *Classic Albums* documentary: "The riff that's on the record and the way it exists today is not really the way Kirk wrote it." Hammett's initial idea was the first five-note refrain morphing straight into the powerchord breakdown. But by chopping and repeating the first clean riff, and doubling it up on the bass, *Enter Sandman* as we know it was born.

"We tried to expand every sound to the max," said producer Bob Rock. "We tried to get the guitars as big as possible, the bass as big as possible, the drums... You know, big and weighty." To this end, Rock insisted on the band playing together in one room, contrary to their previous M.O. "They thought it was a lot of work," Rock told *Mix* magazine, "and they didn't understand it. But this was the only way I knew how to make a record. To me, it was about capturing the feel that they wanted."

Both Hetfield and Hammett are ESP men, and for *The Black Album* sessions Kirk played through Marshall amps with Mesa/Boogie heads. However, the amp that Hetfield put his black ESP Explorer through was a little more complex, as engineer Randy Staub told *Mix*. "We ended up building this huge guitar cabinet for him," Staub said. "I think we had nine or 11 cabinets – some stacked on top of each other, some on the floor – and then we'd get this huge tent around this pile of cabinets curtained because as we were getting James' guitar sound, he kept saying, 'I want it to have more crunch!'"

They got the crunch, the weight, the heaviness. Ultimately, they got the defining metal song of the 90s.

VIDEO LESSON

bit.ly/tg346audio

Part of the greatness of Kirk's riff is its harmony, which never quite settles into one key/scale. Early on, it hops between blues scale and Phrygian mode; later between blues scale and Dorian. We'll end the theory talk here, suffice to say this ambiguity is at the core of the riff's sound. Despite the complex harmony, it's an easy riff to play. Just make sure to move up to the 7th fret with your third finger. It'll keep your first and second fingers in prime position just behind on the 5th and 6th frets.

Appears at: 0:55-1:11

Tempo: 124 bpm

Key/scale: Blues scale / Dorian mode

Main techniques: Powerchords, offbeat timing

TG TIP: Use choppy downstrokes for the previous section, but a more fluid picking style when you reach the main riff.





05 AIN'T TALKIN' 'BOUT LOVE VAN HALEN

(1978)

How to turn a basic exercise into a world-conquering anthem

Proving that arpeggio homework can pay off rather handsomely, this early Van Halen track was built around a simple A minor shape, played palm-muted half a step down, and ended up becoming one of their most famous recordings. On the game-changing debut, EVH was using his self-made Frankenstrat, built out of factory reject parts, then fitted with a 1958 Stat tremolo system and a Gibson ES-335 PAF pickup in the bridge. The swirling effect came courtesy of his MXR Phase 90 before the signal was fed into the late 60s Marshall 1959 Super Lead that was used on all the David Lee Roth-era albums.

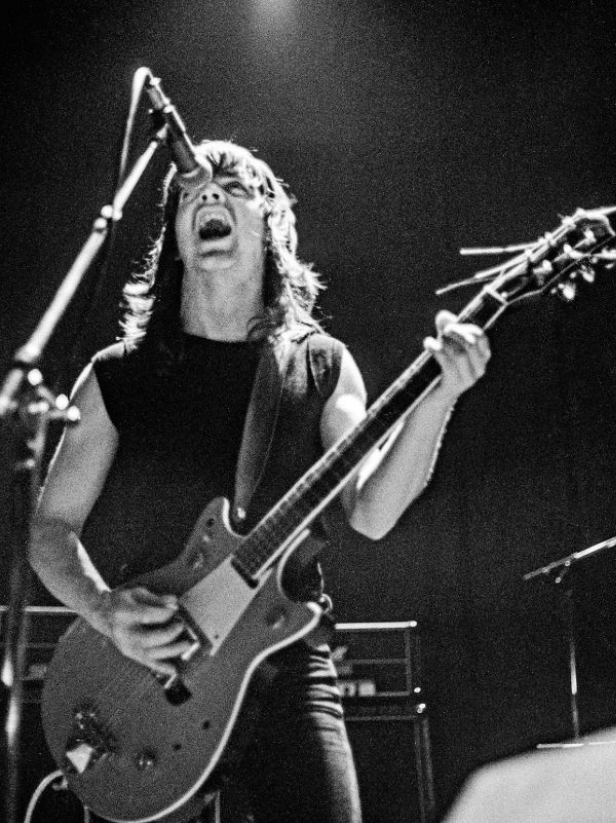
04 SMOKE ON THE WATER DEEP PURPLE

(1972)

The rock classic that almost didn't exist

It has one of the most recognisable and oft-played riffs in rock 'n' roll history – solid, simple and catchy as hell. It's no surprise to see this track at the sharp end of our poll! And yet, as Deep Purple singer Ian Gillan told TG, *Smoke On The Water* might never have been released, because initially the band didn't think of it as anything special. In the winter of 1971, when Purple began work on the *Machine Head* album in Montreux, Switzerland, guitarist Ritchie Blackmore played the riff in their first jam session, and as Gillan recalled: "We didn't make a big deal out of it. It was just another riff. We didn't work on the arrangement – it was a jam." But by the end of the recording sessions they came up short of material, and so, in Gillan's words, "We dug out that jam and put vocals to it." Blackmore played his Strat and was plugged into – as far as Gillan could recall – "a Vox AC30 and/or a Marshall". Over that mighty riff, the singer told the true story of how the Montreux casino – where Purple had been scheduled to record – burned down in a fire that started during a Frank Zappa concert. And with that, a deathless rock classic was created.





03 BACK IN BLACK AC/DC

(1980)

The biggest riff from rock's biggest album

Malcolm Young had it all planned out from the very start. When the rhythm guitarist formed AC/DC in 1973 with his kid brother Angus on lead, he knew exactly how to make the band's sound as powerful as possible. As Angus recalled: "Malcolm's idea was that two of us were always a unit together. We worked as that one unit and tried to make it one big guitar." And there is no better illustration of this than *Back In Black* – the title track from what became the biggest selling rock album of all time.

It was an album born out of tragedy, following the death of AC/DC's singer Bon Scott in February 1980. But with a new singer, Brian Johnson, the band pulled off the greatest comeback ever seen in rock 'n' roll. And for an album that Angus described as "our tribute to Bon", the title track was hugely symbolic. That funky, earth-shaking riff was one that Angus had first started toying with back in 1979 during the *Highway To Hell* tour, Bon's last with the band.

The album was recorded in just six weeks with producer Mutt Lange, who had cut *Highway To Hell* and would go on to make Def Leppard's monster hit *Hysteria*. Lange's right hand man, engineer Tony Platt, described the recording process to Premier Guitar magazine. "There was a definite focus to record *Back In Black* as basically and as live as possible," Platt said. "So all the songs were tracked with Angus and Malcolm, bass and drums. On a few occasions we may have dropped in a chord or so on a great take."

Angus Young has always favoured a Gibson SG (leaving the standard issue pickups in it), and has always recorded with it. The *Back In Black* sessions were no different. His amps were Marshalls as usual. "Still 100-watt Super Leads," Angus told TG's sister mag *Guitar World*. "The old-style ones, without those preamp things. I remember at the time that was the new thing Marshall was trying to push. They were trying to get people interested in 'em, but I wasn't really interested." As Malcolm recalled it: "I think Angus went to a smaller 50-watt Marshall for his solos. Just for some extra warmth. I was still using my Marshall bass head..."

Despite Angus' massively crunchy guitar tone, he seldom cranked up the overdrive. "The amp is set very clean," he said. "A lot of people who have picked up my guitar and tried it through my amp have been shocked at how clean it is. They think it's a very small sound when they play it and wonder how it sounds so much bigger when I'm playing. I just like enough gain so that it will still cut when you hit a lead lick without getting that sort of false Tonebender-type sound. I like to get a natural sustain from the guitar and amp."

What AC/DC created in *Back In Black* was, according to Def Leppard guitarist Phil Collen, "the ultimate rock song". As Phil said: "It has that sexy groove that hardly any rock band could get close to, amazingly restrained, confident guitars that are pure rock, outrageous drums and a vocal meter that is almost a rap but very rock 'n' roll. And considering the song is based on a blues format, it's extremely original."

BACK IN BLACK IS, AS DEF LEPPARD'S PHIL COLLEN DESCRIBES IT, THE PERFECT ROCK SONG...



VIDEO LESSON

bit.ly/tg346audio

Simple is often best, as the Young brothers demonstrate in this huge hit. The opening three chords (E5, D5 and A5) are beginner-friendly shapes. You just have to chop away firmly, keeping the idle strings quiet. The blues scale line that follows needs to be picked cleanly, and you'll need to be prepared to jump back to the E5 chord quickly at the end. For the closing run on the sixth string pick with this pattern: down-up, up-down, down-up, up-down. Angus himself uses all downstrokes here (and you can easily swap to downpicking for that more urgent feel), but the down-up method is a great way to get a feel for the timing.

