1999 edition

Radio LISTENER'S Guide



The world's first DAB tuner

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USING THE GUIDE

WELCOME to the 1999 edition of the Radio Listener's Guide (RLG). The guide shows the frequencies and locations of all the radio stations in the UK.

There is information on BBC Radio, Independent Radio, The World Service, Overseas stations (primarily medium and long wave stations that can be heard in the UK), Satellite stations, Internet stations, Pirate Radio and more - you will be surprised by how many stations there are to listen to.

For BBC and Independent Radio stations, maps show which stations you are likely to receive in any particular area.

How to find a station's frequency

The Guide has been organised so that the various station types are listed separately. BBC Radios 1,2,3,4 or 5 Live are listed separately from national commercial stations such as Classic FM or Virgin. BBC local stations are listed separately from independent radio stations.

The medium wave frequencies for Radio 4, Radio Scotland, Radio Wales and Radio Ulster which broadcast on both medium wave and FM, are listed separately from the station's FM frequencies.

As a general rule you should try the FM frequency first, as FM usually provides better reception, and gives stereo when available.

In the centre of the guide you will find 'quick reference' colour frequency maps for the main national radio stations. So, for example, if you are looking for Radio 4's frequency while visiting Oxfordshire, look at the quick reference map for Radio 4.

If the frequency shown doesn't give you good reception, you must first decide which broad category your station fits. With the Radio 4 example, you would need to look under the section marked 'BBC FM Radio in England'. Look at the map for this section to see which main or high power

transmitter is nearest to you; and tune-in to the frequency listed for that transmitter. If this gives poor reception, try the nearest relay station to you, or, if there is one, another nearby main transmitter.

We have also included an index of station names inside the front cover - which can particularly help if you are trying to track down the details for a local radio station.

New for 1999

We are always looking for ways in which to improve the Radio Listener's Guide - many of the suggestions are yours. This year we have added a list detailing the main ownership groups within commercial radio, and a new section with information on how to make timed recordings from radio.

As the internet continues to grow, we've continued to give references to web sites where useful. I appreciate that many people don't have internet access, but because of the sometimes unique information available, we have included them wherever we think they may be of help.

DAB, or Digital Radio as it is also known, gets more space this year, as we have at last seen the launch of a number of DAB radios. At the time of writing five manufacturers had launched car radios, and Arcam had launched a HiFi tuner. Hopefully next year I will be able to report on the launch of DAB portables!

Good listening!



Clive Woodyear, Editor

Winners

The winners of Roberts radios in last year's freedraw were: W Biggs, Horsham; A Brown, Ceredigion; S Coles, Derby; C Roberts, Petersfield; J Silvester, Crewe; P Dagnall, Solihull; C Smith, Manchester; J Arnold, Kingsbridge.

Cover Photograph

The British made **Arcam Alpha 10**, the world's first DAB tuner. For details contact: Arcam, Pembroke Avenue, Waterbeach, Cambs CB5 9PB tel (01223) 863384

RADIO broadcasting in the UK, can be divided into two main areas - **BBC** broadcasing and **Independent Radio**.

BBC Radio

LW

MHz

MOR

MW

long wave

a unit to measure where a station is on the dial.

middle of the road (music style)

medium wave - also called AM

BBC broadcating consists of five **national networks**, Radios 1, 2, 3, 4 and 5 Live.

The BBC also provide three **regional networks**, Radio Scotland, Radio Wales, and Radio Ulster In addition to this there are also 39 **BBC local stations** in England.

Since the middle of 1998, when the first DAB (Digital Radio) radios were launched, it has been possible in some areas to hear BBC national services on DAB.

Although not targeted at the UK, the **BBC World Service** can be heard at various times of the day, on short wave and 648 kHz medium wave, and between 0100-0530hrs on Radio 4 frequencies.

Independent (or commercial) Radio

Controlled by the Radio Authority. Independent radio comprises three **national networks**, Classic FM, Virgin, and Talk Radio.

There were also (at last count) 225 licensed **local independent stations** - varying in size from so-called regional stations, to local stations (covering a single city or area), down to small-scale and low power local licences (known as 'Sallys').

The Radio Authority also licence cable, satellite and restricted services. The latter includes all short-term, freely radiating services (for example 'special event' radio) and highly localised permanent services such as hospital and student radio. **Restricted Service Licences** (**RSLs**) also offer the opportunity to provide radio coverage for a special events such as Ascot, the Glastonbury festival or football matches. They also give the opportunity for potential local licence applicants to gain experience and to test the market before applying for a full licence. Over 350 RSLs were issued in 1997 with most limited to broadcasting for 28 days. Because of their short-term nature, RSLs are not listed in the Radio Guide.

In October 1998, the Radio Authority awarded a national digital licence to the Digital One consortium, which is due to start broadcasting in October 1999.

ABBREVIATIONS

used to describe the medium, long and short AM Opt out local service, broadcast at times of the day from wave bands. a larger station, or transmitter Commercial Radio Companies Association **CRCA** POI polarization (h = horizontal, v = vertical, CD Compact Disc m= mixed) CLT Luxembourg-based media company RA Radio Authority DAB Digital Audio Broadcasting or Digital Radio RAJAR Radio Joint Audience Research DAT Digital Audio Tape RDS Radio Data System DX'er a listener who likes tuning to distant stations. RLG Radio Listener's Guide **EMRP** effective mean (average) radiated power (of a RSL Restricted Service Licence transmitter). RTE Radio Telefis Eireann (Irish state broadcaster). ERP effective radiated power (of a transmitter). RTL Radio Télé Luxembourg (Luxembourg state **EKR** European Klassic Rock (radio station) broadcaster). FM used to describe the VHF wave band. Sally Or Sallie, Acronym for Small-Scale Local **GMT** Greenwich Mean Time Licencies, issued by the Radio Authority **GWR** The name of the group running a number of SW short wave local commercial radio stations and Classic FM UTC coordinated universal time - also known as ILR Independent Local Radio Greenwich Mean Time (GMT). kHz a unit to measure where a station is on the dial. VCR video cassette recorder kW kilowatt(s) a measure of a transmitter's power. VHF Very High Frequency - another term used to LCD liquid crystal display describe the FM band LED light emitting diode VLV Voice of the Listener and Viewer

VOA

WRN

WRTH

Voice of America

World Radio Network

The World Radio and TV Handbook

EDITORIAL Children's Radio

LAST YEAR I wrote about Children 2000's application to run a children's radio station on 225kHz. Sadly efforts came to nothing, when in December 97 the Radio Authority withdrew this frequency. Around this time, Chris Smith, The Secretary of State for Culture Media and Sport, indicated that there would be space on Digital Radio for children's channels. It now appears that this will not be the case, due to the scarcity of space on DAB.

I have young children, and simply don't accept the arguments that children's speech radio won't work. My children seem fairly representative of the breed, and certainly enjoy taped music, stories and poetry. On long car journeys, such entertainment is essential for the sanity of all concerned.

The sad reality is, that since Radio 4 finally killed-off children's radio in April 1998 there has been next-to-nothing on radio specifically for children.

The commercial sector has shown some interest in exploiting this niche. Capital Radio made an unsuccessful bid to run, 'Fun Radio', a pop based station aimed at 4-14 year olds. The commercial sector is however not really the one to be running children's

radio. Young children are not sufficiently experienced to distinguish between 'editorial' and advertising, are impressionable, and not able to make good judgements about value for money. In Sweden I believe much advertising to children is banned.

Children 2000, the umbrella group fronted by Susan Stranks, seems to be heading in the right direction with their plans to use National Lottery and Millennium funding to promote children's radio in the year 2000. Their contact details are on page 125 of the guide. I can see why Children 2000 have taken this route, but surely it is also time for the BBC to wake up to their public service responsibilities in this area.

Change should not be left to the BBC - the Government needs to address how it can best manage the limited number of frequencies on the airwaves and make the most of opportunities offered by new technologies such as DAB, to give listeners the widest range of quality programmes.

Ownership Battles - the takeover of Xfm

I **DOUBT** that Capital Radio anticipated the fury of Xfm listeners prior to its takeover of the station in July 1998. Capital's purchase of Xfm for £15.9 million, highlighted many of the problems associated with the current licensing system. In recent years the award of a licence has all too often been followed by a sell-out to an established radio operator.

Established radio companies don't like the system, as they end up paying over-the-odds for the licence. Listeners, especially those who campaigned for, or listened to the new station, feel they have been sold-out; and watch with dismay as the new licence-holder usually changes and brands the station with its existing identity. The only winners are those awarded the original licence who walk away with a tidy profit.

Economies of scale within the group - in terms of administration, programme production and particularly advertising sales, make radio groups an attractive proposition for the companies running them.

The Radio Authority currently limits size of groups by limiting companies to owning no more than 15% of listening in the commercial sector. Even so GWR, the UK's largest commercial radio group, now controls Classic FM and at last-count 30 local stations. Capital Radio plc controls its London licences and 9 others, and Emap Radio owns 20 local stations.

Radio groups, have been the source of much criticism by listeners over the years. Key concerns are the loss of local identity and programming, too much syndication of programs within the group - resulting in limited choice on the airwaves. It is easy to tune from one local station to another, only to find the same programme being broadcast.

Like them or loathe them, radio groups are here to stay. If anything, they will get larger still, as the Government and the Radio Authority respond to pressure from the radio industry to raise the ceiling on ownership.

EDITORIAL

DAB - Digital Radio

MY ENTHUSIASM for DAB (Digital Radio) has cooled during the last 12 months. There are a number of reasons why - the slow introduction of DAB radios has certainly played a part. I would also question whether DAB will really give a greater choice and variety of quality stations. Are most radio listeners really concerned about the current quality of FM reception? Do they want DAB's text handling and graphics capabilities? I would also question the way in which DAB is being implemented.

At long last I have seen, heard and touched a DAB radio. This was courtesy of Grundig at the Live '98 show at Earls Court in September. It was one of five DAB car radios on-show, as well as one HiFi unit from Arcam. There's no sign yet of DAB portables.

In terms of stations, DAB needs to offer something new, something not available currently on the radio. As far as I can see most DAB radio stations are going to be either existing stations exercising their right to a place on a DAB multiplex - or offer little that's new. Radio 5 Live's 'Sports Plus', and Digital One's Sports/Dance/News/Soft AC mix, are all formats that are already well covered.

Elsewhere, I have talked about how the proposals for DAB children's stations have been dropped. DAB needs just such stations; as well as stations for groups and music types, abandoned, or not catered for under the current system.

For its quick uptake, new content is far more important than sound quality. Just look at the past successes of Virgin Radio and Atlantic 252, both on AM - where sound quality is far from perfect.

FM currently offers most listeners excellent sound quality, so much so that in normal listening conditions they would be hard-pressed to tell the difference between FM and DAB reception. What is more, in areas such as Scotland, Wales and the West Country, where FM reception is poor, or non-existent and just where DAB could make a real difference - there are no DAB transmitters initially planned!

Looking at DAB's text and data capabilities - I fear that many listeners will consider this an irrelevance to the way they use radio; and will not want, or be able to use them anyway. In-car, where it is hoped that DAB will gain much early penetration, there are obvious limits to what can be safely viewed by a driver.

Over and above the ability to hear new stations, the key feature that would encourage me to purchase a DAB set, is an ability to record and store programmes. Although this features in the BBC's DAB radio design specification, it has yet to appear on any DAB sets launched to date.

In terms of DAB implementation, my concerns range from the way in which DAB has been launched (without radios available at the time of launch), to how DAB will complement, or even replace existing analoque services.

Renaming DAB, 'digital radio', - has also been a mistake. Many people do not understand the difference between a digital radio and a DAB radio, and even believe that current digital radios will be able to receive DAB signals.

Radio Authority change the rules

REACTING to a long-term grumble about the Authority's refusal to give the reasons why it has awarded a licence, the authority's chief executive, Tony Stoller, outlined a policy shift at the Radio Festival in Birmingham in July 1998. From Autumn 1998 the authority plans to publish the reasons for licence awards as soon as possible after decisions are taken. This is to be welcomed, as the reasons behind the Authority's awards have certainly caused controversy in the past. In particular Virgin's award of a London FM licence when it already held an AM licence caused an outcry in 1995.

