

BUILD-YOUR-OWN-CLONE 808

OVERDRIVE PEDAL KIT

A kit so simple even a magazine monkey can't go wrong

HOW often have you looked at some expensive little stomp box and thought, "I could do that"? There doesn't seem to be a whole lot to it when you open one up and take a look inside. You see all those colourful little bits at Dick Smith or Tandy for a couple of cents a piece, so it is only natural to wonder what boutique manufacturers do that adds several hundred dollars value to the 20 bucks worth of transistors, resistors and capacitors you see inside the couple of dollars worth of chassis. Well, there isn't any stardust in there, that's for sure! Everything depends on how you arrange all those little electronic doo-dads, the signal is processed according to its progress through the resulting pathway, and the cool tone that results is purely a function of the complex interaction of those elements. Indeed, if you were to change certain key components in your favourite stomp box, you would vary its output, sometimes quite markedly. These days, boutique manufacturers, who are very often working with designs that are essentially reverse-engineered and approximate desirable vintage models, sometimes use silicon goo to obscure key parts of the circuitry. On the other hand, vintage pedals are an open book

(as we said, that's how a lot of boutique designers got their ideas in the first place). Which is where Build-Your-Own-Clone comes into the story...

Open Your Own Boutique

YOU know those electronic kits you buy at those aforementioned electronic retailers which let you build your very own random number generator or maybe a box with a bank of LEDs that blink randomly? Imagine if you could build something a little less random, like maybe a stomp box. Well, now you can, thanks to Build-Your-Own-Clone, who market kits based on classic pedals, including each and every component you need to build a fully functioning stomp box, with AC/DC power and even alternate components to allow you to tweak the tone of your box. In addition to the supplied components, you will need a soldering iron and solder, some small wire clippers and a clean working area (and a couple of screwdrivers, Craig, but of course we managed without – Ed). Editor Karl and I got the gear together, arranged a time and place, and proceeded to assemble the BYOC kit, working on the theory that if

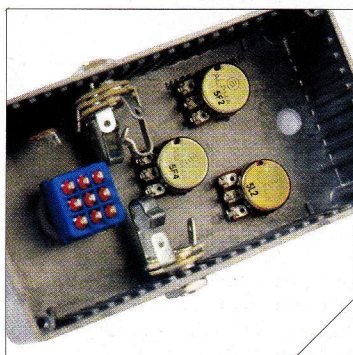
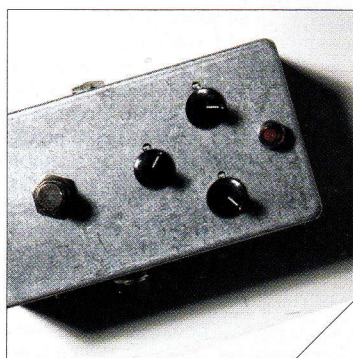
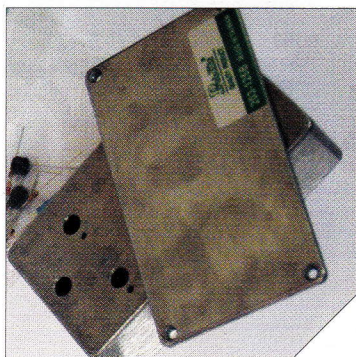
we could do it with our limited electronics experience (don't you mean bugger-all? – Ed), then anybody should be able to.

Get Me The Six-Inch Populating Tool

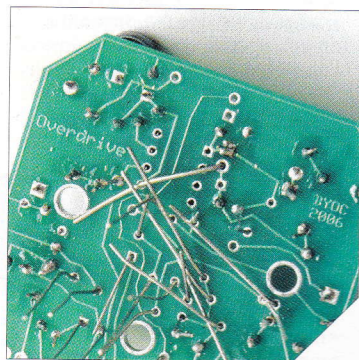
RESISTORS, transistors, capacitors – they all look the same to us, and the fact that they came tumbling from the packaging with everything but an instruction sheet had the build team nervous from the get-go. A quick look at the box directed us to the company's website and a PDF file, so within a few minutes we had the instructions printed out and were ready to go – it is worth noting that the PDF is quite well-illustrated, however the highlight colour used to direct your eye to the part of the circuit board which needs locating at each step does not show up well on a black and white print-out (as we had), so a colour print-out or working in front of your computer is recommended. According to the instructions, our first task is to populate the circuit board, or in layman's terms, put the components where they belong. The components are very tiny; labelling some of them would be almost impossible, so it seems that techies colour-code these thingies, with various bands of colour indicating type. Be very careful identifying these components – some have four bands and several colours that are quite similar, so there is potential for misidentification. We started assembling the components without soldering, bending the wire at the back of the circuit board to hold the component in place until we were satisfied that we had the configuration right.

Solder Boy

ONCE the circuit board is populated, it's time to solder the components, and it is well worth your time to do one last check before you do. If you have no experience with this sort of thing, it may also be in your best interests to get a few tips from a knowledgeable friend – we searched out Fahri from IT to give us a few pointers, and learned a little about dry joints and hairline fractures and all the other pitfalls that await the inexperienced solderer. Now, it turns out that Karl is pretty handy with the soldering iron for a beginner, and we soon had the circuit board soldered and



