

FAME FORUM CUSTOM FLAMED MAPLE TOP TRANSPARENT EMERALD GREEN #FC1909033

The Forum Custom is the flagship of the premium guitar forgery of M-Guitars in Danzig. The best tone woods, hand-wound Seymour Duncan USA pickups and first-class hardware from the German manufacturer Schaller, are combined with refinements such as Abalone bindings, gold-plating and a carefully applied transparent Burst finish. Fame Forum Custom — a premium guitar!

The body of the Fame Forum Custom consists of mahogany and features a two-piece top made from high-contrast and evenly grained quilted maple. The experienced guitar builders in Danzig select for a particularly powerful grain with a three-dimension depth effect, which is highlighted by the illuminating Burst finish. An additional optical depth effect as well as clear body contours is created by the shimmering iridescent abalone purfling, which is rounded off by a cream-coloured binding.

Whoever plays the Forum Custom, whether strapped over your shoulder or resting in your lap, will amazed by the sleek profile and weight of this instrument! All of the hardware of this instrument including knobs, the bridge and switches are recessed into the top for ergonomic purposes, to make palm muting and picking as comfortable as possible.

Regardless if shredder or Blues fan: fast runs as well as organic bendings are ideally supported by the slim, yet contoured 'C' profile of the mahogany neck. To reach even the highest frets, the Forum Custom features a flattened neck heel block, while neck tenon was extended and even reaches under the neck pickup which also helps to improve sustain and construction stability.

Code: GIT0051772-000

CV247 MUSIC STÜRE

London - Cologne





ARRIVED ARRIVED



"This is what I record with, this is what I play with, this is what I have at home to just chill out and strum to, and I think once you know you're serious about playing guitar this is the best instrument that you could get."

Ed Sheeran



SheeranGuitars.com



Guitar

Future Publishing

QUAY HOUSE, THE AMBURY, BATH, BA11UA

Tel: 01225442244Fax: 01225822763 Email: totalguitar@futurenet.com Website: www.totalguitar.co.uk

EDITORIAL

Acting Editor: Chris Bird Group Art Director: Graham Dalzell Senior Music Editor: Jason Sidwell

Guitar Features & Tuition Editor: Chris Bird
Production Editor: Stan Bull

Production Editor: Stan Bull

Music Co-ordinators: Zoe Maughan, Natalie Beilby

CONTRIBUTORS

Richard Barrett, Phil Capone, Jack Ellis, Charlie Griffiths, Jonathan Horsley, Stephen Kelly, Alex Lynham, Grant Moon, Matthew Parker, Amit Sharma, Michael Astley-Brown, Rob Laing, Stuart Williams, Paul Elliott

Music Engraver: Simon Troup and Jennie Troup **Photography:** Olly Curtis, Neil Godwin, Will Ireland

ADVERTISING

Phone: 01225442244 Fax: 01225732285

Chief Revenue Officer: Zach Sullivan, zach. sullivan@futurenet.com
UK Commercial Sales Director: Clare Dove, clare.dove@futurenet.com
Advertising Sales Director: Lara Jaggon, lara.jaggon@futurenet.com
Account Sales Directors: Alison Watson, alison.watson@futurenet.com
Guy Meredith, guy.meredith@futurenet.com

MARKETING

Head Of Marketing: Sharon Todd **Subscriptions Marketing Manager:** Tom Cooper

PRODUCTION & DISTRIBUTION

Production Controller: Frances Twentyman **Head of Production UK & US:** Mark Constance

Printed in the UK by: William Gibbons & Sons Ltd on behalf of Future Distributed by: Marketforce, 2nd Floor, 5 Churchill Place, Canary Wharf London, E145HU

Overseas distribution by: Seymour International Head of Newstrade: Tim Mathers

CIRCULATION

Trade Marketing Manager: Michelle Brock 0207429 3683

SUBSCRIPTIONS

UK reader order line & enquiries: 0844 848 2852
Overseas reader order line & enquiries: +44 (0)1604 251045
Online enquiries: www.myfavouritemagazines.co.uk
Email: totalguitar@myfavouritemagazines.co.uk

LICENSING

International Licensing Director: Matt Ellis, matt.ellis@futurenet.com Tel:+44(0)1225442244

MANAGEMENT
Brand Director, Music: Stuart Williams
Head Of Art: Rodney Dive
Content Director: Scott Rowley
Group Art Director: Graham Dalzell

Want to work for Future? Visit www.futurenet.com/jobs



Future plc is a public company quoted on the London Stock Exchange (symbol: FUTR) Chief executive Zillah Byng-Thorne Non-executive chairman Richard Huntingford Chief financial officer Penny Ladkin-Brand

Tel +44 (0)1225 442 244

All contents copyright © 2019 Future Publishing Limited or published under licence. All rights reserved. No part of this magazine may be reproduced, stored, transmitted or used in any way without the prior written permission of the publisher.

office: Registered office: Quay House, The Ambury, Bath, BA1 IUA. All information contained in this publication is for information only and is, as far as we are aware, correct at the time of going to press. Future cannot accept any responsibility for errors or inaccuracies in such information. You are advised to contact manufacturers and retailers directly with regard to the price and other details of products or services referred to in this publication. Apps and websites mentioned in this publication are not under our control. We are not responsible for their contents or any changes or updates to them.

If you submit unsolicited material to us, you automatically grant Future a licence to publish your submission in whole or in a part of the material to us, you automatically grant Future a licence to publish our submission.

If you submit unsolicited material to us, you automatically grant Future a licence to publish your submission in whole or in part in all editions of the magazine, including licensed editions worldwide and in any physical or digital format throughout the world. Any material you submit is sent at your risk and, although every care is taken, neither Future nor its employees, agents or subcontractors shall be liable for loss or damage.



We are committed to only using magazine paper which is derived from responsibly managed, certified forestry and chlorine-free manufacture. The paper in this magazine was sourced and produced from sustainable managed forests, conforming to strict environmental and socioeconomic standards. The manufacturing paper mill holds full FSC (Forest Stewardship Council) certification and accreditation..



Welcome...



Someone once said, "Anything that's successful is a series of mistakes." Wise words indeed, especially when it comes to guitar playing. Whether you're just starting out or tackling your next new tune, making mistakes is part of the learning process. As it turns out, that pearl of wisdom came from the guitarist on the cover of this very magazine: Billie Joe Armstrong – the frontman of a band

who, let's face it, don't really take too many wrong turns.

So, as you might've guessed, this month we've put together a gargantuan Green Day guide for you, maybe even the "father of all" Green Day guides! Over a full 15 pages we have an interview with Billie Joe himself, behind the scenes studio secrets from producer Butch Walker, lessons on Billie Joe's playing style, riffs from the album and more.

Elsewhere in the issue, there's plenty to wrap your fingers around. With a diverse mix of song tabs, including Slipknot, Steely Dan and Radiohead, we're aiming to keep the 'Total' in Total Guitar. Just don't beat yourself up if you make a few mistakes!

See you next time!



Chris Bird Acting Editor

MAKING THIS MONTH'S MAG



JONATHAN HORSLEY

Jonathan's interview with Emperor guitarist Ihsahn (p32) has been tickling our treble clefs this month. A great feature, for sure, with plenty of well-considered and inspiring playing tips and even a bit of theory. And, as it turns out, the Norwegian multi-instrumentalist suffers with Gear Acquisition Syndrome just as much as the rest of us.



STAN BULL

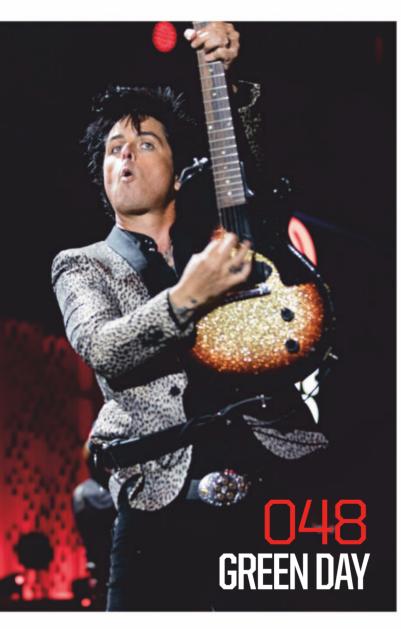
Since joining the magazine in November, TG's Production Editor has been hinting that he may be assembling a "super-group" for a new band/collective-type project. Tight-lipped as regards the line-up, we're wondering if Stan's using his newfound industry contacts to recruit the dream team. Only time will tell...



AMIT SHARMA

Total Guitar has kept Amit pretty busy this month. Hop over to p36 where you'll find interviews, not only with legend of shred, Joe Satriani, but with three of the new generation of Satch disciples. Our hardworking contributor managed to find time to review Hughes & Kettner's floor-based Black Spirit 200 (p98), too.

Güitar Ents



MONITOR

006 First Look

008 Scene

010 Five Minutes Alone: Jonathan Wilson

012 On The Up

014 Me & My Guitar: Viv Campbell

016 Back Track: Post-Rock

HOW TO

018 Riff Of The Month: Weezer

- The End Of The Game

020 Getting Started With...

Pedal Tone Riffs

022 The FX Files...

Paul Cochrane Timmy Pedal

024 What The F? Major chords

025 Competition

FEATURES

026 Rig Tour: Sevendust

032 Ihsahn

036 Joe Satriani

042 2020's Essential Gear

048 Green Day

LEARN TO PLAY

064 Classic Track: Slipknot - Duality

072 Rockschool: Steely Dan

- Kid Charlemagne

078 Jam Track: Gypsy Jazz

080 The Turnaround: Sonny Landreth

TG UNPLUGGED

084 News

086 Interview: Mark Morton

088 Open-Mic Songbook: Radiohead

036 Joe Satriani



THE GAS STATION

090 Start Me Up

092 Cort KX500

096 Vox Cambridge 50

098 Hughes & Kettner

Black Spirit 200

100 The TG Test: Danelectro 64 XT/59 X12/NOS Plus

106 Mooer Tone Capture

108 Fix Your Guitar

114 The Playlist: Circa Waves



Cover Photo: Greg Schneider





Photography: Olly Curtis

INSATIABLE APPETITE

Gibson gets it right with the G N'R legend's latest LP



ack in the late-80s SuperStrats were flavour of the day and Ibanez was the brand as far as rock guitar was concerned. But herald 1987's chart-topping Appetite For Destruction and the image of Guns N' Roses' top-hatted axeman wielding his

flame-topped Les Paul, and demand for Gibson's leading model skyrocketed.

The brand's latest Slash range is a product of the new regime at the company. The guitars come in four finishes: Appetite Burst, November Burst, Vermillion Burst and Anaconda Burst. There's no weight relief so they're hefty, but they are superbly built, look incredible with AAA flame-maple tops, while their medium-chunky mahogany necks play like butter and they sound completely awesome.

With powerful, open-top humbucking pickups, a Slash logo'd truss-rod cover and no pickguard fitted, this range is definitely built to rock.

UP CLOSE



Pickups

Slash's early LP featured open-top humbucking pickups, and the reissues, voiced to Slash's own tonal preferences, offer the same.



Electrics

Two volume controls, two tones and a three-way pickup selector switch look after things, with quality pots and 'orange drop' capacitors inside. Classic!



Tuners

'Keystone' pegs on Schaller tuners provide stability. The truss-rod cover features Slash's signature, but there's a plain one in the case should you prefer.



SECULTARS YOUR NEWS IN GUITARS

EVENT

MY CHEMICAL REUNION

THREE CHEERS AS THE FABULOUS KILLJOYS EYE UP MILTON KEYNES



ollowing their recent reunion and performance at Shrine Auditorium, Los Angeles just before Christmas, My Chemical Romance have announced a massive three-night stint in Milton Keynes' Stadium MK.

Having initially parted ways in 2013, the New Jersey emo titans sparked hysteria amongst fans on Halloween (but, of course) when they announced plans for said reunion show, with world domination via a full reunion now on the cards. Initially selling out one night in Milton Keynes within an hour, a second date was added, followed by a third. The shows will take place on the 18th, 20th and 21st June as part of a larger European tour, and will be the band's first UK performances since they headlined the Leeds Festival in 2011. Members of the group expressed their surprise and gratitude on social media, with guitarist Frank Iero writing: "Damn, I'm totally blown away... Thank you, we're gonna have a blast."

Keep your eyes peeled for more MCR news soon, and perhaps some new music to boot.







CHECK SHIRT WIZARD

UNEARTHED LIVE ALBUM FINDS RORY ON TOP



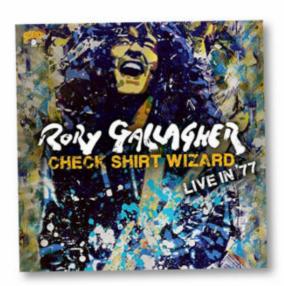
rish blues virtuoso Rory Gallagher will be returning to the TG stereo next month with the release of

Check Shirt Wizard – Live in '77, a new posthumous live album.

The 20-song, previously unreleased set contains performances from shows in London, Brighton, Sheffield and Newcastle during a UK tour in support of Gallagher's 1976 album Calling Card. The new album has been mixed from the original multi-track tapes from the Rory archive, which were recorded by the Rolling Stones and Jethro Tull's mobile studios and mastered at Abbey Road Studios.

Hailing from Cork in the Republic of Ireland, Gallagher was noted for his impressive live performances, both as a solo artist and as a member of the band Taste, before he passed away in 1995, aged just 47. Something of a guitarist's guitarist, Gallagher was a noted influence for many, including Eric Clapton, Brian May and Johnny Marr, among others.

Check Shirt Wizard – Live in '77 will be released 3rd March on Chess/UMC.



Something of a guitarist's guitarist, Gallagher was a noted influence for Clapton, May, Marr and more...

ROUND-UP

The newspieces picking our ears up



Everything In Its Right Place

Oxford musical polymaths Radiohead publish new online archive

hether or not you are a fan of Thom Yorke and Co.'s shapeshifting, genreresistant music, the legacy of Abingdon's most famous band is undeniably one of intrigue, mystique and more than a few classic riffs.

For years, fans have created entire message boards to discuss long lost album outtakes and questionable footage of live rarities. Rejoice, then, for the five-piece have shared a new online archive, featuring material relating to the groups' nine studio releases, as well as alternative art designs, merch and a variety of video content, including TV and festival performances and more.

This, of course, is a must-visit for any self-proclaimed fan, but for casual listeners it's a neat insight into the audiovisual world of one of Britain's most enigmatic bands.

www.radiohead.com
Turn to page 86 for our
Fake Plastic Trees
acoustic tab.





FIVE WINUTES ALONE

JONATHAN WILSON

The Americana artist on Nashville, his musical father, touring with Roger Waters and perfecting your craft...

Got my first real six-string...

"I got my first proper guitar as a combined Christmas/13th birthday present, a black Squier Stratocaster with a Squier 15 amplifier. I could already play because my dad had an amateur band and he had several acoustics at the house. His band were playing the British Invasion stuff – they were that generation of kids who saw The Beatles on the Ed Sullivan Show. I was sounding decent for a youngster and got a lot of encouragement from my family to keep it up. That made me realise I could pursue this

beyond just playing for fun in my bedroom. My own first *acoustic* guitar was actually a 1962 Gibson J-50 I bought in the 90s for \$1,000 plus some trade-ins. It's my main acoustic to this day – that thing's fantastic."

Get rhythm...

"My dad was a real big fan of John Lennon's jagged rhythm style, and he encouraged me to listen and not be too noodly, to notice the other aspects of playing. I spent a long time on the drums too, and that informs my timing

"I'VE HAD INCREDIBLE MOMENTS WITH ROGER, SUCH AS PLAYING IN ROME TO 80,000 PEOPLE"

and rhythm as a guitarist. I always say that is what makes you money, not speed and tons and tons of notes. If your timing's great and you can sit in the pocket and you're maybe even content to chug on the same chord for a while, you should be okay."

Let me whisper in your ear...

"It's important to figure out ways to grow the potential of your ears. The greats would sit at a turntable and play along to Elmore James or someone like that, and that's a tried and true way of training your ear that has served me well. With tab or visuals there's no real connection to the notes, the tonic or the key of the song. YouTube can be good because you can see songs played close up, half-speed if you want, but you see these kids just showing off, playing fast and jumping from song to song - that's not useful. Slow down, try to understand the tonal centres of a song without the flashy bits and get your playing steady and confident. It's easy to have a home studio these days and it's a good idea to overdub over yourself – get it in the form of a recording session, get familiar with the sound of yourself in headphones."

Chasin' the big wheels all over Nashville...

"It wasn't on purpose but [new album] Dixie Blur is definitely the most emotional, straight-ahead album I've done. I recorded in Nashville to tap into the vibe there – it's such a good-time session town and you can hear that in the sound of the pedal steel, the fiddle. In the past I've self-produced and it's been along, arduous process, so to be in a band with these incredible session musicians all tracking together at the same time was a hugely freeing experience for me."

Just another brick in the wall...

"I never expected to be working with Roger Waters. We played 156 shows on the Us + Them tour, I sang pretty much all the David Gilmour parts and did a few solos, but all the iconic Gilmour note-for-note stuff was done by Dave Kilminster, an amazing shredder. I was off the hook! It can be a daunting gig, but Roger is totally chilled out and super-funny. He's 76 and he rocks harder than the rest of us! I do remember some incredible moments – playing the Circus Maximus in Rome in front of 80,000 people; playing Wish You Were Here in front of a stadium of people in South America on a Guild 12-string I borrowed from Jackson Browne. Then I have to come back to planet earth and play my own shows. But it isn't that hard. I get the best of both worlds that's the idea, right?"

Dixie Blur is out on 6th March via Bella Union.









EGO KILL TALENT

Meet the Brazilian rock band doing big things on their own terms...



e've all probably seen some sort of gig or another where the musicians on

stage swap instruments for a moment - but considering they have a reshuffle for every song, Brazilian alternative rockers Ego Kill Talent are taking that concept to the extreme. And while such creative fluidity probably sounds like any live sound engineer's worst nightmare, the São Paulo-based quintet have been supporting names as legendary as Pearl Jam, QOTSA and SOAD on home soil and across Europe. It's an unusual formula, but it's one that's working for them...

"We all play guitar and bass in the band and there are two drummers, including myself," says co-founder Jean Dolabella. "A few years ago we decided to let the music happen naturally regardless of who was playing what instrument." This light-bulb moment led to what felt like having one line-up for one song and a different line-up for another. "It was weird at first but also very rich, musically speaking, since it brought different elements and textures to the process,"

continues Jean. "Though it's a complex way of collaborating, putting egos aside brings more benefits than setbacks. We're brutally honest with our art and that's led to some amazing things and huge opportunities for this band."

The five musicians rely on a mixture Fender and Gibson guitars on each side to bring out the best in whichever member happens to be holding it at the time. These are fed into Orange amps, with some additional colour coming via their delay and octave pedals. "We have the Rockerverb 100 on one side and the Thunderverb 200 on the other," reveals Jean. "The main sound is basically a more creamy distortion out of the amp before any pedals, more crunchy rock than harsh metal tones, using ambiences to add detail and some octave fuzz for the heavy parts!"

ıccaMiranda , Quasar Media, Rob Blackham

FOR FANS OF Pearl Jam, Soundgarden, QOTSA GEAR Gibson SG, Fender Stratocaster/Telecaster, Orange Rockerverb 100/Thunderverb 200



"WE'RE BRUTALLY HONEST WITH OUR ART AND THAT'S LED TO SOME HUGE OPPORTUNITIES"

ON THE UP PEOPLE * NEWS * NOISE



HANNAH WICKLUND

Bonamassa-approved blues ace preps her debut

un th

s one of the more underground names that got booked for the Joe Bonamassa-led

Keeping The Blues Alive At Sea cruise earlier this February, LA-based guitarist Hannah Wicklund and her band The Steppin' Stones will be spending much of this year building on momentum and finishing off their debut album. "It will be a year of new music and lots and lots of creation," says Hannah. "I'm releasing an EP of older songs

played acoustically, before we head back to Phil Ek's studio in Seattle to record a new full-length."

Of her main influences, Hannah cites Hendrix and Tom Petty as two figures who left their mark on her. With Jimi, it was his ability to cover "such a wide spectrum of emotions within each performance", while Petty's up there for his "fiercely simple, yet connected songwriting."

FOR FANS OF Joe Bonamassa, Tom Petty GEAR Tom Anderson Drop Top Classic

GENDER ROLES

Brighton punks who love the squeaky noises



hen asked what he finds lacking in modern guitar music, Gender Roles singer/

guitarist Tom Bennett responds:
"Everyone seems so fixed on
playing very typical parts for their
style of music. There's a fear of
cheese. I live for those weird,
squeaky, 'where-did-thatcome-from?' sounds."

Formed in Brighton, the alt-rock trio released their debut album, *Prang*, last year via indie label Big Scary Monsters to rave

reviews. The guitar tones heard on the album came courtesy of a vintage Fender Strat. "My '67 Strat, is my only guitar," says Tom. "It was one of those 'My uncle's clearing out the loft, do you want it?' situations. There's something about the low-end from the neck pickup and the gnarliness of the bridge that suits everything I play. I'm a bit obsessed with it."

Who wouldn't be?

FOR FANS OF Biffy Clyro, Dinosaur Jr. GEAR Fender 1967 Strat, Pro Co Rat 2



JACK J HUTCHINSON

WHO? Hat-loving British blues maestro with a knack for all things southern-fried SOUNDS LIKE Classic countrified riffs served with extra fuzz, heart and soul GEAR Gibson Les Paul Standard, Tanglewood TW12NS-E Acoustic, Marshall JCM 2000 DSL

FOR FANS OF The Black Crowes, Rival Sons HEAR Who Feeds The Wolf?



WITCH FEVER

WHO? Alisha Yarwood, guitarist in Manchester's new queens of alternative SOUNDS LIKE Finding your new favourite punk

band in the chaos of a 2am basement show GEAR Gretsch Electromatic, Roland VGA-3, Boss DS-1, Electro-Harmonix Small Clone

FOR FANS OF The Pixies, Nirvana, Gallows HEAR Bezerk(h)er



JONATHAN HULTÉN

WHO? The guitarist in Swedish death metallers Tribulation embracing his, er, folk side SOUNDS LIKE A refreshingly modern take on everything we love about Nick Drake and John Martyn

GEAR Ibanez AEL40SE-RLV Acoustic

FOR FANS OF Nick Drake, Bert Jansch, Fleet Foxes HEAR Chants From Another Place



My first guitar was a Les Paul, when I was 15. In the 80s I played Charvel/Jackson S-types, but came back full circle to Les Pauls just after joining Def Leppard in 1992. For a long time, Gibson wouldn't even return my calls. Eventually I got a call from Philip Whorton who runs the Gibson Custom Shop in Nashville, asking if I'd be interested in working on a signature model. I said, 'Absolutely!' I'm really pleased with it. I had the first one at the end of our 2017 tour, and Gibson released it at the Vegas Consumer Electronics Show.

We based the guitar on the bastardised Les Paul I was playing with Def Leppard at the time. It had a slim neck from a 1978 Les Paul Custom I'd bought in a Nashville pawn shop for \$400, and this one's very similar. All my Les Pauls have these jumbo Dunlop frets. I cannot bend with little skinny frets, they have to be big and wide. I bend aggressively in solos, and put a lot of vibrato on chords.

Interview Grant Moon Photo Kevin Nixon

ME AND MY GUITAR

VIVIAN CAMPBELL

DEF LEPPARD/LAST IN LINE

The Leppard, Dio and Whitesnake legend talks us through his beautiful Les Paul Custom signature model

The body is lightweight mahogany. I like light Les Pauls; I've had two back surgeries so I do need to be careful! And how's this for I wanted a dark, charcoal-like, translucent finish where you can see the wood grain. He came back with this colour called Antrim Basalt Burst, after the basalt rocks of the Giants Causeway on the North Antrim coast, and I was actually raised in County Antrim. That was a nice bit of serendipity...



In the mid-90s we were still using

wedge monitors on stage, so the

guitars were at a hefty volume and would



Find yourself fully immersed in your music with the bright tones and just right feel of Elixir® Strings. Their consistent performance sets you free to truly express yourself - time and time again.



ENGINEERED FOR GREAT TONE AND LONG LIFE



A GUITARIST'S GUIDE TO THE ARTISTS YOU NEED TO KNOW

POST-ROCK

By the early 90s, a new generation of bands were beginning to explore the possibilities of traditional rock instrumentation without the conventions of rock itself. As part of a largely instrumental sound, post-rock guitarists chose to explore texture and tone through composition, creating a sense of atmosphere that appealed to the head as well as the heart. Once considered niche, today post-rock can be heard headlining festivals and soundtracking film and TV, all with an eclectic mix of guitar.



MOGWAI HARDCORE WILL NEVER DIE, BUT YOU WILL (2011)

While their 1997 debut holds a special place in the hearts of fans, Mogwai are one of those rare bands that have truly improved with age, and this seventh LP is crammed with career-best songs that are both aurally dense yet accessible, favouring melodic warmth over the dissonance that made earlier releases so striking. Guitarist Stuart Braithwaite's shoegaze textures provide a backdrop for the touches of electronica across White Noise and Death Rays, while Mexican Grand Prix dives into full-on krautrock throb. But for all its gentleness, Hardcore... never shies of making a racket: San Pedro and You're Lionel Richie hint at everything from Rival Schools to doom metal, while Rano Pano's fuzz-drenched riffs rank among the band's finest.

BACK TRACK PEOPLE * NEWS * NOISE



THEN TRY

GODSPEED YOU! BLACK EMPEROR

F# A# ∞ (1998)

A genre cornerstone of resounding influence, Godspeed's glowering debut is often many listener's first foray into experimental rock music, a work of dark, labyrinthine beauty that reflects the independent spirit of its creators, notably the DIY punk ethos of guitarist Efrim Menuck. A sequence of free-flowing movements and interludes, *East Hastings* is by far the most guitar-driven piece here, as austere picking shifts to a thrashing crescendo of distortion, ably employed by filmmaker Danny Boyle in his apocalyptic horror 28 Days Later.

Download East Hastings

THE SERRE IN MICHAEL STREET STATES CONTROLLED AND ALL AND ALL

WORTH A SPIN

EXPLOSIONS IN THE SKY THE EARTH IS NOT A COLD DEAD PLACE (2003)

One of post-rock's trademarks is an eagerness to ambush the unsuspecting listener with torrents of hellish noise as a kind of post-sauna cold plunge, and Explosions In The Sky's early work is full of such moments. The group's third outing is more affable, though. There's little diversity between tracks, save perhaps the brisk, martial drumming that bookends the album, but what remains is nevertheless a breathtaking example of what instrumental rock music can do.

Download Your Hand In Mine



DON'T WISS OUT

SLINTSPIDERLAND (1991)

Slint were one of the first fish to crawl from the primordial, post-rock sea, emerging from the 1980s American hardcore scene with a sound that combined complex guitar structures with a bleak, introspective palette. Much of Spiderland's unsettling atmosphere can be attributed to guitarist Dave Pajo's dissonant guitar lines and unusual use of harmonics, particularly on the proto-math rock of Breadcrumb Trail. Good Morning, Captain's machine-like drone brings the tension to breaking point, and despite the album being punctuated with moments of sonic violence throughout, the gut-wrenching finale is considered the band's finest moment. **Download** Good Morning, Captain

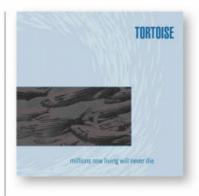


WILD CARD

RED SPAROWES THE FEAR IS EXCRUCIATING, BUT THEREIN LIES THE ANSWER (2010)

Stalking the border between post-rock and heavier acts like Russian Circles, Red Sparowes offer a thoroughly guitar-driven take on the post-rock formula. There's an eclectic mix here, from Emma Ruth Rundle's clean leads of A Swarm to guitarist Bryant Clifford Meyer's euphoric trem-picking that smothers Giving Birth To Imagined Saviors. Though hardly reinventing the wheel, it's hard to argue with the skill Red Sparowes display, particularly as Rundle's eerie, shimmering drone rings across the climax of closer As Each End Looms And Subsides.

Download As Each End Looms And Subsides



ALSO RECOVIVIENDED

TORTOISE MILLIONS NOW LIVING WILL NEVER DIE (1996)

Experimental without being inaccessible, proggy without being overblown, the sophomore release from Chicago's

Tortoise is an album that illuminates the possibilities of traditional rock instrumentation. Described as an exploration of "texture, space and mood", many of these songs are driven by jittery, jazz-like rhythms onto which ubiquitous post-rock axeman Dave Pajo adds embellishments and tonal accents. Though the opening 20-minute oddity *Djed* may prove a little too aimless for some tastes, follow-up track *Glass Museum* rewards the listener with a slab of slow-burning math rock.