Stoller went on to announce that the Authority is examining a change in the current system in which

licence awards are based on a detailed 'Promise of Performance'. Instead of the mass of detail held within the current Promise, stations would work within a more loosely defined 'Format'. This is something that will certainly be welcomed by radio stations, who will have more flexibility in what they broadcast - and will certainly be easier for the authority to enforce. Whether this operates in listeners' interests, remains to be seen.

In October 1998 the RA gave the UK's only national commercial digital (DAB) multiplex to the Digital One consortium. This must have been made easier as Digital One was the only bidder!

(For more information about Digital One see page 15.)

NEWS

Radio 1

Early 1998 saw Matthew Bannister step down as controller of Radio 1 - handing over to Andy Parfit his deputy. Bannister moves to take on the post of chief executive, BBC Production, one of the most powerful jobs in the BBC.

The year has seen changes to the Radio 1 presenter line-up. After a year together on the all important breakfast show, and with ratings continuing to fall, Zoë Ball and Kevin Greening parted company. Zoë Ball now fronts the key breakfast show, while Kevin Greening departs to his own show on Sunday mornings from 0630-1000. The change was reputedly made to prevent Chris Evans poaching her for Virgin Radio!

In October 1998, Chris Moyles took over drivetime, 1600-1745, another key daytime show. Meanwhile Radio 1's playlists are said to be likely to change, in order to try to lure more women to listen to the station.

Rajar results in September 1998 show improved results from the same time last year. Results are not published for individual shows, but are believed to indicate that much of the increase is for Mark Radcliffe and Marc 'Lard' Riley's excellent mid afternoon show.

Radio 2

In July, following 23 years presenting his own show, John Dunn resigned - presenting his last drivetime show in early October. Johnnie Walker takes over the slot Mon-Thursday with Desmond Lynham on Fridays.

Katrina Leskanich, of pop group Katrina and the Waves, joins the station to host a new night-time show Sunday to Thursday nights from midnight-0300. Former Radio 1 presenter Lyn Parsons fills this slot on Fridays and Saturdays.

The station continues to pick-up listeners abandoned by Radio 1's more cutting-edge pop. Rajars show a continued rise in the station's listening share.

Radio 3

In July 1998, two years before the end of his contract, Richard Kenyon stepped down as controller of Radio 3, amidst claims of unrest over the station and policies within the Corporation. Since 1992, when he took over as controller, Kenyon had been unable to boost listening figures for the station, while Classic FM with its popularist approach had seen listeners rise to five million.



Roger Wright

In late-September 1998, the selection of Radio 3's new controller, Roger Wright, was overshadowed by an undignified row between the BBC and Classic FM over whether Roger Lewis (who had around this time decided to accept a post at Classic FM) had also been offered the job at Radio 3.

It appears that Radio 3 traditionalists need not worry that the network is to be taken downmarket. Asked about what Radio 3 stands for Wright

replied, "It's about maintaining quality and preserving the public service role. It's about being a cultural patron, about broadcasting live and specially recorded music."

September Rajars showed very good listening figures, 18 per cent up over the same period last year.

Radio 4

Following James Boyle's, changes to Radio 4's schedule in April 1998, indications were initially, that although more people listened, they listened for less time each week. By September 1998's Rajars, this had changed, with results showing that both numbers of listeners, and average length of listening were down. (See page 13 for more information on Rajars.)

Changes included moving Farming Today to start the flagship Today programme at 0600 rather than 0630, cutting the length of the World at One to only 30 minutes and shifting the Archers to 1400. The slot from the end of the World at One at 1330-1400 initially filled with quizzes and game shows proved particularly unsuccessful and is one which is likely be changed.

In October 1998, Jeremy Paxman took over Start the Week from Melvyn Bragg. Following a successful 10 years in the hot-seat Bragg moves to a new series In Our Time, on Radio 4 on Thursdays at 0900. Today presenter, John Humphrys has announced that he will be leaving the programme when his current contract expires in 1999.

One of the problems for Radio 4 has been the success of Radio 5 Live. If it wants to attract new,

younger listeners, it will need to compete with the increasingly confident and up-beat 5 Live.

Boyle, the controller of Radio 4, has pledged to resign if his new-look schedule is not a success by Spring 1999. If he is to keep his current job, he needs to weed out some of the less successful offerings, and raise the overall standard of all programmes to match that of the best Radio 4 has to offer.

Radio 5 Live

In September 1998, 5 Live introduced major changes to its breakfast and drivetime shows. Julian Worricker and Victoria Derbyshire now present the breakfast show. Peter Allen teams up once again with Jane Garvey, to present the drivetime programme 1600-1900.

Radio 5 Live controller, Roger Mosey, plans a series of changes in Spring 1999, "to keep a sense of freshness", and "stretch the network's editorial aspirations". Changes include the launch of a sports magazine show for children, and the dropping of the gay series, Out This Day. The changed schedule will also feature an hour-long international news programme on Saturday and Sunday evenings to replace Dallyn UK and Dallyn Worldwide, and a new current affairs show to replace Hayes on Sunday.

In September 1998, 5 Live replaced the World Service on BBC local radio. It can now be heard on Local BBC Stations from either midnight or 0100-0500 on weekdays. Mosey said 5 Live "would be able to provide a better service to local stations when there's a breaking news story in the early hours".

In October it was announced that Cybil Ruscoe is to leave 5 Live after 5 years at the station. Her contract ends in March 1999

Arrivals at the station during 1998, include Andrew Neil, who hosts a Sunday morning breakfast show and Edwina Currie who hosts a late show at 10pm on Saturday and Sundays.

Classic FM

The station continues to perform well, with a reversal of the fall seen in last September's Rajars.

The station took umbridge early in 1998, with a BBC campaign to promote Radio 3. Classic FM claimed it was unfair, in particular in the way that it used television adverts to promote radio. Even so, Classic FM can still boast more than twice as many listeners as Radio 3

Virgin Radio

Following the initial shake-ups after Chris Evans' Ginger Group takeover of Virgin Radio in December 1997, more presenter changes followed in August and September 1998. Drivetime DJ Robin Banks departed, as did Ray Cokes who had done just three months on the evening show. In September, overnight DJ Peter Poulton departed, with his replacement Craig Wallace leaving less than a week after he had started!

The station has allegedly been involved in unsuccessful attempts to tempt Zoë Ball, and Chris Moyles from BBC Radio 1

Figures showed good gains post takeover, and Chris Evans' move to host the breakfast show - but although still higher than the same time last year, the station lost 234,000 listeners in the last set of Rajar figures.

Talk Radio

In November 1998 a consortium led by former Sun editor Kelvin MacKenzie took control of Talk Radio. The deal, said to value the station at £24 million was backed by Rupert Murdoch's News International group. An offer from a management buyout team led by ex-managing director, Paul Robinson, was rejected by Talk's owners, the CLT media group.

MacKenzie, infamous for his relaunch of Live TV, with publicity stunts, including Norwegian weather girls and topless darts, is a newcomer to radio. One of the first moves of the new owners was to sack Paul Robinson and other top managers.

The future of Channel 5 presenter, Kirsty Young, signed by Talk Radio earlier in the year to present the breakfast show is unclear - but she, and a number of other presenters will almost certainly be leaving the station.

Atlantic 252

Atlantic 252's owners, the media group CLT, who recently sold Talk Radio, have yet to find a buyer for its 80% stake in Atlantic 252.

Meanwhile in a move seen as an attempt to make 252 more attractive to potential buyers, the station seems set to reposition itself to target the 18-24 market. This will bring it into direct competition with Radio 1. Kiss and Galaxy. Atlantic 252 has seen listening figures fall since the heady days of 1994, when it boasted a 4.3% share of listening. Poor figures in September 1998 show a share of only 1.5 per cent, a fall of 40 percent in the station's listening share during the year.

NEWS

The World Service

The World Service is being rebranded to give it a more modern flavour. The battle with television has seen its audience drop by about 2 million from 1996-1997 and audience research apparently suggests that overseas listeners want a service that is less 'stuffy'.

The changes which have already started, come at a time when the World Service is just settling down following the merging of its news services with the rest of the BBC. Changes seem in line with Government and Foreign Office moves to promote a modern identity abroad.

In September 1998, in a surprise and sudden move, Sam Younger, the head of the World Service resigned to pursue "other interests". Mr Younger is replaced by Mark Byford, who moves from his position as the BBC's director of regional broadcasting.

BBC Local Radio

With over 200 competitors and more to come, BBC Local Radio faces a major challenge if it is to hold on to its listeners. The publishing in December 1997 of 'BBC Local Radio - 2000', a BBC review of local radio, shows that the BBC aren't taking this lightly.

Over the next year we will certainly see the continued marketing of BBC local radio. You may have already have seen the promotion of BBC local radio on BBC television. The aim seems to be to develop a recognisable, and more standardised identity for the local network.

It seems to be working; Rajar figures show the share of listening up by nine percent, compared to the same time last year.

ILR stations due soon

A number of new ILR local stations have just launched, or were licensed but not yet on-air when we published the RLG. **Champion**, Caernarfon, due early Dec 1998

Discovery FM due 1999 **The Falcon**, Stroud, due 29 November 1998.

FLR (First Love Radio) based in Lewisham, due January 1999. Fosseway Radio Leics, came on-air 1 November 1998. Galaxy - awarded the North East regional licence, Chrysalis plan to launch another Galaxy station by Summer 1999. Mansfield, due February 1999. Oak FM Loughborough, due on-air 31 January 1999 Oldham FM due on-air 1999 RNA FM a hospital and community station for the Arbroath area, on-air 25 November 1998. Rutland Radio due on-air 13 December 1998.

Telford FM due May 1999. Tower FM, due March 1999. Trax due 22 November 1998. Wire came on-air 1 September

ILR frequency changes

During 1998 a number of ILR stations have moved onto FM.

Isle of Wight Radio switched from AM to FM on 28 March 1998.

Cheltenham Radio was relaunched on 7 September 1998 as 107.5 Cat FM.

KCBC switched from 1584 MW to 107.4 FM in April 1998.

Mellow 1557 moved on to 100.0 FM at 2kW, and relaunched as Dream on 19 November 1998.

Liberty gained an extra medium wave frequency - 972kHz.

News from the Radio Manufacturers

The key news this year has been the launch of DAB radios. Five manufacturers; Grundig, Pioneer, Kenwood, Clarion and Blaupunkt have launched car

Pioneer, Kenwood, Clarion and Blaupunkt have launched car radios. Arcam and Cymbol have launched DAB tuners for home HiFi systems.

On the analogue front, with the exception of Roberts, there have been very few new personal, portable or world band radios launched.

AIWA have launched a number of new personal radios. We have unfortunately not been able to get samples for review.

Baygen launched a see-through plastic version of the Baygen Freeplay, which is now also solar powered.

Grundig are considering the relaunch of up to five portable radios in the UK during 1999.

Panasonic for reasons best known to themselves, dropped their highly-rated RF-B11 compact portable.

Roberts have launched a series of new radios. These include a number of small personal radios, including one with long wave - good for cricket fans. They have also launched a RDS portable, the R979, which will compete with the Sony M50RDS. Also launched is the R881, at £80, an attractively priced radio with direct keypad frequency input.

Sony replaced the SRF-S80, with another cigarette lighter-sized personal radio, the SRF-S83. Sony are also working on a DAB car radio, but it had not been launched at the time of writing.

NEWS

TECHNOLOGY DAB

DAB (Digital Radio) features highly in the RLG this year. However it is not the only new technology under development. WorldSpace and CD radio offer an alternative method of delivering digital signals to the radio receiver - direct from the satellite. Whether this will work as robustly and offer as little interference as the European-based terrestrial DAB system, remains to be seen

WorldSpace

Based in the USA, and founded in 1990, WorldSpace plans to broadcast digital signals direct from its satellites to portable radio receivers. It aims to do for radio, what Astra and others have done for television.

Three satellites are planned, providing coverage for the Middle East, Africa, the Mediterranean Basin, Asia, the Caribbean and Latin America. There are no plans to cover North America or Europe.

In theory listeners could be able to receive over 180 channels from a satellite

Satellite launch dates have been advertised for March and October 1999, with the service funded by state broadcasters and by advertising.

Hitachi, Panasonic, JVC and Sanyo are developing and producing digital receivers that are expected to cost about £100. They will also have a capability to pick-up short wave, medium wave and FM broadcasts. In a further development in 1998, WorldSpace purchased a 10% share in Baygen Power Industries - manufacturers of the

revolutionary Baygen wind-up radio - making for an interesting combination of technologies!



