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BOSS

50TH ANNIVERSARY



Interviews

ICONIC PLAYERS

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Star Secrets!

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TONE PIONEERS

The inside story of how BOSS revolutionised effects

RARE & COLLECTIBLE

Exploring the most sought-after BOSS pedals in history

PLUS DRIVE, DELAY & CHORUS LEGENDS

KATANA & NEXTONE AMPS
WAZA CRAFT EFFECTS
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技 WAZA CRAFT

Guitarist & GUITAR WORLD PRESENTS



BOSS 50TH ANNIVERSARY

HOW ONE INNOVATIVE COMPANY CHANGED THE SOUNDSCAPE OF MODERN MUSIC IN FIVE DECADES



Music is about shared experiences. The feeling of connection you get when someone loves the same music as you do is one we all know. But some gear becomes so universal, so widely adopted and trusted by musicians, that it, too, becomes part of our shared musical experience. The effects pedals made by BOSS over the past 50 years can fairly lay claim to this rare accolade.

Few items of gear are as instantly recognisable as a DS-1, for example, and it's no surprise because millions have been sold over the years. The genius of BOSS is that its products feel like they belong to everyone – from session pros to metallers, to kids thrashing out their first three-chord punk in the garage. BOSS pedals are some of the most widely imitated and modded effects in the world, and they also appear on more hit records than you could easily list. Wherever you look in music, you'll see and hear BOSS gear in action – from Loop Stations to overdrives, from synths to tech-enabled amplifiers.

That's why, as the company celebrates 50 historic years in production, we've put together this beautiful collector's edition guide to the heritage, sounds and innovative tech that BOSS has rocked the world with over the past five decades – continuing to surprise and inspire musicians, but always reliable and ready for any stage. Join us in the following pages as we chart the milestones and iconic tones of a company that at once feels like the biggest name in effects and part of the family. Enjoy the issue.



Jamie Dickson **Editor-in-chief**

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A TRADITION OF INVENTION

BOSS still lives by its famous motto – 'We design the future' – but don't overlook the milestones that led the Japanese firm to the cutting edge of the modern music scene

Words
Henry Yates
Photography
Olly Curtis

Any show, any stage, any pedalboard, any backline – for more than half a century, BOSS has been the constant strand of DNA in a music scene endlessly shedding its skin. Of course, it is the visionary Japanese company's nature to look to the future, to the products still to be invented, the technologies as yet untapped and the generations of musicians waiting to make their mark. But as outgoing president Yoshihiro Ikegami reminds us, it is only by reflecting on the road already travelled that this still-questing company can forge ahead.

"Our 50-year history is a testament to our commitment to quality and innovation," says Ikegami of a journey whose headline statistics include 18 million total units sold and the release of 140 compact pedal models, not to mention the status of the world's second-biggest amp builder since launching the Katana in 2016. "It's a legacy we're incredibly proud of. While we strive for breakthroughs, we must also cherish our history. Our history is the foundation upon which we build our future. It's crucial to balance innovation with the wisdom and experience that 50 years have provided us."



1. Overdrive pedals have become commonplace but it was BOSS that made them a mainstream, affordable product with the 1977 debut of the OD-1

> "IT'S A LEGACY WE'RE INCREDIBLY PROUD OF. WHILE WE STRIVE FOR BREAKTHROUGHS, WE MUST ALSO CHERISH OUR HISTORY" *Yoshihiro Ikegami*

Rewind to the 1960s and the guitar effects scene was the Wild West. If you knew which doors to knock on, and were famous enough to jump the waiting list, then maverick-genius artisans like Roger Mayer could be commissioned to build a one-off pedal in their London workshops. But there was no coherent effects sector, no industry standard, no single manufacturer giving players what they needed to lead the charge for the gathering rock 'n' roll revolution.

In the States, an exasperated Gibson had discontinued its own fuzzbox, while in Japan, Roland had dipped a toe into the effects market with early units like the AG-5 Funny Cat and AF-100 BeeBaa, but found they were an acquired taste (with the company's founder and chairman Ikutaro Kakehashi memorably explaining that it was "like trying to persuade a person who has never eaten octopus to try a slice").

The arrival of BOSS in 1973 changed everything. In those first years, the newcomer existed hand-in-glove with parent company Roland – itself only founded by Kakehashi a year earlier, as the successor to Ace Tone – even to the point of sharing engineers. But while BOSS would rapidly become its own entity, the two firms' early tag-team creativity would prove key to BOSS's seminal pedal release of 1976, with the CE-1 Chorus Ensemble pedal underpinned by virtually identical circuitry to Roland's iconic JC-120 Jazz Chorus amp.

As Kakehashi told *The BOSS Book*, it was only once the CE-1 had appeared in a photo of jazz great Herbie Hancock that sales ignited. "America is such a big place, it's hard to find a spark to light the fire. But then, once the fire has been caught, it leads to scorching sales. In just a month, we unloaded stocks of the CE-1 that we'd been stuck with for 18 months."

Even if the company had never made another pedal, the CE-1 would have earned BOSS its place in the gear chronicles. The revelation came in 1977, as the simultaneous launch of its first three compact pedals – in the form of the OD-1 Over Drive, PH-1 Phaser and SP-1 Spectrum – announced the Japanese company's intentions to systematically perfect every effect on the market (and invent plenty more besides).

BOSS TIMELINE:
A 50-Year Legacy

1972
Roland Corporation founded in Osaka, Japan

1973
BOSS precursor, MEG Electronics, founded in Osaka



1976
CE-1 Chorus Ensemble: first BOSS-branded stompbox and world's first chorus pedal



The seminal BOSS CE-1 Chorus Ensemble pedal featured the same circuitry used in Roland's also groundbreaking JC-120 amplifier

"BEFORE BOSS, THERE JUST WASN'T A WIDE ENOUGH SELECTION… THEY KICKED IT INTO HIGH GEAR, ECLIPSED EVERYTHING ELSE" *Robert Keeley*



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2. Bold, diverse colours made BOSS pedals instantly recognisable – and yet the standardised utility and toughness of their core design was the real key to their success

"I think we needed the creativity and the manufacturing style of the Japanese to really get effects pedals into the modern world," reflects Robert Keeley, the highly respected founder of Keeley Electronics. "Before BOSS, there just wasn't a wide enough selection and, in my opinion, it wasn't built as well as BOSS could do it. It took a team of engineers to kinda line out all the effects that were possible. Y'know, different types of drives, phasers, flangers, chorus, echo – BOSS just kinda outlined how effects should be organised and the parameters for each of the sounds. They really kicked it into high gear, eclipsed everything else that was going on. And all those things, they put together in a really great package, obviously."

Solid Foundations

For BOSS, operation was never an afterthought. Aside from the colour-coding that identified each effect class, those first compacts established BOSS's enduring calling card of heavy-duty uniformity. Unlike temperamental rival pedals, these units were built on the foundation of an aluminium die-cast chassis, with electronic FET switches that prevented the on/off switching noise and frequent failures of mechanical contacts. For added practicality, the BOSS units featured non-slip rubber bases and footswitch pads and the unprecedented choice between battery or AC power.

"One thing that can't be overlooked is that BOSS pedals are built like a tank, which meant the pros would tour with them," says Daniel Steinhardt of *That Pedal Show*. "I could see the BOSS pedals at the feet of my guitar heroes, the very same ones I could buy from my local music shop."

As Ikegami points out, those practical features were not the result of any single visionary. "BOSS's strength lies in teamwork. In the early days, our team worked relentlessly to develop products like our iconic compact pedal. The dedication and passion that went into these early products have become the heart of our product creation process. They put a great deal of thought into creating the best shape, size and everything else. While we've made minor improvements over the years, the essence remains the same. Even in the early days, it was a collective effort to shape the company's future."

> "I COULD SEE THE BOSS PEDALS AT THE FEET OF MY GUITAR HEROES, THE SAME ONES I COULD BUY FROM MY LOCAL MUSIC SHOP" *Daniel Steinhardt*

From the vantage point of 2023, that first wave of BOSS pedals feels like a series of big bangs for guitar effects, the tremors still felt in the modern sector. The CE-1, for example, was the first stepping stone towards the Japanese company's dominance of the chorus effect class, with that pedal's founding principles still evident in a modern range that includes the CE-2w, CE-5 and CH-1 compacts, alongside multi-modulation units like the MD-200 and MD-500, whose 28 different algorithms are underpinned by state of the art 32-bit floating-point processing.

The PH-1 Phaser, meanwhile, was the starting pistol for a modulation effect with its own hardcore following, that first pedal's DNA still found in the PH-3 Phase Shifter (now massively extended with features like the Rise/Fall modes that allow mindblowing unidirectional phasing). Only a handful of effects fans had even heard of flanger before BOSS developed the BF-1 in 1977 (today, the stereo BF-3 is the global benchmark). Similarly, BOSS's game-changing DM-1 Delay Machine of 1978 is now saluted as a stone-cold trailblazer. Transmuting the delay effect from tape-based units such as Roland's Space Echo devices into a more practical stompbox format, it evolved into the DM-2 Delay compact pedal in 1981.



3

3. Because the market grew to trust the qualities common to all BOSS pedals, notably reliability and great tone, BOSS could afford to develop interesting variations on successful themes such as the DS-2 Turbo Distortion, which built on the success of the ageless DS-1



1977
First BOSS compact pedals: OD-1 Over Drive, PH-1 Phaser and SP-1 Spectrum



1978
DS-1 Distortion (DS-1w Distortion now available in Waza Craft range)



1981
DM-2 Delay: iconic BBD analogue delay



Inspect the modern range and you'll not only find an updated tribute to the Delay Machine in the form of the DM-101 but also descendants of the mid-80s' DD-2 and DD-3 (both the Japanese firm's first digital pedals and the world's first compact digital delays). It seems that with delay, as with so many of BOSS's classic products, what goes around, comes around, sweeping up new advocates in every incarnation. As the great Steve Vai once noted of the DD-7: "It's a beautiful workhorse."

Among those pioneers of 1977, the biggest ripples were felt from the OD-1. For a guitarist to crave dirt in their sound was a notion that went back to The Kinks' Dave Davies slashing his amp speaker cones, if not before. But when it was unveiled at that year's NAMM Show, this banana-yellow stompbox represented a watershed release that brought a whole new sound and concept to the table.

Back in the early 60s, the first fuzz pedals had set out to reproduce a novel kind of signal distortion originating from faulty recording gear. Now, the OD-1 finally delivered on the brief of simulating an overdriven amp at more practical volumes while supplying a rich, characterful, harmonic tone that let the nuances of a player's picking style shine through. Crucially, this new overdrive effect was designed differently to existing distortions: instead of trimming the sine waves equally at the top and bottom of the unaltered signal as they entered the effect circuitry, BOSS's engineers did this clipping asymmetrically. All the players on the stage needed to know, though, was that the OD-1 sounded incredible. As Steinhardt says: "Most guitarists had one of these in front of them at some point."

Once again, the original OD-1 was just the start of BOSS's love affair with grit. As rock 'n' roll swaggered into a new decade – evolving from the classic rock and punk of the 70s to highly technical hair-metallers and the New Wave of British Heavy Metal – overdrive became an essential seasoning that every band applied differently. Meanwhile, BOSS's range ran alongside the scene through every twist, supplying a thousand torn-up tones from its spiralling compact line-up.