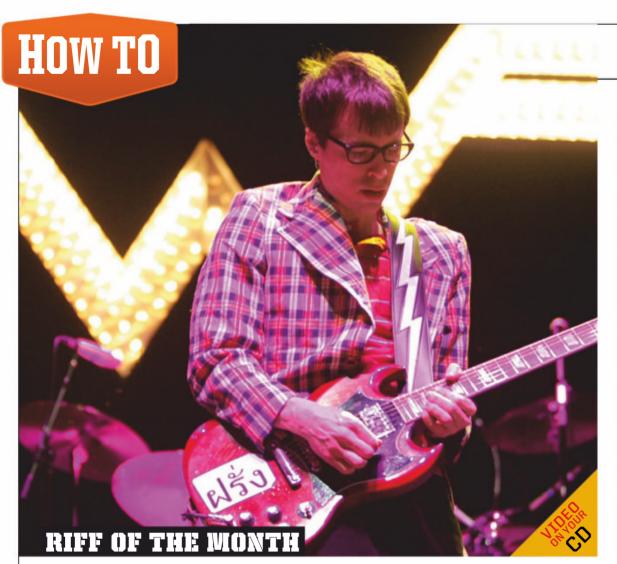
Download *Glass Museum*

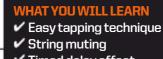
SIGUR RÓS
INNI

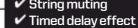
LIVE

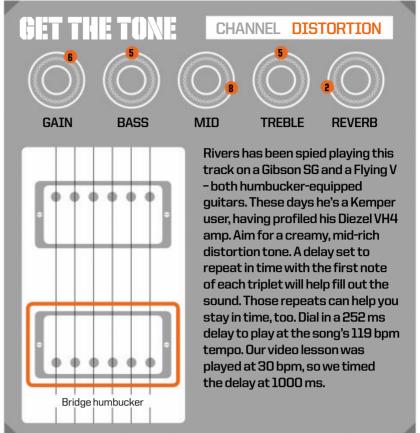
SIGUR RÓS INNI (2011)

Unconventional music rarely translates to mass popular appeal, but the haunting, existential weirdness of Iceland's finest sons has proven a happy exception to the rule: frontman Jónsi's preference for playing electric guitar with a cello bow gives highlights *Glósóli* and *Hafsól* an absolutely unique, shape-shifting quality. Although the constraints of bowed guitar mean there's perhaps less technical nuance on offer than some would like, the dream-like textures of *Svefn-g-englar* and terrifying black hole of feedback that closes *Popplagid* make for a fascinating journey.









WEEZER

The End Of The Game

s if the forthcoming album title weren't enough (it's called Van Weezer, by the way!), Rivers Cuomo's face-melting tapped intro in this early single gives

the game away for anyone uncertain of the band's current trajectory. An affectionate homage to game-changing Eruption guitarist Eddie Van Halen, The End Of The Game's riff is super-fast and sounds flash, too.

Put speed to one side, however, and you have a riff that's not too tough – if you practise slowly, of course. We've played it at quarterspeed in this month's video so you can pick out the notes. Aim for accurate fretting and firm tapping so the notes ring out clearly. Next, turn your attention to keeping the idle strings quiet by resting your fingers against them. It's tricky to find the perfect position so check the video to see how to do it.

Finally, note that Weezer's original was recorded with the guitar tuned to E_b standard (E, A, D, G, B, E), but we've stayed in E to save you retuning.

CHEAT SHEET...

Appears at: 0:00-0:17 Tempo: 119 bpm

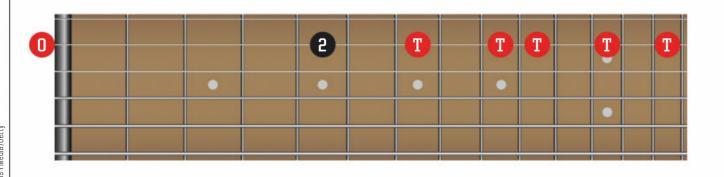
Key/scale: E major scale

Main techniques: Tapping / string muting









These are the notes you'll be playing in the riff. The open string and 5th fret E are a hammer-on, then all the other notes are tapped. The riff is a run that goes 'tap, open string, 5th fret'-simply repeat the pattern and change the tapped notes.



HOW TO

GETTING STARTED WITH...

PEDAL TONE RIFFS

What do a church organ and your guitar have in common? Let us explain...

"Pedal tones? So this is about stomp boxes?"

Pedal tones is actually a reference to the pedals found on organs – like those you see in churches. The organist would step on these pedals to produce a long, sustained 'pedal' tone – usually low in pitch – to provide a deep full sound to accompany the notes played on the 'regular' part of the organ by the player's hands.

"Okay, I guess. What's it got to do with guitar playing?"

Guitarists use the pedal tone a little differently. Rather than have a sustained note ring out (which is usually called a drone), guitarists use the pedal tone as a constantly repeated note that stays the same while notes and chords move around it.

"Fair enough, where can I hear them in action?"

We're glad you asked! You can hear it in old-school 80s riffs like Bon Jovi's Raise Your Hands and Van Halen's Man On A Mission. If you want to hear an advanced version of a pedal tone riff, the driving bass riff heard on Muse's Hysteria changes between multiple pedal notes.



"I'm ready for action, where do I start?"

Example 1 is a classic metal style riff that shows how you can use the palm-muted fifth string as a pedal note against two-string powerchords played on the middle two strings. The low A note drives the riff along, while the powerchords provide the contrast.

"That was easy enough, how else can I use them?"

They can also be used on higher strings as riffs or even in solos. Just check out the solo on Red Hot Chili Peppers' Suck My Kiss. Example 2 uses the open first string as the pedal tone while quickly moving around the neck. You can hear guitar legend Angus Young use this kind of idea in the AC/DC classic Thunderstruck.

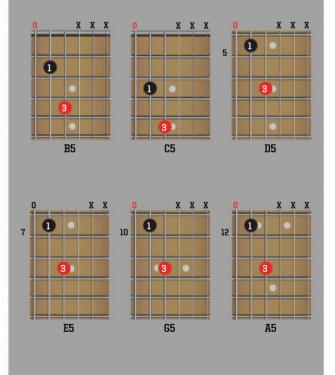
"So far so good. Is there anything else I can work on?"

Plenty, as it happens. We've shown you some basic riffs to get started, but there's lots you can do to modify our two examples. Experiment with changing the order of the chords or notes between the pedal tones. Alternatively, change the number of times you play the pedal tones between the chords. Once you're done with that, we've provided you with some more shapes so you can make up your own riffs.

PEDAL POWERED!

Easy chords for any style

Try out these six chords over a sixth string pedal tone. And, remember, it doesn't have to be metal! With a bit of creativity, these ideas can work in rock, indie or any electric guitar style really.



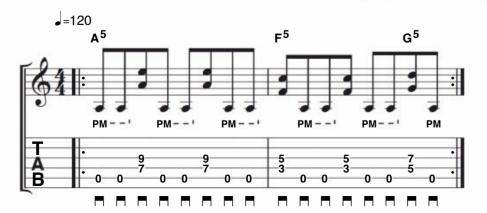
else I can work on?"Plenty, as it happens. We've shown y

1 POWERCHORDS AND PEDAL TONES

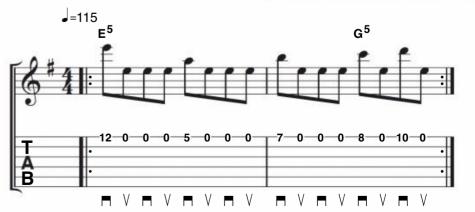
TRACK 07

2 PLAYING ON ONE STRING

TRACK OS



Make sure you mute the fifth string a little, but play the powerchords un-muted – this will stop the pedal note blending with the chords.



As soon as you've played each fretted note, release pressure on the string and start moving to the next fret - this will help you play the riff at full speed.

1958



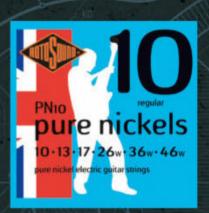
ROTOSOUND HAS HAD A COMPLETE FACTORY REFIT WITH ALL NEW COMPUTER CONTROLLED MACHINERY DESIGNED AND BUILT BY JASON HOW FOLLOWING IN HIS FATHERS TRADITION







£8.95



£9.95



£14.95

THESE NEW STRINGS ARE WORLD BEATERS FOR **POWER**, **SUSTAIN** AND **LONGEVITY** PACKAGING THAT WEIGHS 3 GRAMS, ONE TENTH OF THE WEIGHT OF ALL OTHER BRANDS. THESE STRINGS WILL NEVER TARNISH OR CORRODE AS THERE IS NO PAPER OR CARDBOARD TO SOAK UP MOISTURE





COUNTRIES WORLDWIDE

PLAYED BY SOME OF THE MOST FAMOUS ARTISTS SINCE 1960

JAS OF CHENTYLINET

IF YOU HAVEN'T USED ROTOSOUND FOR A WHILE YOU WILL FIND A LOT HAS CHANGED. WE WELCOME FACTORY VISITS PLEASE EMAIL JASON@ROTOSOUND.COM AND I WILL SHOW YOU WHAT MAKES ROTOSOUND A TRULY LEGENDARY BRAND



WORLD FAMOUS MUSIC STRINGS
WWW.ROTOSOUND.COM





THE FX FILES TG'S CLASSIC STOMPBOX GUIDE

BASS

This control cuts the amount of bass in the drive sound.

GAIN

This pot controls the amount of gain delivered by the amp stage.

VOLUME

This controls how much output the pedal delivers.

TREBLE

This is a simple treble cut after the amp stage.



TOGGLE SWITCH

On later models of the Timmy there's a 3-way toggle switch with additional clipping options - a compressed option with extra symmetric diodes, and an asymmetric option.

DIPSWITCHES

On many models of the Timmy there are internal DIP switches for adding additional clipping diodes.

TIMMY

One of the original boutique drives, the Paul Cochrane Timmy has been endlessly cloned due to its fantastic sound and versatile tone-shaping options



aul Cochrane's Tim overdrive was one of the original boutique overdrives,

generating a dedicated following based on its open, un-compressed drive tone and good EQ options. The larger enclosure size put some off, however, and the boost wasn't necessary for those who were using other pedals to stack with the Tim - one of its main strengths. As a result, Paul also offered the smaller, four-knob Timmy, which became

possibly the first 'transparent' boutique overdrive.

The Timmy is squarely in the Tubescreamer family tree, but lacks the pronounced 'mid-hump' bump of the Tubescreamer, and is less compressed, particularly at lower gain levels. With the clipping options set to minimum, it's a very potent boost, useful for driving tube amps into valve saturation.

Even after it exploded in popularity, the Timmy stayed at a reasonable price point, with the units still produced by Paul himself.

Although it's relatively easy to get hold of a Timmy either used or via a US stockist, it's become much more common for players to build their own, or purchase a clone.

As many companies aren't exactly

transparent about what they're basing their designs on, any time you see a boutique transparent overdrive layout with volume, gain, bass and treble, there's a good chance it's either based on a Timmy, or a straight-up clone of one. Moreover, Paul has continued interacting with the DIY pedal community helping them with designs that are Timmy-like.

THE TIMMY IS SQUARELY IN THE TUBESCREAMER FAMILY, BUT LACKS THE PRONOUNCED 'MID-HUMP' BUMP

UNDER THE INFLUENCE







LOVEPEDAL AMP 11

FROM £225

Side-by-side schematic analysis has shown that the Amp 11's main drive circuit is a Timmy Clone. Now, you might think that would mean the boost would be that found in the Tim, but you'd be wrong – supposedly it's based on the Electra, which makes the Amp 11 a bit of a different beast with that into the gain-stacking equation.

CALINE PURE SKY

FROM £26

The Caline Pure Sky is a straight-up Timmy clone without the clipping options. Also, where the original Timmy had both EQ options functioning as cuts, the Pure Sky has them operating perhaps more intuitively; that is to say that turning bass or treble clockwise increases that level, as opposed to cutting it.

WALRUS AUDIO MAYFLOWER

FROW **£169**

The Walrus Audio Mayflower is a Timmy with additional power-line filtering and signal chain buffering, and it's also been suggested that their Warhorn is a Timmy with the additional clipping diodes permanently engaged. It certainly sounds very Timmy-like to us.

CLASSIC TONES

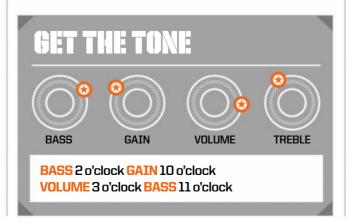
GET THE TONE #1 LOW GAIN DRIVE

First, note that the Timmy's EQ controls are cuts, making them function 'backward' to controls that increase the level of an EQ band. Depending on the type of your amp, you might need to adjust treble and volume to taste; we prefer a punchier, brighter sound. For a more classic blues tone, pull back the treble. To let a valve amp do the heavy lifting, push up the volume, and pull the gain back further.

BASS 2 o'clock GAIN 9 o'clock VOLUME 2 o'clock BASS 10 o'clock

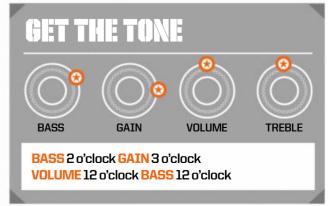
GET THE TONE #2 AMP CRUSHER

Depending on how your amp responds to having the front end smashed, you might need to alter the EQ. Ours tend to brighten up at higher volumes, so we pull back the treble, and add a bit more of the pedal's gain to compress the signal going into the amp. While this creates singing tube saturation, bear in mind it'll also be a big jump in volume!



GET THE TONE #3 GRUNGY DRIVE

If your amp is particularly dark, you might need to pull the bass back a bit so it doesn't get 'woofy'. We tend to think of 90s US-sounding grungy bands with a bit of a classic rock vibe to them when we use higher-gain settings on the Timmy into a tube amp, like Pearl Jam or Swervedriver.



T' ON TRAC

TRACKS 11-12

Our short backing track is a simple A-chord jam -so either jam along on a simple open A shape or try playing the notes of the chord one by one to hear how they sound.



THIS MONTH...

Improve your playing with some inside knowledge on these essential chords



e get it – music theory divides opinion. Some guitarists are into theory and it helps

them develop their playing.
Others, well, just can't be bothered with it. That's fair enough – countless rock icons can't read a note of music or tell you about the ins and outs of harmony. Still, we'd argue there's plenty of easy theory that'll help every guitarist improve their playing...

Which brings us on to this month's lesson on major chords. You're bound to know plenty of

these easy shapes – they're the first things most guitarists learn to play. So how does knowing the theory help you?

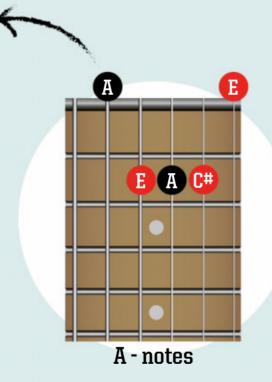
Well, let's break it down. Once you know how chords are built you can figure out new shapes anywhere on the fretboard. And if you can do then you can also play arpeggios across the fretboard too, and in any key. Finally, there are potential improvements to your lead playing to think about – arpeggios are at the heart of countless solos after all. Follow our lesson and get to grips with some theory basics.

You know how to play an open A chord, right, but do you know the notes? Well, from the lowest string to the highest they're A, E, A, C# and E. Three different notes, then: A, C# and E. It doesn't matter that there are two 'A's and two 'E's that's just the way the guitar is. If you didn't fret those extra notes

you'd end up playing

open strings which

aren't part of the chord.



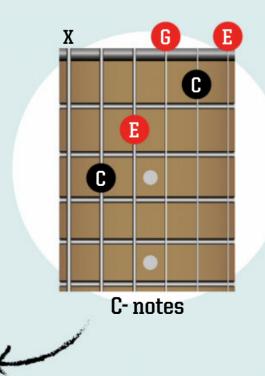
X A E A - intervals

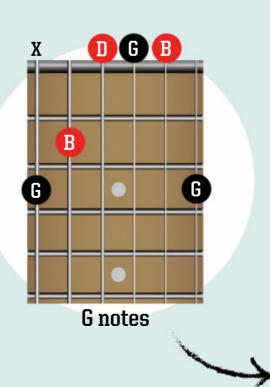
TIME FOR THE INTERVAL

Knowing the notes of any chord is a good start but it's only really useful if you can apply the info to build more chords - and that means figuring out how the gaps or 'intervals' between the notes work. The gap between A and C# is four semitones; then C# to E is a three-semitone interval. This 'four-three' pattern is how you can work out the notes for // every// major chord.

BABOUT THAT!

Try the four-three idea to work out the notes of a C chord. Start on a fifth-string C note then go up four semitones. Either stay on the fifth string or cross to fourth string – either way you should arrive at an E note. From there it's another three steps to the next note - a G. Plav any C chord on the guitar and you'll find it's a mix of C, E and G notes.





G WHIZ!

To hammer our point home, here we're doing the same thing with a G chord. Start on G then ascend four semitones - you'll arrive at a B; three more steps will take you to a D note. Hey presto! G, B and D are the notes of a G chord. Check it against any G chord - it'll be a mix of these three notes. Most important though is that you can work out any major chord this way.



A BEETRONICS SWARM FUZZ HARMONISER PEDAL



otal Guitar and Beetronics have paired up to give you a chance to win a Swarm pedal worth £190.
Beetronics explain more about the pedal: "The Swarm is an Analog Fuzz Harmoniser that sounds like a thousand killer bees coming to get you! It basically turns your input signal into a square wave, then multiplies and divides the frequency of that wave, giving you nine possible harmonies in two different octaves.

Modulation is applied to the harmonies making them go from a nearly perfect tracking harmony, to a wild and uncontrollable swarm of mad bees."

Here's what you need to know about the Swarm:

 SWARM = Fuzzy input signal + modulated harmony + sub-octave of harmony

- There are nine harmonies to select (includes major 2nd, major 3rd, minor 7th, perfect 5th and multiple octave-options)
- Features intuitive control of modulation via two interactive parameters (STING / FLIGHT)
- The modulation ranges from perfect-tracking to super-wild

To be in with a chance of winning, just answer this question: Where are Beetronics Swarm pedals made?

A) California

B) Paris

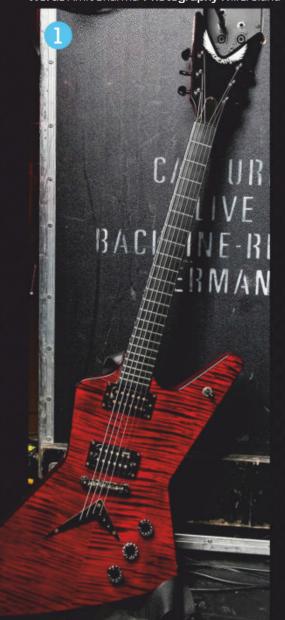
C) Oslo

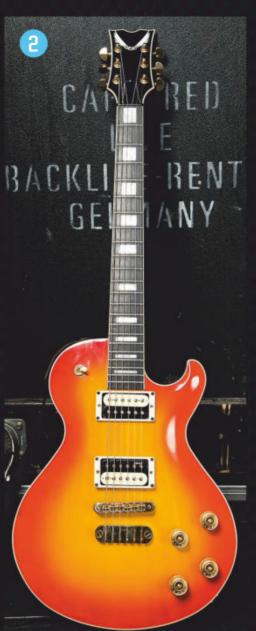
To enter, go to bit.ly/tg329competition, fill in your details and answer the question. Good luck!

Competition closes 13 March 2020



Words Amit Sharma Photography Will Ireland







SEVENDUST

Sevendust pair John Connolly and Clint Lowery talk TG through the rigs on their Return To The Kingdom tour...

t had been a fair while since Sevendust had last performed on UK soil – seven years, in fact something that the band members attributed to bad luck whilst on the search for new management. But, thankfully, despite the bumps in the road (and, in more recent times, having had to cancel tour dates), the Atlanta Georgia alt-metallers met with some good luck too... They would eventually sign up

They would eventually sign up with the company who represent Alter Bridge and Mark Tremonti, inking a new deal with Rise Records for their twelfth full-length album All I See Is War, as well as landing a higly prestigious Grammy nomination on their prior album Kill The Flaw.

Meeting with the band at the end of 2018, it was clear they were making up for lost time. Shortly after the soundcheck on the second night of their Return To The Kingdom UK run, TG would find guitarists John Connolly and Clint Lowery reminiscing over the previous night's comeback and eager to take us through the gear they were using to make a lasting impression...

CONNOLLY CONNOLLY

DEAN JOHN CONNOLLY Z

"I have my JCZ signature prototype out with me again. I didn't retire it but I did pull it off the road for a while, as it was a USA custom shop and first of its kind. It doesn't even have the JCZ markings or any of that stuff. So this is what everything was modelled after... it's a pretty straight shooter. I love those Explorer/Z shapes but I've always preferred the longer, Fender-style 25.5-inch scale

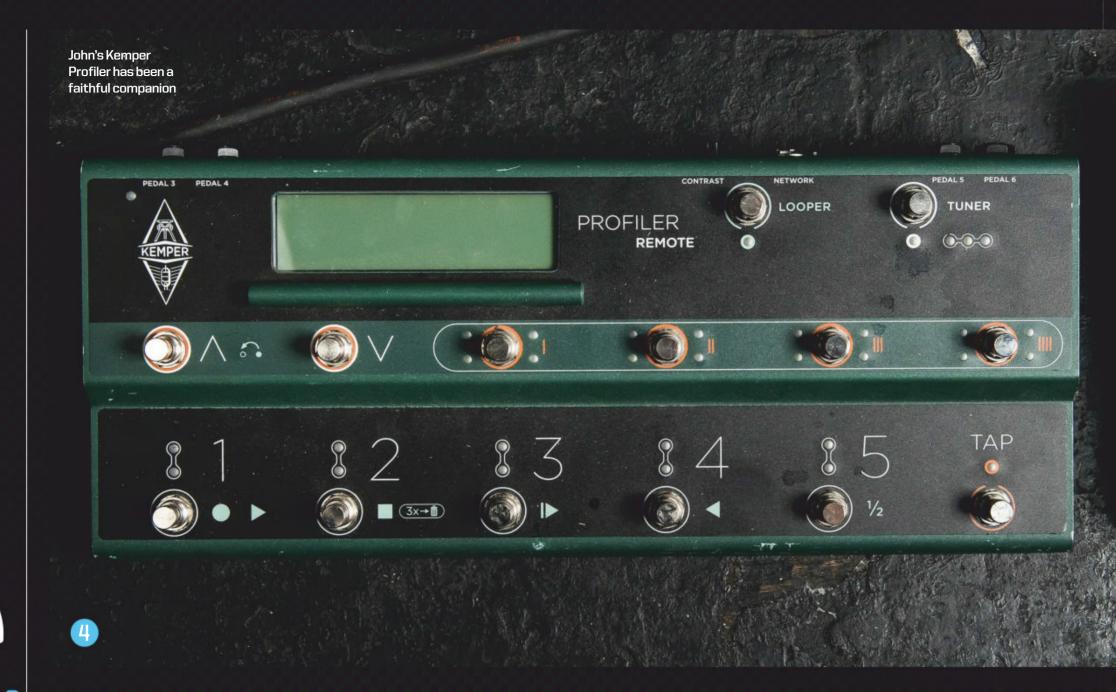
length. It's tough to find them made like that, though Jackson make the Kelly, which is a similar shape. Dean said go ahead and put whatever you want on it so naturally I love this guitar. I've had it for about eight years or so. It's been quite lucky, there aren't any major dings though it's been heavily used – it's my studio workhouse that's been on every Sevendust and Projected record since Black Out The Sun. It's in surprisingly good shape for its age... I'll probably break it now I've said that! I knocked the binding off the back of the neck once, I was in a hotel and didn't have a guitar stand so tried to balance it... obviously it went right into a table. I have other guitars that have way worse battle scars."

DEAN THOROUGHBRED

"Dean made me this custom shop Thoroughbred and I've had it for about seven months. These are Les Paul-shaped guitar with the 24.75-inch scale length. I've come to find that as much as I love the fight of the Fender scale, sometimes it's cool to have something a bit more tucked-in and underneath you. I was missing the feel of Les Pauls, something smaller, tight and compact – and this covered that perfectly. I'm not a big guitar collector. I've got a ton of Dean stuff, a handful of Les Pauls and a 1991 Explorer in this ugly yellow colour, though it's one of the best guitars I own. Mark Tremonti is a dear friend of mine and I've seen how far down that road he's gone down... I respect that, but I prefer to stick to a simple few go-to things, out of laziness or comfort or both. Once I open that door, I'll start spending all my money!"

DEAN Z (BLACK/GOLD)

"This is actually an import model I got, one of the earliest guitars I picked up





from Dean. Any time you pick up these guitars, they're always in tune and they always sound good. My first Z was one of the Lost One Hundreds, then I got a custom shop Soltero and eventually ended up with all sorts of guitars. If you use a bunch of tunings, it's better to have a few instruments... it's less stressful for our techs. We don't break strings a lot but it always happens when we're less prepared! Sometimes if I really love a guitar sound one night, I'll wave off my tech and just tune on the fly... I wouldn't go a step and a half, but if it's close enough, I'd rather just keep it."

KEMPER PROFILER

"I've been using the EVH Fender stuff since 2008, as soon as we got sent them. I don't know what it is about that blue channel, but every time I go to it... I get more. I've used it on every record since. So the first thing I did when I got my first Kemper was profile all of my EVHs and I also own a Marshall 71 Super Lead... it's one of the best-sounding amps I've heard. It's getting older now, I have to warm it up for half an hour just in case. You say the blessing and hope everything's good. I spent around 45 minutes refining the profiles, the more you play, the closer the gap gets and by the end I couldn't tell the difference. Our clean channels are the EVH green channel with a bit of delay and chorus... the way I look at my Kemper is an expanded version of what the EVH can do. I

stick to five channels varying in gain and delay, though I don't use the red channel anymore. I did at first before realising the blue sounds better almost because it has less gain... nothing gets in the way of its clarity. I only tend to use chorus on my clean parts on the records. Our producer Michael 'Elvis' Baskette has a pedal closet that's like a candy store... you never know what he'll pull out of there, even if you've seen it all. It's like Frankenstein's lab. Sometimes we forget what we were hooking everything into! The only effect I'm adamant about having is delay, though I'm not bothered by what kind it is."

DUNLOP CRY BABY WAH

"I'm pretty specific about my wahs. I have a standard Cry
Baby, which I'm using now, plus a
Fulltone and a Fulltone Deluxe –
and I prefer the regular version
despite the extra features on the
Deluxe – as well as a Dimebag wah.
Some of them have too much,

"IF I REALLY LOVE A GUITAR SOUND ONE NIGHT, I'LL WAVE OFF MY TECH AND JUST TUNE ON THE FLY..."







I don't need all the extra voicings, boosts and gain stages. What's more important than all those bells and whistles is a good sound and nice sweep. My Fulltone wahs stopped working for whatever reason, so I figured it would be nice to go back to the classic Cry Baby. I've tried the Hendrix ones, Slash models, Vox wahs, Jerry Cantrell's signature... but I just like this one."

DIGITECH WHAMMY 20TH ANNIVERSARY

"This is the silver anniversary model. We also have some of the newer ones with the toggle switch going from left to right... they drove me nuts! The sweep of the pedal is so awkward and weird, it's almost late... everything happens in the top half of the sweep. We've tried them all, this one is modelled on the original, stocky and solid units and has that same sweet spot. At one point, I was using Mission controllers for wah

and whammy stuff, but I found I didn't like putting my foot on something and it switching on right away. I decided to stick with the real deal for these kinds of pedals!"

CLINT LOWERY

PRS CLINT LOWERY SIGNATURE

"I have two of these out with me, they're my main guitars tuned to B. They're made in flat black with my signature binding and have a 25.5-inch scale length. Instead of the birds that PRS use, I had them make me a custom inlay... which basically represents my initials. The body is a slight alteration for PRS, it was actually one of the things they were reluctant on. I think they're very adamant about the shape of their guitars, I wanted a sharper edge and in the end we met in the middle on it. These are exactly the same as each other, though one is









in an open B tuning that we like to use a lot: B, F#, B, E, F#, B. We've consolidated our setlist a bit so that we only need three guitars."

PRS P22

"This P22 is one of my favourite guitars, it's a really great example of the right pickups and wood. I use the piezo for acoustic sounds through a clean sound on *Angel's Son* and it sounds amazing. I'd say PRS go that extra mile with their guitars, these things play themselves... after all these years, I just can't play anything else."

KEMPER PROFILER

"We're both using the same EVH profiles for a lot of the set. To be honest, I've been using this thing on a very onedimensional level, sticking to just a few settings. But I'm going to start profiling the exact sounds for how these songs were recorded, trying to nail the sounds a bit more by setting up whatever I used on that album. I don't want our engineers to have to deal with new sonics with every song, but I'll definitely be going a bit more in depth with it. There's also a PRS Archon profile I really love. I was really reluctant about those amps at first, because PRS are not known for high-gain amps, their stuff tends to be more bluesy sounding. But I went to the factory a few years ago and ended up trying one out and fell in love. I was actually thinking about going to Orange at

are good and get close enough considering the efficiency they offer... as well as saving you the tap dance. I had a mad pedalboard back in the day. I love stomp boxes and we use all sorts in the studio. I'm a huge fan of the Phase 90 and EVH Flanger because of Eddie Van Halen's tones on songs like Hear About It Later, which was off Fair Warning. Whenever I want that kind of modulation, that's what I'm hearing in my head. I love my TC Electronic stuff, old Boss delays, the Big Muff, Micro-Synths and Uni-Vibes plus lesser known gear like the Captain Coconut germanium fuzz by Foxrox. At the moment I'm just using the whammy inside the Kemper, there's a latency there that almost makes it more dirty and grimy. John hates that... But I actually like how it ends up sounding!"

the time, but ended up sticking

incredible! The Kemper effects

with this. The mids are

"THERE'S A LATENCY THERE THAT ALMOST MAKES IT MORE DIRTY AND GRIMY. JOHN HATES THAT..."



