

# ED'S SHED

In-depth tech advice from TG's industry expert.  
This issue, dealing with Black Ice

## ED MITCHELL

**TG'S RESIDENT** gear guru has been repairing, maintaining and modding guitars since 1986. He joined *Total Guitar* in 2003 after 18 years in guitar retail, and has written the Ed's Shed column ever since.

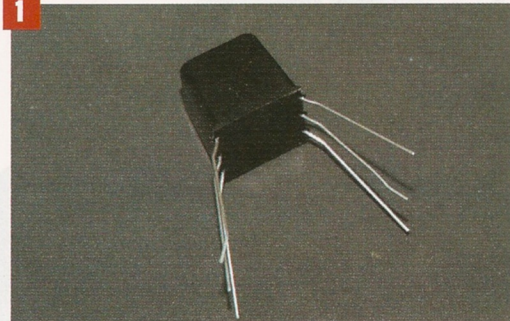


It might sound like a straight-to-DVD action flick, but the Black Ice is actually an overdrive device that you solder into your guitar. The component is available to order from the US, and costs around \$19. Visit [www.blackiceoverdrive.com](http://www.blackiceoverdrive.com) for more information. Designed to work with practically any passive guitar pickups – be they single coils, humbuckers or P-90s – the Black Ice is a small Munchie-shaped block that replaces the capacitor on your guitar's tone control. Unless you use a push/pull control (which allows you to switch between the Black Ice and the tone knob's original function), you'll lose the use of the tone control – or one of them if your guitar has two. The adapted tone control will now increase the intensity of distortion from the Black Ice device.

You can't use the Black Ice with a single-control guitar (an old Peavey Wolfgang Special, for example) or those loaded with active pickups. The good news is that the little cube is easy as pie to fit, doesn't require batteries, and comes with four overdrive options. The Black Ice won't give your overdrive or distortion stompbox an inferiority complex, but it will add some grit to your guitar's circuitry and, hey, how many of you actually use your tone controls, anyway? Let's install this thing.

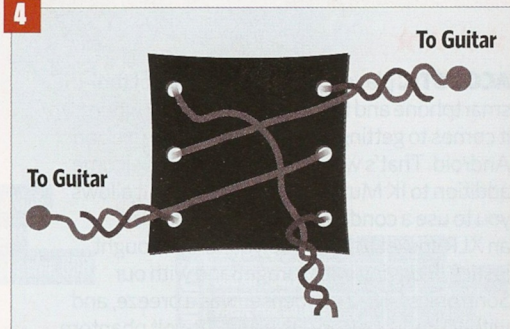
"Future Publishing Limited provides the information for this project in good faith and makes no representations as to its completeness or accuracy. Individuals carrying out the instructions in this project do so at their own risk and must exercise their independent judgement in determining the appropriateness of parts and equipment for a particular use. Anyone under the age of 18 should be supervised by a responsible adult when carrying out this project. Protective clothing, gloves and goggles or safety glasses should be worn at all times when using soldering equipment, tools and adhesives. Modifying your guitar may void its warranty. To the fullest extent permitted by law, Future Publishing Limited takes no responsibility for any person relying on the information relating to this project and disclaims all liability for any errors, omissions, damage or injury to users or their equipment as a result of or relating to the modifying of their guitar."

1



As you can see above, the Black Ice has six wire legs that you twist and solder in one of four configurations (Polite, Warm, Hot, Industrial Strength) to get the type of overdrive you want.

4



Hot pumps out "medium distortion for single coils, aggressive raw distortion for humbuckers and P-90s, and subtle growl for basses". As seen above, the wire twisting is a little bit more complex for this mode.

7



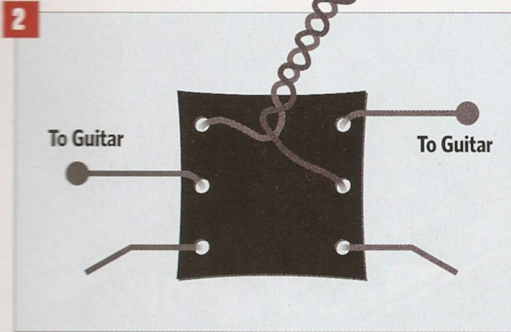
Guitars brandishing humbuckers usually come loaded with 500k pots. That's not always the case, though, so before you replace a tone pot check its casing. It will have '250k' or '500k' stamped on it.

10

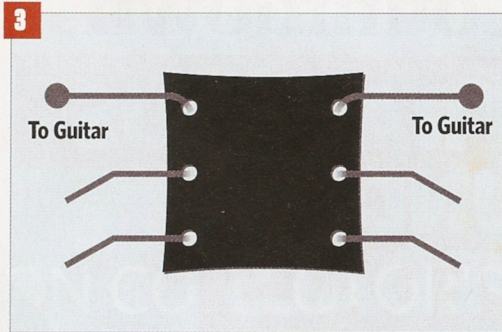


Make sure that you insulate all unused legs on the Black Ice device with some electrical tape. If the legs touch any components they shouldn't, your guitar may cut out. Be meticulous at this stage, people.

