





**How good a radio sounds and how easy it is to use are critical if it is to become a Best Buy**

## Testing sound

We broadcast a range of specially chosen voice and music excerpts over a DAB signal to compare the sound produced by each radio.

Classical music, including Tchaikovsky's piano trio, tests how they cope with music from a full orchestra. A jazz track by Jacques Loussier demands clear bass and highlights a range of frequencies and balance between bass and treble. A Rickie Lee Jones song shows how the radios handle a female vocal, while U2's 'Even better than the real thing' is a good song to assess how well they cope with synthetic sounds and whether they give a sense of space. We also check male and female voice recordings for problems such as sibilance – a hissing sound.

## Easy to use

There's no point having a radio that sounds brilliant if you have to open the instruction booklet every time you want to switch stations. Our experts put each model through tests to check how straightforward it is to use. These range from setting it up to how easy it is to use.

## Independent

We hide brand names from our panel. Scores are statistically analysed to ensure there are real differences and we always include models from previous tests to ensure consistency.

# Time to turn on to digital radio?

## Which? members put three Best Buys through their paces

More than a quarter of UK adults now listen to digital radio (DAB) and 42 per cent of Which? members own a set. The UK and Denmark have taken to it far more than other European countries such as Germany and Finland.

The success of DAB here is due partly to the number of good-quality digital-only stations on offer. The BBC has five (plus the World Service) on top of its usual channels, and there are scores of commercial digital-only stations. How many stations you can receive depends on the area you're in, but in Hull, for example, you can receive 36 stations on DAB compared with 11 on FM.

But what is digital radio like in reality? We gave Which? member Russell Lloyd and his family three Best Buys for a month and asked them to put the radios through their paces. See the family's verdict in 'Digital dilemma', right.

There's a huge range of radios to choose from and our testing found a big difference between the best and worst.

There isn't always a direct link between price and quality and we found that some cheaper models, such as our Best Buy Roberts Gemini RD46 (2), easily outperformed more expensive competitors in our tests. Other Best Buys here have been previously reported in *Which?* and are still widely available.

## WHICH? ONLINE

Go online at [www.which.co.uk/digitalradios](http://www.which.co.uk/digitalradios) for results on more than 50 radios, including previously tested Best Buys. This information is regularly updated with new models, prices and availability. See [www.which.co.uk/loginhelp](http://www.which.co.uk/loginhelp) for help with logging in.



## DIGITAL DILEMMA

**Russell and Caroline Lloyd** *design company director and interior designer*

The Lloyds both love radio but they're divided over whether to go digital.

Russell likes the extra stations on offer but Caroline said: 'I listen to only a few stations at the moment so I'm not sure it's worth getting all the technical extras available on digital.'

They both like BBC Radios 2 and 4 and Russell also listens to Radio 5 Live for sport and LBC for news.

We gave them three Best Buy DAB radios – the Magicbox Lagio (1), the Pure One (5) and the Pure Evoke-3 (6), to put to the test for a month. They listened to both music and speech radio.

The couple thought that FM stations sounded just as good on DAB.

Russell found an 'amazing' improvement in MW stations when he listened digitally.

He also liked features such as the Pure Evoke-3's ability to record, and added: 'It was interesting to get the scrolling sports information on Radio Five Live with the Intellitext function on the Pure One – it's something I'd use.'

Caroline is still to be convinced: 'They were all a bit cumbersome and difficult to use compared with my own analogue radio. I just don't think that the extra technology is relevant to my needs and I found things like the EPG on the Pure Evoke-3 a little difficult to use.'

It seems the digital debate will continue, in the Lloyd house at least.



## 74% Magicbox Lagio £66

It's fitting that the Magicbox Lagio looks like a hi-fi, as it has the best sound and the loudest volume on test. The Lagio lets you preset ten stations each for DAB and FM radio. You can't connect other devices such as an MP3 player to it, and it lacks features such as pause rewind or a sleep timer. It's available from Hughes Direct.

**WHICH?  
BEST  
BUY**

**WE FOUND** This model isn't brilliant for users with poor sight or dexterity problems, as most controls are flush with the radio and buttons are similar.