Words Jonathan Horsley

Marcus Robinson

"IFIONLY HAD THIS PIECE OF GEAR, MY LIFE WOULD BE COMPLETE!"

NORWEGIAN BLACK METAL TRAILBLAZER **THSAHN** ON WHY HE SPENDS TOO MUCH MONEY ON GEAR HE DOESN'T NEED, AND WHY PLAYING PROGRESSIVE MUSIC IS ABOUT THINKING BIG, NOT SHREDDING HARD...

THE WANDERER

"I am not a very technical guitar player; 'progressive' is more of a mentality"



he act of songwriting is much like telling a story. When it works, the music alone can do much of the heavy lifting, creating atmospheres, building worlds and drawing the audience in. That is how Ihsahn sees it now, seven albums and one EP into a solo career that has seen him

pursue a progressive extreme metal sound that's placed at a remove from the tempestuous, quasi-Wagnerian black metal he pioneered with Emperor. That is how he has seen it since the beginning, when, as a boy living on his parents' farm near the Norwegian city of Notodden, he learned guitar by jamming along to Iron Maiden songs while playing bass on the pedals of his electric organ.

"I guess by instinct, all through my career, as a subconscious influence, I have just tried to recreate Seventh Son Of A Seventh Son by Maiden," he says. "Because, in my head, just by nature, I know how I want a full-length album to feel. And in particular, that album. It's conceptual. It's folklore. I practically learned playing guitar from that album. Another album that was huge for me was King Diamond's Them, and consequently Conspiracy – both full-story concept albums."

Ihsahn found these concepts totally immersive; the ebb and flow of these albums interpreted as dramatic arcs within the song-craft, each track essential to the next, the sequencing similarly vital. Are the likes of Iron Maiden and King Diamond prog? Maiden's latter-period sound has evolved towards long-form progressive compositions, but the King? No. That seems too much of a reach. Ihsahn, however, for his sins and to his bemusement, has found himself a paragon of progressive extreme metal. He sees progressive music as a state of mind, one that guides his process.

NORSE CODE

His latest EP *Telemark* was no different. As with every release since Emperor, it started with a blank page into which titles are written before a note has been composed. This time around it was Ihsahn's wife and co-collaborator, Heidi Solberg Tveitan, aka Ihriel, who suggested the title. Once the titles are down, the music can follow. "I will always have titles. *Telemark* is the county I come from, and it was natural then for the riffs to be very inspired by traditional Norwegian music, especially from this county, the Hardanger fiddle and folk elements. The title, in that respect, really influenced me using those kinds of voicings and riffs for that song."

Ihsahn will typically sketch out what he wants from a song and how it fits into the concept, what instrumentation he wants to use, what tones might serve the concept. This isn't about putting limitations on where he might take the record but instead allows him to focus his mind and keep his compositions tethered to the whole. And it allows him to think bigger. This, if anything, is what Ihsahn believes is what defines progressive music. It's not a question of technique, melodic abstraction, or awkward time signatures. Progressive music is a state of mind, a sensibility.

"I have never tried to be progressive, as in being technical or difficult," says Ihsahn. "It was just my fascination for trying to bring new sounds and new colours to what I do, and I kind of

IHSAHN

⇒ extend the palette of what I can do with music. I wouldn't say my music is generally very technical. I am not a very technical guitar player; 'progressive' is more a mentality. Of course, you wish to push things further – at least that's my intention!"

NEW HORIZONS

Chasing the bigger ideas is easier when you have the casting vote. Emperor was one of the most musically expansive of the early Second Wave black metal bands. There was symphonic grandeur to their sound, total aggression, and arrangements that sounded alien enough that legions of would-be copycats could never quite replicate. Their horizons were broader, and yet, looking back on how he worked compared to how he works now, Ihsahn is appreciative of the freedom you have when pursuing a solo career. Playing in a band is as much about learning to compromise and bargain as it is about being able to perform your parts. A solo artist can take their sound anywhere, just so long as they can play the parts. And if they can't, well the usual rule applies to anyone playing music; collaborate with the most talented musicians you can find. "I have this huge privilege of having people around me that I trust and that are in the same kind of artistic mindset," says Ihsahn. "Most importantly, Heidi. She knows me so well and we are so in sync. She will listen to my ideas and help me filter out the good and the bad. The drummers I work with are supertalented, with wide experience."

THE GEAR SLUT

Where no one can help is when you are sitting alone with just the guitar and working out what works in terms of arrangements and tone. If ability constrains the former, technology has made the latter a question of discipline - there are simply so many options for today's player. Even a kid with a 6-watt, battery-powered Line 6 Micro Spider will have options, with onboard effects and four amp models to choose from. That is plenty to be getting on with. Ihsahn now runs a Kemper Profiler, with an onboard power amp so he can run it through a speaker cab, and that presents as near to infinite tone options, certainly more than anyone could need.

That still isn't enough to stop him from wanting more, though, nearly



"IF YOU ARE A KID TODAY, YOU CAN EASILY GET LOST IN ALL THE BULLSHIT"

spending all his money on a vintage Neve mixing console. In a moment of clarity he demurred. "I came to my senses and thought that is probably not what's holding me back," he says, chuckling at the insanity of it all. "I would say gear is really important but I kind of got off it. I have spent too much money from reading up on Gearslutz. com. You know the feeling, 'If I only had this piece of gear, my life would be complete!' by the time you get it there are 10 other things, and £100,000 later you are still there. No! The most important thing when it comes to creativity is having something that works, and in that respect now I am running a Kemper."

Still, that's a lot of options. Some are essential. Ihsahn leans heavily on the cab simulation for the studio. It speeds up his workflow. No more agonising over mic placement, doing a take, and re-micing. Adjusting to multifunctional tools such as the Kemper is fast becoming an essential skill for

Ihsahn onstage with a custom eight-string

Aristides

today's players. Ihsahn wouldn't change anything, but does worry that there is a generation coming through who have never had the chance to get hands-on with their tone, to do the experimenting for themselves. "They have access to all these things, all this equipment is very cheap now, but it doesn't give them the opportunity to explore the different elements of the signal chain," explains Ihsahn. "I was doing front-of-house for some young bands back in the day and they would come with their huge Boss multi-effects boards, with cab simulations, plugging that into the front of a breaking-up Marshall and complaining that the amp sounds horrible!"

In some respects, Ihsahn is in a similar position. With Emperor, and similarly with his solo work, he has less space in the mix for time-based effects such as delay or echo, or to bring in modulation. "I admire all these players who can integrate certain effects and old-school fuzz boxes, phasers, and

As for guitars, in the last few years Ihsahn has moved from using Ibanez's RG Series to a variety of six-, sevenand eight-string custom electrics from Aristides. An avant-garde choice, Aristides use injection-moulded arium bodies, a lightweight composite resin that is injected into a glass fibre and carbon exoskeleton. Aristides use Richlite fretboards, an eco-friendly material made from recycled pulp. "I make sure that they have different pickups and different setups so that they have this personality where I can pick them up, and it is partly the instruments themselves that influence how I write," explains Ihsahn. "I read somewhere that Jack White likes guitars that are really cumbersome to play because he likes the struggle. I am the opposite. I just want instruments that feel like my guitar, and that I am comfortable with so that when I need it to do something it just does it."

HARMONY CORRUPTION

And therein is a lesson: choosing the right tool can make the job a lot easier. Save your efforts for the struggles that matter. Playing a progressive strain of extreme metal presents its own challenges. Big ideas lead to more complex compositions. As Ihsahn maintains, you don't have to have to shred, but it helps if you know your way across the fretboard. In that sense, music theory can help. Ihsahn picked up theory along the way, but there are abundant resources for players looking to get their heads around scales, chord progressions, whatever tickles your modal fancy. "I would absolutely recommend getting at least a basic grasp of music theory because in my every uneducated approach to this I have had some great a-ha moments!" says Ihsahn. "I hear this amazing chord structure or arrangement and I have absolutely no idea how people could manage to go down that road, and then later on I learned that these kind of compositional techniques, or arrangement techniques, that have eventually led me to similar results, and it is just very, very rewarding."

A little can go a long way, too
- especially in extreme metal, when

borrowing simple concepts from other genres can put an almighty slice on your sound. "Every time I come across something interesting, a concept in the jazz world or in modern orchestral music that's totally basic, in my world it becomes a whole new thing!" laughs Ihsahn. Right now, he is trying to wrap his head around the concept of negative harmony -"reharmonising, but across an edge of the circle of 5ths" and checking in on Jacob Collier's YouTube page to get a bead on it. "YouTube is full of them," he laughs. "The information and the skills that you can acquire from just using the internet now is amazing. On the other hand, I am very, very pleased that I grew up without that because instead of playing guitar I would end up watching all the stupid things. If you are a kid today, you can easily get lost in all the bullshit."

LOW-END THEORY

Ihsahn on how his extended-range guitars help him think outside of the box

o many guitarists will approach an eight-string to basically do what they do on a six-string but lower! For me, lower is what you have basses for. It is not that interesting for me. The most important thing about getting a seven-string – and especially an eight-string – is that it skips my muscle memory, so I can write on guitar but not feel like I am

repeating myself by doing what my fingers do when I pick up a six-string.

"With the eight-string you can't be doing the same chord voicings in that register so you have to rethink how you approach it. There are other colours there. You have to rethink how you would arrange the bass parts. It changes the timbre of the instruments and the arrangements."

A Kind of Mords Amit Sharma of Magic Color of Magic

Joe Satriani, guitar hero to guitar heroes.

To Brian May he's "a friend and an inspiration".

To legions of shredders, he's a master of the art. With new album, Shapeshifting, coming soon, Satch tells TG about his "emotional" and "fruity" music, the gear he's using new and old nand how he is still developing as a player.

Plus: Satriani disciples pay tribute to their maestro...

ou're a great friend of mine, I'm proud to call you my buddy," said Brian May, in a video inducting Joe

Satriani into the Metal Hall Of Fame in earlier this year. "But you have been a friend and inspiration to so many," noted the Queen legend. "You've done so much for guitar playing, lifted it to a new place and, all around the world, people like me are still marvelling at what you do."

Seeing the footage for the first time after the ceremony, the newly inducted guitarist felt shocked and touched by such kind words from one of his earliest inspirations, joking that he would have probably been reduced to tears if he'd been in front of an audience.

"Brian is such an amazing human being, brilliant as a composer as well as player," says Satch, speaking to TG a few weeks after. "You know how it is – within one note and you fall in love with his playing all over again, every time you hear him. That's truly remarkable."

Similar things could be said of Satriani's inimitably tasteful contributions to the guitar world, from his double Grammy-nominated and platinum-selling 1987 album Surfing With The Alien – a commercial breakthrough and game-changer for guitar music at the time – to everything he's achieved since, including his latest masterpiece Shapeshifting. Here the man who wrote the rulebook on shredding with finesse, through a perfect storm of tear-jerking virtuosity and choice-note simplicity, explains why your best music can only come from a real place...



INTERVIEW

The title track on your latest album has a really interesting bend where you pull up on the high E before catching and coming down on the B. Where did you learn that?

"That kind of idea was a vocal or harmonica line, I'm gonna take a guess and say it was Hubert Sumlin or Buddy Guy picking it up off harp players in the 50s and early 60s. It's funny, in my early years everything was a mystery. I didn't even know what a barre-chord was. But I was listening to these geniuses - Hendrix, Page, Clapton, Beck, Winter, Berry, Guy, Townshend on the radio. They all did these idiomatic blues things that didn't make sense to a beginner like me. Sometimes I'd figure things out the wrong way until I saw them in concert. I was playing this lick wrong for so long and then I saw footage of Hendrix and realised it was the first two strings. Moments like that can feel like a revelation. And then I realised the 'wrong' way also had its own unique value."

The solo has some heavy blues mixed in with some more fruity, Phrygian flavours...

"I love that idea, getting fruity! I'm happy you noticed, because it's a compositional subtlety that's very specific to the song. Playing like that in the middle of a song is me stating my true nature. There needs to be some sort of metamorphosis to move through different versions of me and that experience is represented by all the feedback noises using a Sustainiac pickup at the end. There was a compositional thought-process that told me not to go total Phrygian - the way you expressed it is great, I'm playing rock but I'm getting sorta fruity here and there! I could have sweep-picked but that doesn't do anything other than display the fact I've practised... I'm looking for an emotional statement so I can tell people how I'm really feeling."

Out of the 80s virtuosos, you've always targeted notes with a level of restraint. Did that come naturally?

"When I was younger and doing sessions, I would see an opportunity to throw in a #4 or something outside and make it work. I'd get this look from the producer, 'What the hell, don't do that!' They just wanted the expected notes – which, of course, would bore me. Then Surfing... took off and the same people were calling me back asking me to do

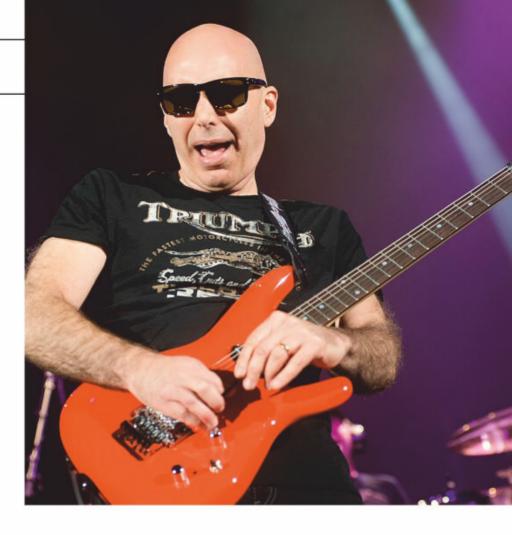
that very thing! It was like, 'You mean you didn't want it before but you do now?' By that point I gave up being a session player. I'd be lying if I said holding certain notes for this length would always work. It's about how you apply the artistry. That's what will make or break you. It has to make sense in that moment in time. Here's a simple analogy: imagine you are playing music for a scene in a film with a cute baby walking towards the camera. You wouldn't play your most grotesque and dissonant notes. But what if that baby is covered in blood and has a huge kitchen knife in its hand? That's totally different! I can't say flat 9s always sound bad, they sound perfectly beautiful in Phrygian or Phrygian Dominant, but if you play a C# when everyone else is in C major you are going to stick out... there's the context!"

Perfect Dust and Falling Stars are great examples of your ability to switch through genres. What were you using on those tracks?

"The overdubs really came together on those songs, as well as Here The Blue River. The main guitars were my JS1CR re-amped through an old Bassman into my 4x12s and the super-clean rhythms went through a Fender FM combo. That solid-state thing is so clear! I sold a lot of my old tweeds and got some new Fenders. They all sound unique and usable, responding well to any guitar you plug in. At one point Chris Chaney [Jane's Addiction] was doubling his bass with one of my 335s through a Marshall 50-watt. Other things got re-amped into a Princeton, Bassman or my JVM head to create a larger sonic picture. Sometimes for a meek solo you want a meek amp and for a bold solo you'll want a bold amp. If they go back-toback then they need to hand off to each other well."

Are there any new pedals that have impressed you recently?

"I used the TC Electronic Sub 'N' Up in the last solo of Falling Stars. The



HOLD BACK

Satriani is known for a level of restraint in his playing – a considered approach that goes back to his session days pedal list was short – the Sub 'N' Up, my Big Bad Vox wah, my Vox Time Machine delay, an MXR Dyna Comp, EP103 and Flanger. There was a Vemuram Jan Ray overdrive on one song. I used my EVH phaser, which felt like a trip down memory lane, going back to the early 80s. I was thinking about what I didn't do in my band [Squares], and one of our rules was trying not to do whatever other guitarists were doing..."

So that's why you steered away from that phaser sound early on?

"In retrospect it was a stupid idea, we should have just done whatever we wanted to do. So I wrote the song Nineteen Eighty in response to that, it's probably what I would have done had I not followed that Squares band rule. I realised I should've used the Phase 90 like Eddie. I saw that pedal and thought I'd rip a solo through it. When I played it to everyone, the

first thing they said was, 'Was that a Phase 90?' It's so retro-sounding, but I wanted to celebrate those times."

How else do you challenge yourself and ensure you develop?

"The writing is the most important part for me. It has to mean something to you.

THEY JUST WANTED THE EXPECTED NOTES, WHICH WOULD BORE ME...



SATRIANI'S DISCIPLES

NICK JOHNSTON

anadian virtuoso and Schecter signature artist
Nick Johnston has been melting minds since his
2011 debut. Much like Satch, he's lauded thanks
to his knack for choice – sometimes unusual –
notes that feel infinitely more dramatic than busier lines.

"Before listening to Joe, I don't think I understood how important a role the melodies played in building compositions," Nick says. "He would place the solo in a different spot than everyone else, and open his songs in different ways, he would play the melody refrain in a higher octave, he would use effects differently and wasn't afraid to be dynamic and pull emotion out of three notes. As I dove deeper, I realised he was the guy who'd really figured it out—the balance of technique, tone, melody and production. While players were learning blues from Hendrix and Clapton, I was learning them from Satriani."



orn to a musical family in São Paulo, Suhr endorsee Lari Basilio has been recording her own music since 2011 and has gained some serious online traffic thanks to her exquisitely rhythmic fingerstyle approach. Not only does Satch himself make an appearance on her latest full-length, Far More, but he also invited her to be part of the 2019 G4 Experience tour, making her the first female artist to do so. She says, "Flying In A Blue Dream is probably the song from Joe Satriani that I listened the most in my life. I remember listening to it on the bus on my way to my guitar class and feeling so inspired. Besides his amazing skills and technique, his melodic sense was what caught my attention in the first place. His approach to writing these beautiful songs and melodies is so unique that I immediately learned that there were ways to make the guitar really sing. It all brought me a new perspective about instrumental music and definitely was a huge influence to me, since the formation of my style to this day. Satriani's melodies are a true gift to this world and we're are blessed to have them to listen to!"



PLINI

ustralian guitarist Plini released his debut solo record, Handmade Cities, in 2016 to high acclaim. Steve Vai described the album as "one of the finest, forward-thinking, melodic, rhythmically and harmonically deep, evolution of rock/metal instrumental guitar records I have ever heard" and the 27-year-old Strandberg player was named MusicRadar's Best Prog Guitarist the following year...

"Joe Satriani was one of my first guitar heroes. I learned so much from him – phrasing, approaches to melody and harmony, tone... the list is endless. Learning *The Journey* was the first time I came across all the pretty chords you can make from leaving a couple of strings open while moving other simple two- or three-note shapes around. His song *Revelation* is one of the most beautifully written and articulate guitar songs I've heard, with the best tone! What I found different in Joe's playing is his ability to craft simple and catchy melodies and phrase them so perfectly that he doesn't have to rely on (but can still bust out) flashy passages and cool tricks to keep the instrumental song format interesting. I hope we get to jam some day!"

It might be something that requires an approach you haven't explored before. Spirits, Ghosts And Outlaws felt like a different approach for me. It could just come from a production angle, a song like Teardrops took concentration to stay true to its meaning and push myself into a different style. It was another first take that I decided to leave alone. Sometimes you just don't know how a song is going to inspire you. I thought if the melody was going to be gospel-like, I wanted the solo to be like one of David Bowie's bridges – the story of the song but from a different viewpoint."

What do you think about the next generation of guitarists? Who is currently impressing you?

"Seeing all the amazing players at NAMM reminded me how the guitar world is very much alive and well. Look at Guthrie Govan - he's just so good. You can't help but be amazed because he plays so well and comes from a place of pure love. We had the guys from Polyphia at Steve Vai's NAMM jam, those guys were remarkable and it was interesting to see them so out of their element. You can throw guys like me, Steve and Paul [Gilbert] anywhere and we'll improvise like always we do. These guys come from a completely different discipline but they're incredible guitarists. I was so impressed they were brave enough to stand next to some old guys and see what happens!"

And vice versa, it must be great to hear other players think of things you might not yourself...

"Players come along and challenge what you thought was possible, coming from new angles. I was listening to Philip Sayce – I don't think I've ever heard someone go that crazy in that direction for a long time. Yvette Young is another, she comes from an entirely different world of playing, but you can't help be blown away by what she's doing. There's room for everybody. There's room for whoever wants to sit in the corner and play something beautiful and there's room for Zakk Wylde... we need him just as much! You meet new players and realise they have this special gift in areas that aren't part of your makeup. What makes me go 'Wow, this person was born to do this!' is when I hear someone with a beautiful yet different form of expression - they find beauty in something I missed and start running



with it. Lari Basilio is like that, she has melody and rhythm that come together in a 'wow' package."

Your blues bends are quite possibly your most powerful weapon - what advice can you offer for getting more out of the pentatonic/blues scales?

"You have to be true to yourself. At NAMM I saw how many talented players are out there, most of whom can copy anyone else. The internet is a great tool, but it also has the danger of homogenising everybody because you can learn how anybody does anything and pick it up in an instant. It takes a lot to say, 'This is the real me!', but it's an option we all have, though some of us rarely utilise it because they're not given the opportunity or might be too shy. They might not have spent enough time being themselves. I know that sounds weird, like a therapy session, but it kinda is! You have to understand who you are and what you like regardless of what your community is telling you. I read this thing when I was young about how Clapton locked himself away and didn't listen to anything but American blues so he could cultivate his own sound. I don't know if it's true and I did feel it was perhaps being described improperly – maybe as a journalistic

AT NAWWI SAW HOW WANY TALENTED PLAYERS ARE OUT THERE

theory that felt methodical or didactic – but I realised, more importantly, it was just Clapton discovering what he loved and, in almost a cleansing way, getting rid of all the things in his playing that he didn't love. He used his influences to find himself. That made total sense. Surround yourself with what you love so when you walk out on stage you don't have to pretend. You can just be yourself, it's the deepest well that you can draw most of your best stuff from."

Some of your most famous songs have incorporated Lydian tonalities. Why do you think that particular scale makes so much sense to you?

"Context is everything. If you play a scale to someone who has grown up with it, they will absorb it like an

everyday thing. If you play it to someone who hasn't been exposed to it, then it may feel exotic to them. In Western music, we're fascinated by playing the 12 notes in our system over and over again. There was a time in human history where that seemed ridiculous. The ancient Chinese were more interested in the harmonics produced by bells than repeating the same 12 notes continually. Their first exposure to classical music mystified them, they didn't understand why we kept repeating the same tones. If you look at classical Indian music, their use of scales is something else entirely. Coming up one way and down another, playing different scales at different times of the day or different moments in the performance. That has nothing to do with the way rock guitarists think: a song is a song, there is a key and it never changes, no matter what time of day or venue it is. It's in F# Lydian, that's the end of that! So our upbringing affects how we respond to these notes."

All For Love also features some more outside note choices during the heavier parts. What have you learned about when to apply harmonic minor?

"It's all about context. We could sit down right and run through a whole bunch of scales, but they won't mean anything until you are making music. If I play a harmonic minor scale while you chug a boogie, that probably won't work. There's nothing wrong with either but it would take some work to make them work together as a convincing idea. *All For Love* felt like the ultimate setup when I go into the five chord, which gave me full licence to rip with it. I almost didn't have to do much because I had all this harmony already working for me. There's a natural tension, you can feel the cadence coming as I head back into my minor key. That allows you to hit some crazy notes. It just happened that way the first time I played a solo over it in my home studio. I tried this weird technique – pushing up with two fingers on the first string and letting the second finger off as I release the tension and allow the note to descend to its natural position. It felt really intense. I don't know if I meant to do it but it felt like ripping a new spot in the sky. Something really opened up. It was a very emotional moment, which is sometimes more enjoyable than breaking it all down into scales."

ACCUSTIC ELECTRIC. EVERYTHING IN BETWEEN.

UNLOCK NEW SOUNDS WITH THE AMERICAN ACOUSTASONIC™ TELECASTER.®

Tender

CRAFTED IN CORONA, CALIFORNIA







ORANGE TERROR STAMP

The Tiny Terror revolutionised the small amp game when it arrived, and now Orange is looking to do the same with the emerging trend for pedalboard amps. The Terror Stamp uses a hybrid design, incorporating an ECC83 valve preamp with a solid state class A/B power section to give you a 20-watt Terror at your feet. It's equipped with a switchable

master volume control (for psuedo two-channel operation), a gain control and orange's classic tone shape feature. On the back is an effects loop, speaker output and an emulated CabSim headphone output. If you thought pedalboard amps were just a passing phase, the Terror Stamp might convince you to dip your toe!



POSITIVE GRID SPARK 40

A practice amp equipped with an app for accessing more tones than you're ever going to need? Yep, we've seen that before. But, as well as this, the latest offering from Positive Grid also looks to revolutionise the way we practise by giving us the tools we need to jam in a way no other amp currently does.

As well as listening to the incoming audio from your guitar to give you a tailor-made backing track to play over,

the Spark can hook up to major streaming services such as Spotify, Apple Music and YouTube and intelligently decipher the chord chart from popular songs.

In addition, it can also act as your audio interface for recording, and even responds to voice commands! We've seen it in action and can confirm that it really does work. Get ready for one of 2020's most exciting new products.



LANEY CUB-SUPER SERIES

Deep amongst the landscape of intelligent amps and crazy effects, you'd be forgiven for thinking that there isn't room for simplicity anymore. Well, Laney thinks otherwise, and the proof that they're correct lies in the Cub-Super series. Picking up where the classic Cub left off, the redesigned valve range offers three amps named by their speaker size - 12-watt Super Cub 10 combo, 15-watt Super Cub 12 combo and the Cub Super Top head. Each version includes an added boost circuit (derived from the Black Country Customs Steelpark pedal), with digital reverb added on both 15-watt models, and an all-valve 12AX7/EL84 design in the pre-amp/power amp respectively. Best of all? The price. These amps will be hitting the streets at just over £300 and should be available shortly after you read this.





VICTORY V4 DUCHESS

Following hot on the heels (or maybe toes) of 2018's preamp pedal series, Victory is now taking things a step further by adding a power amp into the mix. The Duchess V4 can pump out 180 watts of class D power, and as well as an effects loop, also includes on-board reverb and tremolo, making this a serious contender in the floor amp game. Victory's Martin

Kidd tells TG: "We knew we could design a superb sounding amp that wasn't compromised by a lack of power, lifeless tone or burdened with endless options that you never use. A simple, professional guitar amp that you can take anywhere. The front end takes your drive pedals exactly as you want it to, and there's an effects loop, digital reverb and tremolo."



NOBELS ODR-1 BASS CUT

The relatively affordable Nobels ODR-1 has become something of a poorly-kept secret among tonesniffers. Now the company has updated its overdrive with a couple of handy features. First off is a bass cut switch (hidden inside the battery compartment) to help tame your low end, plus it now supports 9 or 18-volt operation for a lift in headroom. At £99, it could be your new go-to, all-purpose overdrive pedal.

BLACKSTAR SONNET

Just when you think you have Blackstar sussed out as purveyors of meaty valve rock tones and superb amp modelling, the UK mob come out guns blazing with an acoustic amp! Blackstar says it wants to deliver transparent acoustic tones with The Sonnet "not changed, not coloured, just your acoustic guitar but louder". There are separate guitar and mic channels, plus bluetooth streaming on-board to make playing out or busking with backing track easy. Other features include digital reverbs, USB and a built-in tilt stand for perfect positioning.



at a first glance we have to agree. It's

aiming at the high end, with a price

tag looking to be around £1,600, and

we can't wait to get our hands on one.



EARTHQUAKER DEVICES AFTERNEATH V3

Nobody makes effects quite like EarthQuaker, and for NAMM, the contemporary kings of experimental effects pedals have updated their much-loved Afterneath reverb. As well as adding a trails on/off switch, V3 has expression pedal control for the unique 'Drag' feature, which in turn delivers some incredible quantised reverb settings. Depending on which Drag you select, the pedal will cycle your sound through pitch-shifted reverbs, and with selectable scales and octave up/down intervals, it's easy to get creative with your reverbs.





BEETRONICS FATBEE OVERDRIVE

We love nothing more than when a company known for producing high-end gear introduces a more affordable line, and one such brand who opted to do this for 2020 is Beetronics. Ushering in the new Babee line of pedals is the Fatbee tube-style overdrive. Far from looking like a compromise, this threeknob OD is still US-made, but will free up some space on your board while saving you a bit of cash. Prices are TBC, but we'll be featuring this as soon as we can get our hands on one



LINE 6 POD GO

The big news in Line 6's world over the past few years has been Helix. So, imagine our confusion when we were confronted by a new addition to the POD line-up! Regardless of the labelling, it's exciting - Helix-derived amp, effect and cab modelling in a floor-based multi effects unit. There's an expression pedal built in, and the inclusion of an effects loop means that you can rig this up to your amp's front end, or by using the fourcable method to directs insert/send effects into their appropriate stages in your chain. Street prices look to be around £430, and it's available for pre-order now.



WALRUS AUDIO

The first-born of its all-new Mako series, the D1 is a multi-function delay with five, studio-grade, high-fidelity, custom tuned programs. The programs in question are Digital, Mod, Vintage, Dual and Reverse, all of which are tweakable with modulation, tone, age, and subdivision controls. There's also an attack knob to switch things up still further, softening the echo's attacks.