WorldSpace radios

Info: www.worldspace.com

CD Radio

An American company CD Radio Inc. is developing a digital satellite radio system for the USA. The system aims to provide a satellite to car service, with up to 100 digital channels available to subscribers. The company intends to broadcast 50 channels of commercial-free music and 50 channels of news, sports and talk.

Satellite launch is planned for late 1999.

Satellite reception is based round a small cassette-sized 'card' that listeners insert into their existing car radio or CD. When tuned to a satellite station a display fixed to the front of the card would show channel, format, title and artist information. This would work in much the same way as an RDS radio shows information now.



A battery powered satellite dish about two inches in diameter, attached to a car's rear window, would relay CD Radio to the radio card wirelessly.

The service is planned to be funded by subscription, with a monthly charge of \$9.95.

Info - www.cdradio.com

Digital Radio Mondiale (DRM)

Just when you thought that short wave was dead, a consortium of broadcasters, manufacturers, researchers and acadmics seems set to inject a new lease of life. They plan to develop digital broadcasting on AM - short, medium and long wave. The consortium has developed from informal meetings held in late 1996, and now involves parties such as Bosch, the BBC, Merlin Communications, Sangean, Sony and others.

There are many advantages to the system. Digital AM would cut out the poor reception often associated with this band, and also enable the transmission of RDS, or even DAB style text and data. All this, plus the benefits of being able to serve relatively large areas with a limited number of transmitters. Existing expensive transmitters could also be modified to provide digital signals at relatively low cost.

Info - www.rnw.nl/DRM/

Auntie's secret civil war



By Libby Purves

BBC TV types loathe BBC radio types. Why not set free the senior service?

THE QUARTERLY Rajar radio audience figures will come out this week, in an atmosphere redolent of a particularly tense edition of The Archers. Cue announcer: "It's Thursday morning and at Brookfield, Phil and David are fearing the worst." Tum-ti-tum-ti-tum-ti-tum. Cut to a cowshed acoustic and a weary voice saying "Doh! The figures are down! Not again!" For Brookfield read Broadcasting House, where Radio 4 heads will be shaken over certain cows in the programme herd which are not yielding enough listeners.

If the stockmen were left to work out which to cull and which to give extra fodder-beet, the farm might pull through. However, this is showbiz and publicly funded showbiz, too, so there will be no mercy. By the weekend expect a strident outcry, orchestrated by fun-loving newspapers, for the resignation of the Controller of Radio 4, James Boyle. The first stirrings came yesterday, when the Daily Mail spoke of "dumbing down" (as if that ever shrank an audience). They wheeled out the National Viewers and Listeners Association to demand that the "old schedule" be brought back and "razzmatazz" removed. But they are shooting at the wrong target.

Because I also happen to exist in the parallel universe behind the Radio 4 microphones, let me make one thing clear: this is not a Boyle defence. I am a heretic anyway, believing that some things should be judged otherwise than by raw numbers; and frankly, in the long term there are worse things to worry about than the fate of one controller. Nobody in the BBC knows I am writing this, and some may object to it and make my life rather difficult, as of this morning. Hey-ho. But before the Rajar hurricane strikes, there are one or two things it seems necessary to spell out.

The problem is this: TV people have always despised radio, and now they have power over it. Those at the top of the BBC think of themselves as running a television service, and radio is a distrac-

tion. They have no feeling for it. This is the heart of the problem, and those who want Britain to keep its unique service of crafted speech radio should not be distracted by the Rajar-Boyle-dumbdown business. Parts of the new schedule work fine and the awful parts are sneakily being readjusted. The odds are that the station will reach an accommodation with its listeners.

Or it would, if it were not for the bigger problems of resources, respect and autonomy. It seems Utopian now, but there was a time not long ago when BBC radio networks each had a controller who really controlled them, ruling departments dedicated to radio and held together by inherited standards of craftsmanship and rigour. To be a radio producer, reporter or technician was a separate and honourable skill, not second best to working in TV.

There were flaws and deadwood, but those who knew how to make good radio were allowed to get on with it. Despite some dull and stuffy patches, there flowed from Radio 4 a stream of inventiveness, humour and intelligence which enriched national life, and - because of its cheapness and freedom to experiment - fed the television service ideas. From Hancock to Steve Coogan, from Any Questions to news guizzes, radio formats have been snapped up by TV. It is still common to see some press fanfare about a TV documentary "scoop" on a scientific or artistic subject, and to remember hearing all about it on Radio 4 six months before. Derek Cooper was first with the news of BSE; From Our Own Correspondent often sounds the first warnings of impending world crises.

Despite this (perhaps because of it), television executives tend to belittle Radio 4. This would not matter, except that a side-effect of BBC reorganisation, with everything running in horizontal rather than vertical slices, has been to put radio into their power. The last radio-only production

department was absorbed this year into a larger empire dominated by television, and therefore by the voracious financial demands of digital expansion and 24-hour news. Radio's exiguous budgets get squeezed further and, in a comparatively simple medium, every cut immediately affects output.

Corporation-wide management policies sit ill with the creative processes of radio. "Bi-media" reporting means that the radio news is studded with bits of soundtrack from TV features, diluting the craft of using speech and sound alone. Intellectual standards are hit by changes such as the new internal market, which makes the cuttings service and the libraries no longer common resources of intellectual wealth but extras which are expensive for producers to use.

The compulsion to use "independent producers" - often, absurdly, former BBC staff on early retirement deals - compounds the daily obstacle course. All these things are matters of public record, often written of; but the connection should be made between the way they hit radio harder than television and the endemic culture (it is not organised enough to be called a conspiracy) of television's contempt for radio.

Making this connection should now be easier because of what happened last week. We were provided with glaring, incontrovertible evidence of BBC TV's contempt for BBC Radio 4, and of how blithely unconcerned senior management is about justice between its Goliath and David. Radio Heads, on BBC2 peak time, was billed as a portrait of the Radio 4 audience. It deliberately portrayed the network as an eccentric's paradise, listened to exclusively by old ladies with mad hair; comedy anoraks in minibuses; dysfunctional, redundant FE lecturers; a strange man with an Alvar Liddell obsession whose father rejected him in infancy; and an Ab-Fab caricature PR guru who listens because he likes getting his clients on Today.

It was a shameful, slanted programme, a real BBC2 raspberry of ignorant, sniggering contempt and wilfully malicious misunderstanding. Its makers had apparently only heard of four programmes (Today, The Archers and Desert Island Discs because they are very old, and Start the Week because it is always in the posh newspapers). It ignored the painstaking documentaries, the literate readings, the innovative drama and comedy, the investigative brilliance of programmes such as File on Four and the immeasurable debt that tele-

vision owes to the senior service. It had so little sense of history that it recorded a middle-aged painter's obsession with the shipping forecast without even realising that the said forecast was broadcast on Radio 2 during the childhood he was talking about, not Radio 4 at all. The programme's moral was "look at the sad weirdos who listen to Radio 4". Coming from a medium which depends for its existence on people sitting on sofas all looking the same way, that is a bit rich. At least radio listeners are driving, or ironing, or painting, or making things.

It is worth stressing this incident because it marks the first public declaration of a long unrecognised war. Mr Boyle, according to The Observer, has gone on the record with his rage at having the Radio 4 audience "traduced". He is complaining to the head of BBC Arts and the Controller of BBC2. Good for him. It will probably get him into trouble, and the DG may even decide to save him the trouble of resigning over the Rajar figures; but someone has to take a stand against these creeps.

The really annoying thing is that the louder listeners' groups moan about schedule changes, the more they play into the hands of those who would love to see Radio 4 atrophy and redeploy its budget to pay a couple of Zoë Balls and build a million-pound set for some great, plodding lemon of a period drama.

What desperate remedy might work? Perhaps a large but simple one. BBC Radio networks (or at least Radio 4) could be removed from the present structure, ring-fenced, allocated their modest budget and given the freedom to run themselves. Maybe we need an Arts Council of the airwaves, to take the licence fee and divide it irrevocably between the different media so that television values cannot wreck radio. Without some drastic action, there will not be a recognisable Radio 4 in ten years, let alone twenty.

(First published in the Times on October 20, 1998 Reprinted with kind permission. © Libby Purves)

RAJAR

RADIO Joint Audience Research Ltd, (Rajar) released their quarterly summary of radio listening figures for the third quarter of 1998 on 22 October 1998. These covered the period 29 June - 20 Sep 1998. The figures are opposite, with previous years alongside for comparison.

Rajar listening figures have become more frequently quoted during the last year or so. In particular we have seen Rajars and leaked listening figures increasingly being used in the media. Beware however of the way the figures are interpreted publicly, as like most statistics they can be used to prove just about anything you want!

What is Rajar?

Set up in 1992, Rajar (Radio Joint Audience Research Ltd) operates an audience measurement system for the radio industry.

The company is jointly owned by the BBC and the Commercial Radio Companies Association (CRCA). Board decisions require the agreement of both parties but also recognise the interests of the advertising community, represented on Rajar's board by the Institute of Practitioners in Advertising (IPA).

Who does the research?

Research is currently contracted to Research Services Ltd (IPSOS-RSL), who in July 1998 were reawarded a new four-year, £11 million contract.

How is listening measured?

Listening information is collected by the annual distribution of more than 170,000 listening diaries. These are placed among a representative sample of the population, with individuals completing the diaries for a week, and recording whenever they listen to a station for more than five minutes.

How are the results published?

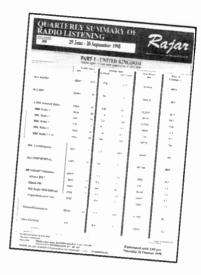
Rajar publish the results quarterly, publishing the figures under the following headings:

The **weekly reach** of a station in numbers of listeners, and percentage within its defined coverage area. The **average hours** a station is listened to, per head of the pop and per listener.

The **total number of hours** it has been listened to. The **share of listening** - within its coverage area.

The importance of the figures?

Within commercial radio, advertising revenue is dependent on good listening figures.



Even within the BBC, who often claim not to be competing for listeners, figures are one of the few objective means of measuring a station's success, and are used to monitor the effectiveness of any network changes.

Rajar plans to update the system

Despite a failed previous attempt at changing the way it collects listening data, Rajar is to introduce changes next year. From early 1999 Rajar plans to change the format of its 'listener diaries', to cope with the growing number of commercial radio stations and the introduction of new DAB services. Another key change will be the monitoring of only one adult per household. The existing system allows for the head of a selected household to ensure that all members complete their diaries. This has believed to have led to inaccurate reporting in diaries.

Rajar also aims to damp-down some of the fluctuations between quarters by providing rolling data over three, six or 12 months, with the data for all stations included in each quarter's report. Currently only national and London-based station audiences are measured quarterly, while regional stations have to make do with being measured only twice a year.

Watch out for increases in listening figures next year, as experts have predicted an up-to six percent increase in listening figures across the board, as the new sampling and reporting methods are introduced.

RAJAR - RESULTS AND ANALYSIS

Figures for quarter 03/98 (Sep 98) are in the table below, with previous year's figures for comparison

Source RAJAR/IPSOS-RSL							% change
	Sep-93	Sep-94	Sep-9S	Sep-96	Sep-97	Sep-98	Sep97-Sep98
Weekly reach (%)*	88%	85%	86%	85%	83%	84%	1.20
Total Hours (millions)**	871	847	841	821	813	846	4.06
Average hrs spent listening	21.2	21.1	20.7	20.4	20.5	21.0	2.44
(per listener, per week)							
stations ranked by Sep 1998 share		share o	f listening1	•			
Commercial Radio's share	41.1	49	50.1	48.8	50	49.9	-0.20
BBC's share of listening	56.1	48.6	47.8	48.9	47.5	47.8	0.63
BBC Radio 2	12.7	12.0	11.0	12.2	1.7	12.6	4.62
		12.9	11.8	12.3	13	13.6	4.62
BBC Radio 1	19.6	11.8	11.8	12.5	10.1	10.5	3.96
BBC Radio 4	10	10.5	10.3	10.5	11.2	9.2	-17.86
BBC Radio 5 Live	2	2.4	3	3.2	3.4	3.6	5.88
Classic FM	2.4	2.8	2.9	3.3	3	3.4	13.33
Virgin 1215 (AM only)	2.1	3.6	3.3	2.5	2.2	2.7	22.73
Talk Radio	-		1.7	1.8	2	1.7	-15.00
Atlantic 252	3	4.3	3.5	2.9	2.5	1.5	-40.00
BBC Radio 3	1.4	1.1	1.1	1.4	1.1	1.3	18.18
Local Commercial	33.6	38.2	38.7	38.3	40.4	40.5	0.25
BBC Local/Regional	10.4	9.9	9.7	8.9	8.8	9.6	9.09

- * The percentage of the UK/Area adult population who listen to a station for at least 5 minutes during an average week.
- ** The total hours spent listening to all radio in an average week
- † The percentage of total listening accounted for by a station in the UK or within its defined area

GOOD results for all BBC national networks, except for Radio 4. Radios 1, 2 and 5 Live showed modest increases in share during the 12 months to the latest Rajars. Radio 3 showed good growth over the year, with an additional 77,000 listeners.

