

Powering a Second Hard Drive



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Just about every hands-on computer builder knows the problem: you've acquired an extra hard drive or cooling fan but there are no spare cables or connectors to power these additional components inside the computer case. In situations like this splitter cables, also called Y-cables, can be a blessing. But what if you don't have one of these to hand and the local computer shop is closed? There's only one thing for it — DIY! As tasks go, splicing in an extra cable is not particularly difficult, as long as you have sharp eyesight. All you need is a second power cable and a choc block ter-

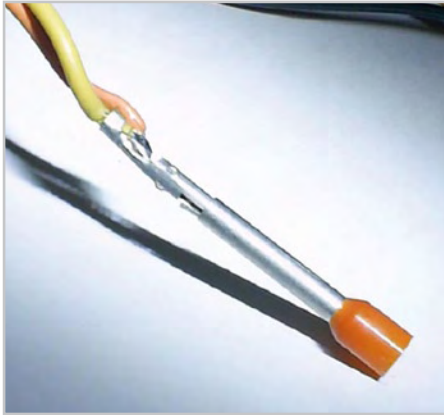
minal strip and the job's done. It works adequately (for a while) but it doesn't look particularly attractive, reliable or professional.

A more elegant solution would be to solder the new power cable direct to the corresponding connector of the existing device. Elegant, yes, but not particularly straightforward, since the power supply rails are seldom easy to get at, whilst the metal pins of individual power connectors are of course buried inside their plastic shell.

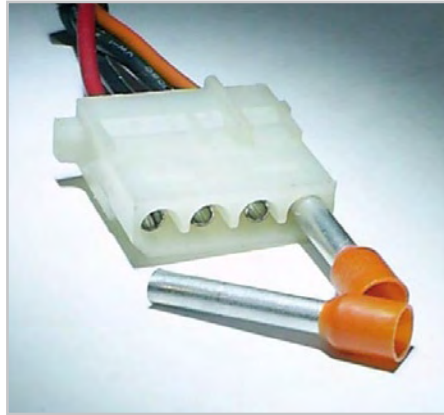
A little trick involving the sleeves that go on the ends of wires will enable you to extract

the pins as far out of the retaining mount as needed to solder onto the rear of these pins additional wires for the accessory device you wish to install.

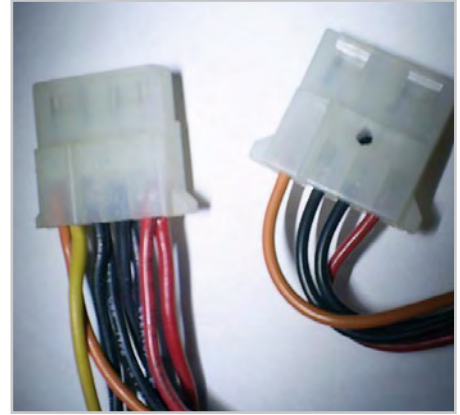
We need two types of sleeves, 4 mm (0.16") for the plugs and 6 mm (0.24") for the sockets. First of all the contact on the cable is pressed hard into the plastic retainer to ensure the restraint spring grips cleanly and fully. Next we attach wire sleeves to the pin that we are extracting and push it carefully and slowly into the plastic retainer as far as the latch and end stop. Just before this point is reached you will feel some resistance, with



a click sound heard after you have overcome the pressure. Exactly as this click is heard you need to remove the wire in question, with its pin, from behind out of the plastic housing. If this doesn't work exactly as desired, it can help to twist the sleeve around while you are pulling. Normally you can release about four pins using



one sleeve. For assured reliability, however, it is recommended to use several sleeves. The free ends of the additional cable should be soldered (using great care and as little solder as possible, as shown in the photo) to corresponding pins close up against the existing cable. Any unwanted solder blobs are best removed with desoldering braid (sol-



der wick). Finally we need to bend the contact springs gently outwards and press each pin back into its right position. You will find the longer sizes of sleeve are easier to handle, also that the individual parts of the connectors move around more easily if you spray them first with contact lubricant.