\$125



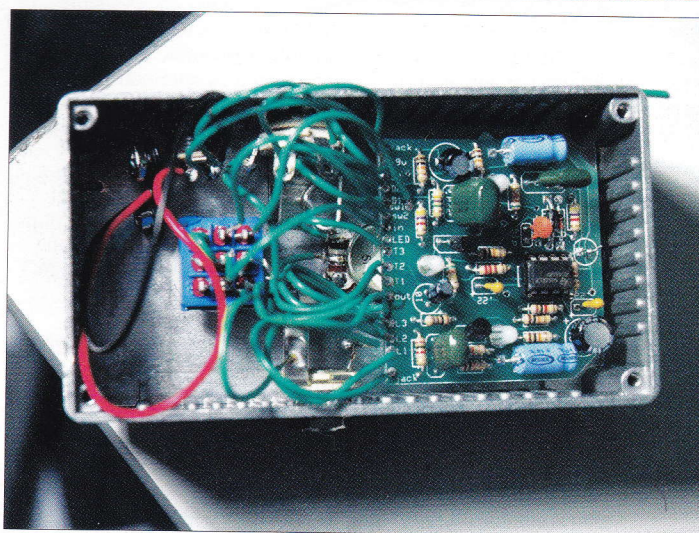
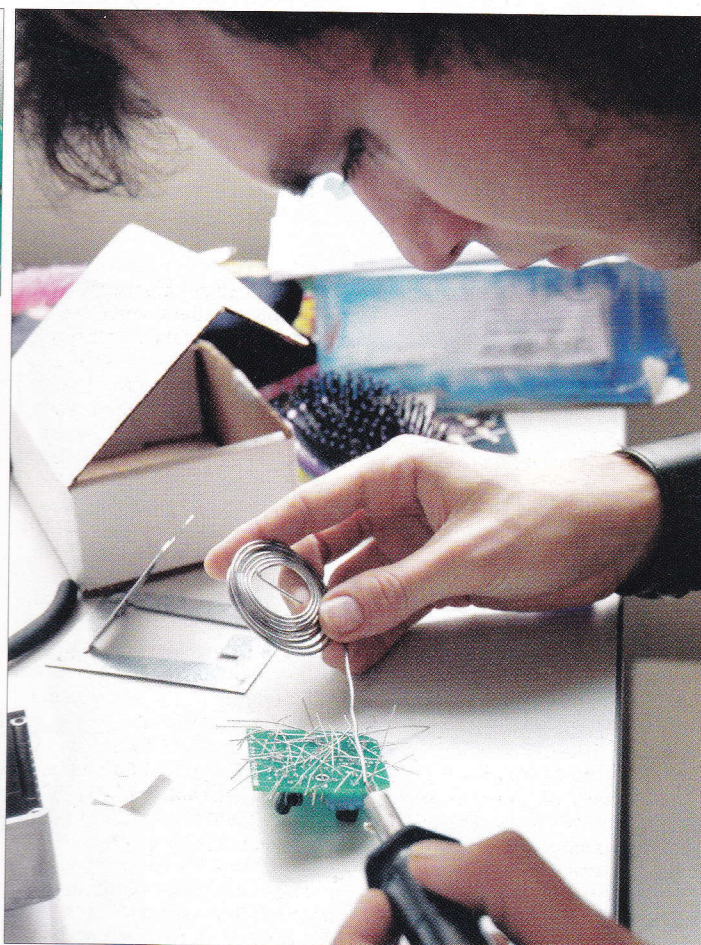
clipped and ready to wire into the chassis, which essentially requires a series of connections be made between the circuit board, the potentiometers, switch, jacks and power supply. Once this is done, the final step involves mounting an LED to indicate on/off status.

I Am A Clone, I Am Not Alone

WELL, that LED turned out to be the deal breaker, at least for a moment. No LED operation was at first taken to mean no operation at all, however upon turning on the amp, it was aurally apparent that the pedal was doing all it should, and it was quickly determined that the LED was mounted incorrectly due to a slightly ambiguous labelling situation, and this was easily rectified – if you build a BYOC 808 kit yourself, remember that the LED is the only polarised component in the kit which is mounted with the positive end in the round solder pad rather than the square. Everything else is surely working fine, because the BYOC overdrive pedal sounds great! Like the model on which it is based, this is a true overdrive pedal rather than distortion pedal. It is like adding a gain stage before your amp and you will notice that winding up the drive parameter significantly increases the output level. As such, it is at its most wonderful driving an attractively voiced tube amp. The tone control is very effective, and judicious settings gave us some very rewarding results – so much modern overdrive is rendered sterile and toneless, whereas a classic overdrive pedal such as this allows you to create equally (if not more) aggressive overdrive without sacrificing tone, so use it wisely.

The Bottom Line

I HAVE to tell you, the idea of



building my own pedal didn't appeal to me at first. Come to think of it, the idea of building my own pedal didn't appeal to me much while I was building my own pedal! Now we are finished, it is a different story – once that baby worked, LED or no LED, I was hooked. If you go to BYOC's

website (www.buildyourownclone.com), there is a gallery of pics showing the many and various arty ways that people finish their BYOC pedals, which is surely another reason these products will appeal. The Electronic Dick was never this much fun (hey, stop giggling).

Craig White

SPECS

Price \$125

Features

- ◆ Metal chassis, screws, circuit board, all necessary electronic components, plus some extras bits and pieces for tweaking
- Also From BYOC Tribooster (\$155), Fuzz, Ultimate Fuzz MkII, Ranger, Compressor, Tremolo (\$110), Phaser, Digital Delay, Chorus, Envelope Filter (\$230), Vibrato

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WHAT WE RECKON

PROS

- ▲ Buying a pre-assembled pedal is nowhere near as satisfying as rolling your own
- ▲ Gives you the opportunity to select components and tweak sound
- ▲ Instructions are quite clear and well-illustrated

CONS

- ▼ You will want to be confident with a soldering iron
- ▼ Don't expect it to work perfectly first time – be prepared to troubleshoot