A good year also for the BBC Local network, with an increase in listening share, as listeners stay tuned for longer.

Virgin and Classic FM did well, but no growth for Talk Radio. The slump continues in Atlantic 252's listening figures. The Ireland-based long wave station lost 663,000 listeners during the 12 months from last September.

Radio 4

The latest Rajars gave little comfort to James Boyle, controller of Radio 4. The station lost 572,000 listeners since the previous quarter's results. This makes a total of 636,000 listeners lost during the 12 months from Rajar 03/97 results. Listeners are also listening on average for less time - down from 10.9 to 10.1 hours per week. Boyle attributed the fall to the flat political climate and

the World Cup. He said that last year's figures were unusually high because of the death of Diana, Princess of Wales.

Radio 1

Fairly good results since the last quarter and an increase of 240,000 listeners over the year. It is still too early to see the affects of changes to breakfast and drivetime shows.

Virgin

Taken over about this time last year by Chris Evans' Ginger Group, the honeymoon seems over. Although figures are up over the year, AM figures show listeners have fallen 259,000 from the peak in the first quarter following the takeover.

Talk Radio

Talk Radio found an extra 242,000 listeners during the year, but listening share was down as listeners cut their average listening from seven and a half, to six hours per week. Football coverage during the World Cup boosted Talk's listening during the summer, but the increase was not sustained.

News from the Radio Authority

Tracy Mullins explains the Radio Authority's plans.

Plans for new licences

The Radio Authority's working list of areas for new analogue licences, which was updated in April 1998 will, on the whole, continue to utilise the FM frequencies between 105-108 MHz. The Authority has been advertising around two licences a month throughout 1998. In 1999, however, in order to make room for other licensing opportunities such as digital and the re-advertisement of existing analogue licences, the Authority will only advertise one new analogue licence a month.

Areas for new analogue local licences

In April 1998 the Authority added the following locations, all of which are relatively small-scale in geographical and/or population terms, to its working list of planned new local licence areas:

Bridgend (South Wales)

Bridlington (Yorkshire)*

Burnley (Lancashire)

Hertford

Kintyre, Islay & Jura (Argyll)*

Newbury (Berkshire)

*Areas which have already been advertised (October 1998).

Other areas already identified for new licences are as follows:

Solent/mid-Hants*

Central Scotland (regional)

Cambridgeshire*

Wakefield

Bristol/North Somerset*

Doncaster

(The closing date has passed for each of these licences but they have yet to be awarded)

Lanarkshire*

South Hams

North/N.W. London*

Coleraine

(The areas which have yet to be advertised on this list are North/N.W. London and a fresh licence for Coleraine - which failed to be awarded a licence this year.)

*Wider areas within which 'small-scale alternative location' (sally) licences will be offered.

Future use of 106-107 MHz

At present, the Authority's local radio licensing strategy provides for a mix of large-scale 'regional' licences, mainly using FM frequencies in the 105-106 MHz range, and 'small-scale' licences offering more localised coverage, usually utilising frequencies between 107 and 108 MHz. When implementing this strategy in 1994, following a wideranging consultative exercise, the Authority reserved its position on the eventual use of the middle third of the 105-108 MHz sub-band, i.e. frequencies between 106 and 107 MHz. However, in order to maintain a momentum of local radio development, the Authority had to decide how best to make use of these frequencies. Accordingly, the Authority invited informed views from interested parties about the use that might be made of 106-107 MHz, in April of this year.

The Authority has just announced (October 1998) that following its analysis of the responses to its consultation exercise, it has decided to use 106-107 MHz for a mix of further regional licences (up to around eight, possibly fewer) and small-scale licences.

The Authority concluded that further development of regional licensing would prove an effective means of broadening choice for a large number of listeners while also enhancing the commercial strength of radio. A total of ten regional licensees are now broadcasting; two others (in North-East England and Central Scotland) should be launched in 1999.

The Authority also took into account the evidence that many of the small-scale stations already licensed to serve individual localities and communities have also been well appreciated, and have shown their financial viability. It is the Authority's intention to continue to encourage innovation

through these small-scale licences. However, the use of the 'alternative location' (sally) approach when advertising licences for new small-scale services will not continue to any substantial degree. Instead, in order to assist the frequency planning within 106-107 MHz, the location of each small-scale licence will usually be specified at the time of advertisement.

New working list

Detailed advance frequency planning will be necessary for 106-107 MHz in order to ensure that each planned new station can be accommodated within the spectrum available, now that adjacent sections of the 105-108 MHz band are in widespread use by existing ILR services.

The Authority expects to issue an updated working list of planned new areas early in the New Year. The Authority does not have adequate frequency resources to add any further analogue services for London to its new list.

Digital Radio

The Authority has recently awarded the licence for the first and only national commercial digital radio multiplex service to Digital One. Digital One intends to provide ten programme services and, initially, plans to cover around 69% of the country.

Digital One

The GWR Group is the largest shareholder in the consortium with a 57 per cent stake, with NTL holding a 33 percent share and Talk Radio 10 per cent. The Radio Authority's decision to award a 12 year licence to Digital One, should see the start of commercial digital services, from 1 October 1999.

Ten services will be carried on Digital One's multiplex, the three existing national commercial stations, Classic FM, Virgin and Talk and seven new channels. These have been proposed as follows.

eriorities, rifese mare
Part-time stations
Club Dance
Plays/Books/Comedy
Rolling News
Sports

24 Hour stations Classic Gold Rock Soft Adult Contemporary Teen and Chart Hits

A separate 'working list' of planned local digital multiplex licences is printed below. Local digital licensing will begin in major markets and the first three licences to be advertised will be for: Birmingham (November), Manchester (December) and Greater London (January).

Digital Licencing timetable

The planned timetable is as follows:

The planned affice		
Licence area	Advert	Licence award
Birmingham	Nov 98	Jun 99
Manchester	Dec 98	Jul 99
Gtr.London I	Jan 99	Aug 99
Glasgow	Feb 99	Sep 99
Yorkshire	Mar 99	Oct 99
Tyne & Wear	April 99	Nov 99
Cardiff & Newport	May 99	Dec 99
Wolverhampton	June 99	Jan 00
Liverpool	July 99	Feb 00
Gtr.London II	Aug 99	Mar 00
Edinburgh	Sep 99	April 00
Leeds	Oct 99	May 00
Teesside	Nov 99	June 00
Bristol/Bath	Dec 99	July 00
Coventry	Jan 00	Aug 00
C. Lancashire	Feb 00	Sep 00
Northern Ireland	Mar 00	Oct 00
C. Scotland (reg)	April 00	Nov 00
Humberside	May 00	Dec 00
North-West (reg)	June 00	Jan 01
Severn Estuary (reg)	July 00	Feb 01
W. Midlands (reg.)	Aug 00	Mar 01
North-West (reg)	Sep 00	April 01
S. Hampshire	Oct 00	May 01
Norwich	Nov 00	June 01
Bradford/Hudd	Dec 00	July 01

About the Radio Authority

The Radio Authority is responsible for licensing and regulating Independent Radio in accordance with the statutory requirements of the Broadcasting Acts 1990 and 1996. It plans frequencies, awards licences, regulates programming and advertising, and plays an active role in the discussion and formulation of policies which affect the Independent Radio industry and its listeners.

You can contact us on: 0171 430 2724

e-mail: info@radio authority.org.uk

www.radio authority.org.uk

The 1998 Sony Radio Awards

Claiborne Mitchell reviews the 1998 Sony Awards

FAMOUS faces from radio and show business gathered at this year's Sonys, at The Grosvenor House in London, for an evening hosted by Maureen Lipman and Kirsty Young.

First announced was the Event Award; celebrating the production skills of the BBC - Network, Regional, Local and the World Service - for 'The Funeral of Diana, Princess of Wales', Peter Griffiths collected the Gold on behalf of the teams.

A kilted Nicky Campbell swished to the stage to collect a well-deserved Daytime Talk/News Award for 5 Live, for what the judges called outstanding radio. 'Parkinson's Sunday Supplement' walked away a winner with a unanimous decision by the judges who felt Michael's show on Radio 2, to be informative and intimate with a vivid anecdote to go with every record on the show. 'The Ed Doolan Show' was another presenter-led programme to score a Sony in the Weekend Award category. It was felt that his Sunday morning live show on BBC WM, successfully set out to make its own news, built on concern for the consumer and a deep knowledge of its patch.

The Evening Late Night Talk/News Award went to BBC 5 Live's 'Up All Night'. The judges complimented Rhod Sharp's intelligent approach. The Unique Broadcasting Company's 'Richard Allison Show' for Radio 2 took the Gold for Evening Late Night Music Award with the judges praising Richard's choice of music and exceptional level of broadcasting craftsmanship.

Another Independent company picked up a Gold for The Short Form Award; 'GRF Christmas Story', GRF Christian Radio for Clyde 1 FM was considered an imaginative piece of short, snappy storytelling that fitted perfectly with the pace and style of Clyde's programming.

The two Feature Awards were highly subscribed once again this year and the judges indicated two clear winners; BBC Birmingham Network Production's 'The Club That Scott Built' captured



John Revell, Alan Freeman and Chris Evans

the romance Ronnie Scott inspired, in a beautifully compiled feature. Radio 4's 'The Coroner', handled the sensitive subject of a young death, reminding us of radio's advantage over the TV fly-on-the-wall documentary.

Cornwall and London had the top Drivetime slots; BBC Radio Cornwall's Tim Hubbard picked up the Gold for his skill in presenting a good balanced news story and Radio 2's John Dunn was praised for his on-air warmth

Popular Radio 1 broadcasters Mark Radcliffe and 'Lard' took the Sony Gold for Daytime Music to the audience's delight. The Comedy Award was held high by the just slightly more controversial Talkback Production team and Chris Morris who produce the surreal 'Blue Jam' show.

Jayne Middlemiss took the Magazine Award Gold for the 'Top of the Pops Radio Show'. The judges were particularly impressed by the vibrancy and warmth of the show and the creation of a fresh format for radio. They noted that the drugs campaign was one of the best they had ever heard.

The glorious 'Songs of the Sufi Mystics', BBC World Service, took a well-deserved Gold for a Special Interest Music Award; the judges felt this programme used sound to create that sense of 'being there' that only radio can do best.

For outstanding craftsmanship and dedication to quality radio, four gentlemen from across the country were honoured. Piers Plowright was praised for a phenomenal body of fine work, longserving Roger Bennett, the voice from BBC Bristol was described by listeners and peers alike as an invaluably good friend. Alex Dickson of Radio Clyde, involved in commercial radio for 25 years, has remained at the microphone, and is held in high esteem for identifying and developing new broadcasting talent. Cliff Morgan also received warm applause from the industry.

Cliff Morgan remained on stage to present the Sports Award to colleagues, Victoria Pennock and John Inverdale, for their coverage of 'Wimbledon and The British Lions Test' on 5 Live.

Another team that picked up a Sony Gold was the Heart 106.2 Team for their 'Mobile Phone Olympics'. The competition played to the strength of radio - using sounds and voices - getting people to do the most extraordinary things live on air via the mobile phone. They took a simple idea and turned it into compulsive listening.

A portrait of Frank Lloyd Wright's Fallingwater, brought the listener into the heart of architecture, to see the most famous house of the 20th century take shape, from dream to a radical new American reality. 'Designs For Living: Fallingwater', by independent production company Just Radio, scooped the Gold in the Arts category. The Drama Award went to BBC Radio Scotland's vivid, 'The Trick Is To Keep Breathing', a creative and emotionally tense piece of work.