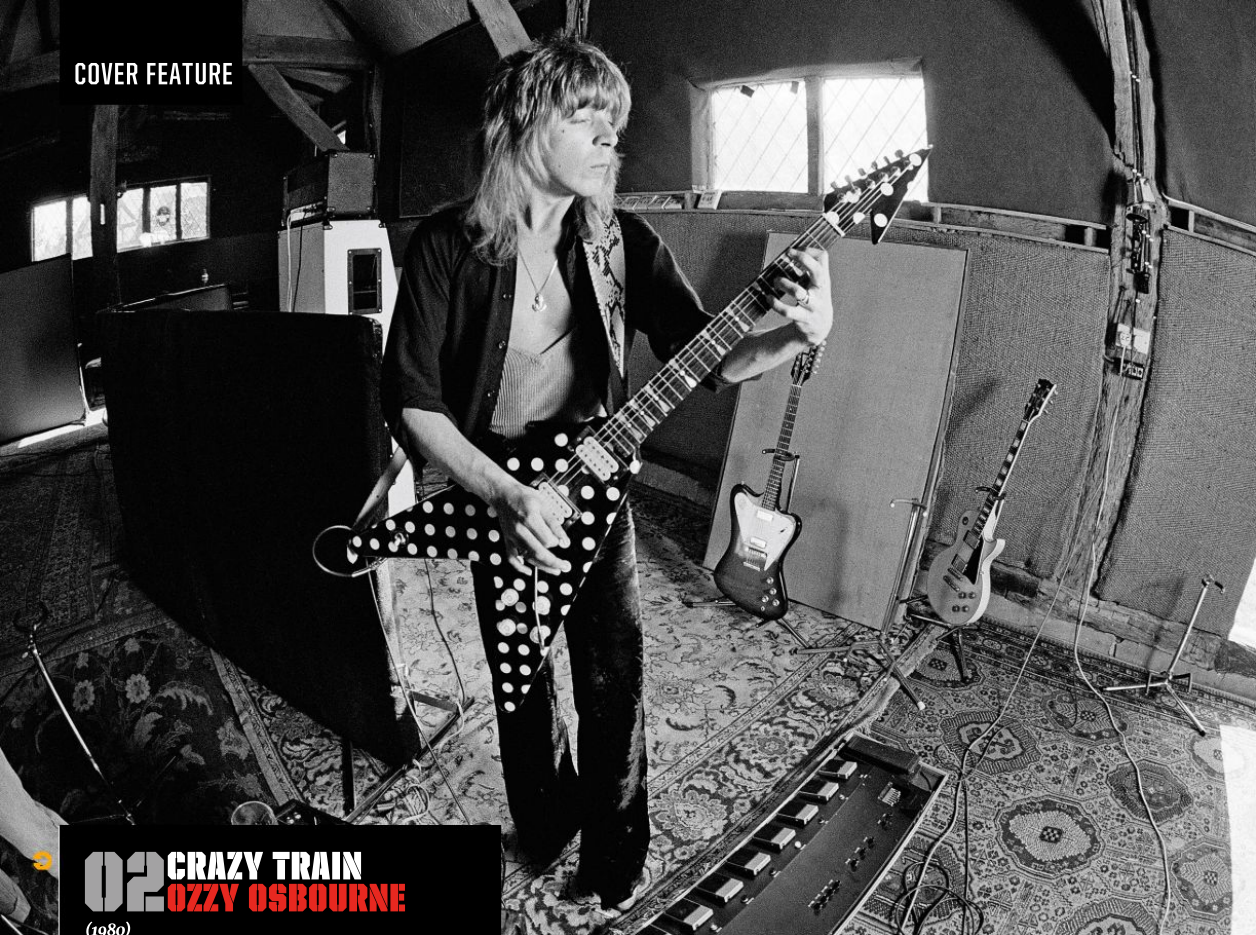
Appears at: 0:06-0:27

Tempo: 91 bpm

Key/scale: E blues scale

Main techniques: Open position powerchords, blues scale licks, syncopated riffing

TG TIP: This is a riff of three parts. Practise the powerchords, blues scale line and syncopated outro separately at first.



02 CRAZY TRAIN OZZY OSBOURNE (1980)

How Randy Rhoads resurrected a lost soul

When he was kicked out of Black Sabbath in 1979, Ozzy Osbourne feared that his days as a rockstar were over. Until, that is, a young American guitarist named Randy Rhoads came into his life. Rhoads, poached from LA band Quiet Riot, would prove the perfect foil for Ozzy's reinvention post-Sabbath. On his debut solo album *Blizzard Of Oz*, that unique voice was framed in a modern context, in which Rhoads' ferocious neo-classical guitar technique was pivotal. And *Crazy Train* was the key track – an anthem that would forever define Ozzy as a solo artist and Randy as one of the great guitarists of his generation.

Unusually, the *Crazy Train* lick was not in the standard metal keys of A or E, marking the first time a guitarist had written to order for Ozzy's doomy holler. "In Sabbath," he noted, "they'd just write something and say, 'Put a vocal on that'. Randy was the first guy to make it comfortable for me."

Years later, questions would be raised over the authorship of the *Crazy Train* riff. Greg Leon, who played bass alongside Rhoads in Quiet Riot, claimed: "I showed Randy the riff to Steve Miller's *Swingtown*. I said: 'Look what happens when you speed this riff up.' We messed around, and the next thing I know he took it to a whole other level." But this

was disputed by Bob Daisley, the bassist on *Blizzard Of Oz*. "The signature riff in F# minor from *Crazy Train* was Randy's," Daisley said. "Then I wrote the part for him to solo over, and Ozzy had the vocal melody. The title came because Randy had an effect that was making a psychedelic chugging sound through his amp. Randy and I were train buffs, and I said: 'That sounds like a crazy train.' Ozzy had this saying, 'You're off the rails!', so I used that in the lyrics."

Released as a single in 1980, *Crazy Train* was only a minor hit (peaking at No. 49 in the UK). But the song's influence on the guitar scene was inestimable. "I remember the moment I first heard Randy," said Rage Against The Machine guitarist Tom Morello. "I was packed in the back of somebody's mom's hatchback in Libertyville, and *Crazy Train* came on. This blistering riff came at me, followed by an incredible solo, and of course there was Ozzy – I recognised his voice as the guy from Black Sabbath. By the end I was like: 'What just happened?'"

Crazy Train set Ozzy on the path to mega-stardom, and confirmed Randy Rhoads as the most gifted guitar player to emerge since Eddie Van Halen. Tragically, he would not live to fulfil his potential. He died in a plane crash in 1982, after recording one more album with Ozzy, *Diary Of A Madman*. But his influence was profound, and as Tom Morello said in tribute: "Randy was the greatest hard rock guitar player of all time."

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01 WHOLE LOTTA LOVE

LED ZEPPELIN

(1969)

Riff (n.): Repeating guitar pattern by Jimmy Page

In 1969, the year Neil Armstrong first set foot on the moon, Jimmy Page launched his own giant leap for mankind. *Whole Lotta Love*'s guitar figure took just 2.7 seconds to play, but it immediately projected music into another decade. While everyone else was still playing the 60s, Zeppelin were now playing the 70s. Any guitar list – greatest riffs, solos, albums – is guaranteed to start fights, but it's a brave soul who challenges *Whole Lotta Love*'s claim to riff supremacy. It wasn't the first great riff, but it is the defining one. It's why riffs became central to guitar music, the reason bands search for the guitar hook that can propel a whole song – or even a whole career.

In many respects, *Whole Lotta Love* was not new. Some of the lyrics were lifted from *You Need Love* by Muddy Waters (lyricist Willie Dixon successfully sued for credit in 1987), and Robert Plant's vocal owed a lot to Steve Marriott's performance on the Small Faces' cover of that song. The riff, though, was all Page. Without that, it was simply another British version of a blues classic. With the riff, it was the invention of a new genre. Page's lick is so propulsive that it powers both verse and chorus. Almost every other riff on this list takes regular breathers so you don't get sick of it, but Page grinds out his eureka moment non-stop, fully confident no one is losing interest. "I knew it was strong enough to drive the entire song, not just open it up," Page told the *Wall Street Journal*. "We felt the riff was addictive, like a forbidden thing."

In fact, it was so addictive it didn't even need variations. Most iconic riffs are two- or four-bar patterns, alternating between different endings: think of *Back In Black*. There's only one modification to *Whole Lotta Love* in the entire song: for the first two repetitions, Page chugs on the E chord for longer, making a two bar pattern. Once Plant starts singing, the riff slims down to regular one-bar repeats. That's how it remains for the rest of the song, relentless and thrusting.

As you'll know if you've ever suffered through a pub band not-quite-nailing it, sounding like Page is another matter. At the start of each repeat, Jimmy slides into fret 7 on the E string, and then plays fret 5 on the A string. He duplicates that 5th fret note by also playing the open D string, and bends the A string slightly sharp to exaggerate the doubling effect. This touch of genius sounds like two guitarists playing at once.

Led Zeppelin II was the album that made the Les Paul the essential hard rock guitar. But although Page also made the 100-watt Marshall the rock star's default choice, he didn't start using it until the album was almost finished. In TG338, Page told us about the amp he used: "When Paul Samwell-Smith left [the Yardbirds] he left his equipment behind – the [Vox] amplifier heads. I know them as Super Beatles... So that's exactly what's on *Whole Lotta Love*." Great... But what the hell is a Super Beatle?

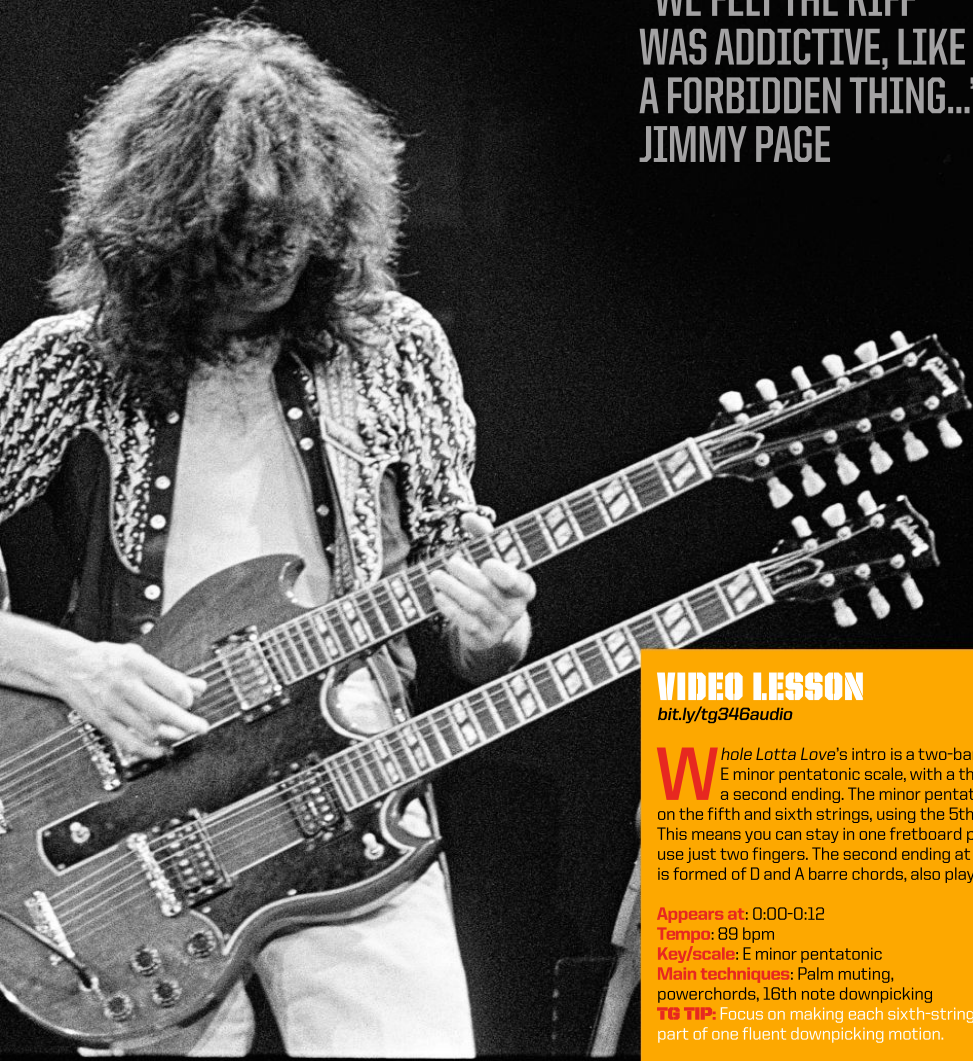


There were several Vox amps officially sold as Super Beatles, starting with the V14. They were 120-watt solid state heads made for the Beatles when their AC30s were no longer loud enough to be heard above screaming Beatlemaniacs. One problem though: there's no evidence Page ever used one. There is, however, a 1969 photo of Page at Olympic Studios, where *Whole Lotta Love* was recorded, with a Vox UL4120. These were also 120-watt Vox heads, used by the Beatles from *Revolver* onwards. In other words, an amp you could reasonably call a 'Super Beatle'. The heads had solid state preamps and valve power stages, and weighed 68lbs. Good luck finding one if you fancy recreating Page's tone: they were only made for a year, and many faulty units were destroyed. Experts estimate there are less than 10 working examples in the world.

