

A choice that's easy on the ear

Picking the best headphones isn't just about sound quality. Comfort can be a real issue too, our testers found

If you've broken the bank to buy the latest hi-fi or MP3 player, you may be looking for some decent headphones to enjoy that glorious new sound. We've tested a wide range, and our top-scoring pair, the Bose QuietComfort 2, would do justice to anything from Bach to Gnarl Barkley.

But if your bank manager would balk at the Bose's £225 price tag, don't worry. Our Best Buy headphones start at £30.

All our Best Buys have pads, which cover your ears or sit on top of them, but that doesn't mean they're for home use only – most are portable. We've also tested in-ear and wireless headphones, and some which fit like earplugs. These don't match the sound quality of our Best Buys, but see 'Which should you choose?', p52, if you have your heart set on a particular design.



89% Bose QuietComfort 2 £225

You could buy a decent micro hi-fi for this price, but if you have deep pockets and want great-quality headphones, go for these. We rated them as excellent. They have a good, natural sound with deep, evenly controlled bass.

The over-ear and closed-back style means you shouldn't disturb anyone nearby and they're good at blocking noise. The leatherette-cushioned ear pads are comfortable and the adjustable headband is easy to fit. The cheapest price we found was through Bose's own website.

WORTH KNOWING They block out background noise well, particularly when travelling.

Available Online/Independents Type Over ear (closed back) **Weight** 213g **Cable length** 166cm (plus 156cm extension) **Colour** Silver **Noise cancelling** Yes **Case** Yes



How we test

Prokofiev, The Prodigy and a special dummy help us hear how good the headphones are

Dummy run

Meet Henry. Henry is a dummy head we use to test how much noise leaks from headphones and how much external sound reaches the wearer. He has small microphones in his ears to pick up the sounds. To see how well external noises are kept out, we put him by a speaker and play several frequencies. We record what Henry hears (that is, what the microphones pick up) while he is wearing and not wearing the headphones.

To test how much noise escapes from the headphones, Henry wears them while sound is played through them. We measure sound levels from a distance of 30cm.

Wear and tear

We drop each pair of headphones ten times from a height of 1.2 metres on to a carpet, check they still work



and note any wear and tear. We also gently tug at cables to simulate headphones being caught on arms or around the neck.

Our panel

To test sound quality, five experts listen to a range of music from Prokofiev to The Prodigy, as well as to speech recordings. They tell us how comfortable the headphones are and whether the headbands are easy to adjust. For noise-cancelling models, we sent a member of our panel to listen to music in the back of a moving car, by the side of a busy road and in a busy office.

If you have deep pockets and want great-quality headphones, go for the Bose QuietComfort 2

How to buy

Making sure headphones fit is very important

Most of our Best Buys are available online and through local independent shops. You'll often find the best prices online (you can do a price comparison at www.pricerunner.co.uk), but it's important to try

on headphones for size and comfort before you buy them.

For reasons of hygiene you can't try on in-ear headphones, even though a snug fit is vital for decent sound.

MEMBER BENEFIT

Free website access

If you're interested in reading more about headphones and seeing the results for five more pairs we tested, have a look on our website at www.which.co.uk



85% Beyerdynamic DTX900 £59

Our experts found that this handsome pair of Beyerdynamic headphones gave a very clear, dynamic sound with good clarity and balance.

They are fairly bulky and heavier than other Best Buys so are not best suited for use on the move. But they're comfortable, with soft velour-covered foam ear pads, and they're easy to fit. The cable, which is attached to the left earpiece, is a generous 3m long. They are available online.

WE LIKE The adjustable cushioned headband and swivelling open-backed earpieces make them comfortable and easy to fit.

Available Online **Type** Over ear (open back) **Weight** 261g **Cable length** 304cm **Colour** Silver **Noise cancelling** No **Case** No

WHICH?
BEST
BUY



85% Grado SR60 £79

The Grado SR60 are old favourites. First sold back in 1994, they were *Which?* Best Buys in 2002 and 2004.

They might look basic, with a simple black design and foam ear pads, but they offer superb sound that is rich and well balanced. Our experts gave them top marks for all types of music, describing the sound as dynamic and spacious. The pads rest on the ear and they're comfortable and easy to fit. The SR60 are not good at preventing sound escaping or keeping out unwanted noise. They're available online and in independent stores.