Driven By Success

While the OD-1 would remain in production until 1985 (and lives on in the OD-3), players demanding more flexibility jumped at the SD-1 Super OverDrive on its debut in 1981, this latest pedal adding an active tone control to cut or boost treble (it remains in production to this day). Just as seminal was the DS-1, whose knife-through-butter distortion, lengthy sustain, rich harmonics and flow from savage to subtle sounds were made possible by electrically clipping the signal waveform. Famously, Kurt Cobain's heavily battered and graffitied DS-1 sold at auction last year for $75,000. But budget-conscious players will be pleased to hear it's still available as the current standard DS-1 – and also as the DS-1w (part of the Waza Craft series).



Kurt Cobain remains one of the most iconic users of BOSS distortion, pictured here in 1991 using a DS-2. Cobain's scrawled-on DS-1 would go on to sell for a record sum at auction in 2022

PHOTO BY IAN DICKSON/REDFERNS/GETTY IMAGES

1983
DD-2 Digital Delay (world's first digital delay pedal) and TU-12 (world's first automatic chromatic tuner)



1987
RV-2 Reverb: world's first digital reverb pedal



1991
MT-2 Metal Zone: million-selling high-gain unit



1995
BD-2 Blues Driver released: influential low-gain design



2001
RC-20 Loop Station: first Loop Station pedal

The DS-1 might be BOSS's all-time bestseller, but this orange-tinted series boasts another icon in the DS-2 Turbo Distortion of 1987, whose twin modes made it perfect for players who covered both rhythm and lead, and a rig mainstay of stars like John Frusciante of Red Hot Chili Peppers.

As the decade turned, BOSS's presence remained undimmed. Launched in 1991, and going on to sell over a million units, it only took one look at the jet-black MT-2 Metal Zone to know BOSS's highest-gain pedal meant business (and while that distinctive midrange scream is indeed all over heavy-mob albums from the period, it was also used by Prince). Meanwhile, for players who wanted to hear every last drop of soul in their fretwork, there was 1995's BD-2 Blues Driver, its responsive roar evoking the vintage valve amps becoming rarer each year. Green Day's Billie Joe Armstrong nailed the appeal when he explained that: "I used a BOSS Blues Driver to make the solos punch harder on *¡Uno!, ¡Dos!, ¡Tré!*"

Overdrive might be the first effect in many young players' rigs, but it's just the tip of BOSS's remit. During those opening three decades, the firm practically defined every effect on the pedalboard, with releases spanning from 1987's RV-2 Digital Reverb to 1996's SYB-3 Bass Synthesiser (both the first of their kind). Even 'straight-to-the-amp' purists will bend their own rules with a TU-3 Chromatic Tuner.

Soon, the wisdom gained from all those standalone stomps fused into the inaugural BOSS multi-effects,



4. With its methodical approach to product design, BOSS almost single-handedly defined new genres of pedal such as high-gain distortion – as evidenced by its 'chainsaw' voiced HM-2 Heavy Metal pedal



Artist Favourites: ADRIAN UTLEY

"The first BOSS pedal I ever got was a DM-2 Delay, which I bought in the 80s along with a wah-wah pedal. I thought it was amazing. I used to do this Wah Wah Watson type of thing with them both. The DM-2 may have a simple layout with three knobs, but you can get loads of different sounds out of it. I love the switch, too – it's super functional and quiet. You can just stamp it off when it's going mental. That was one of the things with Portishead, cutting echoes abruptly. When I switch it off, I want it off – no trails. Same with sampling and mixing: when you cut the sample, you cut the echo. I always liked that chopped-off-on-the-beat thing.

"You can hear the DM-2 on Portishead's *Roseland [NYC Live]* album. When we first started playing live, I used a Roland RE-301 Chorus Echo. I've got an [SRE-]555 [Chorus Echo] and an [RE]-201 Space Echo at the moment. But I've had so many problems with tape that I'll tend to reach for the BOSS [RE-202] Space Echo now. I love it. It sounds really good, as does the RV-5 Reverb. I bought it for the Spring mode thinking I wouldn't ever use the Modulate mode, but I've never used anything else! It's been on my pedalboard for the last 15 years. In fact, I've got three of them – one for each pedalboard, plus a spare.

"I like to use a BOSS [TR-2] Tremolo and a CE-5 Chorus Ensemble with keyboards. I use the Tremolo to get an on/off square wave effect and the Chorus Ensemble for widening out string sounds. The CE-3 Chorus is really good, too. I've also got a DS-1 Distortion, a CS-3 Compressor, which I used on an acoustic for an extreme sound, and a PS-5 Super Shifter I've recorded with a couple of times to get diving sounds. I recently traded a PN-2 Tremolo/Pan for something with a mate. That pedal is great for panning stuff in a mix. I've also been looking for a VB-2 Vibrato as I always loved the sound of those. And, of course, I've got some Chromatic Tuner pedals. Those are just industry-standard. They're the pedalboard equivalent of Levi jeans and Converse Chuck Taylors.

"I love the compact pedal design – BOSS just got it right! These pedals are really important to all of us."



2007
Fender FBM-1 '59 Bassman & FDR-1 '65 Deluxe Reverb Amp



2014
First Waza Craft pedals: BD-2w Blues Driver, DM-2w Delay and SD-1w Super OverDrive



2015
500 Series pedals introduced to BOSS line-up



2016
Katana guitar amplifier range launched



"THE FIRST BOSS PEDAL I EVER GOT WAS A DM-2 DELAY. IT MAY HAVE A SIMPLE LAYOUT, BUT YOU CAN GET LOADS OF DIFFERENT SOUNDS" *Adrian Utley*

5

as the ME-5 of 1988 signposted us towards the mighty processing power of modern-day units like the GT-100 and GT-1000, both loaded with flawless recreations of the greatest amps and effects in the world. As Johnny Marr told BOSS: "You'd be super-surprised how great the drives and distortions are with the COSM modelling technology. This [GT-100] that you can throw in a bag and stick in the boot of your car – only 10 years ago, you'd need a 15 or 20U rack."

In 2001, as the Japanese firm crossed into the new millennium, its next release actively set the course of the music scene. The sound-on-sound tracking made possible by the original RC-20 Loop Station – pack-leader of the new Twin Pedal series – was initially used by solo guitarists to turn their one-man shows into epic symphonies. But the modern Loop Station range – culminating in the six stereo tracks of the RC-600 – can be found at the feet of vocalists, beatboxers, DJs and more. "I got a loop pedal when I was 14," says Ed Sheeran, whose stadium-filling career began with the RC-20XL at his feet.

But for every superstar using BOSS, there's a thousand more passionate up-and-comers relying on this hardware to carry them forward. 50 years since the Japanese company's touchdown, every sound in your head can be found somewhere within that kaleidoscope of effects, and all of them are waiting at every music store in the world. "Why is BOSS such an important brand in the story of guitar effects?" ponders Daniel Steinhardt. "I think it comes down to two main things: innovation and accessibility. Since I was a kid, I've never walked into a music store without finding BOSS pedals available. Regardless of your location, you could easily get your hands on them, and they consistently delivered superb sound."

5. Past, present and future always interweave and inform one another at BOSS. The tonal lessons learned in making benchmark analogue pedals in the 1970s, such as the DM-2, find expression today in digital pedals that sound as vibey as their analogue forebears, such as the recent, superb RE-202 recreation of the RE-201 Space Echo tape delay

As the BOSS story reaches 2023 with another fistful of game-changing gear – including the NS-1X Noise Suppressor, BP-1w Booster/Preamp and pedal versions of Roland's legendary SDE-3000 rack gear – nobody could deny it's been quite a half-century. And as Yoshihiro Ikegami concludes, the best way to treat a storied past is as a springboard into the future. "BOSS's 50-year history is the foundation on which we stand, and it's essential to respect and cherish it. At the same time, we must continue to have the courage to seek breakthroughs. Our philosophy should guide us as we explore new frontiers in music technology. The dedication and hard work that have brought us to this point should inspire us to reach even greater heights..."

"THE DEDICATION AND HARD WORK THAT HAVE BROUGHT US TO THIS POINT SHOULD INSPIRE US TO REACH GREATER HEIGHTS" *Yoshihiro Ikegami*



2019
200 Series pedals introduced to BOSS line-up



2021
TB-2w Tone Bender: collaboration with Sola Sound



2023
DM-101 Delay Machine, SDE-3000D Dual Digital Delay and RV-200 Reverb



THE HOLY TRINITY

Limited to a production run of just 7,000 units each – and featuring one-off finishes – BOSS's 50th Anniversary DS-1, SD-1 and BD-2 are the ultimate collector's editions

Words
Henry Yates
Photography
Olly Curtis

BOSS DS-1-B50A Distortion

It is, quite simply, the best-selling BOSS compact pedal of all time – deployed in a thousand different genres since 1978, putting dynamite under the heels of everyone from Prince to Kurt Cobain. Whether in the form of the revolutionary original unit or the new DS-1-B50A release with limited-edition finish, there's more to that iconic orange stompbox than meets the eye.



Among the unique features of these 50th Anniversary pedals is a dedicated four-digit serial number, found on the rear of the unit

With BOSS engineers hitting on the masterstroke of a two-stage circuit that incorporated both op-amp and transistor gain stages, the result is a unique, character-rich distortion with full-bodied bottom-end, far removed from the inferior drive pedals of the era. For open-ended flexibility, the familiar line-up of Tone, Level and Distortion controls lets you dial up anything from subtle boost to room-shaking gain – all while allowing the flavour of your guitar, pickups and amp to shine through. A stone-cold classic, then and now.

BOSS SD-1-B50A Super OverDrive

Having invented the overdrive concept with the OD-1 in 1977, BOSS launched the SD-1 four years later to perfect it. Crucially, where its big brother had offered two controls, Level and Overdrive, this latest arrival of 1981 raised the sonic options through the roof with an additional Tone dial, letting players cut or boost highs in real time, and all underpinned by a circuit designed to beautifully break up the tone while retaining the intrinsic character of the instrument and the subtleties of the fretwork.

Those revolutionary foundations remain fundamentally unchanged in the SD-1-B50A edition, which, like its stablemates here, has a silver thumbcrew, gold-capped knobs, commemorative anniversary emblem, plus a dedicated four-digit serial number and bespoke packaging. Of course, it still supplies the glorious harmonic-rich roar that identifies the SD-1 from a single riff – alongside the open-ended tone-shaping that has drawn players as eclectic as Eddie Van Halen, Richie Sambora and Mark Knopfler. If you've never welcomed the legend to your pedalboard, now's the time.

BOSS BD-2-B50A Blues Driver

Don't be misled by the name: the BD-2 certainly excels at blues and blues-rock, but since 1995 this genre-crossing blue brick has been the drive unit of choice for any guitarist who wants to hear the soul in their fingers. Channelling classic valve amp distortion, the Blues Driver complements every element of your rig while capturing the playing nuances that lesser filth pedals miss, from the shiver of vibrato to the plectrum attack.

With Level, Gain and Tone controls, the BD-2 is supremely flexible in operation – some players even use it as a simple boost – while finding the sonic sweet spot will reward you with a super-responsive serving of old-school grit. With A-list exponents spanning from Radiohead's Jonny Greenwood to Kevin Parker of Tame Impala, choose the BD-2-B50A Blues Driver and you'll be in good company.

ANATOMY OF A BOSS PEDAL

10 pedal design features popularised by BOSS



Words
Stuart Williams

Multi-Function LED

This LED comes on when your BOSS pedal is engaged and indicates that the pedal is on and working. Its other useful function is to let you know when your battery is running low on juice: if your effect is on but the LED doesn't light up, it's time to change the battery.