Zeppelin refused to release singles in the UK, and they never appeared on *Top Of The Pops*. Instead, the BBC used cover versions of *Whole Lotta Love* to introduce the show. It underscored that Zeppelin were on a higher plane than their would-be rivals. Mortals aspired to appear on *TOTP*; Zeppelin wrote the theme tune.

Whole Lotta Love is what smartphones should play when you ask "What's a riff?" It is the distilled essence of rock guitar: distorted tone, powerchords, string bending, and minor pentatonic notes all squeezed into a single bar of music. It is one of the all time great musical motifs, like Beethoven's 5th, immediately recognisable, strong enough to power an entire movement, and destined to live forever.

"WE FELT THE RIFF WAS ADDICTIVE, LIKE A FORBIDDEN THING..." JIMMY PAGE



VIDEO LESSON

bit.ly/tg346audio

Whole *Lotta Love*'s intro is a two-bar riff based in the E minor pentatonic scale, with a third bar of music forming a second ending. The minor pentatonic element is based on the fifth and sixth strings, using the 5th- and 7th-fret notes. This means you can stay in one fretboard position throughout, and use just two fingers. The second ending at the end of the section is formed of D and A barre chords, also played in 5th position.

Appears at: 0:00-0:12

Tempo: 89 bpm

Key/scale: E minor pentatonic

Main techniques: Palm muting, powerchords, 16th note downpicking

TG TIP: Focus on making each sixth-string palm-mute part of one fluent downpicking motion.

“I DON’T REALLY HAVE ANY BASS HEROES. IT WAS ALWAYS GUITARISTS. JIMMY PAGE, TOM MORELLO, JOSH HOMME AND JACK WHITE – WHO LET THEIR PERSONALITIES BLEED OUT THROUGH THEIR PLAYING”

As architect of Royal Blood’s wall of noise and mighty riffs, **Mike Kerr** is a bassist inspired by the great guitarists. But the set-up of his rig has remained a closely guarded secret – until now. “This is a worldwide exclusive!” he tells TG as he reveals all about his gear – from signal-splitter to a bespoke baritone guitar that plays “like a giant bagpipe!”



Words Amit Sharma Portraits Mads Perch / Lillie Eiger



Taking his cues from guitar giants such as Jimmy Page and Josh Homme, Royal Blood bassist/vocalist Mike Kerr has created some of the greatest riffs of modern times. Better still, he knows how to deliver them, using a signal splitter to route through different amps and effects, filling out the spectrum in a contrast of layers, effectively doubling up on guitar, while the other half of Royal Blood, Ben Thatcher, pounds away on the drums.

The duo's wall of noise has made them one of the biggest British rock acts to emerge over the last decade, and ever since their self-titled debut album was released in 2014, Kerr has refused to reveal the specifics of his rig. Many interviewers have tried and failed, met with stone-cold answers: "I could tell you, but then I'd have to kill you!" Or more direct refusals: "I don't talk about my pedals... Ever."

But now – with new album *Typhoons* just released – he opens up to TG in what turns out to be, by his own admission, the most revelatory discussion on his signal-splitting methods to date. "I've never disclosed any of this information before," he says.

The new album's first single, *Trouble's Coming*, has more of an electro groove than your previous work – almost closer to bands like Justice and Daft Punk at points...

I think the initial riff came to me on a synth, with that envelope filter kind of sound on this tiny little keyboard, which we put over a simple beat at the time. When I played it on bass, I realised that it translated well and it got us thinking about this style of playing. It just made complete sense at the time.

The main riff sounds simple, but there's actually quite a few pushes and pulls in there.

I think playing off straighter beats allowed me to have more room to bounce off the drums a bit more and dance on top of them. I guess I'm rhythmically more complex on these songs. We didn't have a rulebook on this one. We were just doing whatever we liked. It was just about being led by the songwriting and not allowing the parameters of what we thought we could or should not do restrict us.

***Limbo* also has a big Daft Punk feel to it, with some truly monstrous drum fills from Ben.**

That was a fun one. It felt like all three albums coming together. For Ben, particularly in the verses, we kept pushing it and telling him to play more and more until every time that section comes in it feels like a huge drum fill. That's something that dance music doesn't do. That's where the human aspect of it all comes in... I guess we wanted to humanise that disco feel.

You started out on keys, and have previously written tracks such as *Hole In Your Heart* on a Rhodes bass. Would it be fair to call this album more keyboard-inspired?

A lot of these songs started on keys – like *Limbo*, which started with that intro on keys. Those parts would become the glue of the songs. Because a lot of these songs were so rhythmic and complicated for me to play, I ended up writing the melodies



and lyrics at a piano. To be honest, I could barely play the basslines, let alone start singing at the same time. I've only just learned how to play *Trouble's Coming* properly for the live shows, it's so difficult for me. Being at the piano felt much easier, but also allowed me to really focus on the words, which is something I really wanted to get better at. By not being blasted in the face by riffs and beats, it meant I could the lyrics under more of a microscope and I guess feel a bit more vulnerable – which is what pianos seem to bring out of me...

Your bass feels EQ'd a bit differently on this album too, with more of a nasal bite.

Yeah, I became fascinated by those kinds of tones – almost making my bass sound smaller but deeper. I'd add more sub and bottom end, and then push certain other frequencies too. In the studio we were calling it the stereo wasps, leaving a huge hole in the mix. We wanted the drums to be really f*cking loud on these songs, like the driving force of everything.

And you're using some much lower tunings this time round, too.

Yeah, it's funny I'm often playing higher up the neck but actually in B at points – using those really low octaves. I'd almost say it's an inversion of the first record, more like a bass sound than a guitar sound. But I get the guitar sound by playing higher up the neck rather than playing lower and emulating those higher frequencies.

Speaking of guitar sounds – simple as it may be, what you're playing in *Boilermaker* feels like a homage to Jimmy Page...

Yeah, and it's weirdly hard to play! Even though it's one move basically across the whole song, it has so much personality to it. To be honest, I owe Jimmy Page for that riff because I was harnessing that Zeppelin rudeness. I'm not being modest here, I really don't know a lot about guitar or bass techniques. My friend showed me how to pre-bend and so I put it to use.



Honestly, whenever I learn a new technique I always write a song. When I learned hammer-ons, I wrote *Figure It Out* – which is all left-hand – and *Come On Over*. I guess I was really stoked by the fact I could play bass with just one hand. My mate, who actually helped me write *Boilermaker*, suggested using a pre-bend somewhere and that became the whole song [laughs]. So I'm excited for someone to show me what the next beginner's guitar move is!

It often feels like you play bass more like a guitar – we couldn't imagine you going fingerstyle and trying out some slap bass, at least not in this band...

For sure. I don't really have any bass heroes. I often get asked that and, as much as I appreciate brilliant players, they were never inspirations to me. It was always guitarists. The fact that we're a two-piece means the bass is very up-front and a prominent feature. So guitars and guitar sounds feel a lot more relevant to me. I also didn't

really understand a full-sized bass, I went straight to short-scales. Even now, when I play a full-sized one it feels ridiculously big. I like instruments that feel like toys and there's something very professional about a Precision bass. Whereas the [Gretsch] Junior Jets were a couple of hundred quid and if they broke, it wouldn't be the end of the world. That allowed me to not be too precious about them. Otherwise, instruments can be like a brand new pair of shoes that you never wear, and then you outgrow them and they never fit you. I like the idea of using an instrument that gets played all the time.

What advice do you have for all the two-pieces out there hoping to fill out the sonic spectrum?

It's all about understanding space, more than anything. Being a two or three-piece, your immediate insecurity will be about filling space and sounding as big as possible. You might think the way to do that is to have all of you playing all

"PUT DEAD SILENCES IN THE MIDDLE OF YOUR RIFFS. IT'S LIKE GETTING SLAPPED IN THE FACE WITH AIR!"

the time and filling every part of the spectrum. Whereas it's actually the opposite. It's about putting space in everything and using rhythms to counteract that. Put dead silences in the middle of your riffs. Whenever I write, I naturally fill all the gaps, but then I go back and delete notes or slice sections out on the computer. *Typhoons* is a good example. I found ways to have parts with no drums, bass or vocals whatsoever – just pure silence in the middle of sections. It's like getting slapped in the face with air. It made me realise that a lot of my favourite artists, like Prince, Michael Jackson or Daft Punk, do it that way. I mean, AC/DC are the masters of putting gaps in riffs. Look at *Back In Black*, the thing that makes it so powerful is the gaps in between the riffs. It's about the anticipation of not knowing when it's going to come back in, which can feel like someone karate chopping in your face. So don't play all the time. See how confident you can get with using as little as possible.

You've been accompanied by two session musicians for recent television appearances to promote the new album. Was that a difficult decision to make?

It's funny you mention that... A lot of these new tracks have more parts firing off, more production and keyboard lines. So when we start touring, that's what we're going to do. We really want it to be live. We don't want to play to a track or a click, we never have done that.

So we've been trying that out and it's actually been great, it serves the songs a lot better. For anyone who feels it's not the same with just two of us anymore, we have 24 songs we can play just as the two of us. This record was about chasing the best ideas and letting go of that concept. We've proved to ourselves and the world that we can do it with just the two of us. That point's been proven, you know?

On the last album you mainly stuck with your short-scale Fender Jaguar bass, using your Starcaster four-strings on a couple of tracks. Was it the same this time round?

Yeah, I actually played most of it on my custom-built Jaguar, which Fender made for me about four years ago. They just made it and put it in my hands, and I fell in love with it. It's become my main go-to bass and I have a few of them in multiple tunings, so most of the album was using those. There is also a new instrument, which is on *Who Needs Friends*. I don't really know how to describe it – basically it's a baritone guitar with a bass string and guitar strings, all tuned to F. So it's just five F's in different octaves on a baritone! I just came up with it one evening and that song came out immediately. I don't really know what to call it yet, but it's really fun. It's like playing a giant bagpipe!

And as for amps, it's mainly been Super-Sonics and Bassmans.

BELOW

A young Kerr with his trusty Gretsch 62224 Junior Jet bass

I actually bought an amp off eBay for £30 but I'm not going to say what it is... I don't want everyone to go out and buy them, because I might want spares! But there's loads of them left. And it sounded magical. I did all the guitar stuff using that one amp, and I only had one of them, so any double-tracking was actually re-amped through that, to achieve the second layer. It was a much cheaper experience on this record! I got so into that thing we were talking about earlier, where the guitars sounded like they had a bit of a cold, with this nasal and angular kind of thing. We were chasing smaller sounds my end to make the drums sound bigger.

Transposing up from bass seems to work really well for you – arguably better than if you were doing it the other way round.