WORTH KNOWING The Grado SR80, which we also tested, are almost identical but have over-ear, rather than on-ear, pads. See our website.

Available Online/independents **Type** On ear (open back) **Weight** 199g **Cable length** 206cm **Colour** Black **Noise cancelling** No **Case** No

WHICH?
BEST
BUY

The DTX900 headphones are fairly bulky and heavier than other Best Buys



78% Bose Triport £120

These are good for use with portable players as well as your hi-fi.

They cover your ears but are surprisingly light. They have a thin, adjustable headband, which is easy to fit, and comfortable leatherette-covered ear pads. The sound is also good. The bass is a little boomy but overall they are dynamic and clear with a good range. The Triport are available online and through independent stores.

WE LIKE For those who are bored with shades of black or grey or are tired of the fashion for white headphones, you'll be pleased to know the Triport also come in a dashing glacier blue.

Available Online/independents **Type** Over ear (closed back) **Weight** 144g **Cable length** 189cm **Colour** Silver/glacier blue **Noise cancelling** No **Case** No

WHICH?
BEST
BUY

Jargon explained

How to identify the different types of headphones on the market and what they do

■ **OVER EAR** Headphones that cover the whole ear. They tend to be bulky and least suitable for portable use.

■ **ON EAR** These are usually smaller than over-ear models and rest on, not over, the ear.

■ **IN EAR** The kind usually supplied with portable music players such as iPods.

■ **PLUGS** As with ear plugs, you push them into the ear canal. They can be difficult to fit but are good at stopping unwanted sound getting in or out. They usually come with

different sizes of plugs you can mould to fit your ear.

■ **OPEN BACK** With this type the back of the ear pads is not sealed. Sound can be more natural but more noise will escape and disturb others.

■ **CLOSED BACK** The back of the ear pads is sealed. This type is good at stopping noise leaking in or out, but sound can be muffled.

■ **NOISE CANCELLING** A feature that reduces outside noise, especially low frequencies, such as traffic.

It mainly comes with on- or over-ear models but some in-ear ones also have it.

■ **WIRELESS** Wireless headphones have no cable between them and the music player, giving you more freedom to move around the house. But you may get interference.

■ **BLUETOOTH** Short-range wireless technology which can link headphones to an MP3 player without wires. You must be close to the player, so they're best for portable use.

Contacts

AKG www.akg.com	www.logitech.co.uk
Beyerdynamic 01444 258258 www.beyerdynamic.co.uk	Panasonic 08705 357 357 www.panasonic.co.uk
Bose 0800 614 293 www.bose.co.uk	Philips 0845 601 0354 www.philips.co.uk
Creative 0118 9344 322 Uk.europe.creative.com	Saitek 01454 451900 www.saitek.com
Etymotic www.etymotic.com	Sennheiser 01494 551 551 www.sennheiser.co.uk
Grado 01279 501111 www.armorhe.co.uk	Shure 020 8808 2222 www.shure.co.uk
JVC 0870 330 5000 www.jvc.co.uk	Sony 08705 111 999 www.sony.co.uk
Koss 0845 230 4262 www.hama.co.uk	Technics 08705 357 357 www.panasonic.co.uk
Logitech 020 7309 0127	



76% Sennheiser PXC 250 £80

Commuters should love this fold-up pair. A noise-reduction feature helps shut out sound from the outside world. Your fellow passengers will love them, too, as the closed-back design ensures they won't have to share your musical tastes. The sound is fine, with good detail and dynamics and a punchy bass. It's a shame the noise-cancelling box can't be removed when not in use, as it's a bit bulky. Available from Richer Sounds.

WE LIKE Good quality for a fraction of the price of the Bose QuietComfort 2.

Cheapest store Richer Sounds **Type** On ear (closed back) **Weight** 138g **Cable length** 187cm **Colour** Black and white **Noise cancelling** Yes **Case** Yes

WHICH?
BEST
BUY



73% Sennheiser HD 435 £38

These silver headphones are a bit bulky, but we were impressed by their dynamic, spacious and well-balanced sound. The bass was also good.