Battery Thumbscrew

Early BOSS pedals featured a slotted version, but the thumbscrew makes quick battery changes a doddle, without the need for any additional tools. Plus, thanks to its hinged cover, you won't even need to disconnect or remove the pedal from your 'board.

Battery Compartment

What's clever about a battery compartment? BOSS pedals house the battery away from the circuit board, so in the event of a leak you're unlikely to ruin your pedal. It's kept in position by a comfortable fit, reinforced with foam, so you won't strain the battery clip.

Die-Cast Housing

The iconic BOSS pedal housing has remained a consistent form factor since the OD-1 was introduced in 1977. This die-cast housing is strong enough to withstand being run over – but, being aluminium, remains light enough for you to carry a 'board full of them.

Silent Switching

BOSS was an early adopter of electronic switching, removing the problematic pops and clicks that can be introduced when operating mechanical, latching switches. What's more, BOSS footswitches undergo a thorough 100,000-press test using bespoke machinery to ensure they won't let you down.













Pedal Base

Every BOSS compact pedal features a rubber-coated baseplate. Not only does this element of the design add grip and withstand drag from your cables if you're using it without a pedalboard, but it can also keep the pedal in position up to a 60-degree angle.

Power Jack

Batteries are fine, but what if your PP3 runs out of juice mid-set? BOSS compact pedals removed this problem from the outset with the inclusion of a power supply jack, which – along with the centre-negative pin configuration – is now an industry standard.

Stepped Control Section

Many early stompboxes were put together in flat, flush-profiled boxes. It seems obvious these days, but BOSS's stepped control section takes the risk out of knocking (or worse, damaging) the pedal's controls while switching with your feet.

Colour-Coding

All BOSS compact pedals adhere to the same dimensions, along with similar layouts. So, to make it easier to spot which pedal you're about to stomp on at a glance, BOSS was one of – if not the – first to colour-code its stompers by effects type.

Switch Plate

A further, often-overlooked feature of all BOSS compact pedals is the large switch plate. This minimises the target area on a dark stage, meaning you'll never fail to engage or bypass the pedal. It's also covered with non-slip rubber, just to be sure.

MASTER CRAFT

If classic tones with custom voicings and enhanced functionality is what you're after, in a package that's built to the highest possible quality, Waza Craft is for you...

Words
Jamie Dickson
Photography
Olly Curtis

The cult appeal of effects pedals has exploded in recent years and one manifestation of that has been the rise of modded versions of classic pedals by BOSS. But while imitation may be the sincerest form of flattery, BOSS saw this as an opportunity to offer something better: boutique-grade versions of classic BOSS pedals and all-new premium pedals designed by its own team of tone experts. This was how BOSS's *de facto* custom shop – 'Waza Craft'– was born in 2014.

In Japan, the term 'Waza' – represented by the kanji character 技 – means 'art and technique'. Accordingly, BOSS pedals bearing that emblem are the highest quality, in terms of design and craftsmanship, that the company offers and are built exclusively in Japan. They also address a problem that many unofficially modded versions of BOSS pedals have suffered from – in the process of squeezing new sounds from classic circuits, modders often lost the essence of what made the original pedal great.

"Many of them made a difference in sound by adding or replacing parts," says Mitsuhiro Wakiyama, division head general manager, Effector Development Department, and one of the key members of the team that developed Waza Craft. "Changing the components produces a sound that is different from the original – however, the original quality is lost. Waza Craft was born because we know that we can advance to a higher level without losing the original quality. Because we know the original – and build the circuit from scratch – we can create sound with more freedom, while maintaining the original quality. This [Waza Craft concept] was based on the proposal of Yoshi Ikegami, who was then president of the BOSS Corporation."

> "WAZA CRAFT WAS BORN [TO] ADVANCE TO A HIGHER LEVEL WITHOUT LOSING THE ORIGINAL QUALITY"
>
> *Mitsuhiro Wakiyama*

With this ethos driving the project forward, BOSS launched the first Waza Craft effects in 2014 with a trio of classic pedals that had each been given the 'hot-rod' treatment by BOSS's design team: the BD-2w Blues Driver, the SD-1w Super OverDrive and the DM-2w Delay. Setting the pattern for subsequent Waza Craft releases, the three new compact pedals offered classic tones but also unique, custom voicings accessible at the flick of a switch. For example, the Custom mode on the BD-2w delivers "an expanded tonal range, with increased body and sustain", as BOSS explains it.

But the 'custom' approach didn't end there. Under the hood, the new Waza Craft compact pedals featured boutique-grade components that offered benefits such as a lower noise floor. An instant success, the debut threesome of Waza Craft pedals was followed by equally exacting and tone-tailored versions of BOSS classics, including the CE-2w Chorus, DC-2w Dimension C, DS-1w



1. Malina Moye's powerful guitar style has been built on the foundation of BOSS drive and distortion tones, especially those of the MT-2 Metal Zone, which she credits as having surprising depth and nuance for a distortion

Artist Favourites: MALINA MOYE

"My first BOSS pedal was the DS-1 Distortion. I remember the first time I tried it, I was like, 'This makes me sound killer – I love it!' Certain effects can just up your game. And you can't go wrong with the DS-1.

"I think some of the greatest guitarists are those who figured out alternative ways to get their message across and came up with something different. Experimenting is what makes the guitar great. I like to take that approach with gear, and I discovered one of my favourite pedals is the Metal Zone. I love its rich, buttery sound. It cuts through. The sound is big and full, and it kicks ass in stadiums. It's killer. Also, my guitar still sounds like my guitar – I mean, the Metal Zone doesn't mask its qualities, or what I want the instrument to sound like. Your guitar still has the aesthetics and sweet spots you like.

"The Metal Zone has such a good tonal range – you can make it sound really dark or really light. Each venue is different, so it's great to be able to dial in your tone to suit the room using the EQ. There are so many cool sweet spots and feedback things that sound really good when you solo. I use the Metal Zone and Blues Driver for a majority of solos. I'll often want to just wail with the Metal Zone. The tone is big – it sounds like I'm in a room full of Marshall stacks. The Blues Driver is nice and crunchy. I love it. It feels like a red velvet cake – just a hint of sweetness and not overpowering. That pedal will make you step up as a player and let you hear the intricate things you're doing with the guitar.

"BOSS pedals are 100 per cent reliable when we're travelling. They're extremely well made and can take a beating. And the switching works great – whether you hit it light or hard, it just works. I also love the colours. When it's dark on stage, it's good to be able to see what you're stepping on. It was smart to make them loud colours. I love the yellow overdrives, orange distortions, blue Blues Driver and black Metal Zone with the orange writing. BOSS pedals have personality.

"Thank you to BOSS for creating these beautiful pedals. They help me express my voice and what I'm trying to do."



The BP-1w is the newest addition to the Waza Craft line, offering players the tone-enhancing sound of two classic BOSS preamps and one new clean boost

"EACH PEDAL HAS ITS OWN UNIQUE CHARACTER. IT IS CUSTOMISED TO A CONTEMPORARY SOUND"

Mitsuhiro Wakiyama



2. It's hard to improve on one of the best-selling pedals of all time, but the Waza Craft DS-1w adds an extra-juicy Custom voicing that brings a mid-rich, expressive new sound to this ageless design

Distortion and many others. If we look more closely at the DS-1w, one of the most hotly anticipated of all Waza Craft pedals when it launched in 2022, we see how Waza Craft unites tradition with progression very clearly.

The DS-1w retains the distinctive crisp distortion that made the original DS-1, launched in 1978, one of the best-selling pedals of all time. But it also introduces a new custom 'C' voicing from its two-stage gain circuit, which *Guitarist* magazine described this way in its review of the DS-1w shortly after it launched: "Switching over to C mode, you'll notice a volume jump as it's 6dB louder with a different midrange profile. The sound is thicker with the mids poking forward, giving more presence to cut through a mix, and that extra 6dB offers much more leeway in adjusting the Level for a boost. What's more, there's increased sensitivity to picking and volume knob control, engendering a more dynamic playing experience suited to a range of musical scenarios."

> "EACH PART IS CAREFULLY SELECTED AND THE ANALOGUE CIRCUIT IS EQUIPPED WITH EVERY DETAIL"
>
> *Mitsuhiro Wakiyama*

Mitsuhiro Wakiyama of BOSS explains the design approach behind the DS-1w and other pedals in the Waza Craft range even more succinctly: "Each pedal has its own unique character. It is customised to a contemporary sound... while taking advantage of the original qualities," he reflects.

It's important to note that Waza Craft isn't just about creating pedals for tone connoisseurs but about putting enhanced functionality in the hands of guitarists. Take the example of the Waza Craft TU-3w Chromatic Tuner. Based on the globally popular TU-3 tuner, the TU-3w offers signal-chain enhancements that will appeal to tech-savvy players with complex pedalboards, including a premium-quality signal buffer that can be turned off for true-bypass operation should you need impedance-sensitive pedals downstream of the TU-3w to 'see' unbuffered signal.

3. As well as offering new functions and voicings, Waza Craft pedals also feature enhanced componentry offering lower noise floor and other benefits



It's details such as this that set Waza Craft pedals apart – they are not designed to make BOSS's excellent Standard compact pedals obsolete. On the contrary, Waza Craft pedals are built on the timeless bedrock of those iconic effects. However, Waza Craft pedals do offer customised, premium-quality functions and sounds to guitarists that seek nuanced control of their tone in a superlatively built package.

Waza Craft also gave rise to BOSS's hugely successful Katana range amps, which were developed from tech used in the Waza Amp Head. The philosophy has also been extended to pro-spec tone tools such as the Tube Amp Expander, a variable reactive loadbox, 100-watt analogue power amplifier, IR loader and loudspeaker emulator in one. True to the Waza Craft ideal, all of these products open up new horizons for tone aficionados while retaining the core reliability and usability for which BOSS is renowned. The Waza Craft project has also allowed BOSS to create pedals inspired by seminal 60s-era fuzzboxes, such as the TB-2w Tone Bender, and – most recently – pedals that bring together hand-picked elements of other BOSS effects to make an entirely new design.

Tone Boost

Such is the nature of the latest Waza Craft pedal to make its debut, the BP-1w Booster/Preamp. Most guitarists have, by now, recognised how useful and tonally flattering a good 'always on' preamp effect can be, while every player needs a boost from time to time to help solos punch through the mix or drive an amp harder. Keen-eared guitarists also know that some effects not specifically designed to act as boosts nonetheless contain great-sounding preamp circuits. BOSS embraced this idea with the BP-1w, bringing together vintage preamp sounds from the landmark BOSS CE-1 Chorus Ensemble and Roland RE-201 Space Echo, both known for the



flattering tonal character they bring to the signal chain. Engage the pedal's CE-1 or RE-201 modes and you'll discover two classic preamp voices in newly controllable form, which can be used to lift and push your signal or simply add attractive colour to your sound.

"The 'CE' mode is based on the preamp sound of the CE-1, and the 'RE' mode is based on the preamp sound of the RE-201," Mitsuhiro Wakiyama says. "But although the sound is based on [those classic effects], it does not just boost the sound; it produces a pleasant saturation for the guitarist. You can also enjoy changes in tone due to differences in input impedance and changes in the guitar volume."

True to the Waza Craft ethos, the BP-1w also features a third, brand-new NAT boost mode that gives a transparent hike in output for when you simply want 'more' of what you've already got. It's one of those pedals with a simple premise but a wealth of tonal flexibility, a tonal utility tool that is anything but workaday in its sonic influence.