Yeah, I totally know what you're saying. I fluked out really. I noticed a lot of other two-pieces were doing it the other way, using guitars and then going down... Which is more difficult to emulate. But, then again, so is emulating a guitar through bass. You've got to pick a side! The kind of octave up sounds I like are so distorted or fuzzy, that even it was a guitar being used, it's undetectable what kind of guitar was doing it.

You've kept pretty tight-lipped about the pedalboard over the years, but the POG2 is definitely one you are closely associated with. What makes it better than, say, a DigiTech Whammy?

To be honest with you, it's just the first thing I had. I think it was more about how the bass works with the POG. I actually don't like the POG sound on its own. I can always detect it on a guitar and for lack of a better word, it always sounded eggy! There was something unpleasant about it. I think my disgust of its sound caused me to drive it harder so you can't really hear it's that pedal. I have a love/hate relationship with it, you know? But I owe it a lot, and at the same time I'm not a massive fan of it, traditionally speaking. I think I only use two settings. I don't use the others. Also, so much ground has been covered by other bands using that pedal, you don't want to go treading on anyone else's toes.

We've spotted a Boss Harmonist in the mix, too...

That's really just a divebomb thing.



Photo: Getty



there who plays bass and wants distortion, all bass distortions are a bit sh*t in my opinion. They sound cool in a YouTube video or when you're on your own, but when you're with the band, it makes your bass sound thin and not very nice. Whereas the Red Ripper is just rad. It stays really subby and warm, but has this squelch to it. I would say it's a very good one.

Good to know! A lot of this stuff is actually easily available and quite affordable.

There are some brilliant videos on YouTube on how to sound like us, but on a budget. One thing that made me laugh is the budget they work with – usually around £1500. And I'm always thinking, 'Man, you could do it with £600!' It's more simple than that. I did get a bit of a buzz from keeping it all secret at the beginning. Also, people making videos on how to sound like us actually gives me ideas I wouldn't have thought of. Different paths to get to a similar conclusion... It's not how I do it, but I find it very cool and actually get something back out of someone explaining how to rip me off. Ultimately, there's no wrong way of doing anything. Emulation is how creativity begins anyway. We all start from emulating our heroes and usually do a terrible job of it, but then we end up at the beginning of somewhere completely unique.

Speaking of heroes – which guitarists do you think left the biggest mark on you over the years?

There are so many. There are so many elements of each player I've absorbed but for me it's all about Jimmy Page, Tom Morello, Josh Homme and Jack White. Those have been the ones who seemed to have their own style and let their personalities bleed out through their playing. When I started out, I was influenced by all of them so much, at times I was probably playing things that weren't even mine. It's a mixture of those heroes. Over time, I've found the areas where my sound doesn't cross with those players and I've found my own unique little gems. That's what it's all about – learning about who you are and what you can bring to the table. So yeah, Jimmy, Josh, Jack... Anyone whose name begins with a J!"

ABOVE
Kerr (left) with
drummer Ben
Thatcher

The first time I realised I could divebomb the entire rig was very exciting! I had no desire to buy a Whammy pedal because Tom Morello absolutely nailed it and essentially owns it. I also didn't really like the idea of f*cking around with the expression pedal. For me, I want to just kick it in and know it's going to work. But the Harmonist is what I used to write *Ten Tonne Skeleton*, because I was enjoying using it the other way round, screeching up to the top rather than down. So that song was the result of that pedal.

As for fuzz, is it still the ZVEX Mastotron you're using?

Not really... Other than *Loose Change*, I don't think I've used it anywhere else. I wanted to protect the tone of that song and not repeat it – that song is almost an anomaly on the first album. It's its own little creature. I didn't want to play another song with the same sound.

On that first record, we were so conscious of each song having some tonal difference, even if subtle. I didn't want to have exactly the same tone over and over again, because when it's just two of you, there is that threat of it all sounding the same. Which is why we used different tunings, pedals, amp combinations and anything else we could to give it a variation.

This is going better than we expected, so it would be remiss not to ask if there's anything else that's integral to your tone...

Okay, yeah, there's a pedal... I can't believe I'm telling you this. I've never disclosed any of this information before. It's a worldwide exclusive. You're a good interrogator! Anyways, there's a pedal called the Red Ripper – which I didn't discover myself, an assistant engineer showed it to me. It's a bass distortion pedal and it's wicked. For anyone out

"THE FIRST TIME I REALISED I COULD DIVEBOMB, THE ENTIRE RIG WAS VERY EXCITING!"

THE ROYAL BLOOD RIG CHALLENGE!

YouTubers reckon they can get Mike Kerr's rig for £1500. Mike himself says he could do it for £600! TG's Amit Sharma explores both options...



BUDGET £1500

GRETSCH G2220 JUNIOR JET 2 BASS £319

Though he sticks with Fender basses these days, it was a tobacco sunburst Gretsch in Kerr's hands for much of the first album cycle. As the man himself tells us, the shorter scale-length makes it an instrument that lends itself well to being played like a guitar.

BLACKSTAR UNITY 500 COMBO £549

Presuming you already have a guitar rig, you will need a bass amp too, – and quite possibly something you can also gig with. The Blackstar Unity 500 brings a lot of power and tone without breaking the bank.

ELECTRO-HARMONIX SWITCHBLADE PLUS £40

Giving you the option to route to your guitar amp or your bass amp, as well as both at the same time, this clever little box from the New York pedal titans does a lot for very little money.

TECH 21 RED RIPPER £165

The all-analogue bass distortion stompbox from Tech 21 offers some seriously aggressive tones and vintage filter-style effects. There's an active three-band EQ and an R.I.P. dial that allows the user to shape the kind of gain being added.

ELECTRO-HARMONIX POG2 £280

The Royal Blood frontman may have a love/hate relationship with the polyphonic octave generator, but it's also one of the most important pedals in his rig – so much so, he uses two. The tracking for single notes and chords is superb, and there are controls to blend your dry signal against two octaves up and down and other faders to control the amount of attack, detune and low-pass.

TC ELECTRONIC MIMIQ DOUBLER £89

Instead of using two POG2 pedals feeding into two guitar amps, you could stick with one and thicken your signal with a doubler. Something like the MimiQ can create a wider stereo image.

BUDGET £600

FENDER ABY SWITCHER £35

For those on a tighter budget, you could always try it the other way round and pitch-shift your guitar downwards. This Fender ABY switcher will split your signal and allow you to effect each end of the rig independently.

DIGITECH DROP £105

If DigiTech are known for anything, it's this kind of pedal, as evidenced by the long list of players who have sworn by their Whammy over the years. The Drop has nine settings, though it's the octave down option you'll be needing to cover the lower register.

BOSS GE-7 GRAPHIC EQUALIZER £85

It would be wise at this stage to reshape your 'bass' tone and dial in more body to really emphasise its place in the spectrum. It would also make sense to take out some of the bass on your guitar amp, in the hope of establishing two sonically independent rigs that can exist side-by-side.

FENDER RUMBLE 100 BASS COMBO £309

The revamped Rumble line lives to its promise of being "lighter and louder than ever". It comes with a footswitchable overdrive circuit, which could be handy to kick in for bigger riffs and choruses.





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ARABLE

th•mann

QUEEN

BRIGHTON ROCK

Get your teeth into this tasty stick of rock from Queen's 1974 *Sheer Heart Attack* album



The opening track from Queen's third album, *Brighton Rock* has Brian May's name written all over it, with some of the most iconic guitar playing ever put to tape. The song ingeniously starts where *Queen II* finishes off, with a rendition of *I Do Like To Be Beside The Seaside* ringing in a rhythmic Red Special and Vox AC30 powered riff.

The atypical structure of the song features three verses, two bridges, an anthemic chorus (which occurs only once), and a hard rock outro riff which is hinted at in the fairground promenade intro. Amongst the four solos is Brian's crown jewel Echoplex tape-delay playing. The idea is to set the delay to repeat every two beats in order to allow you two play over a repeat of the notes you just played. This technique was a live staple for Brian throughout the early 70s as a way to bring his trademark harmonised guitar sound to the stage.

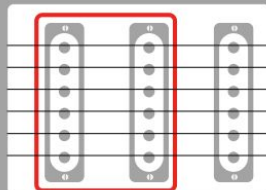
We've arranged the multiple guitar parts into a single playable track for you, which you can play along with the backing track.

GET THE SOUND

Everything you need to know before playing *Brighton Rock*...

GET THE TONE

CHANNEL OVERDRIVE



Brian has his bridge and middle pickups selected and set to 'in phase' throughout.

EFFECTS

Delay

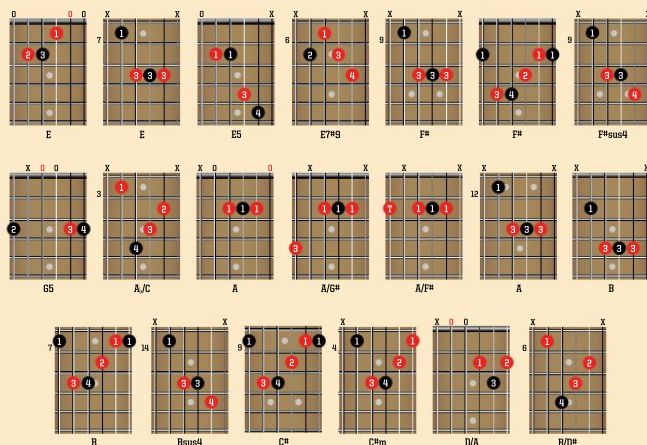
Time: 800 ms

Feedback: One repeat

As with almost every Queen song, Brian used his handbuilt, homemade Red Special, his Vox AC30s with a Treble Booster pedal and the secret ingredient, an Old English Sixpence, which has a serrated edge and creates a unique attack on the strings. For delay, Brian used an Echoplex, which has a tape inside, recording the guitar in real-time, then playing it back as an echo. The echoed guitar signal was sent to a separate AC30 and recorded in isolation in order to split the two guitar signals left and right in stereo. If you listen to only the left speaker, you will hear Brian's played part. Live, Brian would use two Echoplexes to add yet another longer repeat, enabling him to create live three-part harmonies.

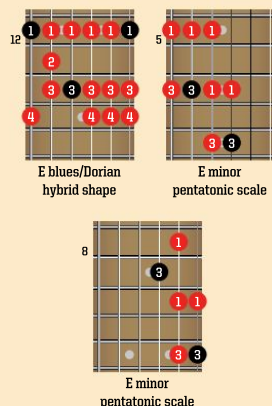
CHORDS

The intro and verse sections are in C# major and B major respectively, and both more or less stick to the standard rock 'n' roll I-IV-V progressions (B, E, F#, for example). Brian cleverly embellishes the changes, disguising them by playing fragments of the shapes to focus on either the powerchord element, or the triad sound. The bridge is in E major makes use of the slash chords like B/D# and A₇/C in order to create smooth chromatic bass movements in the chord progressions; something that is a Queen trademark best illustrated with the *One Vision* riff. Another example of this is in the chorus, where Brian holds an open A chord and adds a G# bass note (A/G#), then an F# bass note (A/F#).