The detachable single-sided cable is more than 3m long and has a control, so you can sit at a distance from your stereo and still change the volume. They come with a carrying bag if you do want to take them out and about with you. They're available online and through independent stores.

WE LIKE We gave top marks to the easily adjustable padded headband.

Available Online/independents **Type** On ear (open back) **Weight** 190g **Cable length** 308cm **Colour** Silver **Noise cancelling** No **Case** Yes

WHICH?
BEST
BUY

Don't Buys

These models are well worth avoiding

With the exception of the Sennheiser CX 300 (8) (see 'Which should you choose?', below), we'd steer clear of the other plug-design models (20 to 25 in the table) tested. Our testers found that some models were uncomfortable. In general we found they were tricky to fit, could amplify noises when you knocked the cable and suffered from harsh sound. We found distortion, buzzing and muffled sound with the Creative CB2530 (26) and Saitek A-350 (27) wireless Bluetooth models. Annoyingly, the volume controls are on the earpads and are tricky to use.

MODEL

- 1 **BOSE** QuietComfort 2
- 2 **BEYERDYNAMIC** DTX900
- 3 **GRADO** SR60
- 4 **BOSE** Triport
- 5 **SENNHEISER** PXC 250
- 6 **SENNHEISER** HD 435
- 7 **SENNHEISER** PX 100
- 8 **SENNHEISER** CX 300
- 9 **SONY** MDR-ED21LP
- 10 **PHILIPS** SBC HN050
- 11 **AKG** K24P
- 12 **SENNHEISER** RS 130
- 13 **SONY** MDR-NC6
- 14 **SONY** MDR-RF820RK
- 15 **KOSS** KSC75
- 16 **JVC** HA-SU700
- 17 **LOGITECH** Wireless MP3/iPod
- 18 **TECHNICS** RP-F350
- 19 **PHILIPS** SBC HC8580
- 20 **SHURE** E3c
- 21 **ETYMOTIC** ER 6i Isolator
- 22 **JVC** HA-FX55
- 23 **PHILIPS** SHE9501
- 24 **PANASONIC** RP-HN150
- 25 **SONY** MDR-NC11
- 26 **CREATIVE** CB2530
- 27 **SAITEK** A-350

a Comes with additional 156cm extension cable

USING THE TABLE

We tested best-selling models from leading makers. The more stars the better.

Specification

Price For Best Buys we give the cheapest widely available high-street price. Prices for other models are a guide. Online prices are in *italics*.

Type See 'Jargon explained', p51. **Portable** Whether suitable for portable use.

Which should you choose?

The best headphones for you will depend on where and how you want to use them



Best for commuters

SENNHEISER PXC 250, £80 These headphones (5) can be folded into a small case – perfect for fitting in your bag. A noise-cancelling feature cuts out external sounds. They come with a flight plug adaptor, with dual pins, for use on planes.



Best wireless

SENNHEISER RS 130, £80 Like many cordless headphones, these (12) suffer from a pretty constant hiss, though sound clarity is good. They work in a range of up to 140m. We were able to listen with them all over the house and garden.



Best in ear/plugs

SONY MDR-ED21LP, £18 (left)/**SENNHEISER CX 300, £40** These (9 and 8) are ultra-portable and don't have a headband. They offer good sound and are lighter than our Best Buys. Both are tricky to fit but once in, don't leak much sound.



72% Sennheiser PX 100 £30

The lightest and cheapest Best Buy is great value. Sound is clear and bright with good bass. They look nearly identical to the PXC250 (above) but they have open-backed pads. They fit in a hard case which you can put in a small bag.

They're available from John Lewis, Maplin and Richer Sounds.

WORTH KNOWING Ear pads and headband padding are replaceable.