"To achieve these goals, each part is carefully selected and the analogue circuit is equipped with every detail," Mitsuhiro Wakiyama says. "This is Waza Craft."

ART & CRAFT *Three Waza Craft Pedals To Try*

DC-2w Dimension C

If you crave shimmering cleans as lush and spatially rich as the best rackmount chorus devices, you should check out the DC-2w. BOSS says the "Dimension is a one-off effect that enhances tonal space", and that certainly captures the floaty, ethereal character of this unique effect, which brings together both the tones of the original Dimension C pedal and studio-grade voices from the rackmount Roland SDD-320 Dimension D. By interactive use of four switches on the front panel, the DC-2w offers the user 20 unique and evocative sounds.

CE-2w Chorus

An irresistible offering for fans of classic modulation pedals, the CE-2w provides guitarists with the era-defining mono chorus tones of the original 80s-era CE-2 Chorus but adds the choice of stereo operation for the first time as well as tones from the equally influential CE-1, putting everything from rotary speaker-style swirls to warm, evocative chorus sounds at your fingertips.

DM-2w Delay

Every guitarist should have a characterful analogue delay based on 'bucket brigade' circuitry for those chewy, viscerally exciting echo sounds. Based on the original DM-2 analogue delay, launched in 1984, the Waza Craft version also offers a Custom mode with more clarity, for times when a more pristine sound is needed, as well as more than doubling the available delay time.

HISTORY REPEATING

BOSS's trailblazing delay pedals changed the world – now the modern range salutes the Japanese firm's storied past while forging ahead with bold new creations

Words
Henry Yates
Photography
Olly Curtis

Imagine a time before the delay pedal. An era when guitarists couldn't conjure slapbacks or ping-pongs at the click of a footswitch. To anyone who came up during BOSS's half-century reign, the notion is unthinkable. After all, with today's range offering everything from next-gen trailblazers like the DD-500 to modern takes on classic units like the Space Echo, Delay Machine, DM-2, DD-3 and SDE-3000, fans of this vital effect have never had such mindblowing tools under their boots.

But delay wasn't always so accessible or user-friendly. When the original tape echo effect first pricked up ears in the 1940s, it was the preserve of professionals players in top recording studios, and created using bulky mechanical reel-to-reel machines notorious for their expense and impracticality.

> BY REINVENTING ITS CLASSIC HARDWARE FOR THE MODERN AGE, BOSS HAS REMAINED HISTORY'S GREATEST EXPONENT OF DELAY

Still, for the select few with access to the technology, astonishing sounds were possible. In subsequent years, a run of tape-based delay units rose and fell, from the Echoplex to the Watkins Copicat. But arguably the first to achieve global use was 1974's RE-201 Space Echo, developed by BOSS's sister company Roland. Outgoing president Yoshihiro Ikegami started his long career at Roland assembling these units – and they're still widely saluted as the greatest tape delay of all-time.



PHOTO BY MAT HAYWARD/GETTY IMAGES

Employing a capstan-driven tape format that reduced the mechanical parts, the Space Echo's branding implied its speciality: unlike simpler rivals, the Roland supplied a widescreen, spacey flavour, sweetened by onboard reverb. As everyone from Hank Marvin to Bob Marley agreed, there was nothing quite like it.

Even so, while the original RE-201 was an industry-standard for studios at the highest level, the original unit's cost and dimensions were a non-starter for the majority of musicians who plied their trade on the stage. Fortunately, by 1978, the fast-rising BOSS company was ready to pick up that gauntlet, having forged its own identity beyond Roland, and now ready to innovate on its own terms.

That year, BOSS launched its first echo unit in the form of the DM-1 Delay Machine, employing the charge-coupled device (CCD) technology usually associated with cameras and offering flexible analogue delays of up to 500 milliseconds. While the Space Echo remained more capable in outright performance, the Delay Machine eclipsed it for practicality, with the tank-tough metal chassis and on/off footswitch announcing that delay was easily practical as a live effect for the first time. And soon, with BOSS's early compact stompboxes flying off shelves at the turn of the decade, the company's ever-curious engineers wondered: could the DM-1's revolutionary delay capabilities be shrunk further still?

Evolution Of Delay

In 1981, the DM-2 answered that question in style. Identified by its magenta chassis, this was BOSS's first compact analogue delay, now featuring bucket brigade device (BBD) tech – with a huge 4,096 stages – that granted up to 300 milliseconds of delay while making the sound warmer and softer. Just as important, the DM-2's keen pricing granted access to players at every level. As Robert Keeley of Oklahoma-based Keeley Electronics remembers: "The DM-2 was one of the few affordable analogue delays you could get in the 80s."

Analogue delay would endure – and still has plenty of advocates – but by the early 80s, the digital age was upon us. As with tape echo before it, digital delay was initially the preserve of pro players and high-end studios who could afford rackmount gear like the Roland SDE-3000. Once again, it took a bold move from BOSS to level the playing field, as to the Japanese engineers' happy surprise

Artist Favourites: ED O'BRIEN

"My first delay pedal was a DD-3 [Digital Delay]. Someone had a BOSS half-rack Digital Delay unit at one of our first ever band rehearsals and it sounded immense. After hearing that, I saved up and bought a DD-3. It still sounds good. I've got a DD-3T (with tap tempo) on my current 'board, the one Daniel Steinhardt built for me. The DD-3 has a sound; that 80s digital thing, one of those sounds we all loved. It sounds slightly cleaner than an analogue delay, but still has lots of character.

"I also love the DD-5. To me, the DD-3 is the sound of the 80s, while the DD-5 is the sound of the 90s. The DD-5 was key to the sound of *The Bends* and *OK Computer*. It was virtually all DD-5. I didn't use many pedals at the time, but the BOSS DD-5 was one of my favourites because I could get so many different sounds out of it. I love using it for ring modulator-style noises. I play around with that pedal a lot and it's been on every Radiohead pedalboard I've gone out with because it's the only delay that can make those *OK Computer* sounds.

"When I go out on tour again, the [DM-101] Delay Machine is probably going on the 'board. I can store sounds in there, which I can't do with the Electro-Harmonix Memory Man. The Delay Machine is extraordinary. And if I can make the SDE-3000D [Dual Digital Delay] work I'll use that, too, although I'll still need a DD-5. I think the [original Roland] SDE-3000 is amazing. That 80s era of delays was really special, and BOSS totally nailed it. Daniel and I have very similar tastes in delays, and I'm always waiting for his validation. With the SDE-3000D, he said, 'BOSS have knocked it out of the park.'

"Delays are like any pedal inasmuch they have their own character. Each one does something differently and, for me, it's an emotional thing. Like, how do I hear and see the record emotionally? I'm not one of those guys who has one delay and that's my sound. It's an expensive habit – I have lots of delays – but, as you can tell, I'm a big fan of BOSS!"



As technology advanced, so did the hallmark sounds of BOSS delay pedals, from the CCD-based DM-1 through the BBD-based DM-2 to today's multi-functional DM-101

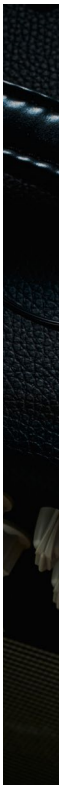


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PHOTO BY PETE STILL/REDFERNS/GETTY IMAGES



1. BOSS deftly mirrored the styling cues of the original RE-201 Space Echo tape delay in its recent, latter-day digital recreation, the RE-202

2. Eddie Van Halen was an iconic early adopter of Roland's original rackmount SDE-3000 digital delay

3. A special edition SDE-3000EVH Dual Digital Delay was co-developed with Eddie Van Halen's long-time tech, Matt Bruck, and Pete Thorn using the late guitarist's original instruments and rigs at the legendary 5150 Studios

they discovered the IC chip from the SDE-3000 would also (just) fit in a compact battery-powered pedal.

As Masao Takahashi of BOSS's Development Division recalled in *The BOSS Book*, transitioning into the digital era was a labour of love ("The DD-2 took the longest of any product to develop"). But that original unit in the ongoing DD series drew a line in the sand upon its 1983 release. Not only the world's first digital delay stomp, but BOSS's first digital pedal of any kind, the DD-2 was also the foundation for 1986's even-more-popular DD-3 that lives on in the form of the modern DD-3T.

For those who'd only known analogue delay, that first DD-2 was a revelation, boasting a glassy clarity and vastly increased range that topped out at 800 milliseconds. "You have to include the DD-2 in the list of most influential pedals ever," says *That Pedal Show*'s Daniel Steinhardt. "The first-ever digital delay in a compact pedal. There's no player of my generation who doesn't remember when they first heard that almost one-second delayed repeat. It was truly epic."

But the story of delay is an ongoing saga, not a history lesson. Few guitar effects have crossed more generational boundaries, bled into more genres or stayed so relevant in the modern scene, and BOSS's commitment to innovation – embodied by the motto 'We design the future' – is evident in the post-millennial product line.

"THE DD-5 WAS KEY TO THE SOUND OF 'THE BENDS' AND 'OK COMPUTER'. I COULD GET SO MANY SOUNDS OUT OF IT" *Ed O'Brien*

In 2013, the TE-2 Tera Echo proved a game-changer, powered by the Multi-Dimensional Processing (MDP) whose ambience effect responds to how a player attacks the strings. In 2015, the DD-500 met the demands of the most ambitious music-makers, nailing historic and modern voicings with 12 studio-quality delay modes, while blowing the sonic parameters wide open with constantly evolving system software. "It all ensures the DD-500 ranks among the best high-end delay units available today," wrote Michael Astley-Brown in *Total Guitar*.

New blood is essential, but some legends are too good to be consigned to the history books. Since the mid-70s, some of BOSS and Roland's most storied hardware has burned brightly before falling out of production and into cult status. The original CCD-based Delay Machine was only in production until 1979, for instance, while the first incarnation of the DM-2 lasted just three years before being superseded by 1984's DM-3.

Since the millennium, however, with the planet's most skilled designers and engineers at its disposal, BOSS has performed an unprecedented magic trick, bringing back the icons that made its reputation, now bolstered by cutting-edge features that propel this vintage hardware squarely into the 21st century. Power up the modern BOSS Space Echo RE-202, for example, and you'll detect all the tonal signatures that built the legend in the 70s, from the character-soaked preamp circuit to the unbeatably atmospheric spring reverb (the dead-on tape emulation even factors in motor speed fluctuations). But this is no museum piece: not only is the reborn pedal-format Space Echo unfailingly reliable on the road, it also ticks contemporary boxes with new features including a doubled delay time, true stereo I/O and a fourth virtual tape head for five more tone combinations.

Likewise, on first inspection of the BOSS DM-101 Delay Machine, you'll be convinced the clocks have turned



3

back. In reality, this regeneration of the legend pushes analogue delay far beyond what was feasible in the late 70s, with 12 modes delivering every texture of mono and stereo delay imaginable, all created by up to eight internal BBDs, forensically shaped by digital CPU control.

Analogue connoisseurs have also cheered the comeback of the BOSS DM-2, with the iconic magenta stompbox now refreshed as the DM-2w Waza Craft, offering both a faithful reproduction of the original's warm vintage effect, and the Custom mode that unlocks a cleaner sound and over twice the delay time (800 milliseconds).