SCALES

Although the harmony of the song switches between three keys, C#, B and E, the majority of the soloing is E blues scale based, sometimes with an added major 6, which borrows from the Dorian mode. The fourth solo is actually in the key of C#, but you can still visualise the licks around the blues scale, you just need to move the whole shape down three frets so the root is on the 9th fret. Our second and third shapes are the good old E minor pentatonic scale, but instead of the familiar box shape, it traverses the fretboard in an ascending diagonal pattern, as heard in the Echoplex solo.



QUEEN BRIGHTON ROCK Bridge

♩=141

A E B/D# C#m G#C C#m B E⁵ N.C. Bridge 1 only -----

0:45
1:11

PM -----

It's less choppy here, so let each chord sustain for it's full duration and keep your fingers close to the strings when changing chords to help keep things smooth. At the end of bridge 1, slide up the sixth string while picking, to bring you into verse 2.

QUEEN BRIGHTON ROCK Verse 2

C^{#5} C# F# E F# C^{#5} C# F# E F#

0:54

B E B E B E F^{#7}

BU BU BU

3

Here we briefly return to the C# intro riff for two bars before reaching to the B major verse. This time Brian adds a two-guitar harmony line on top of the riff - we've tabbed the lower harmony part here. After bending the 9th fret up to 11th, add vibrato by bending just below the target bend pitch, then back up to it.

QUEEN BRIGHTON ROCK Chorus

♩=136

C#m B E⁵ A⁵ A A/G# A/F# B E C#m F#

1:21

B⁵ A E⁵

PM -----

QUEEN **BRIGHTON ROCK** Blag jam section

Sheet music for guitar, featuring standard notation and guitar tablature. The music is in 4/4 time, with a tempo of 2.07. The key signature is one sharp (F#). The music is written for guitar and includes various musical notations such as chords, scales, and fingerings.

System 1: Standard notation and guitar tablature. The key signature is one sharp (F#). The tempo is 2.07. The music is written for guitar and includes various musical notations such as chords, scales, and fingerings.

System 2: Standard notation and guitar tablature. The key signature is one sharp (F#). The tempo is 2.07. The music is written for guitar and includes various musical notations such as chords, scales, and fingerings.

System 3: Standard notation and guitar tablature. The key signature is one sharp (F#). The tempo is 2.07. The music is written for guitar and includes various musical notations such as chords, scales, and fingerings.

System 4: Standard notation and guitar tablature. The key signature is one sharp (F#). The tempo is 2.07. The music is written for guitar and includes various musical notations such as chords, scales, and fingerings.

System 5: Standard notation and guitar tablature. The key signature is one sharp (F#). The tempo is 2.07. The music is written for guitar and includes various musical notations such as chords, scales, and fingerings.

This section has existed in some form since 1969 when Brian and Roger played *Blag* in their band Smile. Try to stay loose and relaxed in the first eight bars as it should sound improvised, rather than note for note. In bars 9 and 10, lock in more accurately with the ascending chromatic scale. Notice how Roger Taylor's bassline descends in a perfect musical mirror image here.

QUEEN BRIGHTON ROCK Solo 2

Musical score for "The Sound of Silence" by Simon & Garfunkel. The score is in 4/4 time with a key signature of one sharp (F#). It features a guitar part with a capo on the 2nd fret and a bass part. The guitar part includes a 2:38 time marker and a "PM" (Palm Mute) section. The bass part is marked with fret numbers 0, 2, and 3. The score is divided into two measures, each with a tempo marking of 167 and 162 respectively.

QUEEN BRIGHTON ROCK Solo 2 (cont'd)[illegible]

The Tempo speeds up here, so if you are playing along to our backing track, listen for the click track we've added. After the open-string palm-mutes in bars 3, 4 and 5, play the E minor pentatonic riff at frets 5 and 7, then move up to frets 12 and 14 for an octave-up version. At the end of the section, use your whammy bar to divebomb the open fifth string, then strum an open E chord as you return the bar to pitch.

QUEEN BRIGHTON ROCK Solo 3

♩ = 161
N.C.

3:20 PM

1

0-0-0-0 0-0-0-0 0-0-0-0 3-3-3-3 5-5-5-5 7-7-7-7 5-5-5-5 7-7-7-7

5

9-9-9-9 7-7-7-7 9-9-9-9 8-8-8-8 10-10-10-10 12-12-12-12 10-10-10-10 12-12-12-12 12-12-12-12 15(17)- (17)- (17)- (17)- (17)- (17)

8

(17)- (17)- (17)- (17)- (17)- (17) (17)- (15)-12-15-12 15-14-12 14-12 14 12 14-12 14-13-12 15 12-12 10-12 12-10-12 10-12

QUEEN BRIGHTON ROCK Solo 3 (cont'd)

Musical notation system 1 (Measures 10-19):

Staff 1 (Treble Clef): Melodic line with eighth and sixteenth notes, key signature of one sharp (F#).

Staff 2 (Bass Clef): Fret numbers for the bass line.

Fret numbers: 12 10 12 10 12 10 12 10 12 10 12 10 12 10 12 9 12 9 12 9 12 9 12

Musical notation system 2 (Measures 20-29):

Staff 1 (Treble Clef): Melodic line with eighth and sixteenth notes, key signature of one sharp (F#).

Staff 2 (Bass Clef): Fret numbers for the bass line.

Fret numbers: 16 8 7 8 7 8 7 8 7 7 7 7 7 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7

Musical notation system 3 (Measures 30-39):

Staff 1 (Treble Clef): Melodic line with eighth and sixteenth notes, key signature of one sharp (F#). Includes a triplet and a "pick scrape" instruction.

Staff 2 (Bass Clef): Fret numbers for the bass line. Includes a "BU" (bend) instruction and a "pick scrape" instruction.

Fret numbers: 20 6 7 6 15 (17) 15 12 15 14 12 14 12 14 13 12 10

Musical notation system 4 (Measures 40-49):

Staff 1 (Treble Clef): Melodic line with eighth and sixteenth notes, key signature of one sharp (F#). Includes a triplet and a "N.C." (no chord) instruction.

Staff 2 (Bass Clef): Fret numbers for the bass line. Includes a "BU" (bend) instruction.

Fret numbers: 24 12 10 0 2 2 2 2 5 17 (19) 17 15 17 15 16 14 12

Musical notation system 5 (Measures 50-59):

Staff 1 (Treble Clef): Melodic line with eighth and sixteenth notes, key signature of one sharp (F#). Includes a triplet and a "D⁵/A" instruction.

Staff 2 (Bass Clef): Fret numbers for the bass line. Includes a "D⁵/A" instruction.

Fret numbers: 28 14 12 14 12 10 12 10 7 5 3 0 3 3 2 2 0 0

♩ = 163
N.C.

33

36

39

42

If your delay settings are correct, everything you play should repeat two beats later. The most important thing is to stay in time with the delay effect, so the notes overlap and harmonise perfectly. We've added click track cues on the backing track to help you stay in sync with our recorded version, but remember Brian rarely reproduced this part note for note, so feel free to experiment, too!

♩ = 146

C# F# C# F# 1/4

4.27

TAB

11 BU (13) BU (13) BU (13) BD (11) 9 11 11 9 11

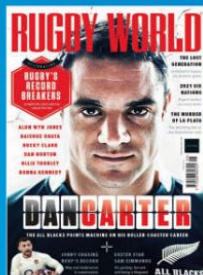
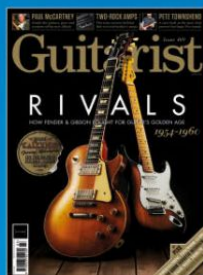
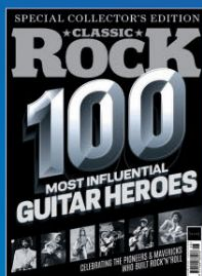
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THE WHITE STRIPES

SEVEN NATION ARMY

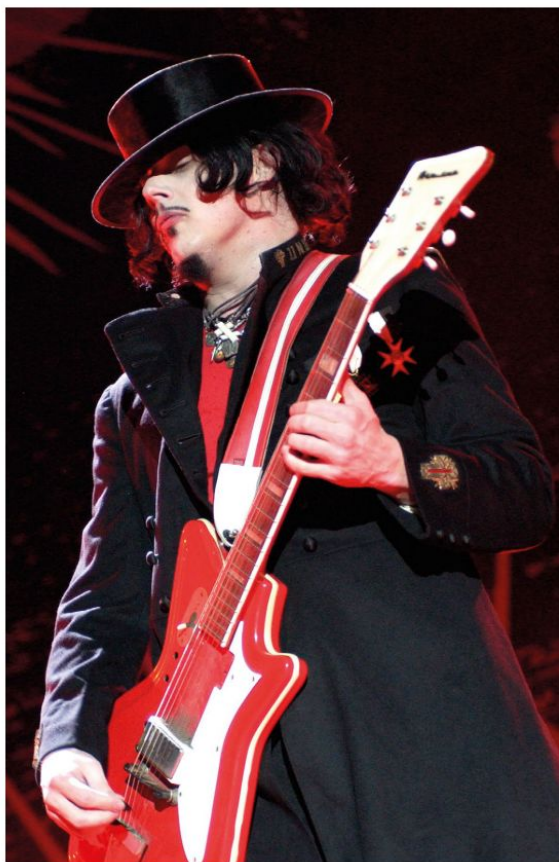
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No riffs issue would be complete without this world-beater. TG and Rockscool take a look at Jack White's masterstroke...

Recorded as the opening track for the band's fourth studio album *Elephant*, *Seven Nation Army* is littered with Jack White's dazzling guitar wizardry, from blistering overdriven chords through slide solos to the track's earworm riff. White played the track on a semi-acoustic guitar through a DigiTech Whammy pedal – a pitch shifting device which gives the song its enormous bass sound.

The riff is re-imagined here for beginner guitarists in Rockscool's

Grade One version for acoustic guitar, making use of the open-position E minor scale. You can tackle this fingerstyle or with a pick, but aim for a clear sound, cutting off the open G on beat 3 of bar 1 with the fretting hand by the time the next note is sounded. At bar 21, be sure to play the repeated 'G' eighth notes with a strong attack from the picking hand, and take care in transitioning to the two-string A5 chord in bar 22. These two bars are crucial to the build up in the song's tension!



ACoustic
Whether you're taking your first steps on guitar or moving into further/higher education, a Rockscool Grade will improve your playing ability whilst you learn iconic tracks from the world of popular music. For more info visit: www.rslawards.com

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gtrslawards

R&L Awarding the Contemporary Arts

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Words: Jane Harrison
Photography: Getty

THE WHITE STRIPES SEVEN NATION ARMY

♩ = 110
N.C.

1

6

THE WHITE STRIPES SEVEN NATION ARMY (cont'd)

11

16

21

24

27

The chorus (bar 23) sees a repeat of the riff but on the higher strings, 'lifting' the tension from the previous two bars. There are some tricky timing elements as with the rest of the track, such as the crotchet rests and dotted rhythms, so take your time with it and enjoy teaming up with the electric guitars on the backing track!