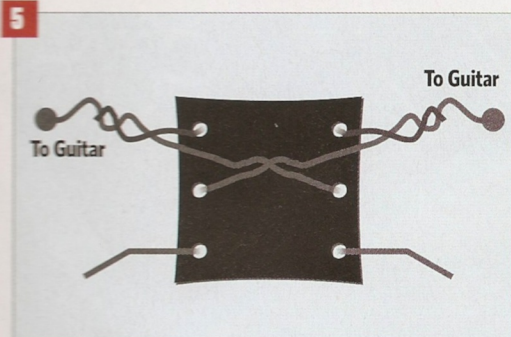




**2** Polite provides "a little grit for single coils, and mild distortion for humbuckers and P-90s". The right-hand centre leg is twisted around the left-hand top leg. The centre and top legs are soldered to the tone pot.



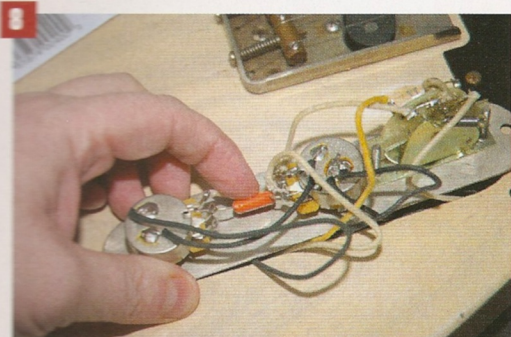
**3** The Warm mode offers "mild distortion for single coils, a little more for humbuckers and P-90s". This configuration involves soldering the two top legs to the guitar's tone pot. The remaining legs are not used.



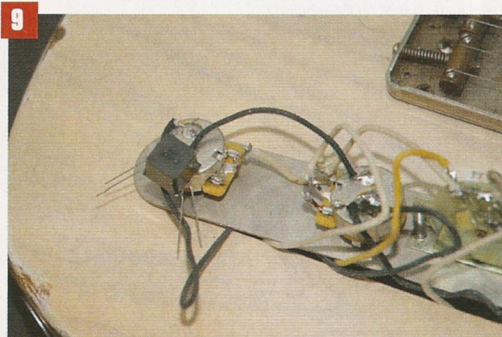
**4** Industrial Strength is all about getting "spitty, nasty distortion with hotter pickups, and slightly more growl for basses". According to the Black Ice peeps, this setting works best if your guitar has weak pickups.



**5** Black Ice recommends that you wire its six-legged bug to a 250k tone pot. These usually come as standard in Strats, Teles and other single coil-loaded guitars. If that's what you've got, skip to step 8.



**6** The Black Ice replaces the existing capacitor on the tone pot. Put your goggles on and carefully apply the soldering iron's hot tip to the solder that holds the capacitor in place, and pull it off.



**7** Once you've selected which of the four Black Ice overdrive types gets you the most excited, solder the legs into the positions vacated by the old capacitor. Shiny solder is good; dull solder means do it again.



**8** If your guitar has a push/pull tone control, you can wire it so that when its knob is up, the Black Ice is activated. Push the knob down, and the tone circuit kicks back in.



**9** Once the wiring is complete, stray legs are protected by electrical tape and your solder is strong and shiny, reassemble your guitar and test it through your amp.

## QUICK FIXES



### THAT'S JUST NUTS...

**Q** Hey, Mr Shed. I've just bought a guitar with a locking top nut. How tight should the top nut bolts be clamped down?  
**Sophie Morrison, via email**

**A** Don't lock the bolts in place with brute force or you might strip their threads. Just a fraction more than finger-tight is enough to hold them in place.

### A DRINKING PROBLEM

**Q** Dear Mr Shed. I accidentally spilled a pint of Coke over my Strat recently. I cleaned the fizzy beverage off the guitar's body, but have I caused permanent damage?  
**N Birdsall, via email**

**A** It's worth checking that it hasn't seeped under the scratchplate or vibrato unit. Take a look, and polish away any residue you find.

## WIN!

### GET A BURNING QUESTION FOR ED? SEND IT IN AND WIN SOME GOODIES

**SEND** your gear query for Ed's Shed to [totalguitar@futurenet.com](mailto:totalguitar@futurenet.com) and if we print it as our main Q&A you'll receive a great Vox Mini3 amp (worth £94) and Korg Pitch Black Tuner (worth £80).

**For more info on these products, visit [voxamps.com](http://voxamps.com) or [korg.co.uk](http://korg.co.uk)**

**WORTH £174**