Cheapest stores John Lewis, Maplin, Richer Sounds **Type** On ear (open back) **Weight** 65g **Cable length** 137cm **Colour** White **Noise cancelling** No **Case** Yes

WHICH?
BEST
BUY

SPECIFICATION						WHICH? TEST PERFORMANCE							SCORE %
PRICE (£)	TYPE	WEIGHT (g)	CABLE LENGTH (cm)	WIRELESS	PORTABLE	SOUND	LEAKAGE	SHIELDING	NOISE CANCELLING	FIT	COMFORT	EASE OF USE	
225	Over ear	213	166 ^a		✓	★★★★★	★★★★	★★★★	★★★★	★★★★★	★★★★	★★★★★	89
59	Over ear	261	304			★★★★★	★★★	★	n/a	★★★★	★★★★	★★★★	85
79	On ear	199	206		✓	★★★★★	★★	★	n/a	★★★★	★★★★	★★★★	85
120	Over ear	144	189		✓	★★★★	★★★★★	★★	n/a	★★★★★	★★★★	★★★★★	78
80	On ear	138	187		✓	★★★★	★★★★★	★★★	★★★★	★★★★★	★★★★	★★★★	76
38	On ear	190	308		✓	★★★★	★★★	★	n/a	★★★★★	★★★★	★★★★★	73
30	On ear	65	137		✓	★★★★	★★★	★	n/a	★★★★	★★★★	★★★★	72
40	Plugs	10	103		✓	★★★★	★★★★★	★★★	n/a	★★★	★★★	★★	69
18	In ear	14	100		✓	★★★★	★★★★★	★	n/a	★	★★★	★★	68
90	On ear	103	151		✓	★★★★	★★★★★	★★★	★★★★	★★	★★★	★★	66
29	On ear	91	138		✓	★★★★	★★★	★★★	n/a	★★★★	★★★	★★★	65
80	Over ear	278	n/a	✓		★★★	★★★	★	n/a	★★★★★	★★★★	★★★★	59
60	On ear	148	105		✓	★★★	★★★★	★★★	★★★	★★★★	★★★★	★★★★	57
70	Over ear	265	n/a	✓		★★★	★★★★	★★★	n/a	★★★★	★★★★	★★★★	57
27	On ear	44	129		✓	★★★	★★★	★	n/a	★	★★★★	★★★	49
25	On ear	366	706			★★★	★★★★	★	n/a	★★★★	★★	★★	48
65	On ear	93	n/a	✓	✓	★★★	★★★	★	n/a	★	★★	★	41
30	Over ear	287	300		✓	★★	★★★★	★★★	n/a	★★★★	★★★	★★★★	41
90	Over ear	343	n/a	✓		★★	★★★	★	n/a	★★★★	★★★	★★★	40
113	Plugs	26	140		✓	★★	★★★★★	★★★★★	n/a	★★	★★	★★	38
90	Plugs	12	148		✓	★★	★★★★★	★★★★★	n/a	★★	★★	★★	36
25	Plugs	13	160		✓	★★	★★★★★	★★★	n/a	★★★	★★	★★	36
30	Plugs	13	61 ^b		✓	★★	★★★★	★★	n/a	★★★	★★★	★★★	36
30	Plugs	19	61		✓	★★	★★★★★	★★★	n/a	★★	★★	★★	35
68	Plugs	52	358		✓	★★	★★★★★	★★★	★	★	★★★	★★	35
66	On ear	217	n/a	✓	✓	★★	★★★★	★	n/a	★★★	★★★	★★★	33
74	On ear	48	n/a	✓	✓	★★	★★★★	★	n/a	★	★★	★	29

^b Comes with additional 65cm extension cable

Test performance

Sound Rating based on assessments made by our panel of expert listeners.

Leakage Rating based on technical measurement of sound leakage.

Shielding Rating based on measurement of how much external noise the headphones shield from listener. **Noise cancelling** Rating based on expert user assessment of how well

headphones with noise-cancelling features block outside noise. **Adjusting fit/Comfort/Ease of use**

Rating based on technical measurements and expert user assessments.

Score

Ignores price and is based on:
 Sound **75%**
 Comfort **12.5%**
 Adjusting fit and ease of use **12.5%**

Insider information

One in ten UK adults owns an iPod. But how good are their white headphones? Our headphones expert gives his verdict

We compared the headphones that come free with the latest Video iPod with the other headphones we tested. We gave them four stars for sound without the foam pads. They gave a good open, airy sound but bass can be weak. With the foam

pads they score only three stars because the pads muffle the sound. Sound quality is very similar to the Sony MDR-ED21LP (9), the highest-scoring in-ear model on test. So unless you plump for one of our Best Buys, stick with the free pair.