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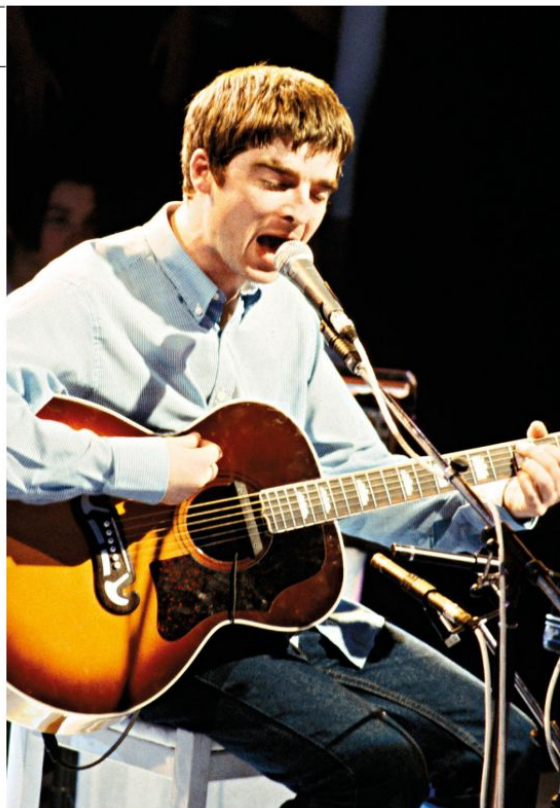
OPEN-MIC SONGBOOK

OASIS WONDERWALL

Learn the song Noel Gallagher said Oasis never played right, with TG's tab, chords and a full song sheet...

A huge worldwide hit and Oasis' calling card it may be, but the squabbling Gallagher brothers have long had mixed feelings about *Wonderwall*. "Every time I have to sing it, I want to gag," Liam exclaimed in 2008. "We've never got it right," Noel said later the same year. "It's too slow or too fast."

Well, this month you can get it right! We've tabbed out Noel's acoustic guitar intro for you below. If you can play this section, you've got most of the song down – there are only a couple more chords to learn and the rhythm changes very little throughout. Just remember to use a capo on the 2nd fret to play in key with the original track.

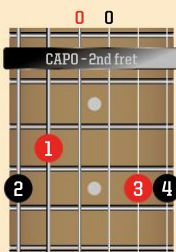


CHORDS

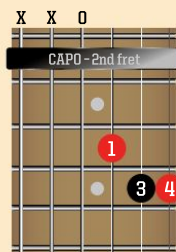
These are easy chords, with your third and fourth fingers staying in one spot while your other digits move from fret to fret. You'll need to use a capo at the 2nd fret to play along with the original recording (and our backing track). Not difficult in itself, but it does make the chord names a little confusing. Notice each chord has two names: first is the actual pitch created with the capo on the neck, and second (shown in brackets) is the name of the shape if you were playing it without capo.



F#m7
(Em7)



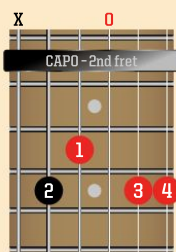
A
(G)



Esus4
(Dsus4)



B7sus4
(A7sus4)



Dadd9
(Cadd9)



A/G#
(G/F#)

WONDERWALL

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Wonderwall

F#m7 A Esus4 B7sus4 x4

F#m7 A
Today is gonna be the day

That they're gonna throw it back to you
F#m7 A Esus4 B7sus4
By now you should've somehow
Esus4 B7sus4
Realised what you gotta do
F#m7 A
I don't believe that anybody
Esus4 B7sus4 Dadd9 Esus4 B7sus4
Feels the way I do about you now

F#m7 **A**
Backbeat, the word is on the street

That the fire in your heart is out
F#m7 A
I'm sure you've heard it all before
Esus4 B7sus4
But you never really had a doubt
F#m7 A
I don't believe that anybody
Esus4 B7sus4 F#m7
Feels the way I do about you now

F#m7 A Esus4 B7sus4

Dadd9 Esus4 F#m7
And all the roads we have to walk are winding

Dadd9 Esus4 F#m7
And all the lights that lead us there are blinding
Dadd9 Esus4
There are many things that I
A E/G# F#m7 B7sus4
Would like to say to you but I don't know how

Dadd9 F#m7 A
 Because maybe
 F#m7 Dadd9 Dadd9 F#m7 A
 You're gonna be the one that saves me
 F#m7 Dadd9 F#m7 A
 And after all
 F#m7 Dadd9 F#m7 A F#m7
 You're my wonderwall

F#m7 A
Today was gonna be the day
Esus4 R7sus4

But they'll never throw it back to you
F#m7 A
By now you should've somehow
Esus4 B7sus4
Realised what you're not to do
F#m7 A
I don't believe that anybody
Esus4 B7sus4 F#m7
Feels the way I do about you now

F#m7 A Esus4 B7sus4

Dadd9 Esus4 F#m7
And all the roads that lead you there were winding

Dadd9 Esus4 F#m7
And all the lights that light the way are blinding
Dadd9 Esus4
There are many things that I
A E/G# F#m7 B7sus4
Would like to say to you but I don't know how

Dadd9 F#m7 A
 I said maybe
 F#m7 Dadd9 F#m7 A
 You're gonna be the one that saves me
 F#m7 Dadd9 F#m7 A
 And after all
 F#m7 Dadd9 F#m7 A F#m7

You're my wonderwall
Dadd9 F#m7 A

I said maybe
F#m7 Dadd9 F#m7 A

You're gonna be the one that saves me
F#m7 Dadd9 F#m7 A

And after all
F#m7 Dadd9 F#m7 A F#m7

You're my wonderwall
Dadd9 F#m7 A

I said maybe
F#m7 Dadd9 F#m7 A

You're gonna be the one that saves me
F#m7 Dadd9 F#m7 A

You're gonna be the one that saves me
F#m7 Dadd9 F#m7 A F#m7

You're gonna be the one that saves me

Dadd9 F#m7 A F#m7 x4

Capo 2nd fret

♩ = 87

F#m7 (Em7) A (G) Esus4 (Dsus4) A5 B7sus4 (G5)(A7sus4)

1

F#m7 (Em7) A (G) Esus4 (Dsus4) A5 B7sus4 (G5)(A7sus4)

3

JULY 2021 TOTAL GUITAR

THE GAS STATION

REAL WORLD REVIEWS OF THE
BEST NEW GEAR

Welcome to the GAS (Gear Acquisition Syndrome*) Station! Every issue, TG scours the market for the hottest new gear and brings you transparent reviews that you can trust. From the smallest of accessories that make your life easier, to big investments, such as brand new guitars, amps and effects pedals – if it's worth your attention, you'll find it here!

HOW WE TEST

CURATION

Our product selection is driven by our love of gear. We select the most exciting products on the market every month to bring you opinions you can trust.

FACE-VALUE REVIEWS

We're not gear snobs here at *Total Guitar*. We judge it on whether it looks good, sounds good and plays well – not by the name on the headstock.

*WHAT IS GAS?

Gear Acquisition Syndrome is the guitar-player's never-ending urge to acquire new gear, irrespective of whether they actually need it. Don't pretend you don't have it – we all do!

NO SNAKE OIL

You won't find us getting hung up on hokey mythology or nonsense marketing speak: we aim to bring you bullsh*t-free opinions on the gear you're interested in.

WE CAN'T BE BOUGHT

TG review scores are a true reflection of our experts' opinion on the product they've been testing. You'll never find a rating in our mag that has been bought and paid for.

REAL WORLD REVIEWS

We test every product under the conditions that they were designed for. For example, if an amp is designed to be played loud, rest assured that we'll have tested it at rehearsal/gig volumes!

BEST BUY AWARD

TG Best Buy Awards are reserved for stand-out products that earn a five-star rating. This is the best, most exciting new gear that you need to check out



BEST FOR...

Different guitarists have different needs. This badge highlights a particular strength that a product has in a TG Test or Group Test, so you can choose what's best for you



90



92



85 START ME UP

Five new products you need to check out

86 NEURAL DSP QUAD CORTEX

One of the most hotly-anticipated floor modelling units is here to make you rethink your rig

90 YAMAHA PACIFICA PAC612V1IFMX

Yamaha's do-it-all workhorse range

92 EPIPHONE EMILY WOLFE SIGNATURE SHERATON

A Wolfe in stealth clothing...

94 DUNLOP CRY BABY JUNIOR

The world-famous wah finds some middle ground



SUPERB, A BEST BUY



EXCELLENT



ABOVE AVERAGE KIT



SOME ISSUES



POOR



02

01



05



04



03



85

START ME UP!

Five awesome new products to get your gear engine revving this month...

EVENTIDE ULTRATAP

1 Eventide's H3000 is so iconic, its algorithms are now generating a whole series of standalone pedals. Following the Blackhole reverb and MicroPitch delay, the latest dot9 model is this ambient wonder. The 12 parameters via six controls that perform double duty give you huge control over the nature of repeats and rhythms. The result is a pedal that can go to synth-like territory and offers five onboard presets with a further slew accessible via Eventide's Device Manager. **£279**, www.eventideaudio.com

SQUIER CONTEMPORARY SERIES

2 A high spec five-model series that proves just how ambitious the Squier brand can be when it comes to offering bang for buck. The Stratocaster Special and Special HT, Stratocaster HH FR, Telecaster GH and Jaguar HH ST feature modern-voiced SQR pickups, coloured headstocks and roasted maple necks with sculpted heels. Both the Strat HH FR and Jag feature coil-tap switching, too. **£369 and £379**, www.fender.com

VICTORY V4 KRAKEN

3 Unleash the Kraken... Again! It's been a head and a preamp pedal - now it's a combination, putting a full two-channel valve-driven preamp and a 180-watt Class D power section at your feet. While that concept was offered with the Duchess V4, onboard cab sim tech from a partnership with Two Notes Audio Engineering widens the capabilities here for recording and straight-to-PA performance. It can even power your pedals via a 9V DC-out. **£799**, www.victoryamps.com

TC ELECTRONIC SKY SURFER MINI REVERB

4 TC's Sky Surfer Reverb is already a proven quantity, so a scaled-down version for your pedalboard at a bargain price is welcome new indeed. With spring, plate and hall reverb it offers go-to sounds for a workhorse role in your signal chain. It even offers the same range of reverb level, tone and mix as its larger sibling. Who says that size matters? **£29**, www.tcelectronic.com

HARLEY BENTON AIRBORNE GO

5 The latest addition to the Thomann brand's wireless transmitter range is a bit different, it includes a 24 GHz wireless transmitter but the main event is a 3W combo with three amp models and 12 digital effects including four delays, four reverbs, phaser, chorus, tremolo and 'vibe'. The transmitter can be charged via the amp's USB port. There's nine drum patterns, dual Bluetooth for streaming audio and it even runs on a battery or mains. **£120**, www.harleybenton.com





NEURAL DSP QUAD CORTEX

£1449



One of the most hotly-anticipated floor modelling units is here to make you rethink your rig

Neural DSP is no stranger to delivering high quality amp modelling, you just need to check out its stellar roster of plugins to see that. So when the Helsinki-based firm showed up to last year's NAMM with the Quad Cortex floor modeller, you'll understand we got pretty excited about it, in fact, the whole guitar-playing world seemed to

All that power doesn't mean a thing if it can't deliver sonically and you can be rest assured that it can, in spades. But that's not all, one of the biggest surprises on using the Quad Cortex for the first time was how intuitive the interface layout is. As soon as we'd plugged in, we were instantly surfing the huge number of presets, cycling through and adding various effects as if we'd

the up and down stomp buttons cycle through those Banks, with a total of 32 available, meaning you have 256 presets to play with before you even need to start creating your own. Scene mode allows for eight snapshots of one preset, so you can bypass effects and tweak settings for eight different versions of the same preset, which effectively gives you over 2000 factory presets alone. Stomp mode drills down into a preset even further by allowing you to assign individual effects, amp models, Neural Captures and IRs to one of the eight stomp buttons. Once the individual module is selected then the eight stomp buttons can be used as rotary encoders for settings within that effect – genius!