The atmosphere hotted up in the Great Room, as the winners of the key breakfast shows were announced. The 'Breakfast Programme' with Jane Garvey and Peter Allen' stole the Breakfast Talk/News Gold from Good Morning Ulster and The Today Programme. Cheering came from com-



Steve Jackson

mercial station Kiss FM as it was announced that Steve Jackson had won the Breakfast Music Award, with Terry Wogan and Chris Evans sliding in behind him.

The News Award went to the BBC for their coverage of the death of the Princess of Wales. The BBC also came up trumps in the Station Branding category, with 5 Live's entry clearly shining above all other entries.

The winner of the Community Award was Radio Ulster's excellent entry 'Breast Cancer Awareness Week'. A familiar subject to programme-makers and audience alike was treated in an informative and sensitive manner. The judges appreciated it's pace, clarity and it's moving and inspiring end.

Anna Raeburn spoke out on behalf of the independent sector as she received her Sony Gold for

the Talk News Broadcaster of the Year. Jo Whiley, of Radio 1, took the prestigious DJ of the Year Award.

Popular Moray Firth Radio strode away proudly with their third Sony Gold in a row for Station of the Year. BBC Radio WM was rewarded with the Station of the Year Award for a station with between 1



Jo Wiley

and 12 million listeners. For a station with over 12 million listeners BBC Radio 5 crowned their night by receiving the Sony Gold.

The evening was by no means over as we saw Alan Fluff Freeman come to the stage to say a few words about a certain pal of his and how this certain pal "liked the company so much he bought it", whereupon the room did finally erupt. The 1998 Sony Radio Awards presented Chris Evans with the coveted Sony Gold Award for his services to radio over the preceding 12 months which he humbly received, naming himself a mere custodian of Virgin FM! As the evening drew to a close all eyes were on next year's prizes...stay tuned.

Radio in his rucksack...

Cycling or pot-washing Graham Smyth is always listening

FORD QUARRY sits at the top of a Lancashire hill, between Burnley and the smaller town of Bacup. It is a Bermuda Triangle for radio signals. Actually, as a landfill site, it's a Bermuda triangle for lots of other stuff too, but that's another story.

More to the point, it's the place in my daily trip to work where Jazz FM (a regional station, theoretically covering North West England) disappears. There I'll be, fingers drumming on the wheel to some dudey Latin beat, round the quarry bend, and in cut sugary Classic FM strings - it's robbery with violins. The next bends form the battleground for duelling jingles, but ultimately it's Jazz FM left lying in the Pennine mud. I've dropped off their map of the North West, and it's time to re-tune.

But what the hell? Pre-7pm Jazz FM presenters are confined to playing their choice of about three selections from The Greatest Waitrose Muzak Hits Ever anyway, and flicking through the pages of this Radio Listener's Guide, there's loads of stations to choose from while waiting for the rescue services at the bottom of the hill (health warning don't read the Guide while driving).

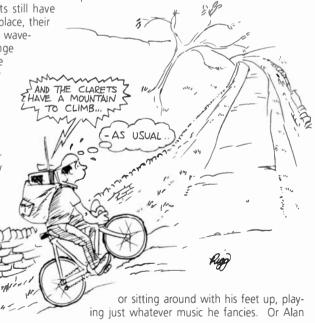
Not that everyone can be bothered with all that choice. Apparently, many wireless sets still have their tuners permanently fixed in one place, their owners unwilling to venture down the waveband to see what else is there. Strange admittedly, but I wouldn't want to take anything for granted about the way different people listen to the radio. I was introduced to a number of approaches through my production of radio 'fanzine' All Ears, between 1993 and 1998. Not everyone is even that bothered about listening to programmes. Avid correspondent Roy Davies in Deeside always gave the impression of being more interested in continuity announcers, such as "the ethereal Charlotte Green". whose reading of the Shipping Forecast he compares to Dylan Thomas' recitation of Under Milk Wood. Then there are the 'DXers', collecting far-flung stations / via short wave like stamps, without worrying too much about the

content. Others take on a monitoring role - a bit like MI6 listening slavishly to foreign stations their pens poised to catch any hint of rudeness or sloppy syntax.

Each to their own. Me? I like all sorts. I do mostly steer clear of those commercial stations which Frank Muir was on about when he said, "the names of all radio stations world wide are an anagram of anthrax." And there are some other right turn-offs. Radio's a personal medium, and you don't half resent the intrusion when someone you don't like tries to foist themselves on you.

Like Edwina Currie or David Mellor for instance. Why does radio employ these people? Let's face it - nobody would tune in specially just because it's them. But how many reach instantly for the off switch for that reason? I know I do.

Even with some of my faves, a hint of jealousy threatens to get in the way of total enjoyment, but I suppose it can be that way with your successful friends. You must know what I mean. There's Andy Kershaw, roaming round the world at the BBC's



expense

THE RADIO DATA SYSTEM (RDS)

THE RDS (Radio Data System) first appeared on radios in the early 1990s and is now found on many car radios and an increasing number of minisystems and HiFi tuners. There are not very many portable radios with an RDS capability. Radios equipped with RDS are usually marked with the RDS symbol.



What is RDS?

The system currently only works on FM, and operates by transmitting an inaudible additional signal to the radio. An RDS-equipped radio can use this information to help the listener in a number of ways, most of them listed below.

Station Name

RDS radios have an eight character display which shows the station name when tuned to an FM station that uses RDS. For example, Radio 4 would show 'BBC R4' on the display; BBC Radio Shropshire would show 'BBC SHRP'. This is a useful feature for quickly identifying stations when travelling, or when you are just scanning the airwaves to see what is on.

Automatic tuning

For stations with more than one frequency - all BBC networks, Classic FM, the BBC local network and some larger commercial local stations, RDS provides the radio with information to help it retune on the move. Each transmitter broadcasts codes advising the radio of the frequencies for the same service in adjacent areas. The radio is able to constantly compare these frequencies with what is currently used and select the best, retuning as necessary.

Travel Information

When a local station broadcasts a traffic report, an RDS radio tuned to it (or with EON - tuned to its



Sony ICF-M50RDS - one of the few portables with RDS

network) will interrupt normal radio or tape playback to broadcast the traffic report.

Enhanced other networks (EON)

Radios with an EON facility will pick up a BBC local station traffic report even when you are tuned to one of the BBC national networks. Unfortunately this won't work if you happen to be listening to Classic FM1

Programme Type (PTY)

Some stations code programmes according to their type. RDS radios which recognise these codes enable you to search for stations broadcasting a particular type of programme. Fifteen programme types have been defined - news, current affairs. information, sport, education, drama, science, culture, varied speech, pop music, rock music, easy listening, light classical, serious classics and other music types. This feature can be used to find programme types, or to interrupt the radio's normal operation in the same way as an RDS traffic report would.

Time and Date

Some RDS radios also display an RDS maintained date and time. The information for this is transmitted within the RDS signal and such clocks shouldn't need adjusting.

All BBC stations broadcast RDS information. Most commercial stations do, although not all support the travel announcement and programme type functions, RDS is a European standard and works while travelling in Europe - although I can't guarantee you'll understand the traffic reports!

Portables with RDS

RDS is most useful while you are on the move, and is therefore found most frequently as a feature in car radios. Portables with RDS include the Roberts R861 and R979, Sony's M50 RDS, SRF-M48RDS and the Grundig Yacht Boy 500 (currently unavailable in the UK). Sony also make an RDS bedside clock radio, the ICF-C20RDS.

AERIALS - IMPROVING RECEPTION

FM reception

The coverage of FM services in the UK is designed on the assumption that adequate outdoor aerials are provided.

Listening to FM on a portable set

For good indoor reception find the rooms 'sweet spot'. Try positioning the radio at different points in a room. Reception is often better near a window, and generally, the higher the set, the better the reception. For FM reception telescopic rod aerials should be fully extended, and tried at different angles until the best reception is found. Personal radios often use the earphone cable as the FM aerial. If so, make sure it is fully extended.

Outdoor FM aerials

These are normally connected to a HiFi tuner or radio which takes a co-axial connector. There are two main types.

Directional aerials

These have a number of elements. The more elements, (and generally the larger the aerial), the higher the gain, and the better the signal. Unless fitted with a small motor to rotate them (this can prove expensive!), directional aerials are usually aligned so that they point directly at one transmitter. This could be your nearest main BBC transmitter or another broadcasting your favourite station.

Near the South East coast, listeners should use a good quality directional aerial to minimise interference from continental radio stations.

Omni-directional aerials look all round with no directional

properties. The simplest of these is the Vertical Single Dipole, an example being Antiference's 'Radio Rod'.

They can be useful, as the proliferation of local radio stations, has resulted in signals coming in from all directions.

What does it cost?

Aerial costs vary. A simple omnidirectional aerial such as the 'Radio Rod' costs about £18 off the shelf (without installation); and a more complex 5 element directional aerial about £40. DIY stores such as B&Q offer their own versions.

For the top of the range aerials, installers like Ron Smith of Luton, will supply aerials like the Galaxie 17 (shown above). The Galaxie 17 costs about £100, with installation charged by the hour. Details of Ron Smith's aerial guide, are on page 124. Installation of a simple aerial is well within the capabilities of most DIY enthusiasts.

Aerials should ideally be mounted outside, although in good reception areas the aerial could be installed in the loft or roof space. They must be kept clear of metal objects. The metal foil cladding used in some forms of loft insulation, can cause problems.

Professional installation

For about £80 an installer will supply and install an average set-up. The aerial should be installed as high as possible, preferably above the ridge line of the building. The installer should use good quality cables and connectors. They should have specialist tuning aids and



Galaxie 17, directional FM aerial, with rotator

should be aware of local reception difficulties.

Polarisation

Traditionally, fixed aerials have been aligned with their elements positioned horizontally. However, to help car radio and indoor reception, horizontal-only transmissions, have nearly all been replaced by mixed (horizontal and vertical) transmissions. It is now normally better to align the aerial vertically.

MW and LW reception

Other than in cars, medium wave and long wave are usually received by the radio's internal aerial, often called a ferrite rod. On HiFi tuners this may consist of an external wire loop on a frame.

To find the best reception, the radio or loop needs to be moved round to find the best position. Watch out for interference from fluorescent lights, computers, televisions and videos, which affect LW and MW much more than EM

Short wave

On most portables the telescopic aerial is used for short wave reception. If you are not happy

AERIALS - IMPROVING RECEPTION

with reception try our 'top tip' for portables.

After that, if reception is still poor, you could try putting up a long wire aerial or installing an active antenna.

A **long wire** normally consists of a wire, about seventy five feet long, supported at each end with insulators, and connected to your set. See *Short Wave* magazine for dealers who will be able to supply the equipment.

An active antenna

This could be the answer to improving reception on LW, MW or SW, particularly if finding the space for a long wire aerial is a problem.

Datong Electronics supply the generally well-rated AD 370 active antenna. It costs £93.94 including VAT and delivery. Tel 0113 2744822

Our experiences

We have installed a number of aerials including a large highly directional FM aerial on a rotator (see picture opposite), an omnidirectional 'Radio Rod', and an active antenna.

Near Oxford, where I am based reception conditions for the main national stations are good. However, I noticed an improvement in reception quality with the installation of an external aerial, mainly because it moved the aerial well away from sources of interference; such as computers, TVs and fluorescent lights. This was more noticeable for medium and long wave stations, than for FM.

An omni-directional aerial is sufficient, and I noticed little difference in reception quality between this and more expensive directional aerials. For weaker FM stations such as Oxford's Oxygen, 15 km away and with only a 100 Watt transmitter, we get no reception on most portables. A quality FM portable gives reception with some interference. A basic external FM aerial, plugged into

a suitable radio (with a coaxial connection) gives good stereo reception.

For AM, an active antenna has improved reception of stations such as Atlantic 252. Not only increasing signal strength, but again reducing interference generated within the house. When listening to distant FM stations an external aerial has been essential. Tuning to Capital FM's 4kW Croydon transmitter over 100 km away with our radio's telescopic aerial extended, resulted in no signal. With either a Radio Rod, or directional aerial, reception was improved - with stereo reception and only a slight hiss and crackle. Deselecting stereo on the radio cut out most of the crackle.

