

Battery of tests

With Christmas gadgets demanding a diet of batteries, Which? has tested a broad range to see which brand has the power

Whether you're powering a new Christmas gadget or a simple everyday item, it's worth picking a battery that performs reliably. We tested big-brand disposable AA and AAA batteries against supermarket alternatives to find the Best Buys.

If you're powering low-energy devices such as remote controls, we found you don't have to pay premium prices to get long-lasting battery life. Only the most energy-hungry of products, such as digital cameras, require expensive batteries, so use our buying advice to ensure you only spend what you need.



Low and medium-drain devices

If you're powering a medium-drain device such as a TV remote control or pocket radio, there's no need to spend extra money on premium batteries. Similarly, with low-drain devices – an alarm clock, for example – cheaper supermarket batteries such as Morrisons Extra Long Life, which cost just £1.69 for a pack of four, will perform perfectly well, so there's no need to shell out £6.99 for high-performance Energizer Ultimate Lithium batteries. We tested batteries for medium-drain use for 34 hours, and some were still going strong at the time of going to press – see www.which.co.uk/batteries to see these test results in full.



High-drain devices

High-drain devices such as remote-controlled toys or battery-powered razors put more strain on batteries, so when buying them for these types of devices, make sure you choose a top performer such as our Best Buy Energizer Ultimate AAA or Duracell Ultra AA and AAA batteries. Surprisingly, the AAA battery which performed best of all in our high-drain test was also the cheapest. Tesco's Everyday Longlife AAA battery lasted more than 10 hours, despite costing less than £2 for a pack of four.



Very-high-drain devices

When powering a very-high-drain device such as a digital camera or a portable DAB radio, it really pays to spend the extra money on top-quality batteries. Digital cameras can be very taxing on a battery because of the demands of the LCD screen, zoom lens and flash, so if you want to snap away without keeping a constant eye on the power gauge, opt for pricier lithium batteries such as the Energizer Ultimate Lithium AA or cheaper Philips Lithium Ultra AA batteries. Lithium batteries are much better suited for use in such products than standard alkaline types, but typically cost around £3 more.





BATTERY BRAND		TEST PERFORMANCE		SCORE (%)
	PACK OF FOUR (£)	HIGH-DRAIN LIFETIME	VERY-HIGH -DRAIN LIFETIME	
AA BATTERIES				
ENERGIZER Ultimate Lithium	6.99	★★★★★	★★★★★	95
DURACELL Ultra	3.99	★★★★★	★★★★★	84
MORRISONS Extra Long Life	1.69	★★★★★	★★★★	77
PHILIPS Lithium Ultra	5.95	★★★★★	★★★★★	74
DURACELL Plus	2.99	★★★★★	★★★★	69
ENERGIZER Ultimate	3.99	★★★★★	★★★★★	68
PANASONIC Evoia	3.45	★★★★★	★★★★	68
MAPLIN Lithium	5.99	★★★	★★★★★	60
MAPLIN Extra Long Life	2.99	★★★★★	★★★★	59
TESCO Everyday Longlife	1.99	★★★★★	★★★★	58
BOOTS Extra Long Life	2.99	★★★	★★★★	53
TESCO Power Hi Tech	2.79	★★★	★★★★	51
AAA BATTERIES				
ENERGIZER Ultimate	3.99	★★★★★	★★★★★	91
TESCO Everyday Longlife	1.99	★★★★★	★★★★★	91
TESCO Power Hi Tech	2.79	★★★★★	★★★★★	88
PANASONIC Evoia	3.45	★★★★★	★★★★★	88
DURACELL Ultra	3.99	★★★★★	★★★★★	82
DURACELL Plus	2.99	★★★★★	★★★★★	82
ENERGIZER Ultimate Lithium	6.99	★★★★★	★★★★★	79
MARKS & SPENCER Extra Long Life	2.93	★★★★★	★★★★★	75
BOOTS Extra Long Life	2.99	★★★★★	★★★★★	73
PHILIPS Extremelife+	2.44	★★★★★	★★★★★	71
SONY Stamina Platinum	3.55	★★★★★	★★★★★	71
MAPLIN Extra Long Life	2.99	★★★	★★★★★	63

USING THE TABLE

The more stars the better.

Specification

Price This is a typical high-street price for a pack of four batteries. Savings can be made by buying batteries in larger multi-packs.

Test performance

We evaluate each battery by subjecting multiple samples of each brand to a variety of drain conditions, judging overall performance on how long each battery lasts before going flat.

AA – high drain

★★★★★ over 8 hours,
★★★★ over 7.5 hours,
★★★ over 7 hours.

AA – very high drain

★★★★★ over 4 hours,
★★★★ over 3 hours,
★★★ over 2 hours.

AAA – high drain

★★★★★ over 9.5 hours,
★★★★ over 9 hours,
★★★ over 8.5 hours.

AAA – very high drain

★★★★★ over 3 hours,
★★★★ over 2.5 hours.

Score

Ignores price, is based on:
High drain **60%**
Very high drain **40%**

RECHARGEABLE BATTERIES

If you're keen to stay green and power your devices with rechargeable AA and AAA batteries, be sure to check our report in May 2010. We'll be publishing the results of our next battery tests, revealing the best and worst rechargeable batteries.

Contacts

Boots 0845 124 4545
www.boots.com

Duracell www.duracell.co.uk

Energizer
www.energizer.co.uk

Maplin 0844 557 6000
www.maplin.co.uk

Marks & Spencer
0845 609 0200
www.marksandspencer.com

Morrisons 0845 611 5000
www.morrisons.co.uk

Panasonic 0870 535 7357
www.panasonic.co.uk

Philips 0870 900 9070
www.philips.co.uk

Sony 0870 240 5651
www.sony.co.uk

Tesco 0845 7225533
www.tesco.com