For fans of digital delay, meanwhile, this year's biggest news was the reimagining of Roland's fabled rack gear of the 80s. Now in a pedal format, the BOSS SDE-3000D nails the inimitable musical character of its namesake, while allowing open-ended modern operation with fully independent delays, flexible internal routing, expanded I/O, MIDI support and 100 memories for storing setups. Then there's the stardust of the SDE-3000EVH, with its recreations of the stereo delays that drove Eddie Van Halen's epic three-cabinet live sound (you'll even find eight EVH-curated presets bottling the precise settings from the late maestro's personal delay units).

Times change and technology marches onward, but by reinventing its classic hardware for the modern age – in parallel with brand-new releases – BOSS has defended its crown as history's greatest exponent of delay. Long may those sonic ripples spread.

BOSS DELAY SETTINGS *Five iconic delay sounds to try out today*



VINTAGE SLAPBACK
DM-2w Delay

REPEAT RATE: 3 o'clock
ECHO: 2 o'clock
INTENSITY: 9 o'clock
MODE: C

Slapback delay dates back to the 1950s era of rock 'n' roll and rockabilly and was first created using tape to elicit a distinctive, slappy sound redolent of short room reflections. The DM-2w Delay reproduces this classic thickening effect using BBD analogue circuitry.



SPACE ROCK
RE-202 Space Echo

INPUT: Guitar
TAPE: Aged
MODE SELECTOR: 11 (Heads 1, 2 & 4)
SATURATION: 11 o'clock
WOW & FLUTTER: 1 o'clock
REPEAT RATE: 12 o'clock
INTENSITY: 11 o'clock
ECHO VOL: 12 o'clock
REVERB/BASS/TREBLE: Season to taste

The BOSS RE-202 recreates the magic of the legendary Roland RE-201 Space Echo by emulating the unit's preamp, multi-head tape delay and spring reverb. This setting includes the RE-202's extra (fourth) tape head and produces a rhythmic, multi-layered sound.



ESSENTIAL DELAY
DD-3T Digital Delay

E.LEVEL: 12 o'clock
FEEDBACK: 12 o'clock
TIME: 12.5 to 800ms
MODE: S/M/L

Arriving in the mid-80s, the timeless DD-3 design remains a flexible pedalboard staple of countless guitarists. BOSS's current 'T' version includes a handy tap tempo function accessed either by holding the switch down or via an external stomp switch.



OFFICIAL EDDIE VAN HALEN
SDE-3000EVH Dual Digital Delay

PRESETS: A 01 through B 04

Eddie Van Halen made great use of Roland's SDE-3000 rackmount delay, and this official EVH/BOSS collaboration packs two of these vintage units into one stompbox. Eight officially curated presets instantly recall settings and sounds from the master's expansive live rig.



ED O'BRIEN SETTING
DD-5 Digital Delay

E.LEVEL: 3:30 o'clock
F.BACK: 3:45 o'clock
D.TIME: 8 o'clock
MODE: 2

When it comes to finding new and unexpected sounds, BOSS delay pedals are ripe for exploration. Here, Radiohead guitarist Ed O'Brien shows us how he masterfully manipulates one of his favourites, the DD-5 Digital Delay, to produce some otherworldly effects.

ELECTRIC DREAMS

Your guitar isn't limited solely to traditional sounds. Roland and BOSS have been at the forefront of guitar-based synthesis for decades – and they're showing no signs of stopping

Words
Stuart Williams
Photography
Olly Curtis
& Phil Barker

The late 70s were all about progression, and a synergy between the production of more explorative gear and the experimental musicians using it made for expanded creative horizons. Guitarists were becoming increasingly more comfortable with complex rack-based effects in order to bring the sound of the studio to the stage. And so guitar-controlled synthesizers were the answer to the rhetorical question: why should keyboard players have all the fun?

BOSS's parent company, Roland, recognised this early, and its first foray into the merging of guitars and synths came in 1977 with the GR-500. This powerhouse paired a full stand-mounted analogue synth with the GS-500 guitar controller to offer guitar players unprecedented sonic potential, and was the catalyst for placing Roland guitar synths in the hands of the likes of Jeff Beck, Jimmy Page, Andy Summers, Steve Hackett and more.

The GR-500 synth unit comprised five sections that could be blended, modulated and filtered to create a huge-sounding mix of electronic and guitar sounds. Synth-wise, it had the Polyensemble, Bass (which could be assigned to respond to: all six strings; the lowest three strings only; or the lowest two strings only) and Solo Melody modes, as well as a section for the GS-500's magnetic pickup. It even had the ability to pass control voltages from the guitar to an external synth, with the audio looped back and combined with that of the GR-500.

Each of the GR-500's three synthesis modes featured a three-stage envelope (Attack, Decay and Sustain), plus a VCF (Voltage Controlled Filter) whose cut-off frequency could be modulated by pitch, an LFO, an envelope or a foot-operated pedal.

Of course, with all of these options, the GS-500 controller was also bursting with features. So many, in fact, that it required a 24-pin serial cable to send all of its signals to the GR-500. First up are the pickups, with a standard magnetic humbucker joined by Roland's divided pickup – the forebear to the current GK-5 model – to create a signal for each string. But in addition to this, the large pool in the neck pickup position housed a sustainer section, which vibrated the strings EBow-style for infinite sustain. The GS-500 was also fitted with no fewer than six volume controls, a master tone knob, and eight switches to collectively control most of the GR-500's parameters remotely.

1. Small is beautiful: the state-of-the-art GK-5 pickup is the gateway to complex, multi-timbral sounds generated by the formidably powerful BOSS GM-800 Guitar And Bass Synthesizer

THE GR-500 SYNTHESIZER PAIRED WITH THE GS-500 GUITAR CONTROLLER TO OFFER GUITAR PLAYERS UNPRECEDENTED SONIC POTENTIAL

Next-Generation Synthesis

Fast forward to today, and Roland and BOSS have continued the development of their guitar synthesizers, arriving at the most recent: the BOSS GM-800. It's a triumphant display of technological progression, packing a mesmerising array of classic and contemporary synth sounds into a compact floor-based unit. BOSS's latest GK-5 divided pickup works in tandem with the GM-800 to deliver lightning-fast, accurate tracking. The GM-800 sound generation is based on the same ZEN-Core engine found in Roland's flagship synth workstations, with over 1,200 internal voices ranging from sampled acoustic instruments to widescreen soundscapes. The GM-800 also benefits from an ever-growing range of creative options through Roland Cloud.

The advanced processing means that each of the GM-800's 150 scenes can comprise up to four individual parts, each playing a different sound, plus a rhythm part. Alongside the sounds, there's a dedicated MFX effects processor (with a choice of over 90 effects) and EQ for each part, two master effects processors that can be applied globally, plus a master EQ and compressor.

There's connectivity, too, of course, with MIDI I/O, stereo audio outputs and the facility for two external footswitches or expression pedals. Thanks to the BOSS Tone Studio integration, taking a deep dive into the settings and sculpting huge, multi-timbral synth patches is a process that's made reassuringly simple.

So, through a combination of cutting-edge pitch conversion and tracking, and powerful, rock-solid processing and effects, the GM-800 represents the progression of Roland/BOSS's synth-guitar DNA in a relatively compact and incredibly creative package.



1

THE BOSS GM-800 REPRESENTS THE PROGRESSION OF ROLAND/BOSS'S SYNTH-GUITAR DNA IN A RELATIVELY COMPACT AND INCREDIBLY CREATIVE PACKAGE



Debuting in 1977, Roland's GR-500 synth and its accompanying GS-500 guitar controller opened the door to new sonic possibilities. Today, the bleeding edge of guitar-synth tech is embodied by the BOSS GM-800 (left), which packs exponentially more power into its sleek blue enclosure

GAME-CHANGERS

You might know BOSS for its distinctive stompboxes, but the innovation to enable easier music-making goes way beyond effects

Words
Stuart Williams

Over the past 50 years, BOSS has established itself and remained the first name in guitar effects pedals. But outside of its colour-generating stompboxes and multi-effects units, the company has turned its attention to many other areas in order to make playing music easier and more inspiring. Here, we're taking a look at three current BOSS products which do exactly that.

Waza-Air Wireless Personal Guitar Amplification System

Headphones are a big deal these days, but BOSS's Waza-Air Wireless Personal Guitar Amplification System is much more than simple 'cans'. As the title suggests, the Waza-Air combines the convenience of jamming alone with premium guitar tones, wireless connectivity and gyroscopic sound immersion via the BOSS Tone Studio App for iOS and Android devices.

WAZA-AIR COMBINES THE CONVENIENCE OF SILENT PRACTICE WITH PREMIUM GUITAR TONES, WIRELESS CONNECTIVITY AND GYROSCOPIC SOUND IMMERSION

The included WL-T Transmitter plugs into your guitar, while the personal monitors receive your signal, as well as Bluetooth for streaming songs and jam tracks from your device, completely cable-free. There are five Katana-derived amp types to choose from, along with 50 effects, and by connecting to Tone Studio you'll be able to edit, store and recall your favourite tones anywhere, at the touch of a button.

The Waza concept is all about innovation, of course, and BOSS has equipped the Waza-Air system with its immersive 3D ambience and spatial audio technology to simulate the sound of your amp in a room – even dynamically shifting with your head movements – in surround, or as a simulated backline. It's a complete solution for portable, wireless, silent practice, without feeling like you're confined to traditional headphones.

Waza Tube Amp Expander

Guitarists love valve amps, but while we can agree that the tone of a cranked valve amp is a sonic delight, it's less of a practical one in today's world. The Waza Tube Amp Expander continues the Waza Craft concept of innovation by providing a do-it-all solution to using your valve amp, live and in the studio. Crucially, it's equipped with a variable reactive load box, which enables you to dial in your amp's sweet spot at manageable volume levels. It also features a 100-watt Class A/B analogue power amp that can be used in conjunction with other lower wattage amplifiers, significantly increasing output while expanding options.

Want to record your valve amp in a home environment without resorting to mic'ing up a cab? The Waza Tube Amp Expander also features 22 mic'd speaker cab emulations, with control over nine microphone types and five virtual room options. The whole signal can be routed through the balanced outputs or built-in USB audio



1. BOSS's boundary-pushing Waza-Air system delivers 'amp-in-room' tones enhanced by gyroscopic sensor technology

2. Comfort and durability are integral parts of the the Waza-Air design, ensuring nothing gets in the way of your playing



3. The Waza Tube Amp Expander helps players get more from their valve amps. It can give low-wattage amps the power to command big stages or, conversely, it can help you capture the dynamic, complex tones of a flat-out 100-watt head while bringing in-the-room output levels down – and much more besides

4. The ES-8 Effects Switching system not only grants one-touch controllability to groups of your favourite pedals but also boasts its own in-built effects suite, making it a hugely powerful tool



interface, so you can record your amp tone silently. You can even plug in headphones directly and use your valve tones for practising, too.

ES-8 Effects Switching System

There's never been more choice when it comes to effects, but as our pedalboard requirements grow more sophisticated, what if we want to switch a number of pedals on, off or both all at once? BOSS's ES-8 Effects Switching System not only takes care of this situation but also presents a whole new dimension when it comes to using a collection of individual pedals, by removing the 'linear' nature of individual stompboxes.

BOSS has long been a pioneer in effects switching systems, such as 1982's SCC-700 Sound Control Center, which allowed up to seven pedals to be switched simultaneously. Today, with eight separate effects loops (plus an additional volume loop) and 800 memories, the programmable ES-8 can switch your entire pedal chain – and any combination within it – in and out at the press of a button. It can also rearrange the order of your chain on a patch-by-patch basis, giving you the flexibility of a digital effects unit from a 100 per cent analogue signal path, while maintaining the finely tuned tones of your carefully selected pedals.