The architecture for each preset is flexible as it comes and allows you to experiment to your heart's content. The individual models within a preset are laid out in a grid and when building your own, you can build up to four individual signal routings with an amp model, plus effects on each one,

“WE’RE CONVINCED THIS IS THE ONE PEDAL TO RULE THEM ALL”

get quite giddy over the prospect. Not just because a revered software company had released its first hardware product, but what lay within its aluminium unibody.

From the off, the Quad Cortex promises unrivaled power in such a small footprint that Neural DSP calls it “the most powerful floor modeller on the planet”, stuffed with 2GHz of dedicated DSP power straight out of its Quad-Core SHARC processor.

been using it for years. With the 7” screen, there is plenty of screen real estate to fit the whole signal chains, without the need for different menus dedicated to just effects, or amp models, etc.

For live performance, there are three main operation modes to the Quad Cortex, you can select either Preset, Stomp, or Scene. Preset mode allows you to use the eight stomp buttons to select one of eight presets per Bank and with

1 STOMP+ROTARY ACTUATORS

That's twisty stomp buttons 'to you and us! A crazy amount of development has gone into the whole board, but the rotary actuators feel like the cherry on the cake.

2 INTERFACE

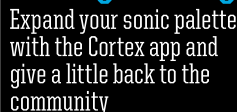
While all the functions are accessible via the touchscreen, the Quad Cortex also excels at giving much of this control over to the footswitches – perfect for gigging.

3 MORE HOLES THAN A SLICE OF LEERDAMMER

There's enough I/O to sate any guitarist's setup needs, be it in the studio, or on the road. With effects loops, multiple outputs and inputs, USB, plus MIDI and dual expression pedal ports at your disposal.

AT A GLANCE

- 50+ amp models
- 70+ effects
- 1000+ Impulse Responses
- 7" display with multi-touch sensors
- AI-powered Neural Capture™
- Proprietary stainless steel stomp+rotary actuators
- 2GHz Quad-Core SHARC® architecture
- Anodized aluminium unibody
- WIFI for wireless preset sharing, cloud backups and firmware updates
- Extra control via the Cortex app
- Dual combo inputs
- Dual effects-loops
- 2x 1/4" output jacks
- 2x XLR output jacks
- Headphone output
- MIDI in, out/thru
- Dual expression inputs
- USB audio interface with Cirrus Logic codecs



Quad Cortex's biggest USP has to be the Neural Capture feature. Powered by AI, capturing your own amps and pedals is blindingly fast, excruciatingly simple and above all else, delivers accuracy. The Quad Cortex guides you through the process on screen every step of the way, ensuring the correct connections are made and appropriate levels are set. Similar to Kemper's profiling, Neural Capture sends and receives a test



There are a couple of gripes though. At the time of writing you're unable to use presets from your desktop Neural DSP plugins, but it is hoped that will be implemented in the future, as will the plugins themselves. So any Neural DSP plugins you currently own, should, in theory, be available for the Quad Cortex at no extra cost. There's currently no desktop app for the Quad Cortex either.



Simon Arblaster

SUMMARY	FEATURES					
	SOUND QUALITY					
	VALUE FOR MONEY					
	BUILD QUALITY					
	USABILITY					
	OVERALL RATING					

REASONS TO REDO YOUR PEDALBOARD. AGAIN.



Ripped Speaker

From the low-fi fuzz sounds of yesteryear to modern, searing, fully-saturated fuzz tone, the multi-talented Ripped Speaker does it all. Includes a bias control, true bypass and an active tone control. Modern fuzz with old school roots, and the best of both!

Mainframe

Features bit reduction from 48kHz to 110Hz, bit crushing from 24-bit to 1-bit, a selectable High/Low/Band-pass filter, a Sample Rate Tuning Mode and expression pedal control. Warp and mangle your guitar to the lo-fi sounds of the early computer age.



Eddy

No one does bucket-brigade effects with an all-analog signal path like Electro-Harmonix. With the Eddy you get our unmistakably lush, signature vibrato and chorus in a compact pedal packed with unique control options. Classic sounds. Modern control.



Nano Metal Muff

A combination of weaponized distortion, an extremely powerful EQ section and a built-in noise gate provide the flexibility, control and tone-shaping needed to dial in an array of ultra-heavy sounds. Hard hitting, aggressive, intense.

electro-harmonix

Demos and more www.ehx.com



YAMAHA PACIFICA PAC612VIIIFMX

£886

Yamaha's do-it-all workhorse range

Electric guitars tend to fall into one of two main camps. In one corner there's the infinitely cool. In the other there's the perfectly functional. If a hot-rodded mojo machine is the guitar equivalent of the weathered drifter who hangs around the bar at your local, encourages you to take up smoking and shows you how to cheat at sweep picking, then a Yamaha Pacifica is the respectable guitar teacher in your town. Perhaps not bursting with danger on the exterior, but it'll see you right for years, and won't try and replace you in your band...

It's been three decades since Yamaha unleashed its answer to the west coast mod shop boom of the late-80s/early-90s, and the PAC612VIIIFMX is the new flagship version of one of the most popular electrics out there. Granted, you won't find pre-aged finishes. There's no retro-inspired quirks or clunky period-correct hardware. What you do get, though, is a cocktail of everything you need to cover as much musical ground as possible. There's the medium-weight, doublecut alder body, 25.5", 22-fret neck and a versatile HSS pickup configuration. It's backed up by a barrage of third party features, too, including Seymour Duncan pickups, Grover locking tuners, Wilkinson vibrato and a Graph Tech TUSQ nut and string trees.

All of that means very little, of course, if it doesn't float your boat when you pick it up to play. Straight away, there's a familiarity. The 13.75" radius maple neck has a comfortable 'all-rounder' feel which is as suited to rhythm work as it is big bends. The tension on the strings

is slinky without becoming too loosey-goosey, and our review model comes perfectly intonated with a low-but-not-buzzy action. Meanwhile, that Wilkinson vibrato reacts smoothly, returning to pitch without any problems under general use. The Pacifica's everyman approach has paid off.

This is continued with the types of tones it produces as standard. Those single coils are Seymour Duncan SSL-1s, and they produce a very nice balance of punchy bass and spiky top end. The neck and neck/middle positions in particular are where we found ourselves a lot of the time - funky and tight when clean, round and bluesy with a bit of drive. Moving to the Custom 5 TB-14 bridge humbucker is almost like having another guitar at your disposal. Here, you're into fat, smooth, mid-heavy rock territory with a voice that contrasts from the other positions brilliantly. As a bonus, you can split the humbucker's coils via the push-pull tone pot giving you even more versatility. Speaking of which, we love the fast response of the volume control, coupled with the higher friction of the tone pot, which both allow for quick changes/stay where you park it respectively.

If the Pacifica needed more evidence as to why it's become such a standard, this is it. It's an unashamedly shiny, contemporary guitar that can tackle a wide range of styles.

Stuart Williams

SUMMARY	FEATURES	★★★★★
	SOUND QUALITY	★★★★★
	VALUE FOR MONEY	★★★★★
	BUILD QUALITY	★★★★★
	PLAYABILITY	★★★★★
	OVERALL RATING	★★★★★

1 PICKUPS
Yamaha has equipped the 612 with a trio of Seymour Duncans, and combined with the coil split for the humbucker, they cover a lot of ground.

2 NECK
The C-shaped neck is a comfy ride for rhythm and lead, capped-off with a 25.5" scale rosewood fingerboard.

3 THIRD-PARTY FEATURES
In addition to the pickups, you get a Wilkinson vibrato, Grover tuners and Graph Tech TUSQ nut and string trees.

AT A GLANCE

BODY: Alder with flame maple veneer

NECK: Maple

SCALE: 25.5"

FINGERBOARD:

Rosewood

FRETS: 22

PICKUPS: Seymour

Duncan SSL-1 (x2),

TB-14 humbucker

CONTROLS: Volume,

tone w/push-pull coil

split, five-way selector

HARDWARE: Wilkinson

V550 vibrato, Grover

locking tuners

LEFT-HANDED: No

FINISH: Fired Red,

Matt Silk Blue, Yellow

Natural Satin

CONTACT: Yamaha





EPIPHONE EMILY WOLFE
SIGNATURE SHERATON

£749

A Wolfe in stealth clothing

The support guitar brands show rising playing talent is vital, and it also sends a message. Seeing Epiphone go from the endorsement of Emily Wolfe to a full signature model here is a statement that it not only believes in her obvious talents as an inspiring musician, but also that it's open to the design input of contemporary players.

It's worked with Lee Malia, Matt Heafy and Jared James Nichols before, and the two parties here have created a truly stunning looking Sheraton. We've long cast envious glances at the Gibson Memphis satin range of 339s and 335s, but this is a black aged gloss

Epiphones we've seen, and there's been some strong output lately on that front with the Prophecy series. Wolfe has described it as "elegant and aggressive". We like that. And if Darth Vader had become a BB King cover act, he'd have liked it too. It's also a heavy guitar – 9lbs gives it a solid heft for a semi. It feels very comfortable to play, though, with a spot-on setup that really sells the Indian laurel 'board; it's fast and coupled with the 60s slim taper profile neck here we've got a very positive first impression plugged in. The string slack is in the goldlocks zone for us – springy for expressive bends but firm enough for heavy rhythm.

“ONE OF THE MOST BADASS
LOOKING EPIPHONES WE’VE SEEN”

that lies somewhere in between, taking on the look of a well played nitro without any of the relic'ing. The idea of pairing it with gold hardware risks going too showy for a guitar billing itself as 'stealth', but the 'lightly aged' gold stays classy and consistent with the aged binding.