MXR CUSTOM SHOP TIMMY

If you've never experienced the beauty of a goosed Timmy, get ready. The boutique overdrive has reached legendary status in recent years, and as such are becoming more difficult and expensive to get hold of. Now, MXR and original designer Paul Cochrane have collaborated to bring you the core sound of a Timmy in an MXR mini pedal with the MXR Custom Shop Timmy Mini. At the heart of the pedal sits the Clip control, which offers three options for how the Timmy reacts to your signal from light clipping, to big compressed drive. It'll be available here in april, with a pricetag of around £140.



FEATURE

DANELECTRO PEDALS

We've been big fans of Danelectro for decades here at TG. While its pedals have, at times, been a little cookie cutter in their design, we have to applaud its new direction. Looking like they were born in a hipster's start-up workshop, the 3699 Fuzz and Back Talk Reverse Delay are actually reissues of classic Dano pedals. Meanwhile, the Roebuck Distortion sees the company aiming to ape the tone of an Ibanez MT10 Mostortion distortion pedal.





MANSON MBM-1 META SERIES MATTHEW BELLAMY

We wondered why Bellamy's original Manson Guitar Works/Cort MBC-1 was becoming so scarce to find with retailers, and now we know. The follow up, and the first since Bellamy took ownership of Manson Guitar Works, offers two humbuckers instead of the SC/H arrangement of its predecessor. There's also a new Starlight Silver finish option,

in addition to Satin Black. In terms of matching looks with value, these guitars were untouchable at the show for £569 (pre-orders are available direct from Manson Guitar Works now). It's also a great platform for upgrading if you wish. Stock spec offers Manson humbucker, a kill-switch, Indian laurel fingerboard and basswood body.

KORG NU:TEKT OD-S KIT

Fancy your chances as a pedal builder, but not sure how to get started? Korg has your back with it's seriously funlooking new self-assembly valve overdrive pedal kit. It's solder-free, and utilises Korg's Nutube analogue triode vacuum tube, which promises the performance and harmonic characteristics of conventional vacuum tubes but in a more compact, stable and energy-efficient manner. It includes two gain knobs - one to adjust the input level to the vacuum tube and one to set the anode load of the vacuum tube amplification circuit, enabling you to tweak its sound to your taste. You can also choose between two different overdrive types, and there's a True Bypass option. If you're feeling creative, you can rest assured that the OD-S is modification-friendly. Discrete components can be changed out as you wish, enabling you to create your own unique pedal. To help you in your customisation quest, you can download circuit diagrams. Word has it that the OD-S will be released in February priced somewhere around the £219 mark.





LR BAGGS SOUNDSCAPE

Ensuring that acoustic players aren't left out of the pedal game, pre-amp masters LR Baggs unleashed The Soundscape. This pedal captures its own version of an impulse response of your acoustic guitar through the Acoustic Live smartphone app, and via the wonders of its algorithm it then translates that to the pedal itself. This can then be blended as desired with EQ tone shaping.

We only tried it through headphones at the show and that's really no way to judge acoustic tone, so we're looking forward to testing this ourselves for a full review.



FENDER LEAD II & III

The return of Fender's somewhat obscure late-70s/early-80s Lead model is a surprise, but with all-new features and Player Series price point, it's a very tempting one that could give it a whole new lease of life.

That guitar was designed as a cheaper Strat-like option, but Fender has made its new Lead II and III distinct follow-ups. A modern 'C' Player neck with 9.5" radius brings the new to balance the authentic reissue body shape and logo. The pickups here are Player Strat single-coils.

But then there's the Lead switching... While the first is the standard three-way pickup switch, the second switch performs different functions on the II and III.

For the II, it's a two-position switch to access in and out of phase sounds when both single coils are activated in the middle position.

For the double humbucker III, a three-way switch splits the bridge or neck humbucker for single-coil sounds. There's some great potential versatility for your tones here for \$599.



MARTIN SC-13E

A surprise saved for Martin's NAMM 2020 press conference at the show, this electro-acoustic's bold offset shape is only half of the story. An innovative neck design allows the most access to the the upper frets on an acoustic guitar that we've encountered, opening up new possibilities for players. A neck taper enhances this sense of freedom to explore the full range of the fretboard.



EPIPHONE LES PAUL CLASSIC WORN

The Les Paul line-up on the Gibson and Epiphone stand had all bases covered – and for the latter brand, the line-up as a whole was a celebration of its history and future. While the Epiphone side of the impressive room featured guitars like the new ES Uptown Kat model, Gibson's Original line was reflected in the new Epiphone Inspired By Gibson series.

We love the understated finishes here; not so much 'Worn' to our eyes as Satin Ebony, Heritage Cherry Sunburst, Purple and Gold Top. Coil-splits on the Alnico Classic Pro humbuckers and Grover tuners make this a strong \$449 deal in 2020.



PRS S2 MCCARTY 594

Was it an easy decision for PRS to allow one of its greatest flagship models to enter the more affordable S2 line? After all, it's kind of giving us more for less and could divert McCarty Customers from its Core line. Be that as it may, we applaud the decision to offer this guitar for players and want to recognise it. The original 594 McCarty model quickly became a best-seller for good reasons, and you get them all here; vintage neck profile, the old school bird inlays, vintage-voiced 58/15 pickups with coil-taps, aluminium tailpiece, zinc bridge with brass saddles and studs... The 24.594" scale length distinguishes this from the 25" S2 models but this is a classic, versatile and Maryland-crafted PRS guitar – for less.





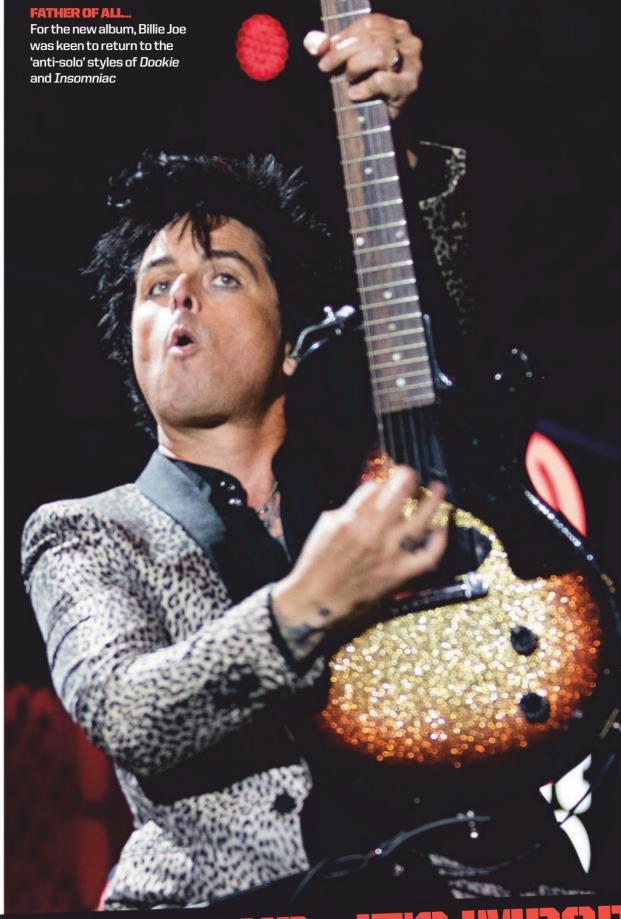


reen Day have always been, first and foremost, a punk rock band. This would seem to be stating the obvious. But it's also been clear that the spiky-haired three-piece from California's East Bay don't fit easily into the genre's confines. Consider

1997's smash acoustic ballad (and enduring high-school prom anthem) *Good Riddance* (*Time of Your Life*) or 2004's politi-rock opera concept album *American Idiot*. At the very least, cast your mind back to 2010, when that multi-Platinum-selling, Grammy Award-winning record became a full-blown Broadway musical.

Of course, singer and guitarist Billie Joe Armstrong, bassist Mike Dirnt and drummer Tré Cool have shown as recently as 2016's *Revolution Radio* that they're still capable of churning out turbocharged, three-minute, three-chord anthems with unbridled energy and emotion. But no one who has followed Green Day all these years would expect the band to stay within those confines for long. As Armstrong says, "I think that for Green Day, the one thing that sets us apart is that we get away with more experiments than most bands that come from punk rock."

As for Green Day's newest experiment, look no further than Father Of All Motherf*ckers (Reprise), the band's boldly named 13nth studio album. While the record is jam-packed with the sort of laser-cut riffing, precision-throttle rhythms, hooky melodies and airtight arrangements that have long characterised Billie Joe and Co.'s work, there's also something new at play this time out. For starters, check out Armstrong's falsetto-fueled vocals on the garage-rocking opener, Father Of All... There's also the laconic hip-hop blues jam Junkies On A High, the Joan Jett-sampling stadium stomper Oh Yeah!,



SE THE THRE WING THINGS UP - IT'S IMPUR

the Motown-soul groover *Meet Me On The Roof* and the early rock 'n' roll/R&B freakout *Stab* You *In The Heart*.

It's a wide-ranging mix of sounds and styles, and perhaps one of the most downright fun albums Green Day have ever made. As for the impetus behind the band's newest musical adventures? "I just like mixing things up," Armstrong says simply. "The most important thing is not to be boring." While Father Of All... might be a long way from the Green Day of Dookie or American Idiot, much like those seminal records it manages to obliterate any preconceived notions of what a punk rock band can and should sound like. And true to Billie Joe's word, it's also most definitely not boring.

Green Day songs, by design, have generally been centred around the guitar riff. But much of the new material seems based around rhythms and grooves, and owes a debt to sounds not typically associated with punk and rock, including Motown and soul.

Yeah, that's true. One thing I wanted to do this time was create space between the vocal and the beat more than I ever had before. So I think there was a conscious effort to get into the drums and vocals and just allow that space in between. And musically, I was into the history of rock 'n' roll. I mean, I've got a pretty vast knowledge of rock 'n' roll music, and there's so much that I love about it. So a song like Stab You In The Heart, it's very Little Richard-sounding, and also similar to something like I'm Down by the Beatles, which is obviously like a Little Richard thing.

That song also reminded me of *Hippy Hippy Shake*.

The Swinging Blue Jeans! I just love that sort of trashy, garage-y kind of rocking-out music. It's like [the 1960s garage-rock band] The Sonics. Just old-school rock 'n' roll. And then the Motown influence really came in for songs like *Meet Me On The Roof*, where I was messing with my vocal, too. I really wanted to sing higher and do a lot more bluesy kinds of melodies.

That brings up another musical focal point on this record – your voice. It does seem to carry more of the melodic content of the songs this time around, and it's clear that you really pushed yourself as a singer.



falsetto and I was like, 'Man, this is so different. But also so Green Day.'

When you perform that one live, you don't play guitar. You're not even holding a guitar. It's like you're up there without your security blanket.

Yeah. When we started this record, I knew I wanted to mix things up. And that gave me the opportunity to try to show a different side of us. I could just jump in deep and do a song like *Junkies On A High*, where I'm literally messing with a hip-hop/

NUCLEAR FAMILY

Even after 34 years together, Green Day refuse to stop flying the flag for punk rock idea. I relate to being a kid in a basement or a garage, and just making music. And I think when you see a lot of what the younger generation is doing, whether it's the SoundCloud thing or someone like a Post Malone, it's kids basically sitting on a computer and messing with a beat and putting these sort of hip-hop melodies on top of it. I can relate to that.

And so with something like Oh Yeah!, I was like, 'Well, if I was going to sample something, what kind of thing would make sense for Green Day?' So I used the Joan Jett version of Do You Wanna Touch Me. And I was like, 'That's cool! That's the way I would sample something.' Because it's glam rock and punk, right? And then I wrote the melody on top of it, just to see what would happen. And three beers later, that's what you end up with.

That's all it takes, huh? [Laughs] Yeah!

When it came to the arrangements, did you know early on that you wanted to keep these songs concise? A few don't even hit the two-minute mark.

I think it was just a matter of going, 'Okay, I think that's enough' [laughs]. With some of these songs, I would do

ANT TO NOT BE BORING...

The title track, which you sing mostly in falsetto, would be an obvious example. Did you feel like you were outside your comfort zone?

Oh, yeah. I remember we did the demo for Father Of All... and I'd been listening to a little bit of Prince and how he had an amazing falsetto. His first couple of records are all falsetto. So I wanted to mess with that. And I can remember, right when we were getting ready to do the vocal, I said, 'Hey, I'm going to try something different here, so please try not to laugh at me!' Then I did the

trap sort of beat, but putting this bluesy melody on top of it.

That song and *Oh Yeah!* are two that embrace elements of modern pop, both in terms of their musical makeup and also their production quality. There are hip-hop beats in the former, and samples, a big chorus and treated vocals in the latter. You're not so much of a punk purist that you close yourself off from those sorts of ideas.

Well, what I relate to is the germ of an



a demo and it would be under two minutes, and then we would get into a thing like, 'How do we make this longer?' And the answer is, 'We don't make it longer. If it feels right, then just keep it the way it is.' And so that's just the way we ended up recording them. It's just getting into that sort of back-to-basics, Ramones, low-attention-span kind of rock and roll.

This time round, you worked with Butch Walker, who has also produced Fall Out Boy and Weezer, not to mention Taylor Swift, Katy Perry and Pink, among others. Why?

I was really open to someone new coming in and having a fresh perspective, because, ultimately, in the past I've produced pretty much everything. Even someone like [Dookie producer] Rob Cavallo was more like a coach. But with Butch, he became almost like a member of the band. And we got on well right from the get–go. He has such a crazy and amazing rock 'n' roll energy.

I think one of the great productions that he did on the record is on the song *Graffitia*, which at first was just this song that was, like, three chords and my vocal. But I did a demo and sent it to him, and I said, 'Go ahead and mess with it.' And he added that intro where

it kind of sounds like Tommy James and the Shondells. And I was like, 'Dude, this is amazing!' Because I love that kind of '60s bubblegum pop. It was kind of the same thing with *Meet Me On The Roof* — he screwed around with the intro and just came up with a lot of really great ideas.

What gear are you using on the record?

A lot of what I used was just whatever was laying around, which is totally different for me. And for the most part,

WELCONIE TO PARADISE

This is what happens when a major label gives a punk band an advance for their next album... in Father Of All... — I just feel like no one's got the time to listen to a guitar solo anymore. So I wanted to get back to where Green Day was with Dookie and Insomniac, where it was almost like the anti-solo.

Musically, these songs are fairly bright and upbeat. But the lyrics tend to skew darker: the kids with bulletproof backpacks in *Oh Yeah!*, the beds of blood and money in *Father Of All...* You're addressing cultural and societal ills but without being overtly political.

"IT DRIVES ME CRAZY WHEN

that was my old
Les Paul Junior and a Divided by 13 amp
set on the dirtier channel. For pedals,
I had a Klon, and then my son has
a Whammy Pedal that gives you the
weird octave things and makes
everything sound crazy. He uses it in
his band, so I was like, 'Hey, Jakob, can
I borrow your pedal?' And he said,
'Yeah, go ahead.' I used it for the solo
on Take The Money And Crawl, which is
just all kinds of noisy, out-of-phase
stuff. In general, the solos this time are
not really melodic things but more
about me making noise. Like the solo

Well, doing a Trump song — it's just too obvious. And compared to songs like American Idiot or Holiday, back then we were going into a war for fictitious reasons and those were sort of a rallying cry. But now our culture is so toxic that it's like, to sing about Trump would just make it more toxic. So I think that, instead, the lyrics are about trying to shine a light. A song like Graffitia, for instance, is a song about young black kids getting shot in inner cities. And then there's this other side about factories in the Rust Belt that are closing

down and these small towns that are losing their identity. It's about trying to have an understanding of what's going on in this country and how we're in the middle of a sort of cultural civil war.

Things can feel pretty dire.

Yeah. It's like, Devo was right, you know? We're devolving. We're going to be dragging our knuckles in the next 10 years if we keep at this pace. So it's a really scary time. But at the same time, I can't help but see that there's so much more enthusiasm for trying to create change, whether it's talking about the issue of climate change or about having real equality. It's not just a slogan, and it's going to happen with young people.

Speaking of young people, Green Day has to be one of the few rock bands these days that can show up at an award show or festival and play alongside pop acts and in front of audiences that, on average, maybe weren't even alive when *Dookie* came out, and still manage to make a meaningful connection. You seem to welcome the challenge of putting yourselves into those sorts of non-rock environments.

Yeah, that's true. I always feel like an outsider at those things, but I think Green Day will always be sort of the class clowns of whatever thing we're at. We're the kids that are going to set off firecrackers at the talent show. And so those things are fun because we're not trying to be like anybody else and we're not trying to be modern. I mean, for



God's sake, we still play wooden instruments, you know? [Laughs] That's almost alien to kids now. So I don't know why these young kids still like it. I think it's just that they see it as 'real'.

As far as being the kids setting off the firecrackers, last year, for Record Store Day, you released a vinyl version of your Woodstock '94 set to commemorate the 25th anniversary of the festival. That show, which ended with a mud fight between you and the crowd, seemed to fuel your rise to fame during the *Dookie* days. Do you feel that moment altered the band's trajectory?

When I look back on it now, absolutely. But at the time, I mean, I think the first thing we were thinking was, Woodstock, this sounds so... Dumb! Like, why would they make another Woodstock? So we went up there and we were like, 'Well, let's just have fun, just be ourselves.' And it was a strange

show because we started playing, and I think we started out pretty blazing. But then there was sort of a dip in the energy somewhere. So it went from good to, like, 'Oh, shit... We might be playing bad!' [laughs]. Then, when a couple of mud balls started coming at us, basically what you're seeing is a bunch of mischievous kids onstage just having a good time with the people in the audience. Because we were the same age as the people in the crowd.



But the coverage of it afterward was insane. I remember, we were the opening band on the Lollapalooza tour that year, and the other bands that were on it were Smashing Pumpkins, the Beastie Boys, A Tribe Called Quest, The Breeders, L7... And all of a sudden, everyone was showing up super-early to come see us play. It was a really exciting time and kind of crazy.

I was in the audience for the Woodstock show, and one thing I recall about the mud fight – and something that I still think about when I watch YouTube clips of it – is that it's hard to tell if you were enjoying yourself or if you were kind of pissed off.

It was probably a combination of the two. I don't really remember being angry. I don't really remember having fun. The whole thing was just mud. And no one was really taking advantage of the fact that there was mud except for the people that were in the crowd. But I think a lot of people in the audience were kind of miserable, because

everybody was just covered in shit and sleeping in tents and buying \$5 water in 1994. So I dunno. It was just, like, misery loves company, and if you can't beat 'em, join 'em!

Well, here we are roughly a quartercentury later and you're going to spend this summer headlining stadiums. People constantly talk about rock being dead. Do you feel like it's some kind of statement to be playing this music in venues of that size in 2019?

Well, rock 'n' roll is huge, you know? Rock bands are giants. It's just that the mainstream media, or the pop media, or whatever you want to call it, they refuse to look at it. They refuse to talk about it. And I don't really know why. Maybe it's just because it's not Taylor Swift or Ariana Grande. I don't have anything against that stuff, but it's like, you have these giant festivals that are going on all over America and all over Europe and Australia and Japan, and it's mainly rock bands that are the draw. So it kind of drives me crazy when

STILL BREATHING

"I've been in this game for 30 years and I'm not going anywhere" people say rock is dead, because it's like, 'No, it's not. You just don't talk about it.' And I think there's maybe also some fault with the rock bands themselves, in that everyone's trying to write the feel-good song of the year. Don't try to do the feel-good song of the year. With this album, I wanted to write the feel-bad song of the year!

As far as the words behind these new songs, I have to ask, what's with the album title?

I guess it's sort of like messing with poetry, or using the English language against itself and just flipping everything around. And obviously you can think about, like, Trump, when it comes to a title like that. But there's also this ultimate gangster kind of chest-pounding feeling about it, where you're like, 'Well, I've been in this game for 30 years and I don't plan on going anywhere.' It has that aspect to it, too. So to call the album Father Of All Motherf*ckers — it just kind of takes the term and makes it even nastier than it already was.

"I'VE WRITTEN THE FEEL-BAD SONG OF THE YEAR!"

INTERVIEW

How did you get involved with Green Day?

My manager manages them, but it wasn't easy to get the gig, obviously. Billie Joe is very particular, and has produced his own records for the last 10 years and he's very good at getting that sound. He knows what he wants. But I think he was ready to venture out of his comfort zone.

Meaning what?

He was bringing in songs and ideas that were a little left-of-centre for them. It didn't sound like typical Green Day, and I love that. I'm a huge Green Day fan and always will be, but I also love any band that's been around for twenty or thirty years and wants to keep pushing the envelope and doing something different. When we spoke on the phone we realised that our childhood record collections were identical - metal, punk, power pop...

What was the first step?

He sent me some ideas and said 'Why don't you mess around with these at your studio?' So I'd play stuff on them. Not typical behaviour for how you'd start making a record with a band, but I think he wanted to see what was in my mind. After a few songs, I called my manager and said 'Am I making the new Green Day record?!' So we just kept going and got Tré and Mike in, and it became a collaborative effort.

Did you have to approach the songs in a particular way to make your styles fit

I was like, 'Here's the thing... You want me to do a thing that you don't do, so I don't necessarily want you to send me finished songs with bass, drums and guitars. Otherwise it's already going to inherently sound like Green Day, then what am I going to do?' So I suggested that we re-cut some of the drums, some of the bass and the other



WALKER LONELY ROAD

Butch began bonding with Billie Joe by discussing their extensive and eclectic childhood record collections

instruments using my gear and my techniques, and marry them with theirs. We ended up with something that's different from anything they've put out so far.

How different?

Well, some of the early Green Day fans hate my guts! They're like, 'Fuck you, you ruined my band!' But it was Billie who had the vision - don't shoot the messenger! At the same time, yes, I helped them to do what they wanted, which was venture out of their comfort zone and explore their other roots. We took some of their punk rock influences like The Clash, then some of their power pop influences. ELO, Sweet, you name it... We'd emulate a lot of that going in; 'Lets get the bass sound from this Clash tune...'

And the guitars?

One thing with the guitars that I think Billie was excited about was that we'd pepper some interesting counter-guitar parts that he wouldn't normally dousually with me doing it - and he wouldn't want to re-do it. He'd just be like 'That sounds great, let's keep it.' So there were no rules about who had to play what or anything like that, so that was fun.

Did you experiment with different instrumentation?

Yeah, they were wanting to explore some of that. Sometimes we would do some marimbas or timpani or glockenspiel that were on records like Pet Sounds. That was fun to implement, as well as some of the bigger rock guitar sound stuff that Green Day do.

What were the main components of the guitar sound?

Billie Joe brought in about four guitars that were worth more than my house, then all the others were my guitars, which are beaters! He had a 50s Nocaster, a '59 [Les Paul] Burst, a '60 [Les Paul] Goldtop and his '58 Les Paul Jr, of course. It was great, we'd plug those in and be done. And for amps we used his Divided by 13 37 head and an old heavily-modded high-gain Park amp. Then for the cleaner, chimier shit we used my '65 Fender Princeton, and then my Goodsell Black Dog, which is like an AC30-type amp.

Did Billie Joe try out any new quitars on this record?

One day he played my Explorer, an '09, and he was like, 'I gotta get one of these!' And the next day, he turned up with the most amazing Explorer you've ever seen! [Laughs] He had a Rickenbacker too, a reissue 360 which was great. And like I said earlier, that was the attitude: no rules!

THE INSIDER

Green Day producer Butch Walker

spills the beans on the making of

than my house!"

PLAY LIKE BILLIE JOE

Learn the secrets of the Green Day guitarist's playing techniques

illie Joe Armstrong sure knows how to make guitars sound big! Even shred god Paul Gilbert described him as one of the best guitarists in the world for his blistering downpicking. Billie Joe's mastery of palm muting and

powerchord riffing rivals even thrash metal giant James Hetfield.

Here, we're giving you the tools to deliver Green Day's breakneck riffing and melodic solos. The outwardly simple delivery is deceptive, and you'll need to develop highly accurate fretting to make it work. To play as hard as possible, Billie Joe often strums all six strings regardless of the chord, using his fretting hand to control which notes ring out. Check out our photos to see how small details make simple riffs sound so great.





O1 HOLDING THE PICK

Billie holds his pick at an angle between his thumb and index finger, not quite flat on the pad nor on the side, which facilitates...



03 STUBBING

When fretting octaves or chords with their roots on the fifth string, the tip of Billie's index finger brushes (or 'stubs') the sixth string just enough to mute it.



02 PICK ANGLE

...Billie's pick angle. Attacking the strings at about 30 degrees gives Billie an aggressive tone and reduces resistance so he can play faster.



04 FRET HAND MUTING

Billie Joe's first finger rests across the first four strings, muting them. Together with stubbing, he can pick aggressively without unwanted open string noise.



05 LEAD PLAYING THUMB POSITION

Live, Billie uses this thumb position to fire off Chuck Berry-style solos. It makes string bending easier on the high strings, and he sometimes uses it for powerchords.



06 RHYTHW PLAYING THUWB POSITION

Billie Joe doesn't worry much about thumb placement for rhythm playing, but he often uses this position. Do what feels comfortable, as long as there's no fret buzz.



07 PALW WUTING

This is where your hand needs to be for BJA's legendary palm-muted powerchords. Note how the back of your hand touches the bridge saddles. Then, to switch...



08 UNNIUTED PICKING POSITION

...rapidly to an unmuted sound, he makes a tiny rotation of the wrist. The two positions should be extremely close so you can alternate between them at speed.



09 PICK ATTACK 1

Billie Joe's pick motion is a combination of forearm rotation and flicking his wrist. For loud strums, he raises his hand level with the top of the guitar, palm up...



10 PICK ATTACK 2

...before slamming the pick downwards, turning his hand so it finishes in this position. The pick needs to brush the top of the strings to avoid getting stuck.

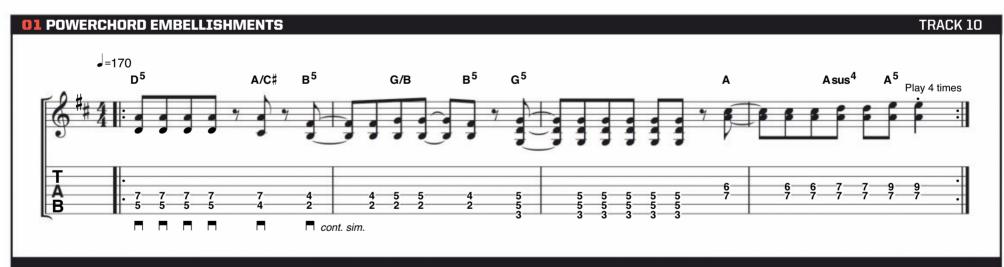
21ST CENTURY TECHNIQUE BREAKDOWN

Make your powerchords faster and your riffs stadium-sized with TG's Green Day guide

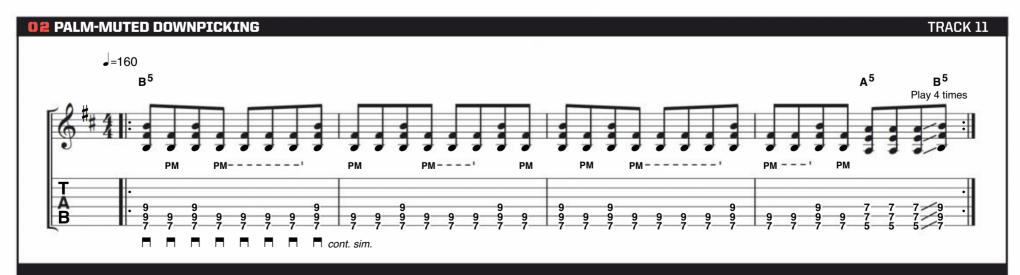
ou've looked at Billie Joe's playing techniques, now have the time of your life with these Green Day inspired riffs! Here you can put your technical knowhow into practice while you learn some punk style

riffs. And it's more than just pure technique – we're looking at some now standard musical ideas that can be traced back through punk's history. From essential chord shapes to powerchord riffs and octave-based melodic soloing,

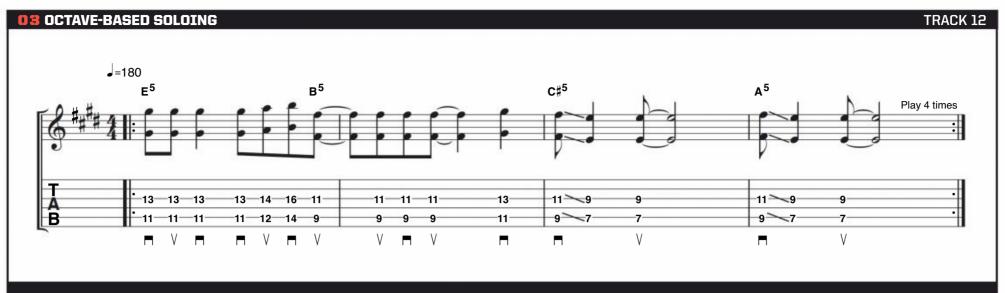
there's enough food for thought here to keep you going during any punk-inspired jam session. Have a look at the tab, listen to the audio tracks on your CD and try to memorise some of these essentials.



