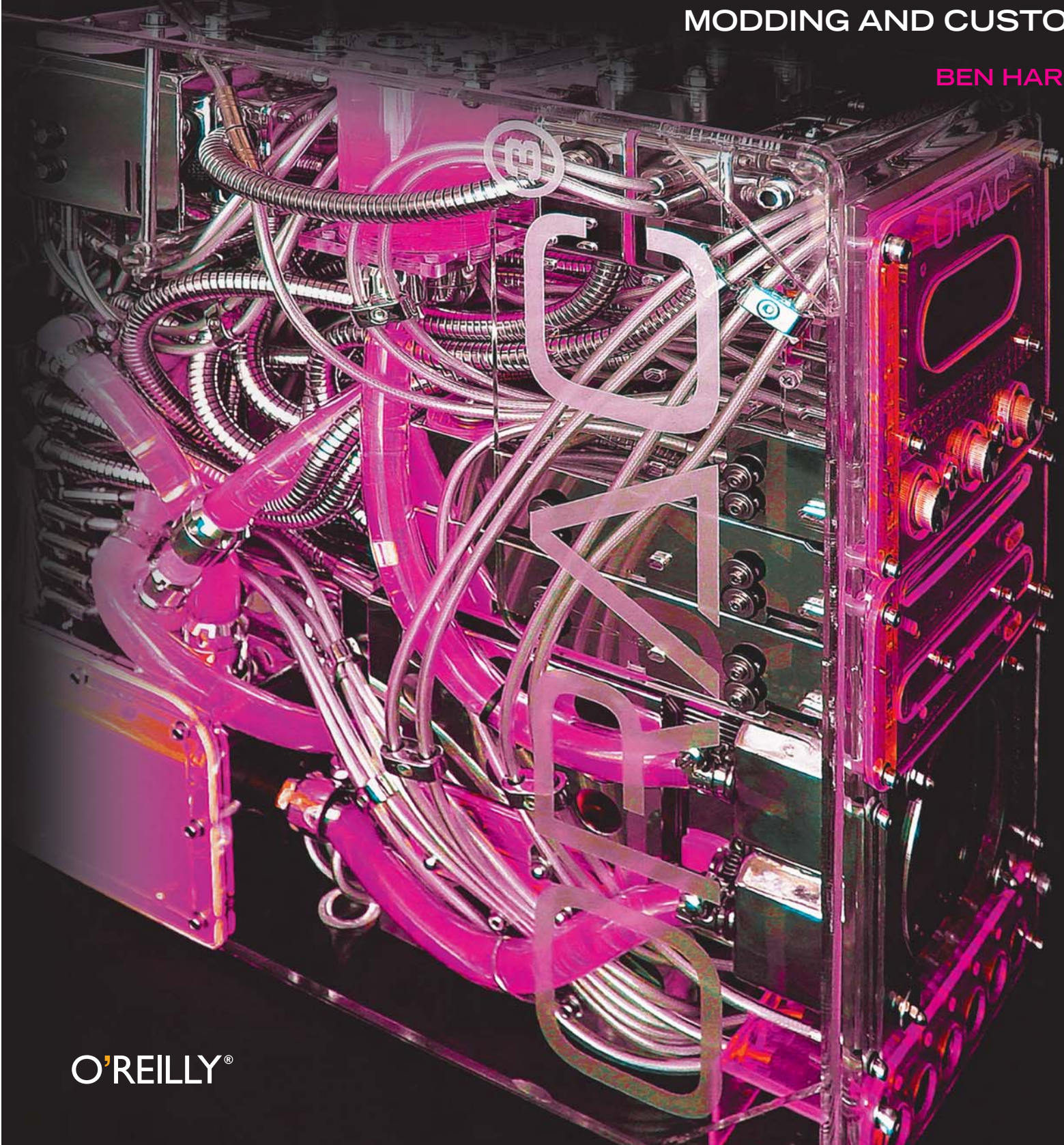


BUILDING EXTREME PCs

THE COMPLETE GUIDE TO
MODDING AND CUSTOM PCs

BEN HARDWIDGE



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Different setups

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If you're new to water cooling, then the best place to start is with a simple kit that comes with all the parts you need. One perfect beginner kit is the Cool River, available in both 80mm and 120mm versions, and comes with waterblocks for your CPU, GPU, and Northbridge. What's more, it also comes with a pre-filled, sealed reservoir, so all you have to do is connect it all up and set it off.

The next step up is something from Asetek's excellent WaterChill range (www.asetek.com), which offers various kits and separate components to build the loop that's most appropriate for your system. Asetek offers a powerful and flexible range of water cooling parts (there's even a waterblock for your hard drive!), and the supplied documentation is also pretty good. With this equipment you should be able to get up and running with no problems—though it helps if you take your time.

There are also plenty of other respectable water cooling kits on the market, including Cooler Master's Aquagate, which can take the place of a second PSU if you have a big enough case. Meanwhile, Corsair's Cool kit is also worth a look, coming with a 120mm radiator and plenty of overclocking headroom. Then, at the top of the heap you'll find kits such as the Koolance Exos, a ludicrous four fan system that allows you to overclock a dual Xeon system.

Another popular kit, meanwhile, is the Zalman Reserator, which is a very different beast from the usual setups. It's designed to make the cooling system as quiet as possible, rather than provide maximum overclocking

headroom. It's basically a huge passive radiator (which also acts as a reservoir) without any fans, and it uses the principle of convection to shift the heat to the top if its tower, while your PC's water supply comes from the cool water at the bottom. The kit comes with a CPU water block as standard, although there are also GPU and Northbridge waterblocks available. The Reserator makes no more noise than a humming fish tank (in fact, it's actually a bit quieter).

The only downer with the Reserator is that its passive cooling system simply can't shift as much heat as fan-assisted systems. This means you need to total up the TDP of all the components you're going to cool before you start, and be careful. There is sufficient potential to cool an Athlon 64 4000+ and a GeForce 6600GT with it, but a dual-core Pentium and a 6800 would be asking too much.

Of course, once you've become experienced in the ways of water cooling, you can start to branch out, putting together your own customized system using the parts of your choice. Water cooling is big business now, and sites such as www.frozencpu.com, www.cooltechnica.com, or www.componentsuk.co.uk are dedicated to providing the exact system you want. For example, Danger Den produces a superb range of waterblocks, and an AngelEye reservoir will look fantastic in a 5.25in drive bay. Once you've built up some experience and know what you want, you'll be able to design and install a custom water cooling loop that fits your requirements perfectly.



Left & Right: Cooler Master and Corsair offer some great water cooling kits.





Right: Even extreme Xeon overclockers are catered for in the water cooling world by the Koolance Exos.
Below right: The Cool River Deluxe is a great starter kit, offering a pre-filled sealed reservoir and three waterblocks.
Above: Asetek's WaterChill range even includes a hard drive cooler.