Large directional, and rotating aerials come into their own when hunting out weaker FM stations, or cutting out interference from other transmitters.

In Car

Ideally go to a specialist, and check that cheap quotes aren't just skimping on the installation (poor quality cabling and connectors) and after sales service.

A good aerial is particularly

A good aerial is particularly important for FM reception. Aerials should preferably be roof mounted (the extra height improves reception and reduces interference), vertical and about 32" long. Most car aerials, and incidentally those on portable radios, are too short.

In Caravan

Remote holiday areas often have FM stereo coverage that is not as good as you are used to. Radios also tend not to work so well inside a caravan unless they have an outside aerial.

A simple and relatively cheap omni-directional aerial such as Antiference's 'Radio Rod' (£18) can help improve matters.
Alternatively, an omnidirectional, combined TV and Radio aerial is available from caravan centres, for about £90.

Portables-Top Tip

We found this idea in Passport to World Band Radio, and it really works!

Fasten (ideally solder) several metres of insulated wire to a crocodile clip. Clip this to your set's telescopic aerial, and use it like an extension to the aerial. Alternatively hang it outside a window - avoiding contact with power cables! It can really improve FM and short wave reception.

RECORDING FROM THE RADIO

I HAVE lost count of the number of times I have been asked about the best way to record radio programmes, so this year I decided to do some research. What I found, was that there are many ways to record, but no recorders that work as effectively as a video recorder does for television.

Let's assume that attended recordings - when you are at home and available to start your recorder are no problem. There are a few quality radios, and many portable cassette players and HiFi systems that can cope with this.

The problems

The problems start when you want to make unattended or timed recordings, and can be categorised as follows:

- Finding equipment that will make a simple timed recording.
- Being able set an unattended recorder to record more that one event. One event is simply turning the radio on, recording and then stopping, usually when the tape finishes. But what if you want to record 30 minutes of Radio 4, and then 30 minutes of Radio 3? This is two event timing, and something that even the most humble video recorder can cope with - but not I am afraid radio recorders.
- Finding a radio recorder that will record more than 60 minutes of radio (the length of a standard audio cassette).
- Recording programs while you are on-themove.

One event timed recording

You can buy quality digital radios with a built-in recorder. At the moment choice is limited to the Roberts RC828 at £220, (sold more cheaply by Tandy as the Realistic DX 392), or the Sony ICF-SW 1000T at £430.

The **Roberts RC828** is a large radio that offers simple one event timing. Using the radio's timer, you set it to come on and record. Recording con-



tinues to the end of the tape, which usually gives about 60 minutes of recording. The main advantage of the RC828 over cheaper cassette recorder based systems, that we look at later, is that it gives particularly good reception.

Sony's ICF-SW1000T is more sophisticated than the RC828 and much smaller. It has two event recording and also offers auto-reverse recording giving two hours recording time. The radio's two event system lets you specify a recording duration, and an on/off time for two separate events, that can involve recording from two different stations.

Cassette recorders that can make timed recordings.

A number of major manufacturers produce models, ranging in price from about £150 - £250. If you plan to record programmes of more than 60 minutes duration, it would be worth looking for models that offer auto-reverse when recording enabling you to record for up to two hours.

If you are willing to look at something larger, such as a mini or midi system, there are systems that can record the same programme daily and also have auto reverse tape recording.

Using a timer block

A cheaper option is to buy a basic cassette recorder (between £50-£100) that can't make timed recordings and link it to a timer block.

Digital timer blocks - cost about £20. Plugged into the mains, most timer blocks can be programmed to switch a radio or cassette on/off many times each day - or even at a set time (or set times), each day of the week.

To record with this set-up, first programme your timer block. Then all you need to do is choose your station, then set the radio cassette to record (usually by pressing play and record). Unplug the cassette and then plug it back in to the timer block. The timer block will then turn the cassette recorder on and off.

Recording on the move

Using a timer block is fine if you are at home, but what if you are on the move and can't plug in a timer block? One of my pet hates when sailing, is having to wake at the crack of dawn to catch the shipping forecast. Here, there are really two options. First, buy a radio with built-in cassette recorder - either the RC 828 or ICF-SW1000T.

A more flexible, and much cheaper option, is to use a compact voice activated cassette recorder linked to a radio that can be set to come on at a particular time. This feature is usually called

RECORDING FROM THE RADIO

'timer', 'standby' or 'alarm' on the radio, but as long as it allows you to program the radio to come on at a set time, it should do the trick.

You will then need to connect the radio's earphone socket to the cassette's microphone socket using a cable with an earphone plug at each end. These cost about five pounds.

Some radios such as the Sony SW 7600G and Roberts' R861 also have a 'line out' socket, useful for listening to the radio while recording, as plugging into the headphone socket mutes the radio.

To record, select your radio station and 'on' time, turn the radio off, and connect it to the cassette recorder. The important thing is, that when the radio comes on, it activates the **voice-activated** cassette recorder. Sony produce the TCM-453V



Sony TCM-S9V

(£30) and the auto reversing TCM-59V, pictured above (£119). Philips produce the AQ6340 (£35), and AIWA the TP-VS470.

I couldn't find any manufacturers currently producing a voice activated mini-disk recorder, but if and when they become available, they should be able to work in the same way.

Use a video cassette recorder

Many thanks to **Adrian Pickering** for the following information on using a video recorder to record radio

One of the constant irritations of the radio listener is that it is so easy to miss programs simply because there is no easy way of making timed recordings. In stark contrast, it has been relatively easy to record television programs on almost any domestic videocassette recorder (VCR) since their introduction nearly 20 years ago! In the last decade 'HiFi' VCRs have the capability of very high quality, stereo audio recordings. The signal is recorded with the video signal on the helical scan part of the tape which results in a performance comparable with digital audio tape (DAT), though the recording method is still analogue. All Nicam VCRs feature this capability.

In addition, modern VCRs have been designed for use with video camcorders and thus can record sound and vision signals direct from a camera or some other similar source. What is not so obvious is that most can record just sound only - they do not need to have a video signal to go along with the sound. This means that the output of a stereo FM tuner can be routed to the input socket(s) of a video recorder and the recorder be set up to record this source. If the 'long play' (LP) setting is used on a 240 VHS tape, up to 8 hours of recording can be done on a tape that costs less than £3! Indeed, this method is widely used by radio stations to make their legally-required transmission log. Wasteful though it may seem, this is actually the cheapest way of recording audio - cheaper than audio cassette. The additional advantages are the uninterrupted length and the audio quality, both necessary for satisfactory recordings of concerts. Though LP can cause degradation of picture, there is no quality penalty for using it for audio only, provided that the signal is recorded and played back using the HiFi mode.

To make timed recordings use the built-in timer as usual but ensure that 'channel' selected corresponds to the 'line in' source on the front or back panel. This is connected to the radio tuner as well as the HiFi, typically using 'Y' connectors, so that you can continue to select the tuner on the HiFi as usual. Unfortunately, the VCR timer cannot select the radio channel, so the tuner must be left powered receiving the required station. However, some videos have more than one 'line input'. So, if you have two tuners or one tuner and a satellite receiver tuned to, say, BBC World Service, then the timer can select between these. Of course, the timer can still be used to select among all the TV stations so the VCR can easily become the heart of

your programme time shifting operation. When it comes to listening, then use the VCR direct audio 'line output' connected to the HiFi system auxiliary input - you do not have to suffer the audio quality of your television set! Many HiFi installations are running short of inputs these days and an outboard source switch may be necessary to select between, say, the tuner and the VCR.

I have used this method with half a dozen types of VCRs over as many years. It is so successful that I now have one VCR now totally dedicated to radio logging! I hope that this tip will increase your radio listening pleasure as much as it has mine.

CHOOSING A RADIO

Before you buy a radio, decide what you want if for. If it is for home use, and stays tuned to Radio 4, there is little point in buying a £300 world band receiver.

AN EXPENSIVE radio doesn't necessarily improve reception!

If you're buying an expensive radio simply to solve a reception problem STOP! Read the section on aerials and improving reception first. A few simple steps, or a cheap outside antenna could be all you need.

Personal, portable or world band

Radios are often grouped into the above categories. Personal radios are very small radios 'Walkman' sized or smaller, designed for listening while you are on the move. Portables are larger and range from small sets operating only on batteries, to much larger radios with built in mains adaptors. World band receivers are sets with short wave coverage. Despite the fact that this guide does not cover short wave stations, we do look at world band radios - simply because many of the advanced features found in such sets improve FM, MW and LW reception.

Buy the best radio you can afford

When buying a radio, you usually get what you pay for. In particular, avoid the cheap unbranded receivers seen advertised in the press. They usually offer poor performance and poor reliability.

The DAB dilemma

Its worth mentioning here that DAB has finally arrived. Prices for DAB car radios are upwards of £700. Arcam's DAB tuner retails at £800. However prices will certainly fall over the next couple of years. Bear this in mind if you are planning to spend a lot of money on a radio; it might not seem quite so well-spent in several years time. DAB (digital portables) are not yet available.

Small size means small sound

The smaller the radio the more portable it may be, but it will have a smaller loudspeaker and will be much less suitable for playing at any great volume. Very small sets are often only suitable for use with earphones.

Check it covers enough bands

If you are interested in a radio that receives the majority of UK stations, choose a radio capable of receiving FM and medium wave. Choose long wave also if you want to listen to the World Service on 198 kHz, Atlantic 252 and Radio 4 on LW. There are still parts of the country where long wave is essential for good reception.

If you want to use the radio to listen to BBC World Service Broadcasts while travelling abroad, you will need a radio with short wave. Short wave is also useful in the UK, if you

The Jargon

AM stands for amplitude modulation. Used to describe the long, medium and short wave bands.

Analogue/Digital Analogue radios are those which work without a digital readout for tuning. They usually have a slide-rule style tuning dial.

Bands The broadcast bands are FM, medium wave (MW), long wave (LW) and short wave (SW) Multi band radios simply cover more than one band, but normally include short wave.

want to listen to broadcasts from other countries.

Digital or analogue tuning

This refers to the way the radio is tuned to a frequency. Analogue tuning sometimes termed 'mechanical tuning' usually operates by a control that moves a pointer across a tuning scale. Tuning is not as precise as digital tuning.

Digital tuning can be operated in a number of ways. Best of all, the frequency can be entered on a keypad. Other methods include a rotary tuning knob, or pair of switches, enabling you to scan up and down the



analogue tuning

frequency numbers until you find the frequency you want. Expensive radios often have both direct entry and scrolling features.

Digital tuning takes the guesswork out of finding a frequency and as far as we are concerned is preferable to analogue tuning.



digital tuning

Presets or memories

Presets allow the reselection of a favourite radio station with the touch of a button.

If you like listening to a range of stations they are an invaluable feature that really simplifies and speeds up retuning. They are a feature usually (although not exclusively) found on digital radios

Clock/Alarm Features

These do nothing to improve reception but can be useful additions to a bedside radio, or a radio used when travelling.

Batteries or mains

Avoid using a radio on batteries.

Batteries are up to 1000 times more expensive per unit of electricity than mains power. Reception can also be better on mains, as once the batteries start to run down, reception suffers. Digital radios tend to use more power than analogue and if you find you are spending a lot on batteries, consider using rechargeable batteries. Many portables can be used with an optional ac adaptor, which costs about £15.

Aerial

Cheap sets often skimp on the telescopic aerial, it is often too short and doesn't rotate.
Changing the angle and orientation of the telescopic aerial is an essential tuning feature for good FM reception. With many personal radios designed for use while gardening, walking or jogging, the earphone-lead also operates as an aerial. A telescopic aerial would get in the way.

RDS

Although it is now commonplace on car radios, there are a few portable radios and even one personal set with RDS. It is not an essential feature on a portable radio, but the station name display is a useful feature.

(See page 19 for more details about RDS.)

Stereo

Portable sets are often advertised as stereo, but only if you listen through earphones. If you want a louder and stereo sound, and aren't concerned about size, you could be better off looking at a stereo cassette or CD player with built in radio, or even a HiFi system.

...more Jargon

LCD (Liquid crystal display) Digital radios have an LCD frequency display.

Local/DX switch DX stands

for distance. This switch adjusts the sensitivity of the radio to improve reception of distant stations, or prevent overloading of the radio by a very strong local transmitter.