Available Hughes Direct Tuner FM, DAB Speakers Stereo External speaker output Yes Connect to hi-fi Yes Headphone jack Yes Pause live radio No EPG No



## 66% Vita Audio R1 £159

**WHICH?  
BEST  
BUY**

This is one of the most stylish radios we've ever tested – and it sounds great, too. It's available in high-gloss grey, red, walnut and cherry veneer finishes. The preset buttons are easy to use and we liked the large central on/off button. However, the instruction manual is cluttered and wordy. A stereo line input socket lets you connect an MP3 player (assuming it has a line-out socket) or other audio device. It's available at John Lewis.

**WORTH KNOWING** You can get stereo sound by linking the Vita to your hi-fi.

Available John Lewis Tuner FM, DAB Speakers Mono External speaker output Yes Connect to hi-fi Yes Headphone jack Yes Pause live radio No EPG No



## 69% Roberts Gemini RD46 £70

The Roberts RD46 is a quality radio that produces good sound for a reasonable price. The large display and well laid-out controls would suit partially sighted users. It works on four D-type batteries that provide 53 hours of DAB listening time or 42 hours of FM listening, as well as on mains power. It's heavy if you want a portable model, though, and the handle is uncomfortable.

It's available at Comet.

**WE LIKE** The RD46 used just 2 watts in standby. Only the Sony XDR-S50 used less.

**WHICH?  
BEST  
BUY**

Available Comet Tuner FM, DAB Speakers Mono External speaker output No Connect to hi-fi No Headphone jack Yes Pause live radio No EPG No



## 62% Pure One £50

**EXCEPTIONAL  
VALUE** *which?*

We were so impressed with this model that we awarded it Exceptional Value status in November 2006. It sounds good and features include Intellitext, a scrolling text information service that gives up-to-date sports scores and news headlines. It's also easy to carry, as it's so light. Cheapest store is John Lewis.

**WHICH?  
BEST  
BUY**

**WORTH KNOWING** The radio takes batteries, but buy the optional rechargeable battery (ChargePAK) for about £30 if you'll use batteries a lot.

Available Argos, Currys, John Lewis Tuner FM, DAB Speakers Mono External speaker output No Connect to hi-fi No Headphone jack Yes Pause live radio No EPG No



## 68% Dualit DAB Kitchen Radio £179

**WHICH?  
BEST  
BUY**

Dualit isn't the first name to spring to mind when thinking about high-quality audio products, but the toaster manufacturer has popped up with a great radio. It sounds excellent, and the logical controls and large tuning and volume dials make it simple to use. If you want stereo, you'll have to connect it to some external speakers. It's available at John Lewis.

**WE FOUND** The display is larger than on most models.

Available John Lewis Tuner FM, DAB Speakers Mono External speaker output Yes Connect to hi-fi No Headphone jack Yes Pause live radio No EPG No



## 60% Pure Evoke-3 £199

The Pure Evoke-3 should be near the top of your Christmas wish list if gadgets are your thing. It lets you pause and rewind live radio and preset up to 99 stations, and has an electronic programme guide that tells you what's on radio for the next seven days. You can also record to an SD memory card (a 2GB card costs about £15) and connect it to an MP3 player.

It's available at Comet.

**WE FOUND** The array of features is difficult to get to grips with but the instructions are clear.

**WHICH?  
BEST  
BUY**

Available Comet Tuner FM, DAB Speakers Stereo External speaker output No Connect to hi-fi No Headphone jack Yes Pause live radio Yes EPG Yes

## Your questions

These are our answers to some common queries about digital radio we've had from Which? members

### Q Are there other ways to listen to DAB?

A You can listen to DAB radio on your digital TV but this can use ten times more energy than the average of seven watts typically used by a table-top radio. It's difficult to generalise about whether DAB radio sound is better through a radio or TV. The sound via your TV depends on the reception you get through your external aerial as well as on the TV. See [www.which.co.uk/tvs](http://www.which.co.uk/tvs) for sound-quality ratings for TVs we've tested.