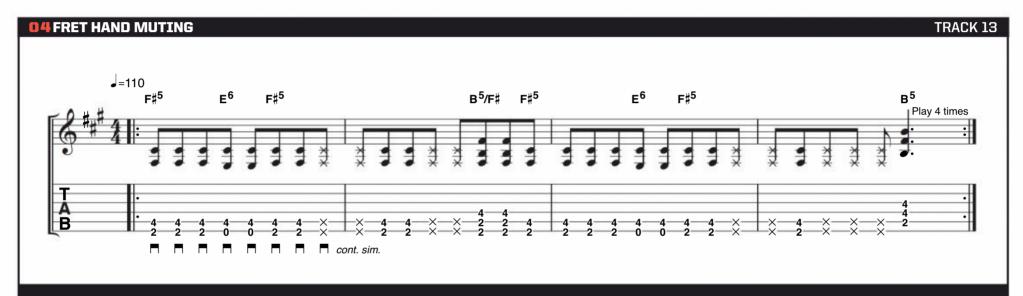
The bulk of Billie Joe's riffs use classic powerchords like the D5 and G5 shapes in bars 1 and 3. He'll also mix things up with the sus4 and slash chord shapes (A/C#, G/B etc) shown here. You can hear this approach on the outro to *Basket Case*. Even when he's not palm-muting, Billie still prefers downstrokes for the most aggressive sound.



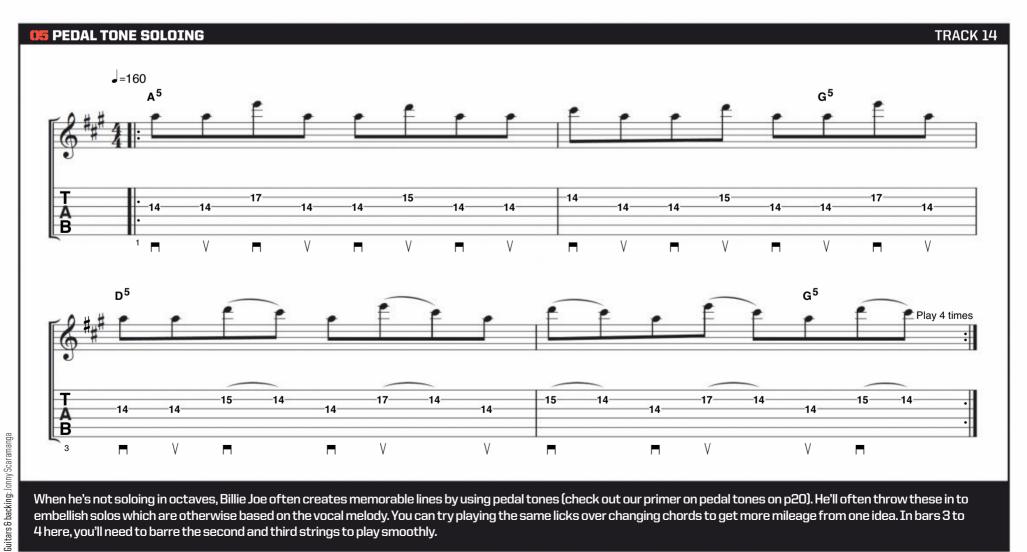
Riffs like this will develop your downpicking and your ability to switch rapidly between palm-muted and unmuted strumming. As you play, mentally check for tension in your shoulder, elbow, and wrist – it'll slow you down, so, if you're at all tight, stop playing, shake it off and try again. The slide in bar 4 is another essential punk motif. Keep pressure on the strings as you slide to keep them ringing out.



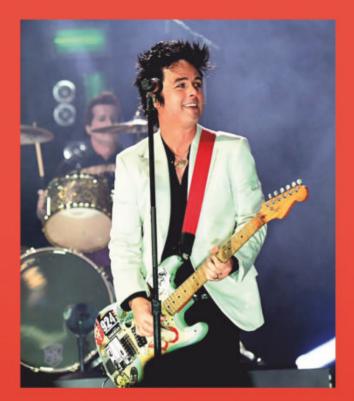
Green Day solos are melody-based and easily singable. To make the lines stand out, Billie Joe often plays them in octaves, as on American Idiot. Stub your first finger against the sixth string and use the underside of that finger to mute the idle strings. You're then free to strum all six strings aggressively and only hear the notes you're fretting.



On Green Day classics like Nice Guys Finish Last, Know Your Enemy and Holiday, the powerchords are often punctuated with staccato bursts where the strings are muted entirely with the fretting hand. If you mute with just one finger you'll hear lots of high harmonics; muting with two or more digits gives you Billie Joe's chunky, percussive sound. Aim to mute all six strings, and then you can pick hard without fear of unwanted noise.

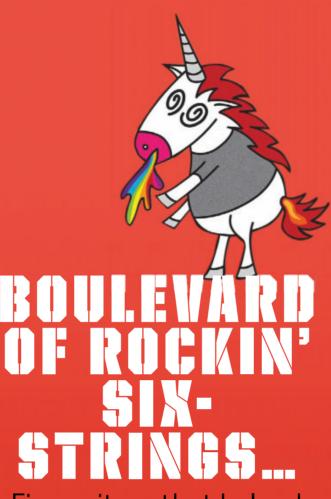


When he's not soloing in octaves, Billie Joe often creates memorable lines by using pedal tones (check out our primer on pedal tones on p20). He'll often throw these in to embellish solos which are otherwise based on the vocal melody. You can try playing the same licks over changing chords to get more mileage from one idea. In bars 3 to 4 here, you'll need to barre the second and third strings to play smoothly.



O1 BLUE

One of the most iconic guitars in punk-rock history, 'Blue' was a gift from Billie Joe's mum on his 10th birthday. It appeared in most early Green Day videos, including *Basket Case*, *Longview* and *Welcome To Paradise*, as well as countless tours. Since its beginnings as a Fernandes Strat copy, it's had the neck and middle pickups disconnected and the bridge pickup changed to a Seymour Duncan JB.



Five guitars that helped make Billie Joe an icon of punk



02 THE WHITE LP JUNIOR

For American Idiot, Armstrong reinvented his guitar sound, switching from Blue to primarily Les Paul Juniors. The raw, spiky sound of P90 pickups propelled some of the angriest lyrics Green Day had recorded to date. His white Junior is immortalised on the Bullet In A Bible live DVD, featuring Green Day and 130,000 of their closest friends. Billie Joe also used a pair of 1950s Juniors, each worth more than the entire recording budgets for Green Day's first two albums.



OS 2018 BILLIE JOE ARWSTRONG SIGNATURE JUNIOR

In 2018, Gibson launched a guitar with elements of both Blue and the Billie's signature Les Paul Junior. The single humbucker threatened a return to Dookie-style beefier tones, while keeping the look and playability Armstrong has favoured since 2004. The finishes were a nod to Green Day's 50s rockabilly influences – maraschino cherry, ebony and (of course) sonic blue.



04 BLACKOUT TELECASTER CUSTOW

The guitar itself isn't special – based on a Blackout Telecaster, it has a custom scratchplate and a Duncan JB. Green Day's tech has built dozens of them as backups for Blue. What's cool is that Billie Joe keeps giving them away. A quick YouTube search turns up videos of fans being invited on stage to play with the band and going home with one of these Teles. Now that's punk rock!



O5 IHEARTRADIO DOUBLECUT

The TV yellow Les Paul Junior doublecut is infamous mainly for its destruction at the 2012 iHeartRadio festival. On learning that Green Day only had four minutes left to play, an aggrieved Armstrong launched into a spectacular rant before taking vengeance on his undeserving Gibson. Videos of the event quickly went viral online. In the aftermath, Billie Joe checked into rehab, his tech rebuilt the guitar, and Gibson's shrewd marketing department spied the opportunity for a new signature model.

2. CHUCK BERRY

Johnny B. Goode was the first song Armstrong ever learned, and Green Day covered it and referenced it on Revolution Radio.
Alongside Elvis's prodigiously talented six-stringer Scotty Moore, Berry was a huge influence on Armstrong. If you were to parse punk's DNA, you'd find traces of his spare, aggressive licks.

1. JOHNNY RAWONE

The Ramones' breezy four-onthe-floor eighth-note blitz is all
over Green Day's style. Protopop-punk? Maybe, but more
melancholic and damaged.
Armstrong has performed at
Johnny Ramone tribute shows
and cites him alongside Johnny
Thunders, the Sex Pistol's
Steve Jones, and Paul Weller
as source material.

3. EDDIE VAN HALEN

This might seem weird,
but pre-punk Armstrong was
a hard-rock nut and asked his
guitar teacher how to play the
pinched harmonics in Ain't Talking
'Bout Love. Shredding wasn't
his bag, but the technique
stuck with Armstrong adopting
a thumb-heavy right-hand
pick grip to this day.

4. BOB DYLAN

Taking a complex social issue and turning it into a simple, accessible song, easily articulated on an acoustic, is something that Armstrong surely took from Dylan – who won the Nobel Prize for Literature on the back of his lyrics. That urgent immediacy is all over Green Day's more political compositions.

60

5. ANGUS AND WALCOLW YOUNG

Johnny (left) and Joey Ramone, perform l<u>ive on</u>

during 1977

stage in The Netherlands

They are two-for-one, indivisible, the archetypical rhythm and lead rock pairing, and, again, they were another huge early influence.

A special mention should go to Steve Clark and Pete Willis of Def Leppard's High 'N' Dry era, who Armstrong has described as having the 'ultimate rock tone'.

6. BOB STINSON

Armstrong has talked about how seeing The Replacements was a life-changing experience that gave him a new perspective on how he saw punk rock.
Stinson's playing never really sat in the pocket of common or garden punk, which, if you think about it, makes him all the more punk.

7. PETE TOWNSHEND

The Who guitarist is one of Armstrong's all-time favourites. You've got volume, attitude, showmanship, great songs and tone. During the recording of iUno!, iDos!, iTré!, Armstrong was experimenting with an early-70s Marshall, a Vox AC30H2 and a homemade Silvertone to get a cleaner tone in the vein of Townshend.

8. BOB MOULD

Hüsker Dü was another game-changer. Candy Apple Grey was so intoxicating that, in the beginning, Armstrong wanted Green Day to sound exactly like Hüsker Dü. You can hear Mould's judicious melodic sensibility even in Armstrong's most frantic playing – though Brian Baker of Bad Religion could take some credit there.

10. PETER BUCK

R.E.M.? Y.E.S.! Firstly, it was
Buck (and Peter Case, too) who
reportedly influenced Armstrong
to play the Rickenbacker 360 on
Revolution Radio. Secondly, there
is got to be an influence – or
like-mindedness – in how
Armstrong and Buck
compose stadium-ready
parts without sounding
explicitly mainstream.

9. JAWES Honeywan-scott

The late Pretenders guitarist is another of Armstrong's favourite players, though he was only 25 years old when he died. Honeyman-Scott was a melodic player, and maybe one of the biggest lessons we can take from players like him is how to incorporate melodies without losing rhythmic momentum.



01 FIRE, READY, AIW

Section Full band intro + verse **Appears at** 0:06-0:31 **Original tempo** 156 bpm **Key** C# minor

o surprises here – it's punky downpicked powerchords all the way and one easy shape is all you need. But if you're thinking there must be more to it than that, well, yes, admittedly you're right! Like a lot of punk guitar, the real challenge here is the speed. Getting those powerchord changes sounding smooth and tight might just take a bit of time. Time-honoured advice is to practise slowly, but this is punk rock, so why not just blast it out quick instead?



THE FATHER OF ALL VIDEO LESSONS

Five easy riffs from Green Day's latest.
Learn with TG's slowed down videos!



02 WEET WE ON THE ROOF

Section Intro/verse Appears at 0:00-0:10 Original tempo 172 bpm (swung 8ths) Key C# minor

hese four barre chords will take you right the way through the intro and verse. You'll be strumming rather than downpicking, but don't be fooled – they're all played with Billie's typical tight delivery. After the first downstroke on each chord, there's a short pause (aka rest). "What's so hard about a pause?" you say. Well, it's not just a matter of stopping playing! This briefest of rests is a kind of musical punctuation mark and you'll need to bring the next chord in bang on time.



OS STAB YOU IN THE HEART

Section Main riff
Appears at 0:15-0:31
Original tempo 150 bpm
Key E dominant blues progression

reen Day often tread a line between Chuck Berry-inspired rock 'n' roll and straight ahead punk rock attitude. This riff is definitely on the more traditional side, outlining a blues progression that's as old as the hills – the good old I-IV-V (said 'one-four-five'). The initial part of the riff has the most notes, but the sparse ending has its own challenge, as all that sonic space makes it easy to lose your timing. Listen to the count on our slow play through to develop your feel.



04 SUGAR YOUTH

Section Intro Appears at 0:00-0:10 Original tempo 178 bpm Key F# minor / F# Dorian

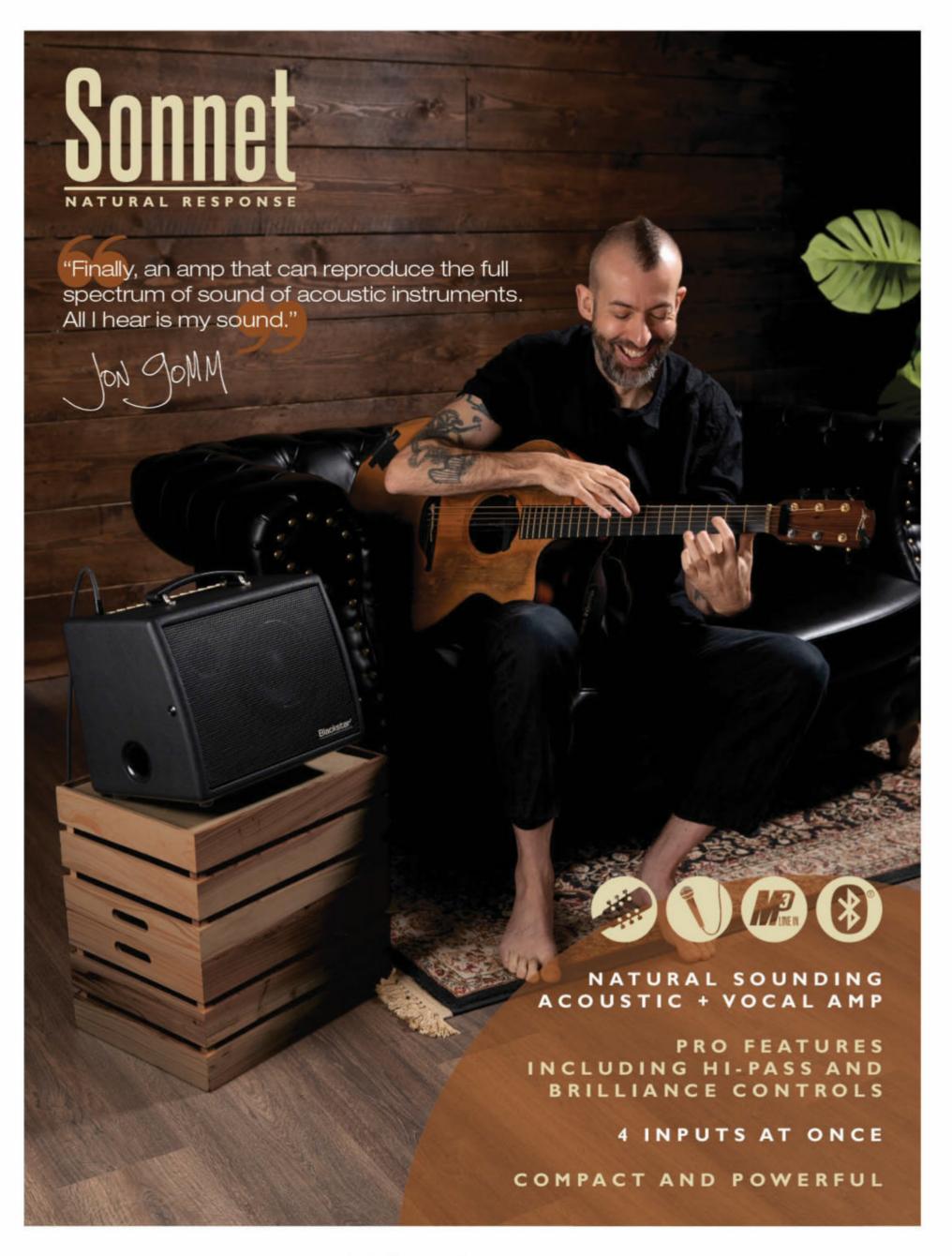
ou'll be blasting this raucous rocker out at a breakneck 178 bpm, so you may need to practise slowly. The four main powerchords are easy peasy but take care as you reach the end of the riff – like Meet Me On The Roof, there's a rest to throw out your timing. You'll be downpicking throughout so try 'ghosting' a downstroke on the rest – simply pick but don't hit the strings. The constant motion will help you maintain your timing.



O5 TAKE THE WONEY AND CRAWL

Section Main riff Appears at 0:19-0:29 Original tempo 148 bpm Key F# minor

ne of the easiest riffs on Father Of All Motherf*ckers, here you can play each two-note powerchord using just one finger – and it should be fairly easy to work out which digits to use. The space between the 2nd and 4th frets means you'll probably find it most practical to use your first and third fingers. From there, your next task is to get a feel for the rhythm and, once again, the all-important rests. Use downpicking for a punchy, punky feel.









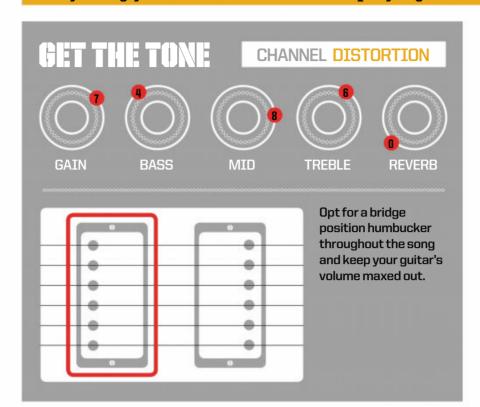
uitarists Mick Thompson and Jim Root draw on various influences here in this pounding lead single release from 2004's Vol. 3: (The Subliminal Verses). From the grindcore-tinged intro, a rhythmic nu-metal breakdown, black metal-influenced verses and a melodic meat hook of an octave-based chorus riff, the metal giants offer up a broad set of techniques to get your zipper-mouthed teeth into.

To play this song with the fearsome attitude and aggression it requires you might think you have to put all of your energy into picking hard and attacking the strings, but, in fact, Jim and Mick are both incredibly relaxed players. To play with Slipknot-level stamina, it's a better idea to allow your hand to move naturally from the wrist (not your elbow or forearm) and let your picking speed develop gradually over time.

Make sure to stick a set of heavy gauge strings on your guitar, though! Duality is in super-low drop B tuning (BF#BEG#C#). Gauge 0.013s should do the job.

GET THE SOUND

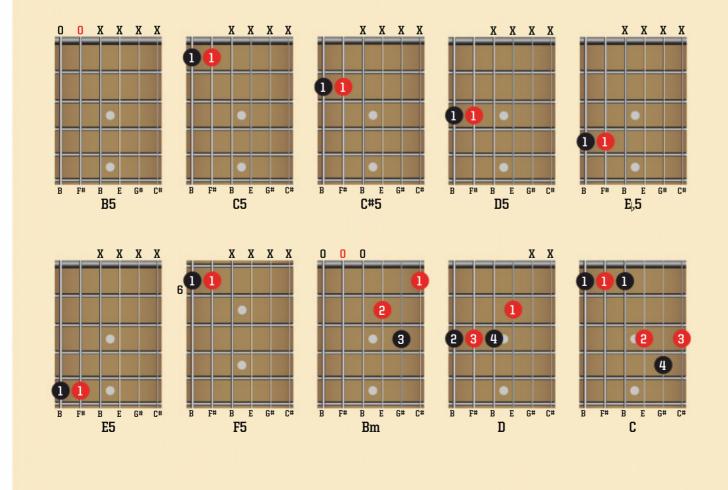
Everything you need to know before playing 'Duality'



t may surprise you, but with metal it's often best to use as little gain as you can get away with - too much and you'll suck out the body of your tone. With Duality, check that the palm-muted chords feel chunky and the pinched harmonics sing, then set your gain accordingly. Keep reverb to zero for maximum clarity. A Tube Screamer-type drive pedal will tighten the low end if you're using a high-gain valve amp, but if your amp is light on drive, try pedals such as MXR's Fullbore Metal or the classic Metal Zone from Boss. Most modern multi-fx pedals will have a handful of similar presets that you can tweak.

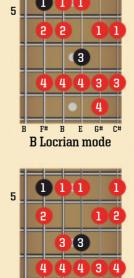
CHORDS

uality's chords are all played on the two bass strings. In drop B tuning these two open strings form a powerchord, which means all the other powerchords can be played with a straightforward one-finger barre. Happy days! Just move this easy shape around the fretboard. Here, we've also given you three major and minor shapes that are suggested by the riffs in the chorus.



SCALES

he song uses a blend of two 'modal' scales: B Locrian (BCDEFGA) and B Phrygian (BCDEF#GA B). The only difference between the two scales is the 5th F note in the Locrian mode, compared to the more standard perfect 5th in the choruses. There are no solos in Duality, but you could easily use these scale shapes to improvise variations on the riffs or even your own leads.





SLIPKNOT DUALITY

DUALITY

Words and Music by M. Shawn Crahan, Paul Gray,

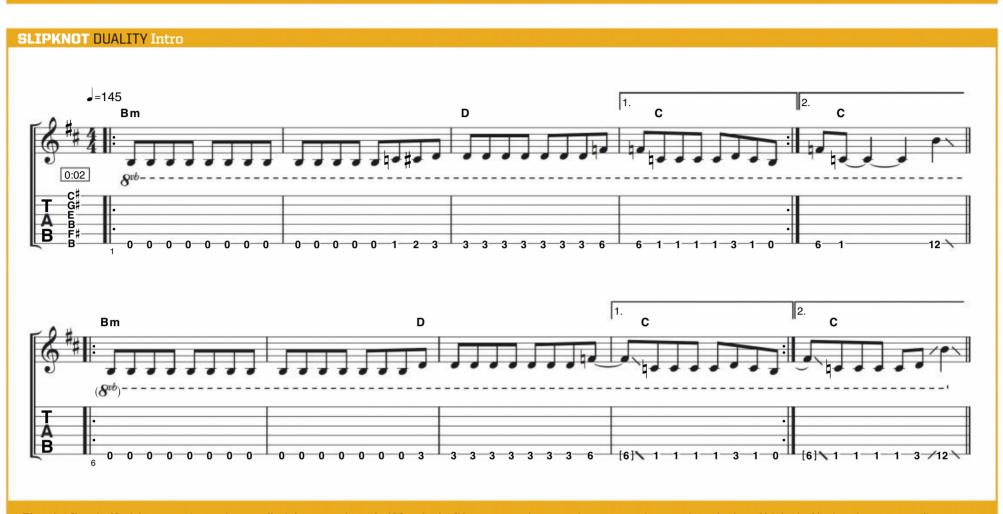
Nathan Jordison, Corey Taylor, James Root and Sid Wilson

Copyright © 2004 EMI APRIL MUSIC INC. and MUSIC THAT MUSIC

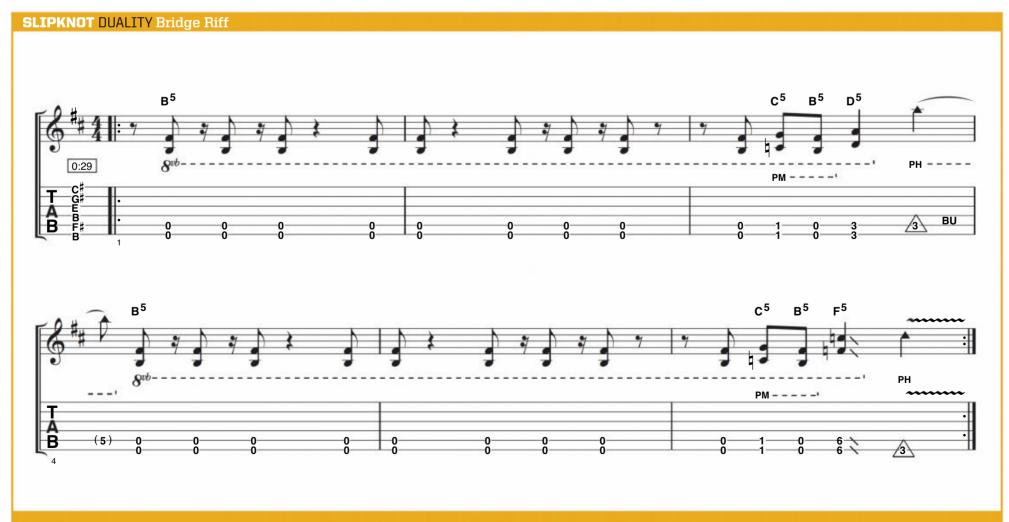
All Rights Controlled and Administered by EMI APRIL MUSIC INC.

All Rights Reserved. International Copyright Secured. Used by Permission

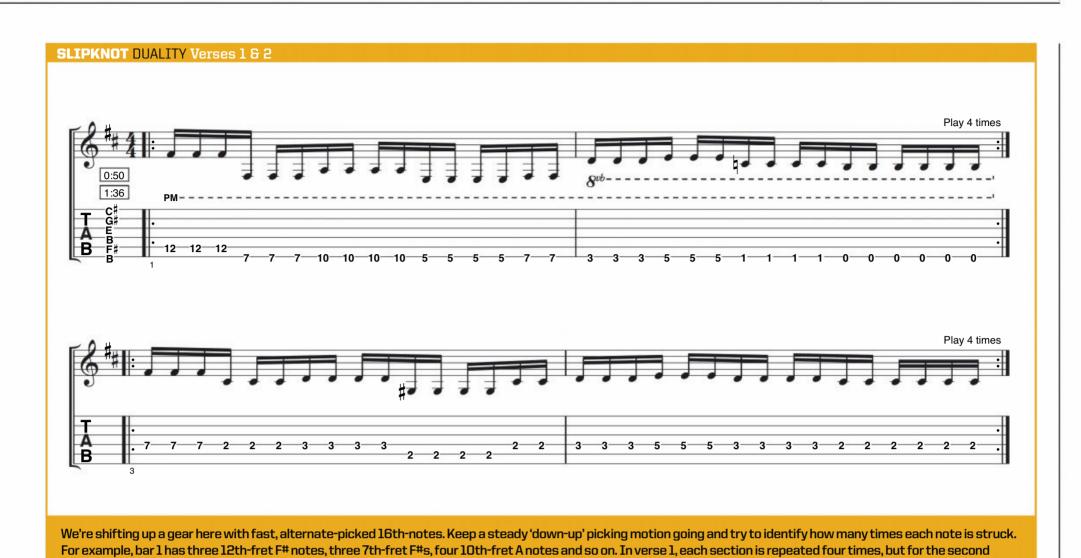
Used by Permission of Hal Leonard Europe Ltd.

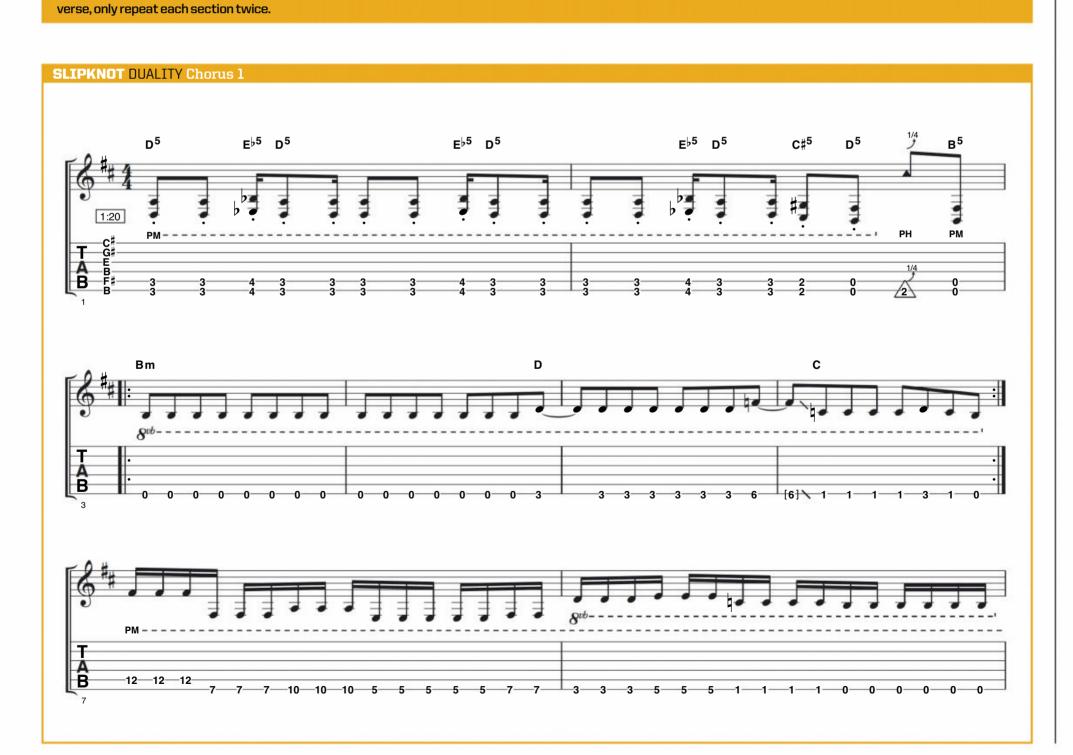


Play the first half with your guitar volume rolled down to about half for the lo-fi intro tone, then turn it up to maximum when the band kicks in. Notice the greasy, slippery feel and the occasional slide down the string - try using only one or two fretting fingers to recreate this. Downpicking is the way to go here.