Presets (or memories)

Allow you to programme your radio with the frequencies of favourite stations

PLL (Phase Locked Loop) An electronic circuit in digital radios that locks onto your chosen station to give clear, drift free reception.

RDS Radio Data System

SSB (Single Sideband)

Only essential if you want to listen to ham radio and utility stations.

Selectivity The ability of the receiver to select the station is is tuned to, from all the others close to it on the dial/display.

Sensitivity The ability of the receiver to work with a faint signal. Useful if you want to tune to distant stations.

Synchronous detection

Found on top of the range Sony world band receivers. Improves reception on AM.

World Band

Another name for short wave.

CHOOSING A RADIO

Earphones can be used on radios with an earphone socket but without FM stereo, but depending on the socket used by the radio manufacturer, may only give sound from the left earpiece.

If you have special needs

We spoke to Help the Aged, The Royal National Association for the Blind and Wireless for the Blind. (Wireless for the Blind are a charity who help people who are registered blind, who are unable to buy their own equipment. Their details are given on page 125.)

All three organisations highlighted the problems that their members can face - radios that are not particularly stable, difficulties in tuning, replacing batteries, and operating the controls.

In particular people who are blind, or who have poor eyesight need radios that are straight forward to operate. Features to look for are presets, large buttons, controls that are easy to use. A good contrast between the buttons and the colour of the set can also help people who are partially sighted. We have looked at a number of radios suitable for those with disabilities and list our conclusions at the end of the reviews section.

Two radios commonly recommended for use by people with disabilities are Clarke and Smith's Easiplay, and Robert's RP28. To see how they perform, and how they compare to other radios, see the reviews later in the guide.

Buying - in the shop

Ask for a demonstration. Although most sales staff in the larger discount electrical stores specialise in HiFi, video and television, ask them to show you how the radio works. Check that you are happy with the controls and that the size of the radio provides sufficient volume for your needs. Remember that the quality of reception in the shop, (particularly on medium wave and long wave) will almost certainly be severely affected by televisions on display, or the steel structure of the building. If in doubt, try the radio outside.

Don't forget the accessories

Some radios are sold with batteries, ac (or mains) adaptors, carrying cases, and earphones; many are not. Check what extras are included. Some expensive radios don't seem quite so pricey when you consider that they come with the extras listed above.







Short wave

You generally get what you pay for with a short wave receiver. Cheap or unbranded radios generally lack quality and sometimes offer only partial coverage of the main short wave bands. They usually only allow you to listen to the stronger international broadcast stations. Before you buy one, check first that if covers the frequencies you want to listen to.

Also, never assume that an expensive short wave radio will enable you to listen to distant countries with the quality that you would expect from a nearby FM or AM transmitter. If you are interested in overseas broadcasts without the whistle and hiss of short wave, look at satellite radio, in particular the broadcasts of World Radio Network (WRN), who feed the output from a number of the world's broadcasters onto satellite.

If you are a serious short wave listener, and want detailed radio reviews, they can be found in *The Passport to World Band Radio* (see the booklist at the back of this guide), or on Radio Netherland's excellent Internet web pages.

http://www.rnw.nl/

Radio Netherlands also provide a simplified version of their guide for people who do not have internet access. You should write to-The English Language Service, Radio Netherlands, PO Box 222, 1200 JG Hilversum, The Netherlands

BUYING A RADIO

Shop around If you're looking for a bargain it's well worth shopping around. Expensive world band radios in particular, can often be found below their recommended retail price. The same applies to radios that are no longer made but are still on the dealer's shelves.

Different Badges There are a number of radios, which although badged by different manufacturers are in fact identical. This particularly applies to Roberts world band radios. Roberts have the licence to sell Sangean-made radios in the UK, under the Roberts brand name. This does not stop some companies from importing and selling almost identical Sangean receivers. Check that the cheaper radio has all the accessories included with the Roberts - if not, add them to the purchase price.

Mail-order Shopping The disadvantage of buying a radio by mail-order is that you do not have the opportunity to try out the radio - hear how it sounds or check the reception quality.

If you can't find a local radio supplier, have limited mobility, or are after a bargain, mail-order can offer a good way of obtaining a radio.

Most suppliers selling by mail-order, tend to concentrate on expensive top of the range radios, but they often offer them at much cheaper prices than the manufacturers recommended prices.

Postage and Packing You will normally pay for postage and packing - this is usually between £5 - £10. This is relatively low compared to the savings to be found on some world band radios, but is more difficult to justify on top of the price of a cheap (£10-£30) radio, unless you can't find the radio elsewhere.

Ring around Compare prices and ask what the supplier charges for postage and packing. Ask what guarantee comes with the radio.

Check availability Before you part with your money - ask whether the radio is in stock - and if so how long will it take for delivery. Some dealers send by overnight courier, others use parcel post

Use a credit card If possible pay by credit card. It is much safer than sending cash - with the additional benefit that many credit card companies provide insurance (for a limited time) for items purchased using their card. This may only cover items valued at more than £50 or £100 - so check your card's details first. Check that the radio supplier doesn't charge a surcharge for using a credit card to pay.

If you have to send cash Send cash by registered post.

Keep a record If you order by post keep a record of your order, or if by phone, the time and date when you made calls and to whom you were talking. This could be useful in the event of any problems occurring.

Warranty Most products are on a 12 month return-to-supplier warranty. You pay for shipping/postage charges back to the dealer if a fault develops.

Market Research Oct/Nov 1998

I looked at the prices for a number of radios, checking advertisements in the press and ringing round dealers. We concentrated on the more expensive world band radios where the largest savings can be made. Prices vary, so if you are interested in buying by mail order, we would recommend that you ring a number of suppliers to find the best deal. Almost without exception, when we looked, we

found the best prices at ASK Electronics. For example the Sony ICFSW1000T at £360 (RRP £430) - Sony SW7600G at £120 (RRP £180). They were also selling the Roberts R861 at £165 (RRP £200), and the Roberts R809 at £89.95 (RRP £100). We asked, no pun intended, about discounts for RLG readers but were told the prices were already at 'rock-bottom'. However, ask for Paresh if you call, and mention the RLG, he will provide free batteries.

Tandy were still selling the DX 392 at £149.99, a radio equivalent to the Roberts RC828 (RRP £220).

ASK Electronics, London (0171) 637 0353 Haydon Communications London (0181) 9515782 Nevada, Portsmouth (01705) 662145 O'Gormans, Bicester, Oxon (01869) 246612 www.ogormans.co.uk Tandy

(0990) 134935

WHICH RADIO?

IN THE following pages we first show the features of each radio under review in table form. This enables, a quick comparison of their features, price and our star rating.

After this, follows a picture of each radio, with our comments. We finish the reviews with our best-buy recommendations on page 51-52.

Categories Personal

Small, highly portable radios - ideal for use while out and about. Sizes vary from tiny cigarette-lighter sized radios to larger radios that you can still slip into a pocket. Most personal radios are designed for use with earphones, with the earphone cable doubling up as their FM aerial.

Portable

Portables vary in size from smaller than a paperback book, to much larger, barely luggable radios! To enter the category a radio must be capable of running on batteries.

Some radios are sold as world band receivers. World band simply means that the radio picks up short wave broadcasts.

We have made no separate distinction for world band radios and have included them within our portable section. We split portables into two groups, those with analogue and those with digital tuning.

Star ratings

The star rating system is based on a scale of 1-5. 1 is poor overall value and 5 excellent overall value. The rating is based on a number of factors - the quality of design, features, reception, sound quality and

A number of radios didn't easily fit our categories. We decided to review Clarke and Smith's Easiplay radio cassette, because its radio has unique features designed to help those with a visual handicap. It is included within the portable reviews.

Tandy's Optimus with TV was first drawn to our attention last year, but seems to have been dropped by Tandy this year, although you might still find it on the shelves of some dealers

The Bose Wave radio has been advertised widely in the press. At £275 it is not cheap. We looked at the radio to see just what you get for your money, and how well the sound quality matches the manufacturer's claims. The review is on page 31.

Photos not to scale

You should note, that so we could show as much detail. for each radio as possible. the photographs are not at the same scale.

Radio Suppliers

AIWA - (0990) 902902

Baygen - (0800) 7313052

Bose - (0800) 614293

Clarke and Smith -

(0181) 669 4411

Grundig - (0181) 3249400 (01788) 545827 At the time of writing, Grundig sell no radios in the UK. Grundig are considering relaunching some radios in 1999.

Morphy Richards

Part of the same group that owns Roberts. (See Roberts)

Panasonic - (0990) 357357

Philips - (0181) 6656350

Roberts - (01709) 571722

British company with a reputation for traditionally styled radios. They also rebadge Sangean world band radios with the Roberts label. for sale in the UK. Customer Helpline number

Tel 0181 7580338

Sangean

One of the world's largest manufacturers of short wave radios; both badging its own radios and producing sets in the UK for companies such as Roberts

Sony - (0990) 111999

Tandy - (0500) 300666 for nearest dealer. (0990) 134935 for orders. Tandy sell a range of radios, mainly their own brands. They also sell by mail order.

D				ma	in fe	atur	es		-	Pers	onal	(po	cket)	radios
	Price on the relievant	FM	MW	LW	FM Stereo	Digital tuning	Total presets	Autoseek tuning	RDS	Loudspeaker	Tone control	FM telescopic aerial	Weight g (inc batts)	RLG star rating
Boots RX 45	£ 10	•	•							V		~	270	***
Boots RX 45 Sport	£ 10	•		•						~		~	270	***
Philips AE 1595	£ 10	•	•										225	***
Sony ICF S10	£ 11	•	•					- Alle		~		~	202	***
Alba TR2501 (Sports)	£ 13	•	•		~	A COLOR STREET, STOCK OF							150	***
AIWA CR-AS15	£ 13	•	•							~		~	170	***
Sony SRF 49 (Walkman)	£ 20	•	•	-	~								95	****
AIWA CR-A55	£ 25	•	•		•						~		50	****
Philips AE 6360	£ 25	•	•		•						V		52	***
Philips AE 6745	£ 30	•	•		•	~	10	~			~		110	***
Roberts R981	£ 30	•	•		~						~		60	***
Roberts R984 (Sportsman)	£ 30	•	•	•	~								112	****
Roberts R972	£ 40	•	•		•	•	24	~			~		93	****
Sony SRF M32	£ 40	•	•		•	~	10						82	***
Sony SRF M606	£ 40	•	•		~	~	15	~			V		95	****
Sony SRF M806	f 45	•	•		~	~	15	~		~	~		100	****
Roberts R982	£ 50	•	•		~	~	18	~		•			138	***
Sony SRF M48 RDS	£ 60	•	•		~	~	15		~				161	**

(All the above radios had a socket for either an earplug or earphones)

reviews start on page 34

The lack of long wave

One of the surprises while reviewing personal radios last year was the lack of any sets with long wave. This year we have two models, Boot's RX 45 Sport and the Roberts R984 'Sportsman'.

Using the earphones lead as a FM aerial.

Many personal radios use the earphone lead as the FM aerial. Even if the radio has a speaker, you will need to ensure that the lead is extended to achieve the best possible reception.