### Q How do I check whether I can get DAB?

A More than 85 per cent of people in the UK

can, but quality is patchy in some places. You can visit [www.digitalradionow.com](http://www.digitalradionow.com) to check what reception is like in your postcode area. There are transmitters being put up all the time, so if you can't tune in now you might be able to in future.

### Q What is DAB+?

A DAB+ is a new way of digital broadcasting that will be adopted by many European countries instead of DAB. It can potentially broadcast programmes at a higher quality than DAB or transmit more stations. We'll soon see models for sale that could

be upgraded to receive DAB+. However, there are no plans to introduce DAB+ in the UK yet and our talks with industry experts and regulators lead us to believe it won't be broadcast here for a long time.



## What you should look for

### ELECTRONIC PROGRAMME GUIDE

An EPG allows you to select a radio station and scroll through to see future programmes. It works in a similar way to the EPG on your Freeview or Sky TV set-top box

### FM

Just one radio on test, the Sony XDR-S50 (15), can't receive FM radio. It's useful to have FM especially in areas not well served by DAB. DAB coverage is weakest in areas of low population or places with lots of mountains or valleys such as Wales, the Scottish Borders and the Highlands

### PAUSE AND REWIND

Some top-of-the-range radios let you pause and rewind live broadcasts. This is great if you want to restart a song, say, or if the doorbell rings during a crucial scene in *The Archers*

### CLOCK RADIO

Many digital radios have the same functions as a clock radio: a clock and alarm, as well as snooze and sleep functions. They're often not a perfect substitute for a proper clock radio because the clock digits are small and not always illuminated



### RECORDING

Some radios can record to their internal memory or memory cards. Normally, you have to buy the memory card separately

## The way we were



One of our tested models brings back memories of early transistor radios



A digital radio in this test, the Bush TR82DAB (13), brings to mind an early transistor model. Daphne Oxenford (above) was the voice of *Listen with Mother* when the original Bush TR82 became a radio for the masses in 1959. It cost £17 8s 11d (equivalent to about £280 today). We never tested the TR82 but did look at the similar Bush VTR103 in 1965. It wasn't a Best Buy, but we said: 'Our listening panel tests showed that technically less good sets may please people just as much'.

MODEL	SPECIFICATION			FEATURES				BATTERIES		TEST PERFORMANCE		SCORE %
	PRICE (£)	WEIGHT (kg)	SIZE (cm) (h x w x d)	FM	DAB PRESETS	PAUSE/ REWIND	NUMBER OF ALARMS	TYPE	RUNNING TIME DAB/FM (hours)	EASE OF USE	SOUND QUALITY	
<b>1</b> <b>MAGICBOX</b> Lagio	<b>66</b>	3.1	33x16x14	✓	10			n/a		★★★★	★★★★★	<b>74</b>
<b>2</b> <b>ROBERTS</b> Gemini RD46	<b>70</b>	1.6	15x27x9	✓	5			standard	53/42	★★★★	★★★★	<b>69</b>
<b>3</b> <b>DUALIT</b> DAB Kitchen Radio	<b>179</b>	2.5	18x27x15	✓	5		1	rechargeable	4.5/4.5	★★★★	★★★★★	<b>68</b>
<b>4</b> <b>VITA AUDIO</b> R1	<b>159</b>	1.6	18x13x17	✓	5		1	n/a		★★★★	★★★★	<b>66</b>
<b>5</b> <b>PURE</b> One	<b>50</b>	1.1	15x21x8	✓	20			standard <sup>a</sup>	28.5/16	★★★★	★★★★	<b>62</b>
<b>6</b> <b>PURE</b> Evoke-3	<b>199</b>	3.1	22x29x13	✓	99	✓	20	standard <sup>a</sup>	22/10	★★★★	★★★★	<b>60</b>
<b>7</b> <b>ROBERTS</b> MP-Sound 23	<b>249</b>	5.2	13x36x29	✓	10	✓ <sup>b</sup>	1	n/a		★★★★	★★★★	<b>60</b>
<b>8</b> <b>TIVOLI</b> SongBook 100	<b>165</b>	1.4	16x21x8	✓	5		1	standard	23/18	★★★★	★★★★	<b>54</b>
<b>9</b> <b>ETÓN</b> Sound 102	<b>140</b>	1.8	12x21x17	✓	5		1	n/a		★★★★	★★★★	<b>53</b>
<b>10</b> <b>INTEMPO</b> PG-02	<b>50</b>	2	20x25x15	✓	4		1	n/a		★★★★	★★★★	<b>52</b>
<b>11</b> <b>REVO</b> Pico 1.1	<b>100</b>	1.1	17x11x12	✓				rechargeable	6/4.5	★★★★	★★★★	<b>52</b>
<b>12</b> <b>TANGENT</b> DAB	<b>139</b>	2.4	12x21x18	✓	5		1	n/a		★★★★	★★	<b>44</b>
<b>13</b> <b>BUSH</b> TR82DAB	<b>70</b>	2.6	28x35x13	✓	10			standard	24/110	★★	★★★★	<b>41</b>
<b>14</b> <b>ACOUSTIC SOLUTIONS</b> PD2	<b>30</b>	1.8	18x29x14	✓	8		1	n/a		★★★★	★★	<b>38</b>
<b>15</b> <b>SONY</b> XDR-S50	<b>50</b>	0.4	10x20x4		10			standard	9/na	★★★★	★★	<b>34</b>