Handy functionality – including parallel loop configuration, dual amp outputs, MIDI I/O and multiple footswitch/expression pedal connectivity – means the ES-8 can act as a complete switching system for your entire rig. If you want to unlock the full creative potential of your gear, it's a definite game-changer.

OUTSIDE OF PEDALS AND MULTI-EFFECTS UNITS, BOSS HAS TURNED ITS ATTENTION TO OTHER AREAS TO MAKE PLAYING MUSIC EASIER AND MORE FUN



THE POWER & THE GLORY

BOSS's status as an effects heavyweight is set in stone – but lesser-known is how the visionary company reached the summit of the amp sector in under a decade

Words
Henry Yates
Photography
Olly Curtis

Breaking into the modern amp market is not a mission for the faint-hearted. On one side, you'll find the old guard, eternally sworn to the valve technology they created back in the 50s and 60s, still dining out on war-stories of Hendrix, Woodstock and 4x12 backlines looming like monoliths. On the other, the high-tech disruptors, shredding conventional wisdom, casting aside manufacturing tradition, dragging the sector ever-further from physical hardware towards apps and plug-ins.

Both philosophies are valid, and each has its advocates. But if BOSS's status as the second-biggest amp builder in the world proves anything, it's the appetite for products that walk a perfect middle path between tradition and revolution. Inspect the modern BOSS amp range – comprising the Katana, Nextone, Waza, CUBE and Acoustic series – and you'll find hardware that feels reassuringly human, offering the hands-on tangibility that makes plugging into a great amp so satisfying. Look a little closer, though, and you'll detect the innovation that underpins BOSS's design philosophy, with lively and responsive amp sounds called up at the twist of a dial, signature tones crafted using editing software, and a thousand other paradigm-shifting leaps.

To some, BOSS's rise as an amp builder might seem like an overnight success, sparked by the runaway sales of the Katana series from 2016. In fact, to those that know, there's a precedent and considerable pedigree underpinning the boom. Anyone with even a passing knowledge of the amp scene will recall that sister company Roland had already planted its flag in 1975 with the legendary JC-120, a 2x12 combo dubbed the 'king of clean' for its glassy, stereo chorus-sweetened shimmer, seen in the rigs of everyone from Metallica's James Hetfield to The 1975.

> BOSS'S AMPS SATISFY AN APPETITE FOR PRODUCTS THAT WALK A PERFECT MIDDLE PATH BETWEEN TRADITION AND REVOLUTION

Likewise, by 1978, the ultra-portable CUBE series – then a Roland range, rebranded as BOSS in 2021 – gave musicians on the move a professional level of performance for the first time. At the top end, from 2014, the Blues Cube was attracting some of the scene's most discerning names, from Eric Johnson to Robben Ford. As for BOSS, scan the history books and you'll find the brand dipped a toe into the market with tidy practice combos like the MG-10 (released in the mid-80s and long-discontinued). But it wasn't until the post-millennium era that the Japanese firm truly forged into the amp sector with full intent, capturing the public imagination for something other than its rainbow of globally acclaimed effects pedals.



1

PHOTO BY JIM DYSON/GETTY IMAGES

1. Since its release in 1975, Roland's legendary Jazz Chorus amplifier has appeared on the stages of many guitar icons – Limp Bizkit's Wes Borland delivers his clean tones with a pair of JC-120s

At The Cutting Edge

Everything changed in 2016. That January, BOSS announced its ambitions and reset the norm with the launch of the 150-watt Waza Amp Head: a four-channel tone machine that earned admiring reviews for the organic, frayed-edge response of its Tube Logic circuitry, delivered through a stylish 2x12 or 4x12 cab. "It's an attractive alternative to a tube head," wrote *Guitar World*, "ready for the biggest stages."

But BOSS had another ace to play, and later that year came the big reveal that sent ripples through the amp scene. Even before you saw the hardware in the flesh, the Katana sounded evocative, aptly named after the traditional curved sword carried by Japan's ancient samurai warriors, in a nod to the new amp's precision and artistry. Just as compelling was the pitch, with a press release welcoming a new amp series that "embodies BOSS's determined pursuit of the ultimate rock sound".

But that first wave of Katana amps – a line-up comprising the Katana-100, Katana-100/212, Katana-50 and Katana-Head – only revealed the true extent of their powers when a player pushed a guitar lead into the input jack. It only took a few riffs to realise that, for the first time, authentic valve-worthy tones and forward-thinking modern features could co-exist in harmony. Uniquely, the Katana hit the neglected sweet



No valves required: from the seminal JC-120 (pictured at the back here) onwards, Roland and BOSS have trailblazed fantastic-sounding amps that do not rely on vacuum tube technology for pro-grade tone. The popularity of the Katana series of amps shows the concept is more valid than ever

ROLAND HAD ALREADY PLANTED ITS FLAG IN 1975 WITH THE LEGENDARY JC-120, A 2X12 COMBO DUBBED THE 'KING OF CLEAN'



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2. The BOSS Acoustic Singer Live amp is a next-gen acoustic/vocal amp that offers progressive features such as Acoustic Resonance for natural guitar sounds. It can also analyse your vocals and harmonise on them

3. The Roland Blues Cube was, for many players, a watershed amp – the first non-valve combo that really sounded and felt like an old tweed amp

spot between time-honoured and template-breaking philosophies – and sat within reach of budget-conscious working musicians, to boot.

Today, firing up a Katana amp for the first time is still a revelation, the range's garage-band pricing at odds with a professional spec that suggests a boutique recording amp. Since the range was introduced in 2016 it has steadily grown to include: premium Katana-Artist models; the desktop Katana-Air; the newly released Katana-Air EX; and the ultra-compact Katana-Mini. Regardless of the specific model there are features in common. Most players start with the Amp Type dial, cycling their sound between Clean, Crunch, Lead, Brown and Acoustic (Brown offering BOSS's sonic salute to Eddie Van Halen's famously warm and characterful 'brown' sound).

"FOR ALL THOSE GUYS WANTING TO GIG AND KEEP EVERYTHING IN ONE BOX, THE KATANA-ARTIST IS A GREAT OPTION" *Rabea Massaad*

Nominally, then, the Katana could be classed as a 'modelling amp'. But that term doesn't do justice to the gulf between less refined products claiming to recreate famous valve amp tones and the Tube Logic circuitry at the heart of these Japanese-built amplifiers, which genuinely brings the alive-in-your-hands response of a valve glowing red-hot. It's complemented by the Class A/B analogue power amp section, which underlines that organic, character-soaked response, and delivers it through custom-designed speakers that make the air move. Meanwhile, the Variable Power Control lets players dig out those same fit-to-burst tones at feasible home volumes.

But perhaps the masterstroke of the Katana range is that it stands on the shoulders of a half-century of guitar-effects innovation. Boasting 60-plus effects, taken direct from BOSS's key stompboxes since the 70s – not to mention the ability to edit, store or deep-dive with the almost-infinite voicings of BOSS Tone Studio software – the Katana feels like a blank canvass, making each guitarist feel like they own a custom-tuned signature amp, no matter how many millions of players start from the same factory-spec foundation. As *MusicRadar*'s Daryl Robertson wrote earlier this year of the Katana-50 MkII EX: "There is no genre this amp cannot do."

It was true, and from its launch in 2016, the Katana swiftly cut a swathe across stages worldwide, appearing everywhere from the backlines of school bands to the rigs of pro players like Andy James, Ola Englund and Rabea Massaad. "The Katana-Artist is a really impressive addition to the range," said the YouTuber of the premium model released in 2018. "For all those guys wanting to gig and keep everything in one box – whether it be all your effects, the functionality, the different tones – this is a great option. I can't fault it. But then, I couldn't fault the other Katana amps..."

Next-Level Amplification

With over one million Katana amps sold, a less adventurous firm might have marked time. But BOSS's next move underlined its refusal to rest on past glories. By 2018, the whispers in gear circles told of a brand-new BOSS amplifier range, pushing the concept of valve-less guitar amps to unprecedented levels. Enter the Nextone. At first glance, these latest combos (originally released in 80-watt Artist 1x12 and compact 40-watt Stage variants) offered a more traditional amp experience, finished with silver-trim grille cloth, featuring familiar Clean and Lead channels and a streamlined selection of core effects (reverb, delay, tremolo and boost).

But the giant leap came in the choice of four Class A/B analogue power amp circuits, with a twist of the rotary knob letting players travel through time and cross the Atlantic, choosing between the proud bark of US-style 6L6/6V6 voicings and the creamy roar of the EL34/EL84 valves associated with the golden age of British rock.

Remarkably, the Nextone didn't just sound like a line-up of classic valve amps: it truly felt and reacted like each one of them, with the series' Tube Logic foundation meaning each power amp mode revoiced the entire circuit from input to output. "In use, the Nextone sounds scarily realistic," wrote Nick Guppy in *Total Guitar*. "It's one of the best-sounding solid-state amps on the market."

To excel at one design discipline is hard enough. To excel at two is a rare feat indeed. But in the post-millennium, BOSS is acknowledged as a specialist across both pedalboard and backline, its effects and amplifiers offering a one-stop solution for tone that turns heads. The future of amplification has truly arrived.



TO EXCEL AT TWO DESIGN DISCIPLINES IS A RARE FEAT, BUT BOSS IS ACKNOWLEDGED AS A SPECIALIST ACROSS 'BOARD AND BACKLINE

KATANA VS NEXTONE: *At A Glance*

If you're in the market for a professional, high-calibre value amp, you might find your shortlist boils down to the BOSS Katana or Nextone and wonder which is right for you. Of course, the best approach is always to trial both amps at your local Roland stockist and trust your ears. But each product is conceived for a subtly different player, and it's a useful jump-off to grasp the fundamental differences.

The Katana series is unbeatable for players who demand digital flexibility. Perhaps you're in a busy function band with every song in the setlist requiring a different tone. That's where the Katana's huge variety of amp types and onboard effects becomes invaluable: it's like a portable library of all-time-great tones (and that's before you even factor in the BOSS Tone Studio editor).

As such, while these amps lean towards rock, no genre is off-limits. By comparison, the Nextone doesn't have quite as many built-in sonic options. But if your priority is organic-sounding, authentic recreation of history's greatest valve tones – complete with a reactive Class A/B power amp – you simply won't find a better contender than this unique new type of amp.