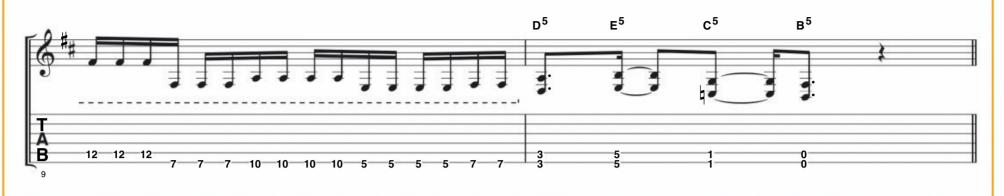
Play the open-string powerchords with a quick pick stroke, then use your fretting fingers to mute the strings to create nice, clean rests in between. For the pinched harmonics, touch the string with the side of your thumb as you down-pick and release. Mick and Jim tend to aim their harmonics two octaves higher than the fretted note.







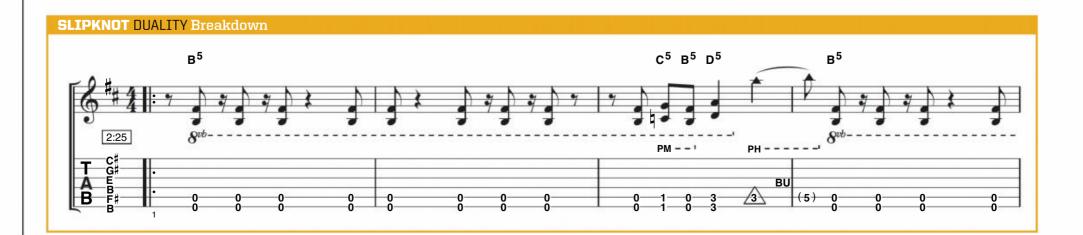




Choruses 1 and 2 feature a palm-muted setup riff in bars 1 and 2, followed by an eighth-note riff. Played with single notes, these eighths are pretty similar to the intro. Use steady downstrokes here and let the string ring out without any palm-muting. Switch to palm-muted alternate picking when you reach bar 7.



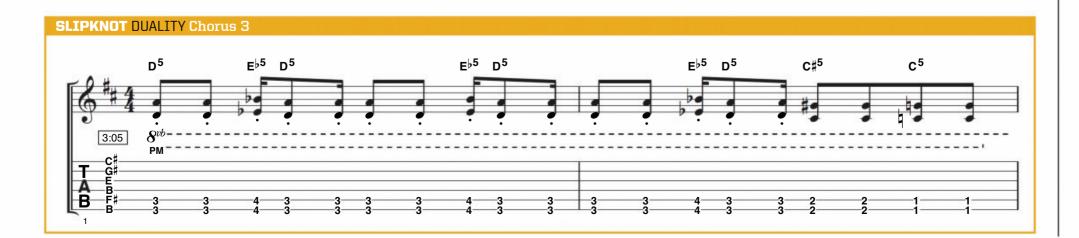
Bars 1 to 6 are broadly the same as the beginning of chorus 1. However, bar 7 introduces an octave melody played on the third and fifth strings. Use your first and fourth fingers to fret the two strings, keeping them stubbed up against the idle strings to keep them quiet.



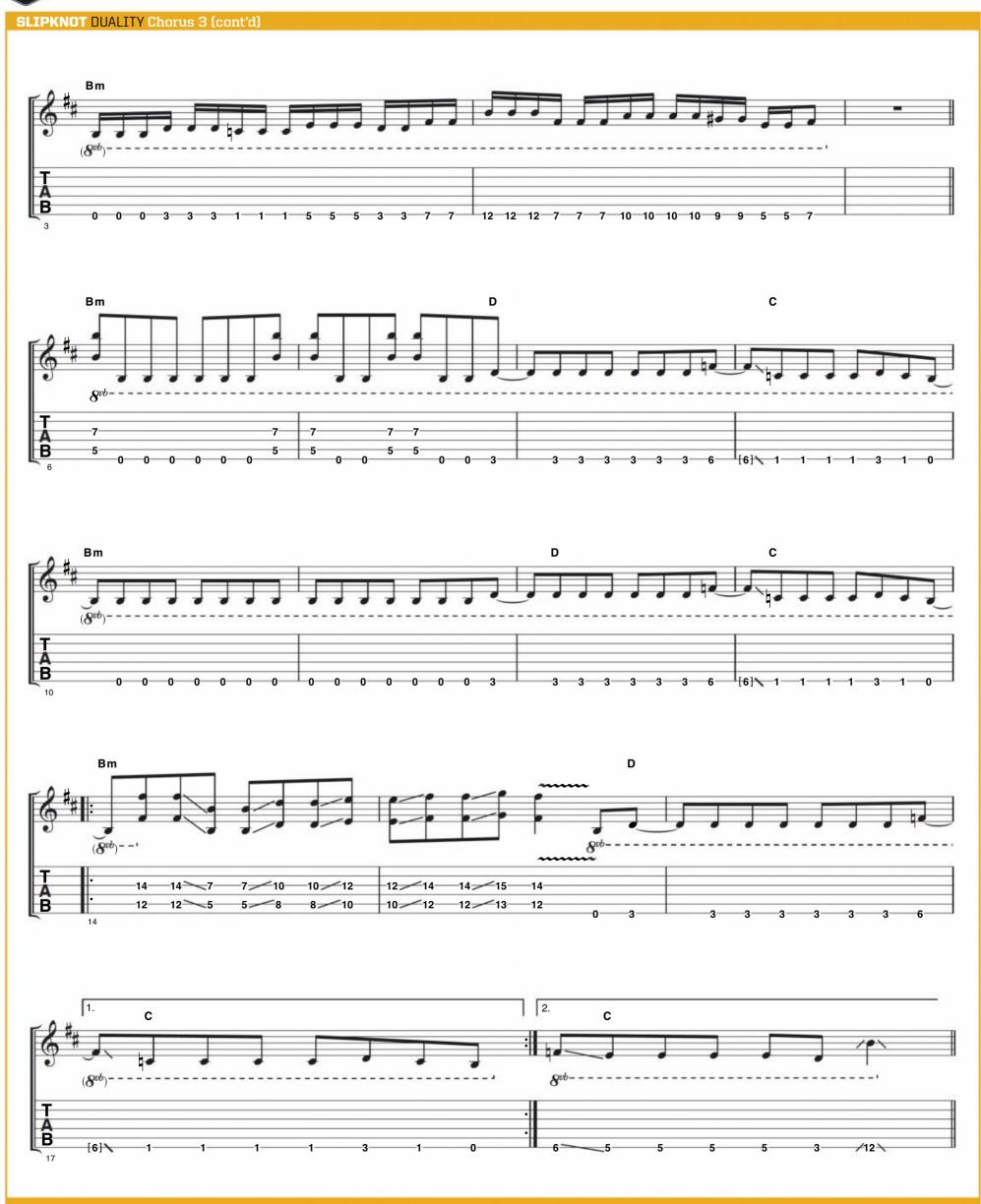




The breakdown is an extended version of the bridge riff near the beginning of the song. There is a combination of open chords, fretted chords, palm muting and pinched harmonics throughout, as well as rhythmic variations, so play it slowly at first to ensure all the elements flow together.







Watch out for the unusual rhythms in bars 6 and 7-identifiable from the two-note octave shapes you'll be using. It's all straight eighth notes here, but the placement of

the octave shapes might just throw you off. Once again, practise slowly until you get a feel for it.





STEELY DAN KID CHARLEMAGNE

Delve into the work of one of the greatest session players of all time with Rockschool's Grade Eight Steely Dan classic

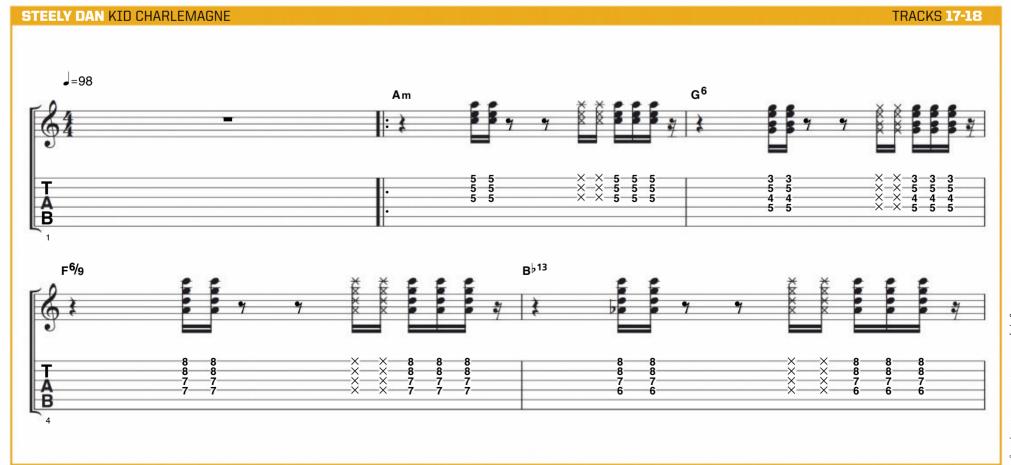
id Charlemagne appeared on Steely Dan's fifth studio album Royal Scam in 1976.
The album featured the cream of the crop of session musicians of the time, including, as on this track, Mr 335 himself – guitarist Larry Carlton. It's a great example of the fusion of styles that was happening in the 70s, where bands and musicians were mixing the grooves of funk with the harmony of jazz and the guitar sounds of classic rock, making this the perfect track

to study for an insight into the genre of fusion.

The verse features an Am–G6–F6/9– $B_{\flat}13$ chord sequence where the guitar is playing chord fragments with a funk rhythm and technique. Meanwhile, the solo is a masterclass in referencing chord tones. Larry is never too far away from blues pentatonic phrasing, but is a genius at blending this with arpeggios relevant to the chords he's playing over. The result is the Dan's typical heady mix of blues and jazz.





















After learning Larry's solo, try using the backing track to develop your own improvised solos over. Initially play the solo as transcribed and then start to replace bars with

your own ideas. The trick is to make the changes seamless, so make sure to practise slowly before jamming with the track.

SHOOTING AT THE MOON

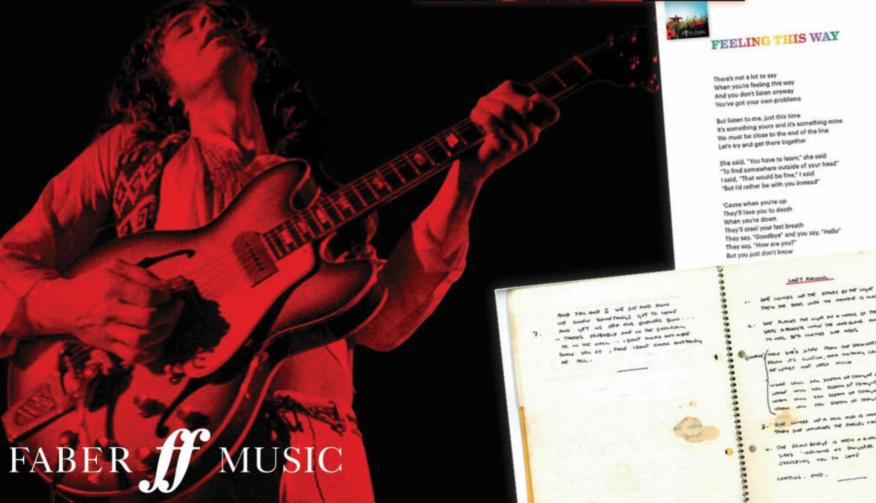
THE COLLECTED LYRICS OF KEVIN AYERS

The brand new book showcasing lyrics from Ayers' solo career and pages from his notebooks, alongside never-before-seen photographs and quirky collages.

Immerse yourself in the world of one of the **great bohemian voices** of British music.

Available to buy online and from all good music retailers.

















JAMI TRACK PLAY GUITAR WITH A BAND!

GYPSY JAZZ

Channel the smooth, technical playing style of Django Reinhardt with TG's gypsy jazz walk-through

ypsy jazz is widely associated with Romani guitarist Django Reinhardt, who pioneered the genre in Paris during the 1930s. Now best remembered for his collaborations with violinist Stéphane Grappelli, Django was a musical genius, and his playing style continues to inspire jazz guitarists such as Angelo Debarre, Jimmy Rosenberg, Remi Harris and Biréli Lagrène to this day.

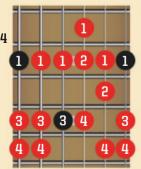
This style of jazz is a slick musical form that demands good technique. Uptempo solos tend to be based on wide-interval arpeggios and fast scale runs, and regular chord stabs outline the progressions with each lick. Of course, this means that you have to know the progressions inside out.

Our Jam Track shouldn't pose too much of a challenge, but tougher diminished chords and fast changes are commonplace in the style. Take a look at the chord chart, practise playing through the chords, and work out two or three voicings for each before you start soloing.

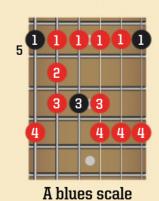


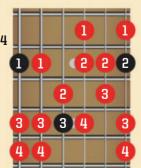
SCALES

■ ypically of Gypsy jazz, there are a fair number of scale options here. A natural minor and A blues scales both work well over the Am and Dm chords, and you can switch to A harmonic minor over the E7. When you reach the A7 and B7 chords try using an arpeggio – simply play a lick using notes from the chord shapes.



A natural minor scale





A harmonic minor scale

CHORDS

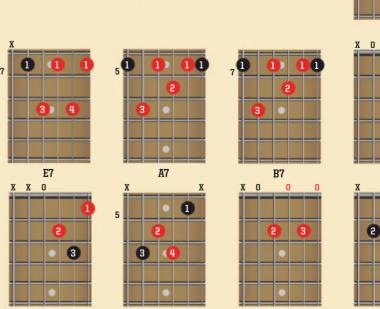
Dm

■ ive chords is all you need if you want to play ■ along with this month's backing track. They're all barre chords though, so, if the dreaded aching first finger kicks in, try switching to some open chords instead - we've provided both here. Most importantly, listen to our backing track for a standard Gypsy jazz rhythm groove and try to join in with the swinging uptempo feel.





B7



E7

A7

king Ph Capone Photography Michael Ochs Archives/Getty



JAM TRACK

CHEAT SHEET

Tempo: 100 bpm Time 4/4 Kev/scale: A minor Django's Swyng

INTRO / OUTRO

11: Am / / | Dan / / 1 | 3 | E7 / / / | / / | |

VERSE

PRE-CHORUS

Den / / / / / An / / / / / | B7 / / / / / / | E7 / / / / / |

CHORUS

Following the intro riff, the track runs straight through to the end of the chart before repeating the verse, pre-chorus and chorus over and again. Think carefully about gradually building your solo ideas. Perhaps start with a slow, tuneful melody and take time to build up to speedier technical licks.



THE TURNAROUND LICKS OF THE BLUES GIANTS

SONNY LANDRETH

Learn about the style and techniques of this slide guitar virtuoso with five transcribed examples and a specially-recorded backing track

Vince Gill namechecking him as one of the finest slide players in the world, Sonny Landreth has maintained a steady and fruitful career since the early 1970s, recording a stream of solo albums, guesting on many more and maintaining a busy touring schedule with his trio. This month's tutorial is based on the trio format with just bass and drums backing allowing the guitar to be heard loud and proud!

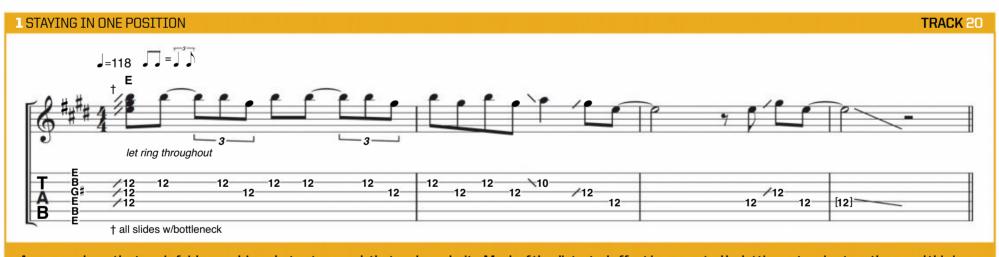
However, before getting started, there are a couple of things you'll need to prepare.

Sonny's sound isn't just about his gear –

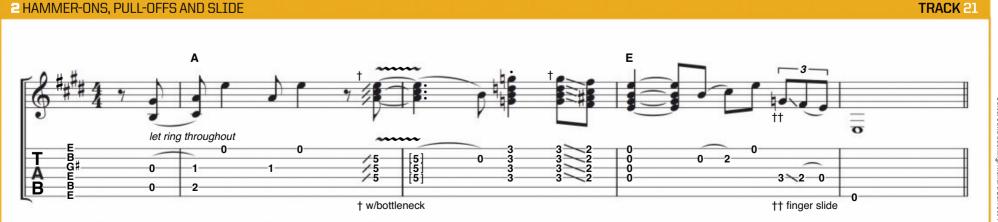
he usually plays in an open tuning. Our tab examples use his favourite: open E (low to high: E B E G# B E). By tuning the third, fourth and fifth strings up in this way, you'll now have a ringing E chord when you strum the open strings. Ideally, use a fixed-bridge guitar to avoid difficulties with string tension.

Next, you'll need a slide. Sonny prefers a heavy glass slide, which he wears on the fourth finger of his fretting hand, leaving his remaining fingers free to fret in the conventional manner. This is key; Sonny will often fret a note or two behind the slide to give unusual voicings. Have fun!



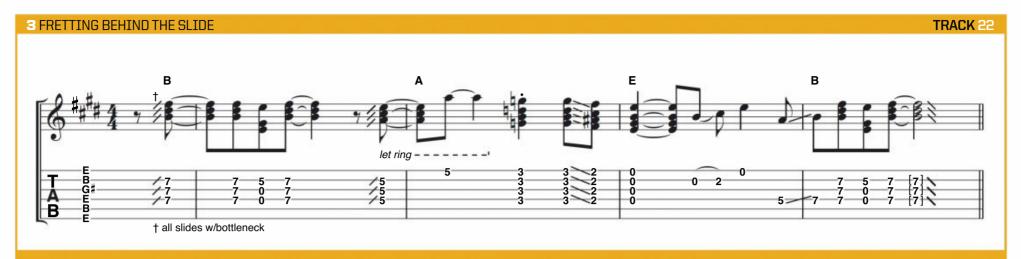


As you can hear, the tone is fairly overdriven, but not so much that we lose clarity. Much of the distorted effect is generated by letting notes ring together – and this is where the open tuning really comes into its own. Remember to position your slide directly over the fret for accurate pitching – we're in 12th position here.

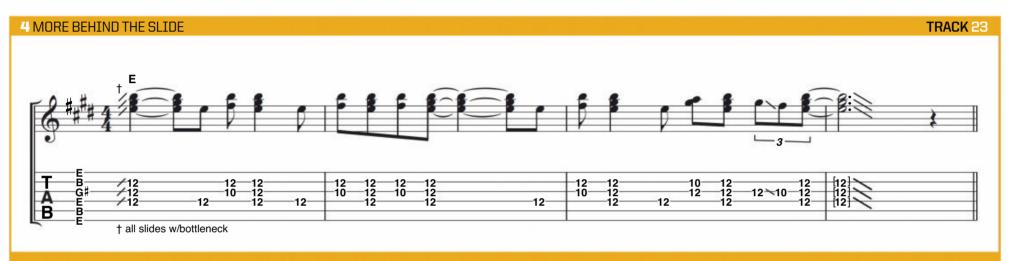


Starting with a Keith Richards style hammer-on, the slide is brought back into play as we head for the A chord. After sliding down to G, we then head back to the open E chord (via a quick F# at the 2nd fret). Here, we revert back to conventional playing, with a hammer-on, slide and pull-off.





Sonny often frets notes behind the slide to give voicings you might not normally expect to hear using a bottleneck. In this case, the second string is pressed at the 5th fret, while the slide is positioned at the 7th. Though it is lifted off briefly in this example, you can see how it expands the possibilities – once you have developed the skill!



Once again, this example features fretted notes behind the slide. Sonny makes this easier for himself by using heavy strings and a high action (generally the best option for slide guitar) but it is possible with a light touch and some patience!



This month's final example mixes conventional playing, bottleneck and fretting behind the slide to give an overview of what we've been concentrating on here. This isn't an easy technique at first, but by keeping the gain low and using a light touch, some amazing sounds can be made!

TRUMP(ET)S WAR

Once upon a time, there was a man with a trumpet. And when he was a soldier in the US Army landing on the beaches of Normandy, he kept it by his side. Once, when he was standing guard at night, his captain told him: "Don't play tonight, there's a sharpshooter out there." But our

man thought: "That guy out there is just as scared and lonely as me. I'll play a piece for him."

The next day, a POW was brought into the camp, and he asked: "Who is the trumpeter that played 'Lili Marleen' last night? When I heard that song, the war was over for me - I just

couldn't use my gun any more."

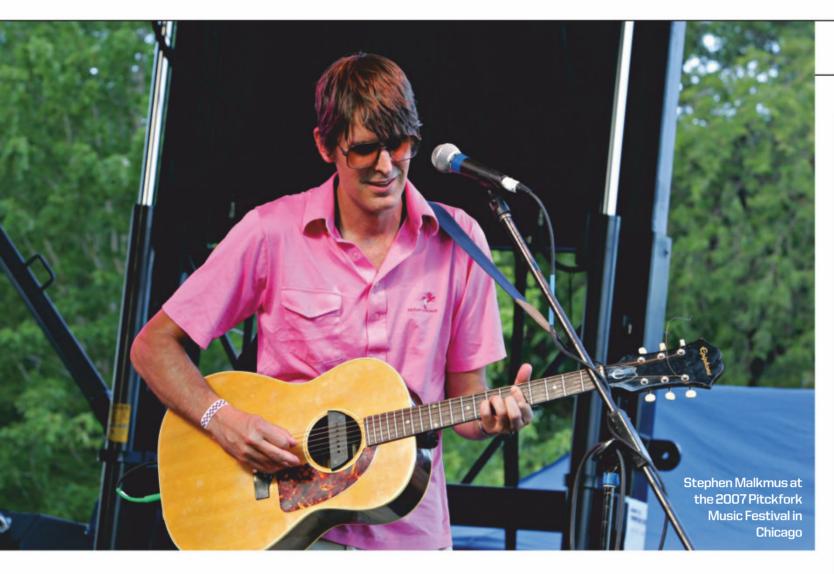
The man with the trumpet was called Jack Leroy Tueller. And though it may sound like a fairy tale, this is a true story. A story only music can write.











GOLD SOUNDZ

THE SLACK-ROCKER STRIPS THINGS BACK FOR NEW SOLO LP

ormer Pavement frontman Stephen Malkmus has announced his third truly solo album, Traditional Techniques, on 6th March via Domino Recording Co. Following on from last year's electronic album Groove Denied, Traditional Techniques explores Malkmus' folk side, with its 10 songs composed and performed on the singer's 12-string acoustic. Performing with a new band

outside of his usual outfit The Jicks, Matt Sweeney joins for additional guitar duties, while The Decemberists' Chris Funk has been drafted in to assist with arrangements.

According to an official announcement on Malkmus' Instagram page, Traditional Techniques is "New phase folk music for new phase folks, with Malkmus as attuned as ever to the rhythms of the ever-evolving lingual slipstream. Drawing from a whole new musical palette including a variety of Afghani instruments – to support an ache both quizzical and contemporary, the resulting album is expansive and thrilling. Alongside gorgeous folk music, there are also occasional bursts of flute-laced swagger, straight-up commune rock, and mind-bending fuzz." Traditional Techniques is released 6th March on Domino.

SHAPE OF YOU

PLAYING FOR COMFORT WITH FURCH

urch Guitars returned to NAMM earlier this year to present their first models with the new ergonomic Bevel Duo feature. This innovation, comprised of two bevels – one in front, at the forearm, and one in the rear, at the rib position – is said to provide 'a significant increase in player comfort'.

As Petr Furch, CEO of Furch Guitars, says: "A bevel is one of the most complicated manufacturing

operations possible in the production of acoustic guitars. Even more complicated is to apply this to both the top and back. This is why most guitar makers only bevel the top plate. But we have decided to apply it on the back plate as well, and the result is really outstanding. Bevel Duo allows players to play all-out for extended periods without negatively affecting their comfort."

www.furchguitars.com

TRACKS 25-29 FIVE FLAT CHORDS

Essential chords to fuel your creativity



B_bmaj7



D_badd#11



G_bmaj7



E_pm7





Mark Morton

THE GUITARIST WITH THRASH METALLERS LAMB OF GOD CHANGES DIRECTION WITH A NEW ACOUSTIC EP. WE JUST HAD TO KNOW MORE...

ast year, I put out the Anesthetic album and did a full live band tour, but after that, I got the opportunity to do some abbreviated acoustic sets – one at the South Temple Festival, in Columbus, Ohio, and one at Download last summer. That was really the first time I'd got to do something like that..." the Lamb Of God lead guitarist enthuses. Anesthetic is Morton's debut solo release; a hard rock and metal record – perhaps what you'd expect the metal maestro to do. The acoustic gigs? Well, that was more of a change of direction...

"It went really well, and I was kinda thrilled with the feedback I got from it. For me, it was time to stretch out, get out of my comfort zone a little bit, and do something different. Those first couple of acoustic shows were definitely an opportunity, and I really enjoyed it. So we started this campaign – an EP of acoustic songs, and some cool covers too." The result? This year's Ether EP, a five-track offering featuring guest vocals from Lzzy Hale, Killswitch Engage's Howard Jones, John Carbone (Moon Tooth) and Mark Morales (Sons Of Texas). A contemporary line-up, then, but Mark traces his influences back to the 90s on Ether, as revealed in cover versions of Black Crowes and Pearl Jam songs.

"I'm on record as being a Black Crowes super-fan. On my last album I had Steve Gorman play drums on two songs, and Marc Ford played a guitar solo, the only guest guitar I had on that album. The idea to me of having Lzzy [Hale] sing that song [She Talks To Angels], coming from a different protagonist, was kinda heavy and cool. Black is just a great song, I've always loved that song, particularly the Unplugged version – it gives me goosebumps. I've heard Marc perform it a bunch of times in his own acoustic gigs, so that one was really obvious for us to do. Our version is consciously stripped

down. We didn't try to recreate such a classic song, we just put our own quiet spin on it and it turned out cool."

Talking about the challenges of choosing songs to play live, Mark is pragmatic, with songs seemingly choosing themselves or ruling themselves out. He also reveals his emotional connection with one or two favourites. "Some of the more metal-oriented songs we're not gonna do – we're not gonna do the song I did with Alissa (White-Gluz) and Randy (Blythe), we're not doing the Chuck Berry song – those are pretty much thrash metal songs; we could

MORTON WORDS

Mark's happy with his acoustic guitars. Just plug in and play through the PA...

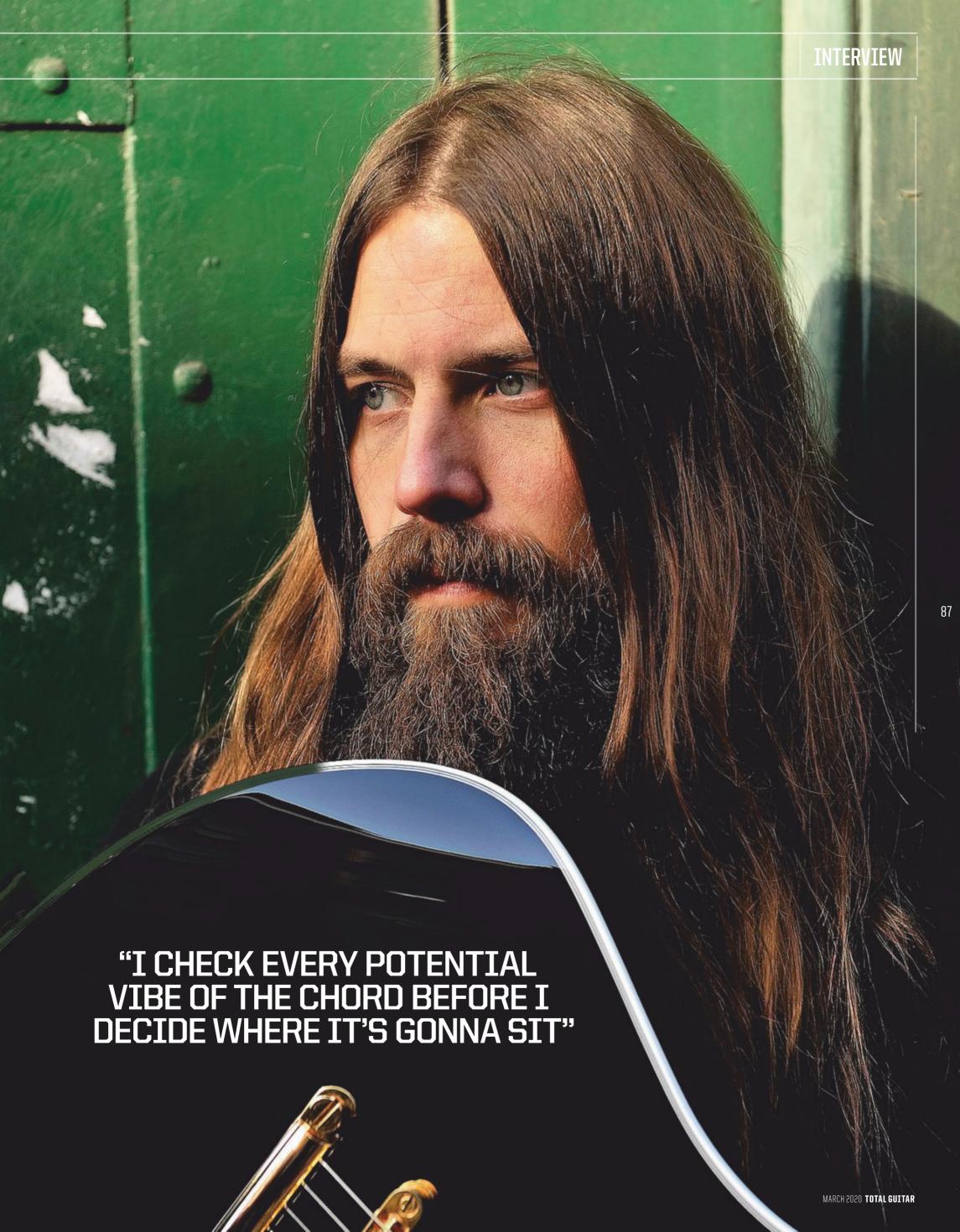
I have a pair of beautiful Guild D-55s, the electric ones. The good people of Guild are taking great care of me. They make a beautiful guitar and have really stepped up. I've had my D-55 for years, it's what I recorded all of *Ether* with. Then coming over here, they gave me a loan guitar that's the same model, so I'm stoked. I'm in good company, and we're playing straight into the PA – no loop pedals or effects or anything like that, we're just playing the tunes, man. There's nothing I love more than chunking up a heavy riff, doing a screamin' two, man, pushing speakers, but this is just a different kind of thing. I'm learning as I go, and making people happy.

certainly play them on acoustic guitars but they don't translate very well. There is some more mellow, straight rock stuff on *Anaesthetic* and those translated pretty well. For example, *Cross Off* [featuring the late Chester Bennington on vocals] wouldn't be right not to play. It's such a special song, a special part of the solo stuff I've been doing – it means a lot to people, a lot to us, and to me. There really is a song underneath all that, and we got to the kind of essence of that, instead of trying to replicate all of the riffing and all the technique that's in the version you hear on the album, we tried to

present and honour the actual song."