<sup>a</sup> You can buy an optional rechargeable ChargePAK battery for these models for around £30

<sup>b</sup> Between five and 15 minutes

## Facts & scores

### Helping you choose a digital radio

#### Play your CDs and MP3s

The **Roberts MP-Sound 23 (7)** can also play CDs and MP3 music files recorded on to two memory devices, an SD card or USB stick.

#### Energy offender

The **Revo Pico 1.1 (11)** used a huge ten watts in standby – as much as the hi-fi that used the highest power in our August 2007 report, the Pure Legato II.

#### Clock radios

The **Etón Sound 102 (9)**, **Intempo PG-02 (10)** and **Tangent DAB (12)** can be used as clock radios, with snooze, sleep and alarm functions.

#### Remote controls

The **Roberts MP-Sound 23 (7)** and the **Etón Sound 102 (9)** come with an infrared remote control.

#### Different colours

The **Rivo Pico 1.1 (11)** is available in three colours – satin black, snow white and titanium silver.

### USING THE TABLE

Digital radios must score at least four stars for sound quality to become Best Buys. The more stars the better.

#### Specification

**Price** For Best Buys we give the cheapest widely available high-street price as we went to press. Prices for other models are a guide.

Prices for models that are available only online are shown in *italics*.

**Weight** With batteries.

**Size** With speakers if separates.

#### Features

**DAB presets** How many DAB stations stored.

**Pause/rewind** Whether a radio can pause or rewind live shows.

**Number of alarms** How

many times you can set a radio to come on in a given period.

#### Batteries

**Running time DAB/FM**

With supplied batteries.

#### Score

Ignores price; based on:

Sound quality **40%**

Ease of use **30%**

Battery life **15%**

Features **15%**

## Contacts

**Acoustic Solutions** 0871 230 7747  
www.acousticsolutions.co.uk

**Bush** 0870 873 0079; www.albaplc.com

**Dualit** 01293 652500; www.dualit.co.uk

**Etón** www.etoncorp.co.uk

**Intempo** 0161 828 5219

www.intempo-digital.co.uk

**Magicbox** www.magicboxproducts.co.uk

**Pure** 01923 277488; www.pure.com

**Revo** 01555 666161; www.revo.co.uk

**Roberts** 01709 571722; www.robertsradio.co.uk

**Sony** 0870 511 1999; www.sony.co.uk

**Tangent** www.tangent-audio.com

**Tivoli** 01279 501111; www.tivoli-uk.com

**Vita Audio** 01702 601410; www.vitaaudio.com

### OUR RESEARCH

When choosing DAB radios to test, we consult manufacturers, market intelligence reports and industry experts, then check high-street and online availability.

Tested models include top-sellers from the most popular brands, products with innovative features, models from some lesser-known brands and widely available Best Buys from previous tests.