COLLECTIBLE COMPACTS

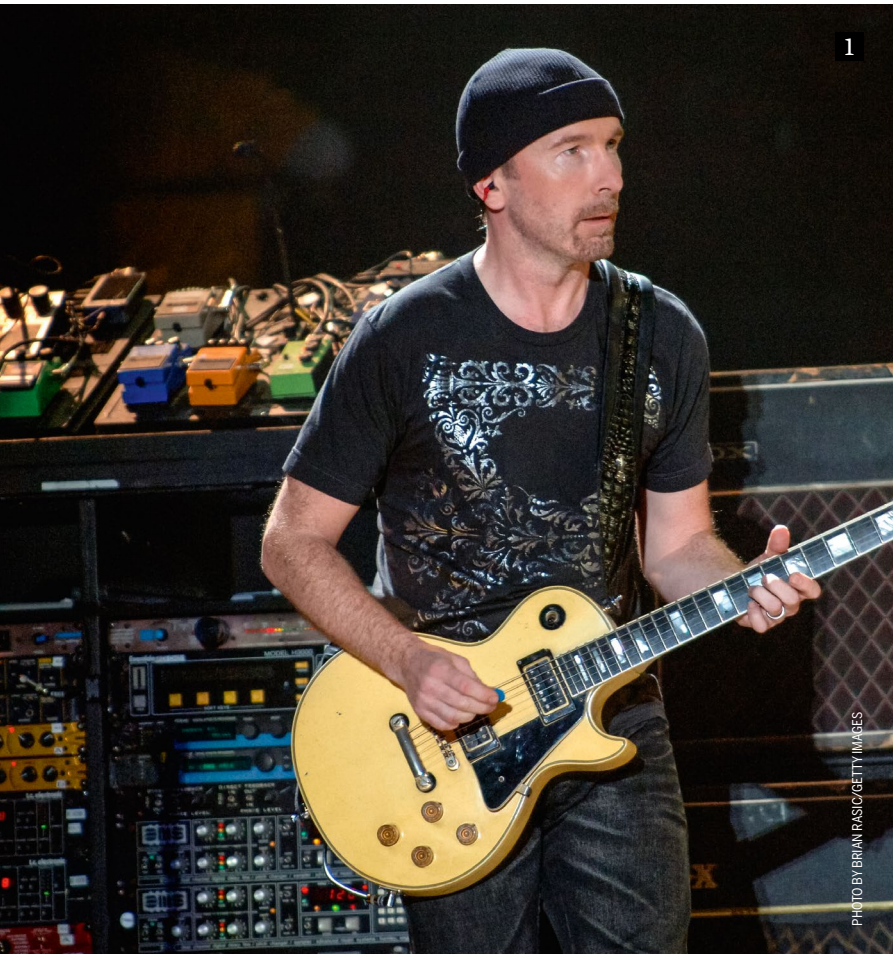
The BOSS compact pedals may be colourful little objects of desire to many, but it seems that some of them are more desirable than others...

Words
Trevor Curwen & Jamie Dickson
Photography
Olly Curtis & Phil Barker

BOSS revolutionised the pedal world with the 1977 release of its first compact pedals – the OD-1 Over Drive, PH-1 Phaser and SP-1 Spectrum. Since then, the compact series has been ubiquitous and there can't be many guitarists who haven't owned one at some time. But while there's a massive range of BOSS compacts available to buy new, yet more models have been discontinued over the years. Perhaps they were ahead of their time, or possibly their qualities were overlooked in a crowded marketplace – and thus only remained in production for a couple of years. Today, the very scarcity of such pedals has granted them a cachet and collectibility that has made them among the most sought-after effects in the world.

You only have to look at the Instagram pages of collectors such as @boss_pedal_collector and @boss_pedal_aficionado to see that the BOSS collecting bug is not purely about visual impact or a completist desire to own them all – many early BOSS pedals are desirable for their unique sonic qualities and can still play a part at the cutting edge of music. Before we take a look at the rarest compact pedals, however, we must first give an honorary mention to some earlier and larger BOSS effects.

Although Roland had released pedals earlier (the AP-7 Jet Phaser and AF-100 BeeBaa fuzz to name just two), the first pedal to appear under the BOSS name was the CE-1 Chorus Ensemble in 1976. BOSS had previously put the newly minted chorus effect into its synths and JC Jazz Chorus amps, but the CE-1 put it into a pedal and these, long out of production, are still very much in demand today and not just with guitarists – you'll find many a CE-1 used in the recording studio for its spacious stereo sound. There were other larger-format BOSS pedals from the period, too, such as the DB-5 Boss Driver (used by Rory Gallagher in the 90s), BF-1 Flanger and the GE-10 Graphic Equalizer, all of which are now rare and collectible, but let's move on to those discontinued compacts...



1. The Edge used the PW-2 Power Driver on U2's Vertigo tour, but the pedal was relatively obscure for some years before rocketing up in desirability in recent times

Slow Burners

First up, the SG-1 Slow Gear, a black auto-swell pedal – with its circuit DNA rooted in the NF-1 Noise Gate – that was only in the BOSS catalogue for three years. It muted the attack and swelled the volume of a note's tail, while Sensitivity and Attack knobs allowed the user to tailor the effect. BOSS actually puts digital Slow Gear emulations in its large GT-series floorboards, but if you want the real thing they occasionally come up for sale and command a price that matches their scarcity. Online marketplace Reverb.com reports that, in 2022, vintage SG-1s changed hands for an average price of $550, with some examples fetching nearly $650.

Slightly longer-lived in its original production run, the HM-2 Heavy Metal was produced from 1983 until 1991 – the same year BOSS introduced the perennially popular MT-2 Metal Zone. It is very much the sound of Swedish death metal and in demand by anyone wanting that original buzzsaw sound. And it seems that's an itch some people simply have to scratch – original examples have seen a 12 per cent rise in value over the past year alone, according to Reverb.com.

Staying with drive effects, the FZ-2 Hyper Fuzz (1993 to 1997), closely related to the vintage Univox Super-Fuzz, offered two distinct fuzz voices and gain boost combined with a two-band active EQ for some tremendously powerful and now highly sought-after sounds. More intriguing still, however, is the recent surge in interest in the PW-2 Power Driver, available from 1996 until 2000 and used by The Edge on U2's Vertigo tour. A drive pedal, it has the expected Level and Drive knobs, plus Fat and Muscle knobs for control over bass and mids. Yet despite its relatively brief association with U2, it remained a sleeper until relatively recently – but made up for lost



Irish blues-rock legend Rory Gallagher was a prolific user of BOSS pedals in the later stages of his career, including the large-format DB-5 Boss Driver, pictured below

THE VERY SCARCITY OF DISCONTINUED BOSS PEDALS HAS MADE THEM AMONG THE MOST SOUGHT-AFTER EFFECTS IN THE WORLD



2

2. As the forefather of a long line of era-defining BOSS chorus pedals, the original CE-1 commands used prices in line with its historic-kit cachet

time during the past two years and saw the single largest jump in value of any BOSS pedal during that period, according to Reverb.com.

Another pedal that features on many collectors' wishlists is the 1984 DF-2 Super Distortion & Feedbacker, a distortion pedal with a feedbacking function that sustained a note if you held down the footswitch, and had a name change to Feedbacker & Distortion in 1985, making the earlier version more collectible. Moving away from the dirt pedals, one of the first trio of pedals released in 1977, the SP-1 Spectrum was in production for about four years. Its role was to boost a select band of frequencies. The boosted frequency was variable between 500Hz and 5kHz via the Spectrum knob, while a Balance knob set the blend of normal and EQ'd sound. The PN-2 Tremolo Pan, meanwhile, was a precursor to the TR-2 Tremolo pedal, but, unlike that pedal, features stereo outputs, allowing it to be used as an autopanner. Besides the standard Rate and Depth controls you get four selectable modes – tremolo in square and sawtooth flavours or panning in both flavours.

> "THE CE-1 PREAMP IS A SECRET WEAPON, AS IS THE RE-201 PREAMP. BOTH HIT THE FRONT-END OF THE AMP PRETTY GOOD" *Joe Bonamassa*

Bag any one of the above and you'll be the envy of many a BOSS aficionado and the possessor of a unique tone machine.

What Makes A Pedal Collectible?

There are several factors that may have a bearing on both the collectibility and the cost of discontinued pedals. One thing to note is that the earlier pedals were made in Japan while production later moved to Taiwan, and those Japanese units are the more collectible and

3. Fuzz pedals form their own genre within the collectible pedals market and BOSS is very much a part of it through sought-after effects such as the FZ-2 Hyper Fuzz

4. The 'history reimagined' appeal of the BOSS Waza Craft Tone Bender TB-2w saw it sell out almost instantly on launch in 2021



Artist Favourites: JOE BONAMASSA

"I've been using a DD-3 [Digital Delay] for as long as I've had an effects loop – about 30 years! I run them in the effects loop because it's clean and sounds right to me. It's the only delay I know of where all the knobs can be set at noon and you're good. To me, BOSS delay is still the industry standard. I know they're up to the DD-8 now, but I still love using the DD-3 or even the [DSD-2] Digital Sampler/Delay, which is similar to a DD-2. All the early BOSS Digital Delay pedals and 80s Roland rack gear, like the SDE-3000, sound so organic. At the time, 12- and 16-bit digital processing was some of the best tech available and it still sounds amazing.

"I'm old-school. I like the BOSS choruses – including the CE-1 Chorus Ensemble – and I have a couple of Roland Space Echo units. The tape delay sound melts away beautifully; it almost feels like reverb. They do a thing. If you want Andy Summers, 1983, get a CE-1 Chorus Ensemble – chorus, a little slapback and some reverb, and that's pretty much it. The CE-1 preamp is a secret weapon, as is the RE-201 [Space Echo] preamp. Both hit the front-end of the amp pretty good. A lot of people run the CE-1 on the low input setting, but I like to use the high input. It does something unique. It really loves a clean amp. Making up the volume and hitting the input hard on the amp gives you kind of a crunch thing. I like to put a compressor after the CE-1 so it's hitting the front of the amp with a little bit of compression.

"I also like the [BD-2] Blues Driver, but my favourite BOSS dirt pedal – and I know this is going to sound really fucking strange – is the [MT-2] Metal Zone. Being a child of the 80s, I really dug the Metal Zone. I was a Metal Zone guy. I thought you could get some cool midrange things out of it with a clean amp. Just because it's called the Metal Zone, that doesn't mean you need to run the gain all the way up. The OD-1 [Over Drive] was good, too, and the silver BOSS Fuzz pedals are interesting – especially the one they did with Sola Sound: the [TB-2w] Tone Bender."



3



4

expensive, especially if you find a really early one with a silver (rather than black) thumbscrew to access the battery compartment. The label on the base of the pedal also has a significance, which is why you'll often see pedals listed as 'black' or 'silver label', and then there are different versions and circuit revisions that have taken place over the years.

As an example, let's take a look at the humble DS-1, the orange distortion pedal that started life in 1978 and has never been out of production. Let's face it, there are loads of these about, but, barring the really rare commemorative models out there, the most revered early version is made in Japan, has a silver screw and black label. It's perhaps really about the circuitry, though – early versions used a Toshiba preamp chip, but in 1994 the pedal (by now made in Taiwan) was redesigned to use an op-amp. There have been other changes since and while all DS-1s may be in the same distortion ballpark, there's plenty for players and collectors to think about.

Another strand to this story is the BOSS collaborations with other companies, starting with pedals officially licenced by Fender and launched in 2007; the FDR-1 and FBM-1 were designed to recreate the sound of Fender amps, the '65 Deluxe Reverb and '59 Bassman respectively. There was also the FRV-1 '63 Fender Reverb based on the standalone reverb tank immortalised in surf music.

Collaborative Collectibles

Perhaps the most sought-after of collaborative pedals, though, isn't quite so old. The TB-2w was a collaborative effort between BOSS and Sola Sound in 2021 to create a compact pedal version of the renowned 60s fuzz, the Tone Bender Professional MKII. This was a limited run of just 3,000 pedals, the limited run being a necessity due to component availability, namely the germanium transistors at the heart of the circuit. These, of course, all sold out rather quickly (we couldn't even get hold of one to review in *Guitarist*) and, needless to say, used examples come at a premium. In fact, while prices of rare vintage BOSS pedals may have softened somewhat recently, Reverb.com reports that the TB-2w remains hot property. Occasionally fetching four-figure sums since their release, these pedals regularly change hands for several hundred pounds.