The unique features continue with diamond holes inspired by the Trini Lopez model and lighting bolt inlays that give the aesthetic a subtle rock 'n' roll edginess. Wolfe's own signature touches strike a careful balance – her signature on the back of the headstock is literally stealth-like as it's only visible at certain angles in the light. The tattoo-style gold wolf's head below it is more conspicuous, but we're not complaining. This is undoubtedly one of the most badass-looking

The neck humbucker really sings with sustain, and drenched in fuzz and reverb it's a treat. The bridge is warm too and it's comfortably voiced for blues and classic rock, with the volume controls proving sensitive for cleaning up. But like Wolfe's music, this will confidently stride between the world's of Albert King and Josh Homme: when things get gainy there's broad low string heft complemented by open higher end articulation for chords that wins semis so many fans. As this guitar deserves to do, too.

Rob Lainq

SUMMARY	FEATURES	★★★★★									
	SOUND QUALITY	★★★★★									
	VALUE FOR MONEY	★★★★★									
	BUILD QUALITY	★★★★★									
	PLAYABILITY	★★★★★									
	OVERALL RATING	★★★★★									

7 CONTROLS

1 Wolfe decided against a second tone knob as she struggled to reach it onstage, leaving one master tone knob.

2 The choice to go with lower output pickups here was influenced by minimising feedback – diamond F-holes reportedly create more at higher levels. But the transparency means you're also hearing more of the natural resonance of the guitar which is why many players end up coming back around to lower output humbuckers.

3 HEADSTOCK INLAY

The headstock's Tree of Life inlay isn't actually a Wolfe motif but a vintage Epiphone Sheraton II feature.

AT A GLANCE

BODY Maple
NECK Mahogany,
60s Slim Taper
SCALE 628 mm
(24.72")
FINGERBOARD
Indian laurel
FRETS 22
PICKUPS 2 x Epiphone
Alnico Pro Humbuckers
CONTROLS 2 x volume
controls and 1 x CTS
potentiometer
tone control
HARDWARE Lightly
aged gold-plated
Epiphone LockTone
Tune-o-matic bridge,
StopBar and Lightly
aged Grover
Rotomatic tuners
FINISH Black
Aged Gloss
CASE Epiphone case
CONTACT
Epiphone,
www.epiphone.com





DUNLOP CRY BABY JUNIOR

The world-famous wah finds some middle ground

£125



AT A GLANCE

TYPE: Wah pedal
CONTROLS: Rocker pedal, voice switch
SOCKETS: Input, output, power
BYPASS: True bypass
POWER: 9v battery, PSU
CONTACT: Westside Distribution

With individual, physical pedals at an all-time high, the term 'real estate' gets used now more than ever in relation to our pedalboards. One of the biggest cheeses on our sonic smorgasbord comes from expression-type pedals, and while a volume pedal may not be classed as 'essential', the humble-yet-effective wah pedal is a space-hogging staple.

Enter the Cry Baby Junior. Now, this isn't the first time that Dunlop has gone all Rick Moranis on its offspring, and the previously released Cry Baby Mini has solved many peoples' pedalboard Jenga problems, but some might argue it solved them too well. The Junior has been designed in collaboration with pedalboard titans Pedaltrain to fit on its popular boards. It sits between the Mini and regular-sized

Cry Baby, measuring 20cm long by 10cm wide, the idea being that you'll have a more conventional travel from the rocker pedal, while still being able to fit and stick the pedal on your board neatly. The jack and power sockets have also been moved to the front face of the pedal for easier wiring, plus the Junior sees the inclusion of a battery door on the bottom, rather than the Mini's old-school-style full-plate. No screwdriver required here.

As with the CB Mini, there's a voice switch (mounted more conveniently on the side rather than internally here) which shifts the pedal's frequency range between three options: High (standard Cry Baby GCB95 voicing), M (vintage-style, mid-focused) and L (covering a lower frequency range), so once again the benefits aren't just in the dimensions - you get some tonal variations, too.

Plugged in, H mode is business as usual when compared to the Cry Baby we know, but if you're after something a bit smoother then the M and L settings are a handy addition. M knocks a little bit of shrillness off, while L goes even further delivering some smoother vowel-y sounds without so much of the harsh resonant peak.

Is it worth the £50 difference? That'll depend on your requirements, but if convenience and some variations are what you're after - or you're buying your first wah - we'd say the Junior hits multiple sweet spots.

Stuart Williams

SUMMARY	FEATURES	☆☆☆☆
	SOUND QUALITY	☆☆☆☆
	VALUE FOR MONEY	☆☆☆☆
	BUILD QUALITY	☆☆☆☆
	USABILITY	☆☆☆☆
	OVERALL RATING	☆☆☆☆

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Words Amit Sharma / Photo Rob Blackham

SCOTT MCKEON

Scott McKeon is a guitarist notable for many reasons. He was the child prodigy that became the face of a Fender campaign to recruit younger talent in the 90s, making his debut on British television at just seven years old. For much of the last decade, he's been busy playing guitar in legendary singer Tom Jones' band and developing his own line of fuzz pedals – the SM Fuzz, as used by the likes of Gary Clark Jr. and Doyle Bramhall II, and the all-new SM Octave Fuzz. Following an 11-year break from solo material, his third album *New Morning* witnesses him at the helm of some truly mesmerising modern blues tones...

"For the main bulk I was using my all-original 1962 Strat," says McKeon. "I also used my 1965 Jaguar and [producer] Paul Stacey's '59 Les Paul, made by Terry Morgan. Jimmy Page actually played it on stage with The Black Crowes at Shepherd's Bush Empire a few years back! That was fed into a 1964 Vibroverb, a Two-Rock Classic Reverb through a custom 2x12 cab made in Japan by String Driver, plus a little Gibson amp I picked up in Philadelphia."

And, of course, there was plenty of SM Fuzz in the mix, too. He made the first incarnation himself at the age of 18 and "after opening a couple of shows for Joe Bonamassa he asked me what the pedal was and if I could make him one, before telling me I should sell them."

The idea would sit with McKeon for many years, until he found the right builder to help improve his design. One of the biggest difficulties, he says, came with sourcing the right AC128 germanium transistors – only half of which manage to pass the rigorous testing prior to assembly. "When the pandemic hit, I started thinking of different ways to survive so we came up with the octave version," he continues. "It uses silicon instead of germanium, which gives it a slightly different character, but it still cleans up when you roll your guitar volume back. There's also a bias control for the fuzz which takes it from wide-open to a gated, spitty sound – and we've also added a 'Wonder' switch that rolls the top end of the Octavia side. It's something I do a lot myself – turn the tone down so you get this keyboard sound that's a bit like Stevie Wonder's clavinet, hence the name!"

Naturally, having the right tools of the trade is essential practice for anyone performing on big stages alongside Tom Jones. There's such a vast catalogue, McKeon explains, it requires being able to adapt quickly through an array of sounds and styles – from rootsy blues to funk and country. "Tom's really into his old rock 'n' roll, so quite often I'll reference a James Burton solo or a Scotty Moore thing, and he'll always know exactly what it is."



explore the Pedal Fleet

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Bumble Buzz Pedal

Handmade by Chris Young of Union Tube & Transistor.

Elmore Pedal

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Triplegraph Pedal

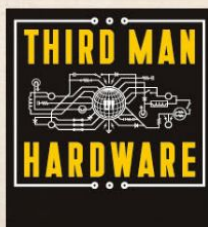
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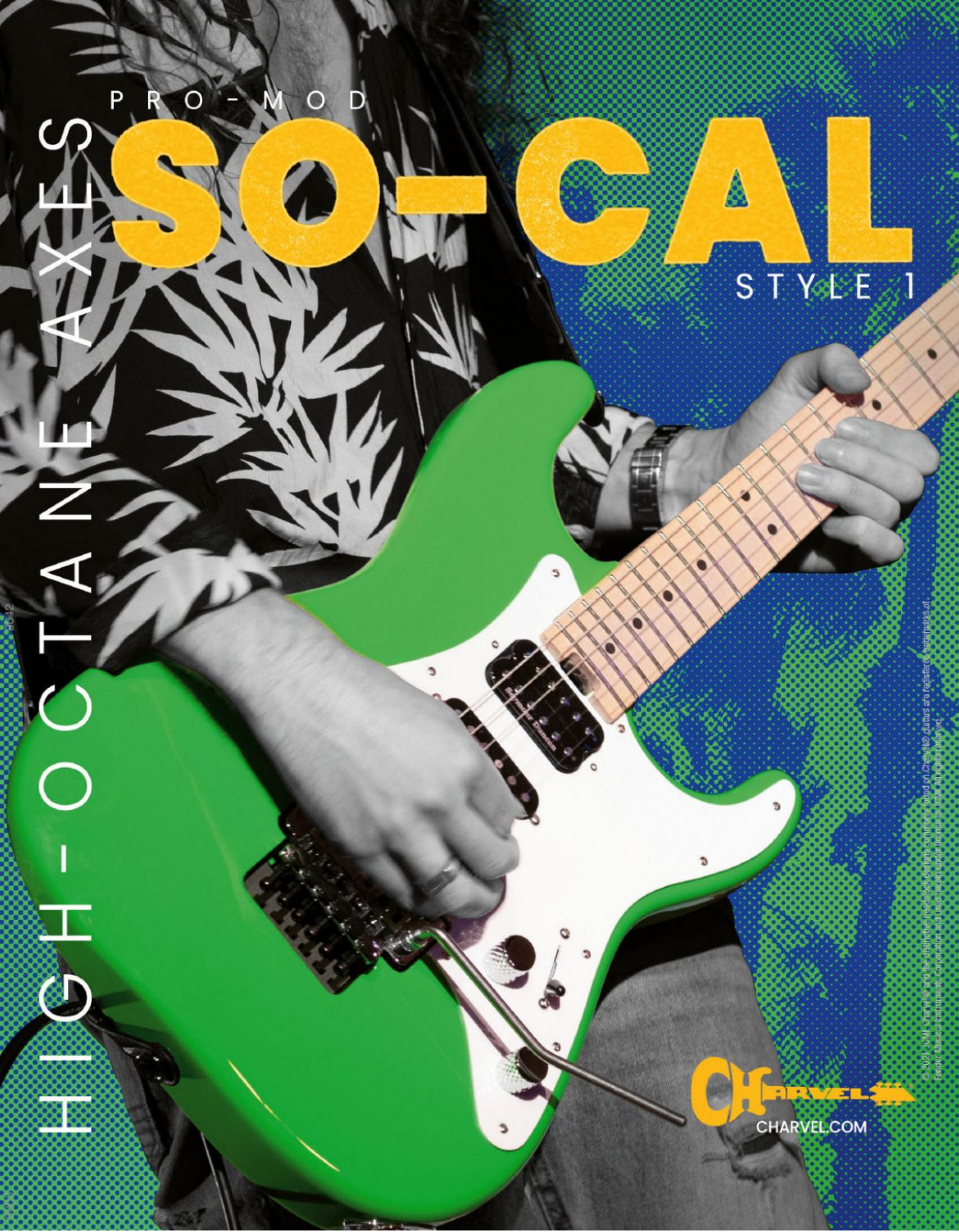
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