We get the impression Mark has been evolving as a musician, with the acoustic guitar becoming more of a go-to choice. "I wrote some of the stuff on Anaesthetic on acoustic, and almost all the new songs on Ether. I recently wrote a couple songs with Mark Lanegan, also on acoustic. It depends on what I'm writing – for Lamb Of God, I'm writing entirely on electric, but outside of that, I keep an acoustic lying around. Now more than ever, I've been playing more acoustic. I think it's healthy to write on acoustic, because it doesn't lend itself to the sort of trickery - the technical focus - that we may intuitively start doing when we grab an electric. I don't wanna downplay electric playing and riffing, it's just a different style. For me, when I play acoustic, I try a lot of different options to make sure I'm checking every potential vibe of the chord before I decide where it will sit."

Reflecting on the suggestion of a new direction, Mark says, "I think with Anaesthetic people saw there was a lot of diversity in the songwriting, it's not just metal. I love metal, it's my home, but I got the chance to do something a little more diverse stylistically, and I pounced on it. Maybe people will recognise me for doing that kind of stuff, too. Regardless, I'm just glad that people are listening at all. You need to grow as a songwriter."



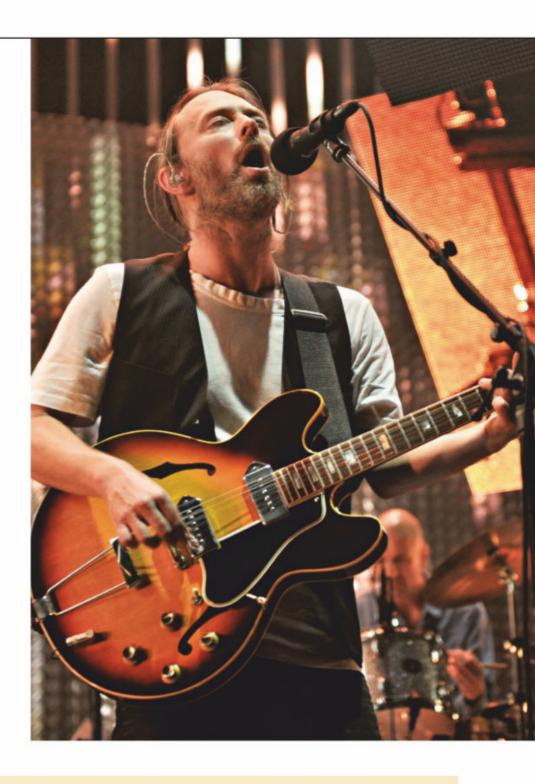
OPEN-WIC SONGBOOK

RADIOHEAD FAKE PLASTIC TREES

Get your open chords and strumming in shape with Radiohead's intimate acoustic alt-rocker

nveiled to the world in March 1995, sophomore release *The Bends* established Radiohead as a supreme alt-rock force that would be set on the path to global domination. And, though nearly every track on the album is a classic, *Fake Plastic Trees* offers an intimate, emotionally charged centrepiece – it's also pretty easy to strum along to. With just six chords, all in the open position, there's nothing too challenging for any guitarist to have a go at. Even the scary sounding Dmaj9/F# and Bm11 chords are easy enough to play.

When you have the chords under your belt turn your attention to the strummed rhythms. Generally, there's emphasis on every beat – assuming you're counting to four in time with the 74 bpm pulse.
Listen out for the variations in bars 2, 4, 6 and 8 of our tab though, where beat 3 is un–accented, ie, played without emphasis. It's a subtle change that keeps the music flowing at these moments.

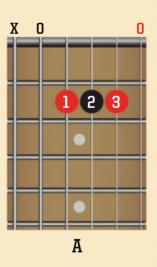


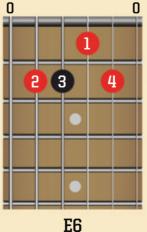
CHORDS

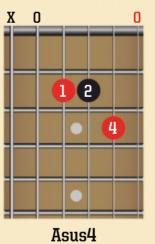
Il of these chords are played in the open position and all belong to the key of A major. To help you to feel more 'anchored' to the guitar, keep your fourth finger in contact with the second string for the whole song. Use a sliding motion to move between the 3rd and 4th frets, but try not to lift your finger away from the string. Finally, note that we've written the Dmaj9/F# chord as 'Dmaj9' in the song sheet to save space.

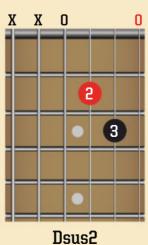
FAKE PLASTIC TREES

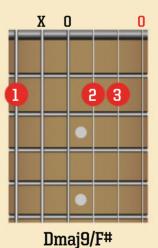
Words and Music by Thomas Yorke, Edward
O'Brien, Colin Greenwood, Jonathan Greenwood
and Philip Selway
Copyright © 1994 WARNER CHAPPELL MUSIC LTD.
All Rights in the U.S. and Canada Administered by
WC MUSIC CORP.
All Rights Reserved. Used by Permission of Hal
Leonard Europe Ltd and Faber Music Ltd

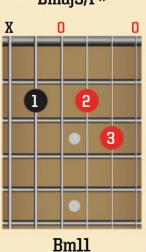












Guitars and backing: Phil Capone Photo: Andy Sheppard



Fake Plastic Trees

Verse 1

Asus4 Dmaj9 Her green plastic watering can

> **E6** Dsus2

For her fake Chinese rubber plant

Dsus2

In the fake plastic earth

That she bought from a rubber man

E6

In a town full of rubber plans

Dsus2

To get rid of itself

Chorus

Bm11

It wears her out

It wears her out

It wears her out

It wears her out

Verse 2

Asus4 Dmaj9 She lives with a broken man

E6

Asus4

A cracked polystyrene man

Dsus2

Who just crumbles and burns Asus4 Dmaj9

He used to do surgery

Dsus2 **E6**

For girls in the ei-ei-ghties

Dsus2 But gravity a-always wins

Chorus

Bm11

It wears him out

It wears him out

Bm11

It wears him out

Asus4 A

It wea - ea - ea - ea - ears

Verse 3

Asus4 Dmaj9 She looks like the real thing

She tastes like the re-al thing

Dsus2

My fake pla-a-stic love

Dmaj9

Dmaj⁹/F#

But I can't help the feeling

E6 Dsus2

I could blow through the cei-ei-ling

Dsus2

If I just turn and run

Chorus

Bm11

And it wears me out

It wears me out

Bm11

It wears me out

E6

It wea-ea-ears me out

Breakdown

Bm11

And if I could be who you wanted

If I could be who you wanted

E6 Dsus2

All the time

E6 A **E6**

All the time

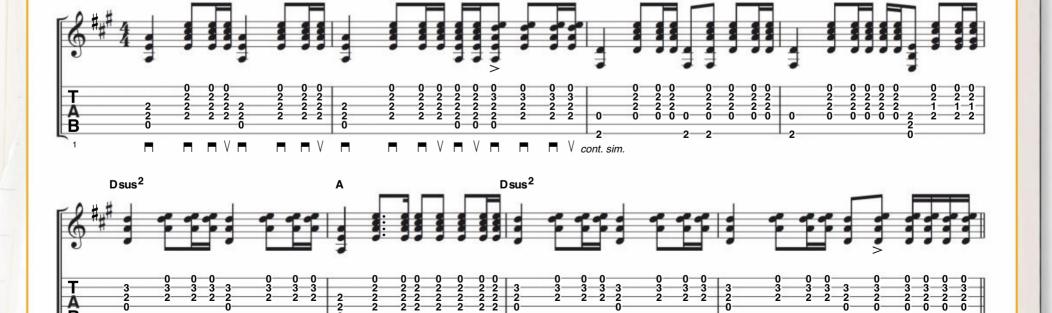
Outro

Bm11 Bm11

FAKE PLASTIC TREES RADIOHEAD Intro

-74

TRACK 30



The rhythm is based on a 16th note alternate strumming pattern. Keep a constant 'down up' motion going throughout to help you stay in time. Curl your thumb over the top of the neck and lightly touch the fifth and sixth strings to mute them when necessary.

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 bullshit-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



SUPERB, A BEST BUY

00000

EXCELLENT

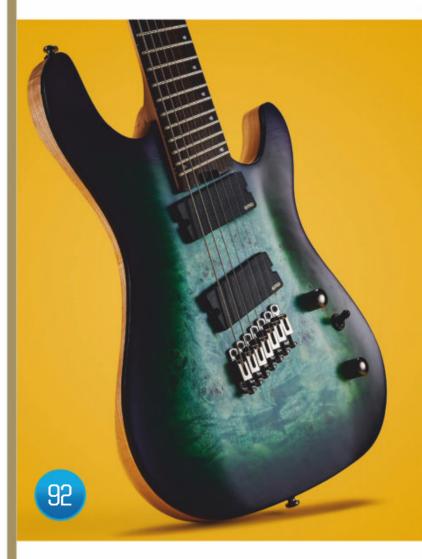
ABOVE AVERAGE KIT

SOME ISSUES

2000

POOR





091 START ME UP!

Five new items for your rig

092 CORT KX500MS

Seven-strings and ready to shred

096 VOX CAMBRIDGE50

A superb mash-up of hybrid and digital tech

098 HUGHES & KETTNER BLACK SPIRIT 200 FLOOR

A forward-thinking floor-based amp

100 TG TEST: DANELECTRO

Three options on parade including a 12-string, an all-rounder and a rock 'n' roll sexagenarian

106 MOOER TONE CAPTURE

Sample any guitar with this box of tricks











START ME UP!

Five new products to fuel your GAS this month...

TWO NOTES TORPEDO CAPTOR X

The acclaimed Universal Audio Ox could have some serious competition here - especially when it comes to price. The Torpedo Captor X is for players who want to enjoy a great sound they're playing onstage, at home or in a recording environment. This is a compact reactive load box, attenuator and mic'd cabinet simulator in one. A solution for going direct without a cab or enjoying a loud amp at lower levels.

(£469, www.two-notes.com)

NOBELS ODR-1 BC

Don't be fooled by the green livery-this certainly ain't no Tube Screamer clone. Those in the know will swear by the ODR-1, as it's a cult classic overdrive trusted by session and wide range Spectrum control-it increases bass and treble at the same time. But this 2020 edition adds a bass cut switch under the battery cover for increased low-end shaping. Also added is the capability to run on 9 or 18v for extra headroom. (£99, www.nobels.de)

DIMARZIO JIM ROOT CLIPLOCK QUICK RELEASE STRAP

Can't stump up the readies for the new Fender signature Jazzmaster from Slipknot's #4? There is still hope. ClipLock straps feature heavy-duty clips that secure to your guitar with bushings, providing super-secure fastening and allowing players to change from one guitar to another with just "a little fingertip pressure". It's available in black or white with Jim's red 'Knot insignia-there's a standard strap version too. (\$29.99 www.dimarzio.com)

KORG NU:TEKT OD-S NUTUBE OVERDRIVE KIT

Imagine Lego but for guitarists-this build-your-own overdrive pedal is probably the closest thing we've found. And without the need for a soldering iron, too. It must be easy because NAMM and managed it in under the quoted 45-minute assembly time. The finished OD-S packs an analogue triode vacuum tube for warmth and harmonic detail. The Nu:Tekt line also includes a headphone amp (£269) and synthesizer kit (£99). (£219, www.korg.com)

IK MULTIMEDIA iRIG PRO DUO I/O

It's been 10 years since the first iRig and although this isn't being touted as an anniversary model, it's certainly worthy of it on paper with dual-channel recording for iPhone, iPad, Android and Beyond guitar it offers simultaneous scope for mic input (XLR is catered for), bass, keyboards...the possibilities go on and on. The Pro Duo's updated mic preamps with increased gain and a USB-C cable to keep up to date with the latest devices. (£169, www.ikmultimedia.com)

CORT KX500MS





Seven strings, totally brutal tone, multi-scale... This is gonna be poplar

ccasionally you pick up a guitar and you'll be a little unsure as to what you are going to get when you switch on the amplifier. But usually there are some subtle (and not-so-subtle) tells. Take the KX500MS. You might call Cort's flagship seven-string a multi-scale extended-range exercise in not-so-subtle tells. It has fanned frets for enhanced intonation and feel, and, complementing those, you'll also find an angled nut and an ingenious hardtail of six independent saddles arranged in similar fashion to Ibanez's Mono-rail bridge design – adding yet another angle into a soupedup S-style that is all angles. With two active EMG-707 humbuckers

one of the coolest - definitely easier on the eye than, say, the similarly 4+3 profile offered on Jackson's fleet of seven-strings. And, again, it's all angles, sharp, kinda dangerous. On that headstock you'll find a set of Cort locking tuners in black nickel, matching the bridge and volume and tone controls.

The KX500MS feels a little neck-heavy at first, but that could be said of many extended-range electrics. Its five-piece maple and purple heart (aka amaranth) neck is certainly packing no extra flab; it is flat and slim, topped with a macassar ebony 400mm-radius fretboard with Raindrop inlay. Speedsters will love it. The satin-smooth finish won't gum up on you. The sculpting around the

SHARP, KINDA DANGEROUS... 33

in the neck and bridge, there's probably a little too much fire for the open-mic folk night. Indeed, the KX500MS might have too much firepower for all but the most extreme styles - chug-heavy contemporary metal, death metal, dient, that kind of thing - but, hey, that's what Cort built it for. That they built this and put it on the market for 700 bucks is really the big story here.

The KX500MS has a genuinely premium look and feel. It has a lightweight swamp ash body with a poplar burl top that lends a three-dimensional quality to the finish, and a matching headstock that might have one of the less-celebrated names in guitar manufacturing, but is nonetheless bolt-on heel-joint offers safe passage to the upper registers. The multi-scale fretboard is certainly a boon when it comes to intonation and keeping the solidity in that low-end, and if it takes a little getting used to, with the KX500MS's scale running 27-25.5" from seventh-string to first, the greater leap for anyone visiting the KX500MS from a regular six-string is adjusting your style so you can make full use of the low B string.

The KX500MS is certainly voiced for low-end shenanigans. There have been a number of active humbucker sets wound for seven-string players who need plenty of gain, but the EMG 707 remains a firm favourite, not least for its clarity. Featuring an

Ð



FRETBOARD The fanned fret design will feel intuitive in time, while the jumbo fretwire rewards a light touch-ideal for shredders

AT A GLANCE

BODY: Swamp ash with poplar burl top

NECK: 5-piece maple and purple heart, bolt-on

SCALE: 27-25.5" multi-scale

FINGERBOARD:

Macassar ebony with Raindrop inlay

FRETS: 24

PICKUPS: 2x EMG 707 humbuckers (neck and bridge)

CONTROLS: 3-way pickup selector, 1xvolume,1xtone

HARDWARE: Individual hardtail string-through body bridge unit. locking Cort tuners, black nickel

LEFT-HANDED: No

FINISH: Star Dust Green [as reviewed], Star Burst Black

CONTACT:

cortguitars.com/ 01132379658







A question of scale

What's a fanned fretboard and do I need one?

ort's KX500MS has a lot of clever features but the most eye-catching is the multi-scale fretboard. This novel approach in guitar design is credited to luthier Ralph Novak who developed his designs in the 70s. It's only recently, with the growing popularity of extended-range guitars, that we're seeing such designs in mass production. The benefit of a multi-scale is it helps keep tension in the longer-scaled lower registers, so the low B string stays tight, while the high E has a Fenderesque 25.5" scale, so you can bend high-notes as normal. It's a way of splitting the difference and getting the best of both, and if it's not needed for a standard six-string, it can be crucial for an extended-range guitar's performance.

alnico V magnet with wide aperture coils, the EMG 707 brings plenty of crunch and definition for open chords, and is good and tight when playing busy, high-gain leads, ever ready for pinch harmonic squeals – especially on the bridge humbucker.

The controls are fuss-free; you've got master volume and tone and a three-way selector, while the 9V battery for the pickups onboard preamp is easily accessed via a compartment on the rear of the body. Clean tones are excellent, so long as you enjoy the precise piano-esque attack when using EMGs. However, such are the EMG





707s' output you'll want plenty of headroom on your clean channel or your tone will start to break up pretty early. This is by design; these active high-output humbuckers hit your amp hard. If there's a weakness in the KX500MS's tone it's in that breakup. The cleans are fine, pare excellently with a little modulation and would take a pedal such as a Boss CH-1 Super Chorus like mother's milk. The high-gain tones are total nuclear sustain and crunch - riff with abandon. But milder overdriven crunch tones don't quite have the dynamics as



you might find on a passive humbucker. But that's the point, right? Ultimately, that compressed quality will serve you well when it gets down to playing modern metal, splitting the atom with shred and weaponising your rhythm tone so it could saw through concrete.

Jonathan Horsley

	FEATURES	0	0	0	0	0
	SOUND QUALITY	0	0	٥	0	ø
[VALUE FOR MONEY	0	0	0	0	٥
Σ Σ	BUILD QUALITY	0	0	٥	0	0
2	PLAYABILITY	0	0	٥	0	
S	OVERALL RATING	0	0	٥	0	0

ALSO TRY...

IBANEZ RGMS7 IRON LABEL MULTI-SCALE

Boasting a similar Mono-rail six-saddle bridge to the Cort for easy intonation adjustment and greater resonance, this Ibanez is a steal.

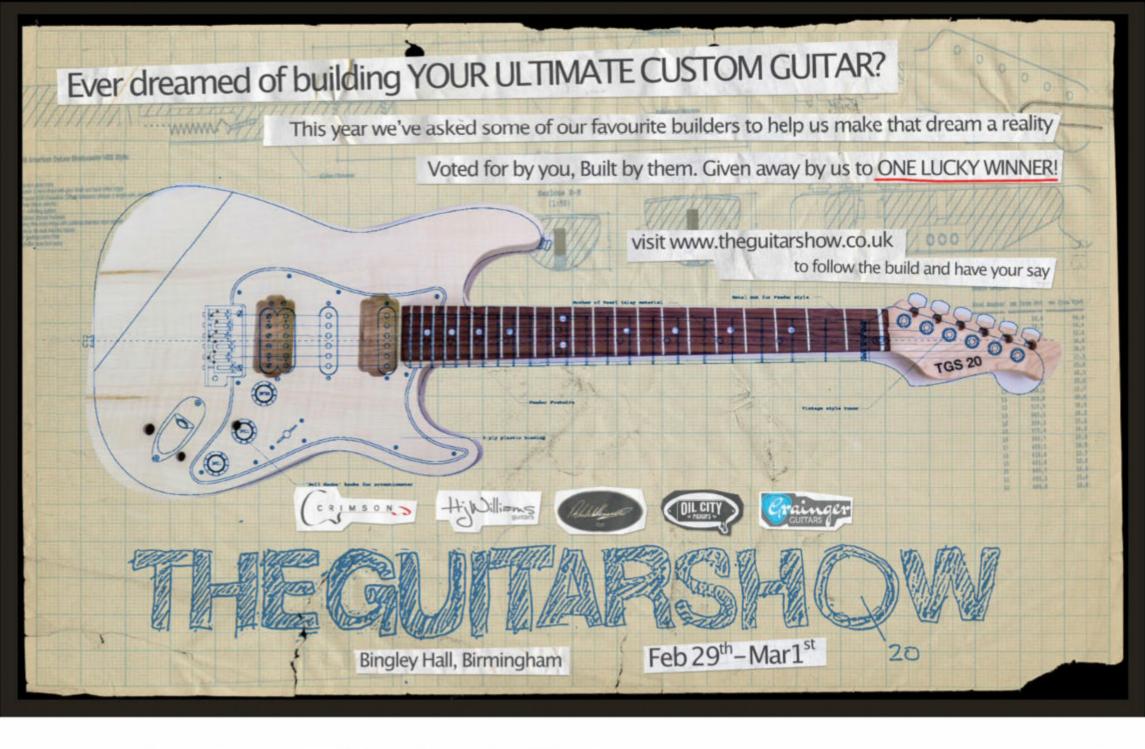
SCHECTER REAPER-7

It's a little more expensive, but the Reaper-7 is one of the best seven-strings we have played with excellent pickups and hardware, and poplar burl top.

JACKSON X SERIES SLAT7

With a quilt maple veneer top, Jackson blade humbuckers, a 12" to 16" compound radius laurel fingerboard, the stylish SLAT7 is truly a modern shred machine.







HUDDERSFIELD'S PREMIER GUITAR SHOP

14 years in business and still going from strength to strength.

With 400 guitars in stock WE STOCK DRUMS, AMPS, UKULELES AND PIANOS.

OPEN 6 DAYS A WEEK



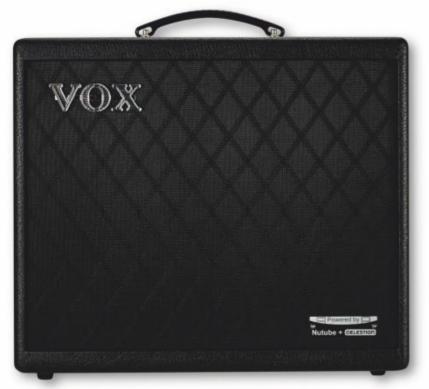
39b WESTBOURNE ROAD, MARSH, HD1 4LQ

TEL: 01484 321388 www.keithdawsonmusic.com











VOX CAMBRIDGE50



TG gets hands-on with Vox's hybrid of valve and digital tech

hen it comes to guitar amplification it's particularly hard to overstate the longstanding influence of Vox. Found in the rigs of pioneers such as Hank Marvin, Brian May, The Edge and, frankly, countless other icons of guitar, the company's legendary AC15 and AC30 models have shaped the sound of rock music for more than six decades.

The Cambridge50 continues in the vein of the company's Valvetronix digital modelling sounds come from Vox's own AC30 and AC30TB (Top Boost) models. There's a warmth and naturalness to these, and the breakup on the grittier TB model is especially pleasing. The three obviously Marshall-inspired Brit models also see the Cambridge50 in its sweet spot. Think classic 70s Led Zep riffing, AC/DC style rock 'n' roll, Oasis drive tones – you get the idea.

Head into high-gain territory and you'll find the Vox has a biting top-end. We found ourselves winding the treble right

FE IT REALLY IS LOUD! AND REALISTIC? YES THAT TOO!

series of the early 2000s, employing a NuTube preamp valve alongside Virtual Element Technology (VET) and a solid-state power amp to deliver "realistic and stage-ready" sounds.

Analysing that statement, we'd agree that this is indeed a stage-ready offering – for small gigs at least. For a relatively lightweight amp, this Vox box dishes out impressive volume levels. It really is loud! And realistic? Well, yes, that too!

Perhaps unsurprisingly, the Cambridge50's most authentic

back to tame the highs on the SL-OD and Double Rec models. A touch too much top-end perhaps? We'll let you be the judge of that, but even if it does sound harsh to your ears, consider that it might be just the ticket to get you heard in a busy mix or over a heavy-hitting drummer.

Eight effects are included on the Cambridge50 – four modulations and four delays/ reverbs – and, though you can't dial all eight in at once (and, let's face it, most players wouldn't do so anyway!), you can save up to 11 presets. That's probably enough for most gigs and a fair reflection of the amp's capabilities – this is a product designed for players who want to dial in their tone quickly, and not for those who want to go deep into menu editing. Suffice to say you'll get the most out of the effects via Vox's included Tone Room editor app for Mac, Windows, iOS and Android, and there's also an optional VFS-5 footswitch controller (£60).

These days modelling amp devotees will expect a bit more than just mere amplification, so the Cambridge50's onboard tuner, audio interface, auxiliary input and preset recall controls are welcome additions. JamVOX III modelling software is also bundled.

The NuTube valve is the ace up the Cambridge50's sleeve though, helping to deliver a natural feel and response in those traditional Vox-inspired medium drive tones – and the amp certainly represents great value for money. Well worth a look!

Chris Bird

	FEATURES	0	٥	0	0	
SUMMARY	SOUND QUALITY	0	0	0	0	
	VALUE FOR MONEY	0	0	0	0	0
	BUILD QUALITY	0	0	0	0	
	USABILITY	0	0	0	0	
	OVERALL RATING	0	0	0	0	0

AMP MODELS

The amp model knob cycles from the cleanest through to the dirtiest tones, with an 11th clean 'line' option for acoustic guitars and keyboards

TAP TEMPO / TUNER

Exactly what it says on the tin! Tap the button to set your delay times by feel or hold it down to access the onboard tuner

I/O SOCKETS
Use the 3.5 mm
TRS jack socket to
plug in a digital music
player and jam along.
A headphone/line
output includes
speaker cabinet
emulation for playing
at home

AT A GLANCE

TYPE: Digital modelling guitar combo with NuTube valve

OUTPUT:50 watts **SPEAKER:**1x12"

VALVES: NuTube 6P1

CONTROLS: Power On/ Off, Preset Write, Amp Type (Deluxe Clean, Boutique Clean, Boutique Overdrive, Vox AC3O, Vox AC3OTB, Brit 1959, Brit 80O, Brit VM, SL-OD, Double Rec, Line), Gain, Treble, Bass, Volume, Modulation Type/Level, Delay/ Reverb Type/Level, Tap Delay, power level

SOCKETS:Input jacks, footswitch, aux in, line out, headphones out with cabinet simulator, USB (type B) port

WEIGHT: 8.9kg **DIMENSIONS:**

410mm(h)x 452mm(w)x 240mm(d)

CONTACT:

Vox Amplification voxamps.com







HUGHES & KETTNER BLACK SPIRIT 200 FLOOR (1889)



The amp heavyweights unveil their ultimate floor-based device

he unmistakable blue lights of Hughes & Kettner amps have been seen on stages for some of the world's biggest and best artists - from Rush, Kiss and Stone Sour to Pendulum, Al Di Meola and Elton John. In 2018, the German manufacturers announced their solid-state Black Spirit 200 head, the first to feature their revolutionary new 'bionic' Spirit technology – aiming to

pedals, two expression/controller inputs and MIDI compatibility, as well as three operation modes to best utilise the 128 presets on offer. Then there's the eight Red Box AE+ cabinet emulations, options for power sagging, switchable power taking it from 200 Watts at full pelt down to just two, further connectivity via the official app and more.

So clearly, it's a forwardthinking machine that offers

SE APPEALING FOR ITS ROAD-WORTHY DURABILITY 33

reproduce the natural response from classic valve amp circuits with effortless ease.

The brand-new, fully programmable, floor-based version offers much of that same ingenuity – even more, in fact - aimed at guitarists who want a fly rig-format super pedal to handle their amp tones and a variety of effects. The versatility is most impressive indeed: it has its own serial effects loop, two programmable true bypass pre-loops for your analogue

superior functionality to handle just about anything you could throw at it. But does it sound good? Well, truth be told, it's a bit of a mixed bag. The cleans aren't hugely inspiring, missing some of the frequencies you'd be hoping to hear from a unit made to mimic valve amps, with a noticeable digital shrillness. The Crunch and Lead channels fare much better, with thicker mids that capture the nuances in your riffs and solos to an articulate level – responsive as promised. This definitely feels like

where the Black Spirit 200 Floor comes to life. The Ultra channel, on the other hand, sacrifices those mids for a scooped metallic harshness that much like the clean channel cuts through in the wrong places.