Coming right up to date, another collaboration is with JHS Pedals and was created to celebrate the 40th anniversary of compact pedals. The JB-2 Angry Driver is a melding of the BD-2 Blues Driver with JHS Pedals' Angry Charlie. While this is not exactly a collectible at the moment as it is still readily available, it might not always be around. Maybe you should get one while you can...

Now, while many BOSS pedals have disappeared they can also come back. So far we haven't mentioned such revered early classics as the CE-2 Chorus, the DM-2 Delay or the DC-2 Dimension C, all of which are still sought after in their original versions. The thing is, if it's the sound of these pedals that you want, rather than a vintage example, you need look no further than the Waza Craft series of premium versions of much loved and long gone pedals (see page 12). The CE-2w, DM-2w, DC-2w and several others are all available now, but perhaps they will become the unobtainium collector's items of the future.

UNDER THE INFLUENCE

Inspiring artists and gear designers alike, BOSS gear has shaped much of the last half-century of music. Here, we consider the company's impact on guitar culture

Words
Henry Yates

Half a century is a long time in rock 'n' roll. Just as we've witnessed a thousand bands and genres blow up then burn out since 1973, scanning the archives reveals a long line of gear that launched to fanfare but left the faintest of thumbprints.

With no shortage of game-changing releases to its name – from the world's first digital delay in the form of the DD-2 to the OD-1 pedal that single-handedly invented the overdrive concept – BOSS could have rested on past glories. But in 2023, as we find the Japanese company at the heart of the modern music scene, a position it has held for 50 years, it's a glowing testament to a lifelong ethos of letting the players of each era become the musicians they want to be.

So, what is the secret to BOSS's enduring status as the brand that built the world's pedalboard? Perhaps it's partly down to practical benefits. After all, one of the seismic shifts sparked by BOSS is that effects pedals no longer have the whiff of elitism, but are viewed as everyday tools for working musicians. BOSS pedals have become a byword for affordability, availability and unbeatable toughness: whoever you are, wherever you're based, whatever your budget, you can pick one up from your local music shop and trust it to survive on the toughest gig circuit.

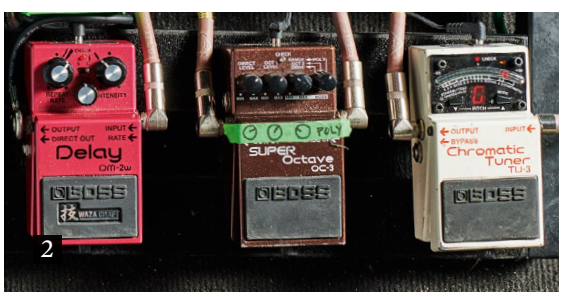
"You know, not only did the BOSS sound become the staple," says Robert Keeley, founder of Keeley Electronics, "but they were also built extraordinarily well. Once BOSS has made a pedal, it just works exactly right. The construction quality, the switching, the buffers – they just provided all the right features to guitar players to make it a truly satisfying experience."

Just as important, compared with the early effects pedals that typically featured one footswitch, no dials, another BOSS departure was to add onboard tone-shaping features that let players of every persuasion dig out their signature sound. "It's one thing to say that a chorus pedal sounds great, but it's another to be so inspired by the sound that you create a tune around it," says Daniel Steinhardt of *That Pedal Show*. "This, I think, is the most significant contribution made by BOSS. So much music has been inspired by the sound of these little boxes. When BOSS released a new pedal, you simply had to try it out."

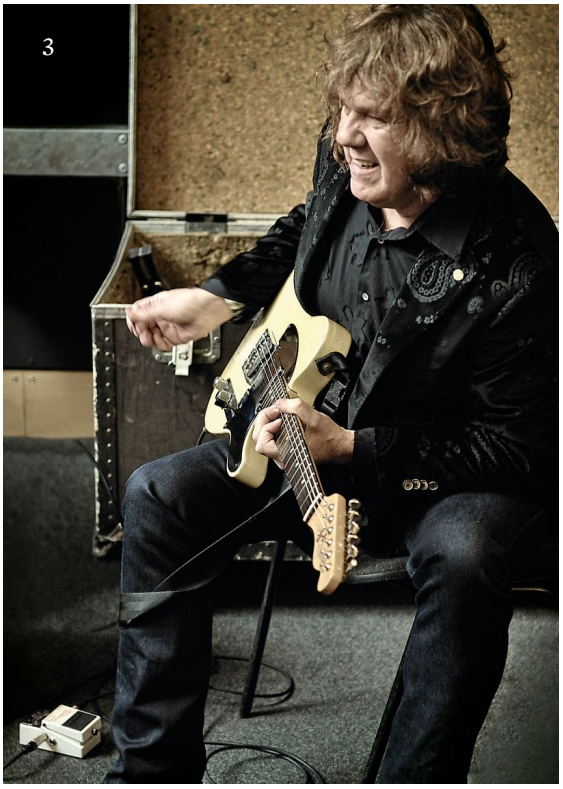
Infinitely flexible and accessible to all, it's no surprise that BOSS gear has been used on countless landmark recordings since 1973. Yet what's most interesting to note is that these products are not tied to any one single genre but bend to the vision of whoever plugs them in. The Cure's Robert Smith, Steve Vai, Kurt Cobain and Glenn Frey of the Eagles are players with nothing obvious in



1. Laura-Mary Carter of Blood Red Shoes finds the DM-2w Waza Craft Delay to be "quite synthy... you can make it sound like some of the parts I made on the album [*Get Tragic*]"



2. Laura says of her OC-3 Super Octave that it offers "pure low-end that you can build a tone with", alongside distortion pedals



3. The late Irish blues and rock hero Gary Moore was just one of the legions of guitarists who have relied on the TU series of tuners



4 The battered enclosure of Gary's HM-2 Heavy Metal pedal bears witness to heavy use, seen here alongside a DSD-3 Digital Sampler that was also part of Moore's pedal arsenal



Australian songsmith Kirin J Callinan performs with a multi-hued crescent of 17 BOSS pedals at London's O2 Shepherd's Bush Empire in 2018

PHOTO BY OLLIE MILLINGTON/REDFERNS/GETTY IMAGES

common, but all have used the DS-1 Distortion in wildly different contexts. While Josh Homme, Kirk Hammett, Joe Perry and Kevin Shields of My Bloody Valentine are unlikely to appear on the same festival bill, the DD-7 Delay has featured on the pedalboards of all four.

As for the TU-3 Chromatic Tuner, it's a strong contender for the world's most ubiquitous pedal. "That one is my favourite – it makes everything else sound good," says Lzzy Hale of Halestorm. "You can have the best pedals in the world, but if the guitar's out of tune..."

Genre aside, rolling generations of musicians have found a place for BOSS gear at the heart of their pedalboards. Old-school virtuosos like Eric Johnson, Joe Satriani and Gary Moore might have been early adopters, but they passed the baton to Mark Bowen and Lee Kiernan of Bristol alt-rockers Idles (who between them are proud owners of the VB-2w Vibrato, TU-3w Chromatic Tuner, PS-6 Harmonist and RE-20 Space Echo). From Jake Bugg's stinging vintage/modern indie-folk (bolstered by the BD-2 Blues Driver and AC-3 Acoustic Simulator) to Australian maverick Kirin J Callinan (who uses a massive 17 BOSS pedals on stage to recreate the fearless sonic adventurism of albums like *Embracism*), the Japanese brand has always surfed the zeitgeist right alongside the new wave of players.

THESE PRODUCTS ARE NOT TIED TO ANY ONE SINGLE GENRE BUT BEND TO THE VISION OF WHOEVER PLUGS THEM IN



5. Robert Keeley describes the BOSS SL-2 Slicer as "magical-sounding gear" and salutes the company's impeccable quality control

"You plug enough gear into each other and it fills up the whole space and there's a song," considers Callinan of his experimental writing process. "You jam it out and then when the lyrics finally come, it might be six months down the track. But also, you can't give the gear all the credit because no two people sound the same with the same piece of equipment. A lot still has to come from yourself."

And while BOSS has been present at the birth of every rock 'n' roll moment that matters, even the world's greatest designers refer to these products as their benchmark. "I've been influenced by BOSS on so many levels," says Keeley. "If I'm ever thinking, like, 'How am I gonna fix this problem?', I'll say, 'Well, how did BOSS fix it?' I still compare my Keeley stuff to all the brand-new BOSS stuff to make sure our buffers are switching as quiet as theirs and the noise levels are comparable. It's impossible to beat modern-day BOSS stuff. You have to know where the bar is. And you have to keep an eye on the BOSS products to know what's going on. Like the new [SL-2] Slicer – that's a magical-sounding piece of gear. I need to buy one of those."

> WHATEVER FORM THE GEAR OF THE FUTURE TAKES, TRUST BOSS TO DESIGN IT IN THE IMAGE OF THE MUSICIANS ON THE GROUND



The SY-200 Synthesizer unlocks yet more sonic doors for guitar players in 2023 – it's intriguing to consider what will come next from BOSS

BOSS might be the sound of the last half-century, but perhaps even more exciting is the mark it will surely make on the next. Whatever form the guitar effects and amps of the future take, trust the Japanese company to design them in the image of the musicians on the ground. As outgoing BOSS president Yoshihiro Ikegami explains: "Our goal is to remain at the forefront of the music technology industry. We'll keep focusing on creating high-quality, user-friendly products that inspire musicians. Our dedication to innovation will drive us forward. We're excited to see where the next 50 years will take us..."



Artist Favourites: LEE KIERNAN, IDLES

"My first BOSS pedals were an Over Drive, Distortion and Compressor. This was around the year 2000. Every weekend, I'd go into Sound Control in Bristol – which is now called PMT – and there were loads of BOSS pedals in there. When I joined Idles about 10 years ago, the boys were like, 'You're going to need some delay and reverb effects,' so I instantly bought a BOSS RE-20 Space Echo double pedal. It's very good at what it does – it sounds good and makes some weird noises, which is fun. I haven't had it on the 'board for a while, though; I switched to the BOSS Waza Craft DM-2w Delay, which is incredible. The DM-2w is a top-end BOSS pedal.

"Everyone says the same things about BOSS pedals: they're reliable, relatively inexpensive and built like tanks. But I think people don't talk enough about how fun they are. I mean, it's amazing how many weird sounds you can get out of the DM-2w. I like to turn the Intensity up so it's screaming, then pull the Repeat Rate down to get sub-y drops. Stuff like that makes it fun, but you can also get a really cool post-punk slap out of it, and just the most amazing 80s-sounding delays. The new RE-202 Space Echo is a lot of fun, too. It's a massive upgrade to the RE-20. I have an original Roland RE-201 [Space Echo], but the RE-202 does the same cool things you can do with real tape.

"In terms of BOSS pedals on my 'board right now, I have the half-size [TU-3S Chromatic] Tuner, the Waza Craft DM-2w Delay, and the [PS-6] Harmonist. I use the Harmonist mostly for rises – like a ramp up in pitch. It's the primary sound for my guitar part in *When The Lights Come On* from the album *Crawler*. And there's a section in *Never Fight A Man With A Perm* [from *Joy As An Act Of Resistance*] where I use the Harmonist. I like it for noise.

"Looping is something I'm really interested in at the moment, and I recently got the RC-5 Loop Station. It's incredible – really intuitive. I wanted it mainly for writing to begin with, but I found it's cool to loop a part and then play with the 'board. I also got the SY-1 [Synthesizer] for making pad sounds. But then I discovered the SY-200 Synthesizer, which is insane!"


BOSS


50 YEAR ANNIVERSARY
BOSS
50
1973 - 2023