With built-in reverb, delay and four types of modulation, there are a lot of extras that make this unit appealing - especially for musicians who want road-worthy durability (its high-quality aluminium die-cast housing can take much more of a beating than any amp) and flexibility. Of course, while it could never have rivalled the world-class tones of Hughes & Kettner's flagship TriAmp Mark 3 - which, let's not forget, retails for three times as much - a more musical clean channel would have been a welcome addition. Overall, though, this new board can certainly get a lot done in a very small amount of space.

Amit Sharma

	FEATURES	0	0	٥	0	0
SUMMARY	SOUND QUALITY	0	0	0		
	VALUE FOR MONEY	0	0	٥		
	BUILD QUALITY	0	0	٥	0	0
	USABILITY	0	0	0	0	
	OVERALL RATING	0	0	٥	0	0

SPIRITTONE GENERATOR

H&K are clearly proud of their Spirit Tone Generator. Digitally controlled but analogue at heart

CONTROLS Everything you could possibly need right there under your nose and lit up in that signature neon blue for good measure

PRE-LOOPS Being able to program two independent true bypass pre-loops brings high-level functionality with your analogue pedals

AT A GLANCE

TYPE: All-in-one fly rig amp

CHANNELS: 4

BANKS/PRESETS: 32/128

EFFECTS: Reverb, Delay, Modulation (Chorus, Phaser, Flanger, Tremolo)

CONTROLS: Channel, Gain, Volume, EQ, Sagging, Presence, Resonance, Noise Gate, Pre-Loop 182 On/Off, Boost On/Off, FX Parameters, FX Loop On/Off, Cabinet Type

NOISE GATE: IDB (Intelligent Dual Breakpoint) Noise Gate

OUTPUT: 2, 20, 200 Watts (switchable)

WEIGHT: 4.1 kg MIDI: In and Thru

CONTACT: www. hughes-and-kettner.



ROUND-UP

They are kinda weird, vintage rock 'n' rollers, with Lipstick singlecoils and Masonite builds, but don't underestimate the Dano's magic...



Danelectro lineup of this or any other year and you would be hard pushed to find a manufacturer with a better sense of what it is all about, what its guitars should look like, how they should sound. This month's test is a three-way shoot-out between a 64XT doublecut with tremolo, a

important because it gets at something fundamental about the electric guitar. Maybe it's about being cool. It is definitely rock 'n' roll. These Danelectro electrics have that. They've got the vibe. "To thine own self be true." Couldn't have put it better, Bill. Now, Laertes, where'd we put that fuzz box...

9

Fun on the outside, serious on the inside with stage-ready tone

and studio chops alike



DANELECTRO DC59M NOS+



Honk if you're shorthorny





he 60th Anniversary DC59M comes in a choice of silver or blue MetalFlake finishes, which might be too disco for some, even for birthday celebrations. But then those people could always plump for the DC59M NOS+, which comes in black to best serve their fantasy that they're actually Jimmy Page, the tune is Kashmir, and they're standing atop the stage in some Midwest enormodome. Whatever, it's all a matter of taste. Either way you'll get the famous Danelectro construction, Masonite on the top and bottom with inside frame

When you pick it up and plug it in, it soon gets serious. This guitar might be fun with a price to match, but there are few rock 'n' roll contexts, professional, amateur or somewhere in between, where it doesn't make perfect sense.

that gives the DC59M a lightweight

homemade feel.

This is ready for the studio or stage. There are a pair of NOS+ (New Old Stock) Lipstick singlecoil pickups in the bridge and neck positions that really nail vintage rock tone. They are pleasingly quiet, work well with some dynamic overdrive or fuzz, and are ultimately well balanced tonally, with solid lows, plenty of midrange punch and a real snap to the high end. The aluminium nut must help deliver some of that brightness.

There's a three-way selector and two stacked controls with the inner white control handling tone and the outer black control handling volume. It's a neat touch visually, but can get in the

way when playing, especially with the volume taper requiring a fairly wide turn of the knob for swells and so on. There's a noticeable spike in volume in the middle position, too. But these foibles are soon forgotten, such is the playing experience.

The maple neck is bolted onto the body with a blocky heel and yet is so svelte that it accommodates noodling anywhere on the fretboard. Tonally, this will handle blues, rock, grunge, country, punk... Dial in a little slapback tape echo, some spring reverb, and you've got rockabilly twang that's thicker than pomade. This is truly a rock 'n' roll machine.

AT A GLANCE

BODY: Masonite with poplar frame

NECK: Maple, bolt-on

FINGERBOARD:

Pau ferro

FRETS:21

SCALE: 25' PICKUPS: 2x

Danelectro NOS+ Lipstick singlecoils

(neck and bridge)

CONTROLS:

2x stacked volume and tone

SWITCHING:

3-position toggle

HARDWARE: **Fully adjustable**

wraparound bridge, vintage-style tuners FINISH: Deep Blue MetalFlake [as

MetalFlake CONTACT:

danelectro.com/ 0113 286 5381

reviewed], Silver

THE MAPLE NECK IS SO SVELTE THAT IT ACCOMMODATES NOODLING ANYWHERE ON THE FRETBOARD

DANELECTRO 59X12

Jangle all the way







BODY: Chambered Masonite with centre block and spruce frame

NECK: Maple, bolt-on

FINGERBOARD:

Pau ferro

FRETS: 21 **SCALE**: 24.5"

PICKUPS: 1x

Danelectro Dual Lipstick humbucker (bridge), Danelectro vintage-style large housing

CONTROLS: 1x volume, 1x tone with push-pull coil-tap for

singlecoil (neck)

bridge pickup **SWITCHING**:

3-position toggle **HARDWARE**: Fully
adjustable 12-string
vintage-style tuners **FINISH**: Blood Red
[as reviewed],

Vintage Cream **CONTACT**:

danelectro.com/ 0113 286 5381



ransplanting the 64XT's pickup and switching configuration to the Shorthorn doublecut body of the 59 models, the 59X12 has a reassuringly familiar setup, all the better for investigating its octaveforward 12-string voice. An electric 12-string is by its very nature a strange beast. In recent times we've seen Fender's Electric XII resurrected, complete with cartoon headstock and split-coils. The 59X12 offers something different. The bridge humbucker offers a thicker, punchier voice. As with all these Danos, there is plenty of treble, that brightness again enhanced by the aluminium nut.

Lose yourself in the psychedelic 12-string

You can be as fastidious as you like with the tuning and intonation and yet when you dig in there's that natural chorusing effect; when using with any sort of overdrive it is a heady mix.

Shoegaze players would love layering

gain and some fuzz over the top and letting the harmonic overtones work their magic. On single-note rockabilly lines, the 59X12 sounds incredible with some slapback echo and reverb, the overtones contributing to the rumble, but it's when you've got this running clean and letting those notes collide and bleed into each other that it comes into its own. Engage the coil-tap and you can go full on Byrds jangle. You could lose hours messing around with that oversized neck singlecoil, and that's before engaging the pedalboard.

There's a psychedelic quality to electric 12-strings before adding effects, but stepping on an old

YOU COULD LOSE HOURS MESSING AROUND WITH THAT OVERSIZED NECK SINGLECOIL



orange box phaser and you start to worry less about the odd bum note and more about that acid flashback taking hold. It can feel a little neck heavy; there is a lot of metal on that headstock, but again that Dano slimline bolt-on neck is so easy to get to grips with.

If we had other gripes it would be that the controls being a little hard to grip for engaging the coil-tap. But this is certainly no deal-breaker. At this price, the 59X12 presents good value, and it's seriously tempting to have it as an option to complement your six-strings. All studios should have one. All players should make its acquaintance at some point in their lives.

DANELECTRO '64XT



'Rite out of left field





hen it is time for something completely different, it might well be time for Danelectro's '64XT. Rocking a sort of reverse doublecut Mosrite body shape, with a big oversized singlecoil offset at an angle in the neck position, and a double Lipstick humbucker in the bridge, the '64XT exists way outside the Strat/Tele/offset continuum.

It has a vintage pawnshop look, old-school tone, but in a sense it has the modern player in mind. This is a hugely tweakable, high-functioning electric dressed to look like an oddball. The coil-tap on the tone control offers a singlecoil voicing of the dual Lipstick humbucker, with all the lively mid-high twang that entails. In its natural humbucker mode, you'll find plenty of chewy attitude, not necessarily super-hot but with enough hair to get some gnarly breakup from

AT A GLANCE

BODY: Chambered Masonite with centre block and spruce frame

NECK: Maple, bolt-on

FINGERBOARD: Pauferro

FRETS:21

FRETS: 21 SCALE: 24.5"

PICKUPS: 1x Danelectro Dual Lipstick humbucker (bridge), Danelectro

vintage-style large

housing singlecoil (neck)

CONTROLS: 1x volume, 1x tone with push-pull coil-tap for

bridge pickup **SWITCHING**:

3-position toggle

HARDWARE:

Wilkinson floating tremolo, vintage-style tuners

FINISH: 3-Tone Sunburst [as reviewed], Gloss Black

CONTACT:

danelectro.com/ 0113 286 5381



your amp. It partners overdrive well, loves fuzz, and if you like to play in the styles of Ron Asheton or Johnny Ramone you'll find all the power you need. But what of more subtle tones? That's where the tone controls and neck pickup comes into its own. The positioning might dull some of its brightness but with the tone control's taper offering a wide sweep you can get some really cool nasally tones when overdriven, and warm spangly cleans that work really well for blues and rock 'n' roll, inviting experimentation with time-based effects.

With a guitar that doesn't look like it fits in anywhere, that invitation is

open-ended for those players looking to take their sound into bold new directions. Roll back the treble and you can do jazz if that's your bag, too, and the neck, slim as per the DC59M, has all the zip you need for fast, noteheavy runs.

The Wilkinson tremolo is perhaps a little modern, where a vintage two-point version would have been more appropriate. It's not quite like watching *Happy Days* and seeing the Fonz wearing an Apple Watch but it's kind of anachronistic. It is, however, stable, well engineered, and offers plenty of wobble without throwing the whole shebang out of tune.

THIS IS A HUGELY TWEAKABLE, HIGH-FUNCTIONING ELECTRIC DRESSED TO LOOK LIKE AN ODDBALL

FINAL VERDICT

Which Dano will you be grabbing by the shorthorns?

e've got ubiquitous Coke bottle headstocks, Masonite builds and bolt-on maple necks with the most rudimentary of heel joints throughout. The South Korean factory has lost nothing in translation in bringing a real feel of American rock 'n' roll to the collection. How to choose? Well, first, there is an obvious outlier, the 59XT12. It is a specialist instrument, perhaps too weird for the majority of players to consider for their

number-one guitar. We love having an electric 12-string with both singlecoil and humbucker voicings in the bridge; allied to the neck pickup, there is a lot of room to play with. This setup suits the '64XT well, too. And this is the one if you are looking to cover all bases, if you're searching for a sound and need the thicker growl from humbucking pickups, and of course a tremolo. Danelectro say it's the best-sounding guitar they've got. Maybe. But it is hard to see past the 60th

Anniversary DC69M. The NOS+ pickups are incredible, with a voice that belies their size, and this is exactly the kind of guitar that does not hide anything from the player, the kind that makes you a player better – and it will handle rock of all ages. As with all Danelectro models, if you see one you like, grab it, because they often switch up their lineup. That's a bummer. But these are priced to facilitate impulse purchases, and with rock 'n' roll guitars it's alway best to go with your gut.



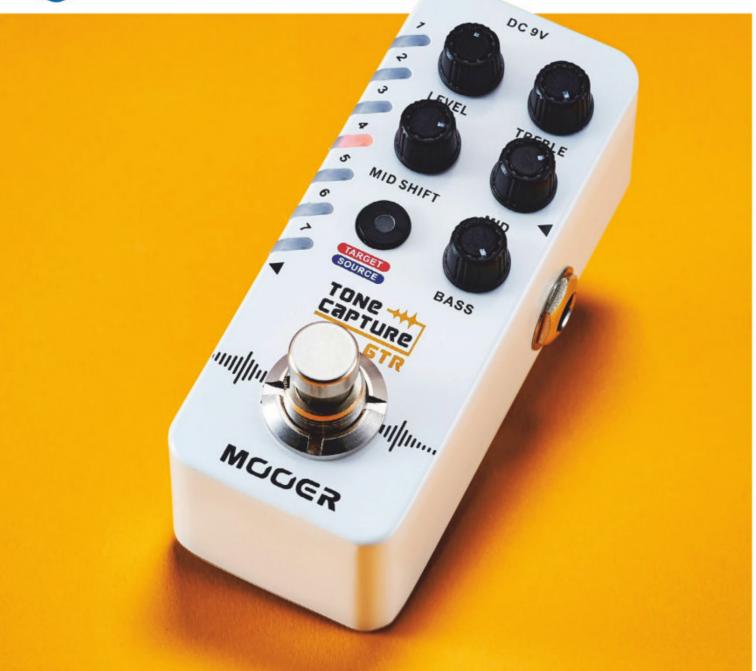


















MOOER TONE CAPTURE



Lightning in a bottle, or too good to be true?

magine a pedal that can capture the sound of any guitar you care to plug into it, and then recreate it for whatever guitar you plug in next. The Mooer Tone Capture's technology is based on Mooer's EQ-matching algorithm, and while it sounds too good to be true, we've seen this type of objective carried out successfully before.

The pedal works by 'sampling' your guitar's tone to one of seven preset slots. This is done by pressing the target/source button and strumming in a consistent and realistic way while the lights cycle through their sequence. When

they all flash together, your tone has been captured and saved to a slot. You then have to do the same when you plug in your constant - or source - guitar to allow the pedal to work its magic on the incoming signal.

Mooer's demo video shows it working between different pickup types and even turning an electric into an acoustic. So, we tried the most obvious first - turning a humbucker into a single coil and vice versa. This works pretty well, with the Tone Capture recreating the snap of our Tele when played from a humbucker-equipped Jaguar. The other way round is

A USEFUL ALTERNATIVE TO JUMPING BETWEEN GUITARS == similarly impressive, but to our ears, it has that 'humbucker in a Strat' sort of sound. Finally, we tried it with our Faith electroacoustic, and this is where we were less convinced. It does a good job of getting a bit of that unplugged woodiness, but reminds us of the acoustic sim on our late-90s multi-fx.

It's a useful pedal if you find yourself jumping between guitars throughout your set, but we won't be putting down our dreadnought just yet. A solid effort from Mooer.

Stuart Williams

I M M A R Y	FEATURES	0	0	0	0	0
	SOUND QUALITY	0	0	0	0	0
	VALUE FOR MONEY	0	0	0	٥	0
	BUILD QUALITY	0	0	0	0	0
	USABILITY	0	0	0	0	0
S	OVERALL RATING	٥	٥	٥	0	٥

AT A GLANCE

TYPE:

Tone-matching pedal

CONTROLS:

Level, bass, mid, treble, mid-shift, target/ source

BYPASS:

Switchable

SOCKETS:

Guitar in, guitar out,

POWER:

DC 9V

CONTACT:

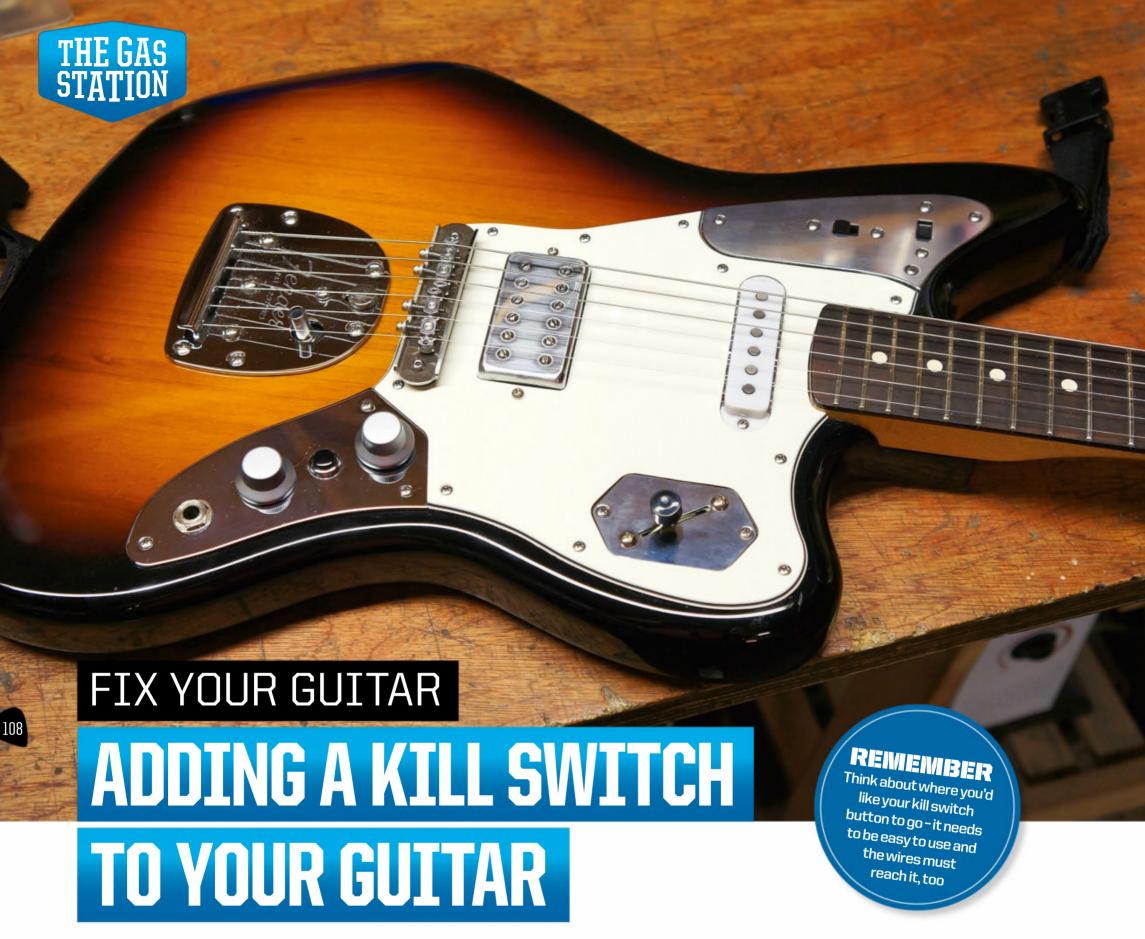
www.mooeraudio.co.uk

THE UK'S NUMBER 1 BASS GUITAR MAGAZINE



All about the bass, every four weeks

Also available to order online at www.myfavouritemagazines.co.uk



Upgrade time: here's how to put a super fun kill switch button into your guitar

Words: Jack Ellis

ill switches are great fun. They're a great way to incorporate some hard-hitting rhythmic gated sounds into your playing technique, especially if the switch is somewhere easy to grab! The sound often used by Buckethead or Tom Morello creates a silence when the switch is depressed; release and your guitar sound comes back, simple. The way you use it is where the genius can strike! There's lots of buttons and switches online so the choice is yours, but you must

keep in mind the mechanical resistance – you'll want it to be easy to activate and not tough like the button on an elevator! We'll be using a momentary push-to-make button to do the switching for us so you can just slap the button down.

Where to put it though?
Most push buttons require
a drill-hole and a nut to fasten
on the reverse of the switch,
so as long as you have room,
scratchplates, control plates
or Les Paul pickup selector
holes make great candidates.
You can use this simple circuit
and method on any guitar!



WHAT YOU NEED SPST momentary

- push-to-make switch button
- Safety goggles
 Correct size HSS
 drill bit or cone step
- Centre punchPin hammerMasking tape
- PH1 screwdriver
 Soldering iron
 60/40 solder
- Spare cable
- Pen
- ▶Vernier calipers

•Adjustable spanner

SKILL LEVEL Medium



MEET YOUR EXPERT
Jack Ellis runs Jack's
Instrument Services
from his workshop in
Manchester. In his
career he has worked on
thousands of instruments,
from simple fixes and
upgrades, to complete
rebuilds. For more info, see:
www.jacksinstrument
services.co.uk

THE GAS STATION



We'll be popping the kill switch button on our Fender Jaguar's control plate. Due to the Jag's design, this means we only have to take off the chrome control plate down the bottom. Let's get rid of the knobs so they don't get scratched! Some knobs will pull off, but our ones here needed a tiny grub screw-loosening first.



To gain access to the electronics cavity we'll rather obviously need to take off the chrome plate. Use a PH1 screwdriver to remove the small screws holding it on. Take care not to lose the screws.



Under here, the Jaguar will normally have a tone pot and a volume pot next to the output jack (we have a custom circuit in this guitar, that's why it looks different). Support the components from behind as you loosen them—turning the nuts on the top will likely just spin the components round inside instead of removing them.



With the plate loose, let's get the guitar out the way. Tape up the guts so they don't fall out or get tangled in anything else. The guitar is going out of harm's way while we make a mess of the control plate. We've replaced the nuts, washers and star washers on each pot so we know where it all came from.



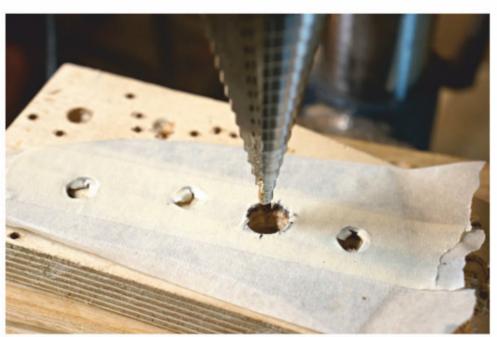
Let's modify the control plate. First up, cover it in masking tape. This will allow us to mark it easily but also protects the face from scratches. Poke a hole in the old pot holes so we know where they are. Tip: The lid on our ubiquitous Papermate® ballpoint pen was perfect for the job. Remember, only the best tool will get the job done right!



Let's choose the location for the new kill switch button. We used a vernier caliper to measure and mark where half-way was (it would have looked bad not totally in the middle) and drew a big X. Consider the size of the knobs that will be replaced and make sure you have easy enough access to tap that awesome kill switch.



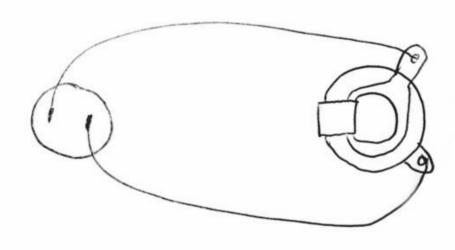
As we're drilling metal, extra precaution is required. Drill bits like to wander off when they don't have a soft material to get stuck in to, so let's help ourselves. A centre punch is the tool for the job, hammer that onto exactly the spot you marked to create a dimple for the drill bit to sit in.



Goggles on, lets make some swarf (the name for waste metal shavings)! A cone step drill bit is perfect for the job. As you touch the next step, it automatically countersinks the hole you just made to take off the sharp burr edge. We use a pillar drill and a piece of scrap timber to chomp into our control plate.



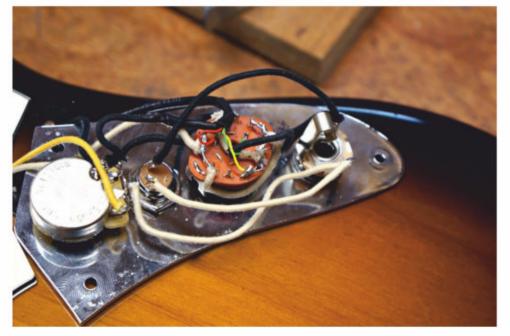
Gorgeous. Dispose of all that swarf, it's paint job killer. Drop in your new kill switch and have a look at the terminals. Our switch here is actually a PTM/PTB switch—that's 'push to make/break'. Our circuit requires a push to make a connection, so chop off the undesired terminal—many kill switch buttons have just two terminals.



This is the simple circuit that needs installing. We have the jack socket on the right with a wire from the hot (tip) and a wire from the ground (sleeve) going to the push button terminals. Add this onto whatever guitar circuit you have going. It doesn't matter which wire goes to which terminal on the switch.



Reattach everything back onto the control plate and tighten up, remembering to support the components inside so the wires don't twist. Let's make that drawing a reality. Using just the right amount of cable, graft on the extra wires to the connection at the jack socket without disturbing what was there before.



Once you have those wires in place, tin the terminals on the new switch button and attach onto there too. Tip: Tinning the new terminals really helps make the connection! Plug it in and give it a test. What's happening is, as you press the button, your signal is sent to 'ground', which results in silence!

Find Your Perfect Tone

Every issue, Guitarist brings you the best gear, features, lessons and interviews to fuel your passion for guitar



Subscribe to Total Guitar and get...

A Year's Subscription For Half Price + FREE Ernie Ball Regular Slinky Strings!



HURRY! OFFER ENDS 30/6/20

Gauges .010, .013, .017, .026, .036, .046

Print Edition

For just £22.50 every 6 months

Save 50% – Every issue delivered to your door with a Guitar Skills CD



ORDERING IS EASY, GO ONLINE AT

www.myfavouritemagazines.co.uk/half20s

OR CALL 0344 848 2852

*TERMS AND CONDITIONS: *2 x 6-monthly payments at the stated price, after which a step up to the standard subscription price. Prices and savings are compared to buying full priced print and digital issues. You will receive 13 issues in a year. You can write to us or call us to cancel your subscription within 14 days of purchase. Payment is non-refundable after the 14-day cancellation period unless exceptional circumstances apply. Prices correct at point of print and subject to change. UK calls will cost the same as other standard fixed line numbers (starting 01 or 02) or are included as part of any inclusive or free minutes allowances (if offered by your phone tariff). For full terms and conditions please visit: bit.ly/magtandc. Offer ends 30/06/2020

The Playlist Frontman for Livernudlian indie rockers Circa Waves

Frontman for Liverpudlian indie rockers Circa Waves, **Kieran Shudall** tells TG what makes his musical mind tick

he first song I remember...
It's A Kind Of Magic - Queen
We had The Best Of Queen - the
second one was the one I used to
play around the house a lot. I used
to listen to It's A Kind Of Magic and jump up
and down on the sofa, dancing around
thinking I was Brian May. That was probably
the first thing I became slightly obsessed
with, it made me realise that I loved
music with guitars in it.

The song that made me want to play... *Polly* - Nirvana

My brother brought back a MiniDisc – remember them?! – with MTV Unplugged in New York from Australia. It was one of those older brother moments of 'Listen to this!' I remember thinking, 'Holy fuck, this is amazing!' Because it was acoustic, and Polly was really easy, it made me feel like I could do it. Then, later on, I realised that's not how Nirvana sounded, but Unplugged is what made me want to learn guitar and play those tunes.

The riff that I've never been able to play... A Crow Left Of The Murder – Incubus

It has this riff that I thought was a bit good. I always try and play it in soundcheck, but I'm just not very good at guitar, I'm very limited! It jumps between octaves and you have to do a lot of stretching and hammering-on. Mike Einziger is a really good writer of parts, he makes some really unusual stuff. I think he's quite underrated in that sense.

The riff I wish I'd written... Seven Nation Army - The White Stripes

I'm sure loads of people say this. To me, the best riffs are just straight down the line, and that's a riff where you think 'How the fuck didn't I think of that?' You try and make a riff that's similar and as good, but it's so difficult. It's transcended guitar music now and become a football anthem, with everyone shouting 'Jeremy Corbyn'. It's probably one of the only later modern-day riffs that has become globally huge. If 10 drunk football fans can scream your riff then you're sorted!



My favourite guitar sound on record is... 12:51 – The Strokes I always loved 12:51

I always loved 12:51 on the second Strokes record. Apparently he just cranked a load

of Fender Champs and pumped loads of distortion through them. The legend is that he broke about six amps trying to get this take. It's a super-saturated lead sound, and I think he played a hollowbody Epiphone Riviera. It's an amazing sound, like a keyboard, but it's this super-cranked amp.

The song I'd like to be remembered for... T-Shirt Weather – Circa Waves

Our biggest song is *T-Shirt Weather*, in terms of connecting with that many people. For a song to become as big as that has for us is something I always wanted, to have a bit of an indie anthem. I write everything on acoustic, if it sounds big on an acoustic then it's going to sound ridiculous on an electric. I read Tom Morello saying that in *Total Guitar* when I was a kid, and if it's good enough for him, it's good enough for me!

The song that reminds me of home... In My Life – The Beatles

Most Beatles songs remind me of home, being from Liverpool. I have very fond memories of listening to them, and *In My Life* is very humbling, and feels like a big, warm hug. They were the masters of weird chord changes that sound natural. Only a few acts can get away with that and they were one of them.

My musical guilty pleasure... Sugar – Maroon 5

I was listening to *Sugar* by Maroon 5 the other day, and that is a proper banger. I was going for a jog and I needed some pop energy so I whacked on Maroon 5. I think with guitar you want to be cool and listen to Sonic Youth, but ultimately people like Ed Sheeran, Maroon 5 and Shawn Mendes are keeping guitars alive too, which can only be good.

Happy, part one of the Sad Happy album, is out now. Sad is realsed 13th March.







'I need a pickup with the ability to create glassy, ambient leads and warm, clear chord tones. Equally I need it to sound crushingly heavy and aggressive. The Silo humbuckers give me everything I need and more. I couldn't be happier.'

Rabea

launch your tone into the ambient-sphere

hoto: Max Taylor-Gran