Analogue P	ortal	ole	rac	lios			ma	in fe	ature	25				
OHOOD G	Price Price	FM	MW	ΓW	SW	FM Stereo	Total presets	Tuning indicator	Earphone socket	Loudspeaker size (mm)	Tone control	Ac adaptor*	Weight g (inc batts)	RLG star
Tandy 2 Band Radio	f 8	•	•							45			250	***
Morphy Richards R170	£ 10	•	•	•				~		75	~		740	**
Tandy Optimus Shower R	£ 10	•	•							75			640	***
AIWA FR-C10	£ 13	•	•					~	~	57			305	****
Tandy Steepletone MBR95	£ 15	•	•		•				~	50		0	270	**
Tandy 2 band with stereo	£ 15	•	•					~	~	75		0	500	***
Roberts Mayfair 6150	£ 15	•	•	•				~		100	~	b	1100	***
Roberts Chelsea 6169	£ 15	•	•		•			~	V	50	- Constitution	0	270	**
Sony ICF 390	f 16	•	•					~	V	66		THE REAL PROPERTY.	260	***
Bush (Tandy) R661	£ 20	•	•	•	•			~	V	100		b	1650	***
Morphy Richards Green Machine	£ 20	•	•					~	~	55		0	410	**
Panasonic RF-544	£ 20	•	•						~	80		b	650	***
Philips AE 2140	£ 20	•	•	•					V	100	~	b	1135	***
Roberts Knightsbridge 6155	£ 20	•	•	•	•				V	110	V	b	1546	***
Roberts RP15	£ 25	•	•	•					~	90	V	b	1300	***
Sony ICF 790L	f 25	•	•	•				V	V	102	V	b	975	***
Panasonic RF-3500	£ 30	•	•	•	•			~	V	100	V	b	1180	****
Roberts R862	£ 30	•	•	•	•			~	•	40		0	260	***
Sony ICFS70 Shower Mate	£ 30	•	•							77			575	***
Tandy Realistic 351	£ 30	•	•	•	•				~	50		0	260	****
Philips AE 3350	£ 35	•	•	•	•			~	~	50		0	340	***
Roberts RP16	£ 35	•	•	•			3		V	90	V	b	1300	***
Sony ICF 990L	f 40	•	•	•	•		3	~	~	100	~	b	1025	***

					mail	n fea	tures		A	nalo	gue	Po	rtabl	e radios
To	Price	FM	MW	LW	SW	FM Stereo	Total presets	Tuning indicator	Earphone socket	Loudspeaker size (mm)	Tone control	Ac adaptor*	Weight g (inc batts)	RLG star rating
Tandy Optimus†	£ 40	•	•					·	_	127	_	b	3200	****
Radio with TV									,	1 1 1	_		3200	1
Roberts R871	£ 40	•	•	•	•			~	~	65		0	670	****
Sony ICF-SW 10	£ 45	•	•	•	•	~		V	~	57		0	340	***
Baygen Freeplay FPR 2(S)	£ 60	•	•						~	102		0	2400	****
Sony ICF-SW 12	£ 65	•	•		•			~	•	45			240	**
Roberts R760	£ 65	•	•	•					~	55		р	1298	***
Roberts R757	f 80	•	•	•					V	70	V	р	1300	****
Roberts Revival 250	£ 100	•	•	•					•	70	V	р	1600	***
Roberts RP28	£ 100	•	•	•			6		~	100	V	р	1870	**
Roberts Revival 550	£ 130	•	•	•					V	100	V	р	2000	***

(* b - built-in, p - provided, o - optional extra), † - discontinued (old stock possibly still available)

Although this radio falls outside our main review areas - the Bose Wave radio has been widely advertised, so we thought it worth reviewing.

Rose - Wave radio

FM 87.5-108, MW 531-1602

PARTY

The Bose Wave radio has a flat design, rather like HiFi tuner, but has built-in speakers on either side of the radio. We liked the clean design and the large clearly labelled buttons on the radio's top. These are mirrored on a credit card sized remote control, that worked from up to 10m away. An alarm function gives 2 wakeup times

There are 12 presets, 6 FM and 6 MW. There is no long wave coverage, and no headphones socket or tone control. The radio has a 4m long, wire FM aerial, that plugs into a coaxial

socket Better still, if you have an external aerial, it can be plugged into this socket. FM reception with the supplied aerial was good - better than most standard portables, but not as good as a quality world band receiver. Auto seek tuning worked well to find strong stations. With an external FM aerial plugged-in, the quality of reception was very good.

Average MW reception. The fact that the radio is large and mains-only, can make for tricky MW reception, where turning a radio round to find the best reception angle for the internal

MW aerial is vital. There were no connections for an external AM / MW aerial.

Sound volume and quality for the radio's size was excellent, although no better we thought, than a quality stereo radio-cassette or HiFi system. Pros - clean uncluttered design with remote control operation, and very good sound quality. Cons - lack of long wave, average MW reception, and price!



Digital Po	ortab	le	ra	dic	S				1	naii	n fe	atur	es	37						
2	Price Price Price	FM	MW	LW	SW	FM Stereo	Total presets	Keypad frequency entry	PLL	Autoseek tuning	Clock	Alarm	SSB (Single sideband)	Tuning indicator	Earphone socket	Loudspeaker size (mm)	Tone control	Ac adaptor*	Weight g (inc batts)	RLG star rating
Tandy Realistic Radio with Clock	£ 25	•	•	•			15		~	~	~	~			V	55		0	420	**
Boots [†] RX 200 (RX 210)	£ 30	•	•	•	•	~	20		~	V	V	~		~	~	60		0	510	***
Sony ICF M260	£ 40	•	•				15		~		~					66		0	260	***
Sony ICF M350L	£ 50	•	•	•			15		~		~	~			~	77	•	0	430	***
Roberts R309	£ 50	•	•	•	•		20		~	~	~	~	ļ		~	95	~	b	1250	***
Panasonic RF-3700	£ 55		•	•			32			~	1		ś	~	~	100		b	1350	****
Sony ICF M760L	£ 55	•	•	•		[28		~		~	~			~	120	~	b	1364	****
Roberts R979	£ 60	•	•	•			30		~	~	~	V	- Company		~	90	~	b	1300	****
Sony ICF M50 RDS L	£ 60	•	•	•	1		15		V		~	V			~	92	~	b	880	****
Philips AE 3650	£ 70	•	•		•	V	20		~	~	~	V		~	~	nk		0	320	**
Roberts† R802	£ 80	•	•		•	~	20		~	~	~	V			~	45		0	280	**
Roberts R881	£ 80	•	•	Г	•	V	45	~	~	~	V	V		V	~	60	~	0	480	****
Sony ICF-SW 30	£ 80	•	•		•	V	15	П	~	~	~	V		V	~	66	V	0	448	***
Sony ICF-SW 40	£ 100	•	•	•	•	V	20		V		~	1			~	66	~	0	410	***
Philips AE 3750	£ 100	•	•	•	•	V	40	~	~	~	~	V		~	~	57	V	0	990	***
Roberts R809	£ 100	•	•	•	•	~	54	~	~	~	~	1		~	~	65	V	0	720	****
Clarke & Smith Easiplay (+cass)	£ 115	•	•	•		i i	15		~	~	~			1	~	100	~	b	2100	****
Grundig ^{††} Yacht Boy 400	£ 130	•	•	•	•	V	40	~	~	~	~	V	V	~	~	75	V	0	700	****
Roberts†	£ 130	•	•	•	•	V	45	~	~	~	~	~			~	45		р	390	***
Roberts R876	£ 130	•	•	•	•	V	54	~	~	~	~	V		V	~	45		p	390	****
Tandy Realistic DX 392	£ 150	•	•	•	•	~	45	V	~	~	~	~	~	V	~	75		0	2500	****
Roberts R827	£ 160	•	•	•		V	45	~	~	~	~	~	~	~	~	120		р	2500	***

						m	ain	fea	ature	es			ble	radios					
	Price	WW	ΓM	SW	FM Stereo	Total presets	Keypad frequency entry	PLL	Autoseek tuning	Clock	Alarm	SSB (Single sideband)	Tuning indicator	Earphone socket	Loudspeaker size (mm)	Tone control	Ac adaptor*	Weight g (inc batts)	RLG star rating
Sony ICF-SW 7600G	£ 180	•	•	•	V	22	~	~	•	V	V	~	~	~	77	~	0	615	****
Sony ICF-SW 100E	£ 200	•	•	•	V	50	V	~	~	V	V	~	V	•	40	~	0	220	****
Roberts R861	£ 200	•	•	•	~	307	~	~	•	•	~	V	~	~	65	~	р	851	****
Roberts RC828	£ 220	•	•	•	V	45	~	~	~	~	~	V	~	V	75	ŀ	р	2500	***
Sony ICF-SW 55	£ 300	•	•	•	•	125	~	•	~	~	~	~	~	V	77	~	0	850	***
Sony ICF-SW 77	f 400	•	•	•	~	162	~	V	V	~	•	V	~	~	125	V	0	1480	not reviewed
Sony ICF-SW 1000T	f 430	•	•	•	V	32	~	~	~	V	V	V	~	V	45	V	0	560	****

^{*} b - built-in, p - provided, o - optional extra, † - discontinued (old stock possibly still available), †† only available overseas



PERSONAL OR POCKET SIZED RADIOS

Boots - RX 45 ★★★

One of the larger personal radios with FM and MW. Walkie-talkie style with an FM aerial that pulls up, but doesn't rotate. The large tuning and volume controls worked well. The slide-rule style tuning display was easy to read. Batteries were included but not earphones. Limited sound from the small speaker. On earphones mono sound on left earpiece only. Little to

FM 88-108, MW 530-1600

choose between this and the Philips AE1595. The RX 45 Sport is almost identical to this radio, but boasts long wave coveage instead of medium wave.



Boots - RX 45 Sport ★★★



FM 88-108, LW 150-280

£10

One of the larger personal radios with FM and LW. There are not many personal radios with long wave - just this and Roberts Sportsman. They are in particular sought after by cricket fans, who want to tune to Radio 4's cricket coverage during the summer. This is a walkie-talkie style radio, with an FM aerial that pulls up but doesn't rotate. The large tuning and volume controls

worked well. Batteries were included but no earphones. Reasonable sound from the small speaker. On earphones mono sound on left earpiece only. A very competitively priced basic personal radio for those wanting long wave coverage.

Philips - AE 1595 ***

A walkie-talkie style radio with medium wave and FM. The FM telescopic aerial extends from the top of the radio. The radio feels well-built, and has a plastic handle that swivels out from the back of the set. The slide rule style tuning display is easy to read, and the controls operate smoothly. It is one of the heavier personal sets, although it is slightly lighter than the RX-45 and RX-

FM 88-108, MW 530-1600

E 5 1

AA batteries.
Reasonable reception, sufficient to pick up stronger stations. Speaker volume fine for personal listening. An earphone socket offered mono reception.

45 Sport. This radio is powered by two

A good basic radio with no frills, and at a low price



Sony - ICF S10 ★★★

This is an analogue walkie-talkie style personal radio. This is Sony's cheapest radio and it has very limited features. There is FM and medium wave, but no long wave. FM reception is unexciting and nowhere near as good as Sony's digital personal radios, SRF M606 and SRF M806. The small speaker gives fair sound for its small size. With earphones plugged in, you only get sound from

FM 87.6-108, MW 531-1602

the left earphone. A cheap radio - fine for anyone unconcerned about sound quality and looking for reception of strong FM and MW stations only.



728



This is a basic 'sports' style personal radio with FM stereo and MW. The radio has a grey and yellow casing with simple controls. Plugging the earphones into the radio turns it on. The grey text on the slide-rule tuning dial is not very easy to read. The radio includes a belt clip. Reception quality is sufficient for the stronger stations. FM stereo over earphones is good. Basic features - and

the cheapest personal radio with FM stereo that we found.

AIWA - CR-AS15 ***

Analogue FM / MW personal radio with speaker. This is a walkie-talkie style radio with FM telescopic aerial that swings out from the side of the radio. The antenna rotates in one plane - which is annoying if you want to lean radio flat on its back- and you are likely to do this as it's not particularly stable in any other orientation. The basic controls - volume, tuning and band

FM 87.5-108. MW 530-1605

selector all work smoothly. The slide-rule tuning dial is clearly marked. An LED tuning indicator works well to show the position of stronger stations. FM reception was good for stronger stations. The loudspeaker volume was also good for such a small radio. Although mono on FM, sound over earphones is good and was to both ears when listening on earohones.



Sony - SRF 49 Walkman ★★★★

FM 87.5-108, MW 530-1710

The Sony 'Walkman' is a medium sized personal radio. It has FM stereo, and comes supplied with a detachable belt clip and headphones with headband. The controls are large and easy to use. The tuning dial is particularly easy to read. Battery changing is easy, as the radio is powered by one AA battery. Sony claims that this gives about 40 hours of use. Very good clear reception

for stronger stations on FM and medium wave. I did not like the headphones supplied with the radio. I found them uncomfortable and they made my ears hot! I would take the first opportunity to change them for a simple set of in-ear earphones costing about £5. Apart from that, I liked this radio. It is simple to operate gives good reception, and feels well made.



AIWA - CR-A55 ****

FM 87.5-108, MW 530-1605

This is one of a number of tiny stereo FM / MW radios, that are little larger than a cigarette lighter. On a radio of this size the switches have to be small, and the on/off switch can be a little fiddly. The slide-rule tuning scale is small

too, but not too difficult to read. The radio is surprisingly sensitive and reception quality is excellent considering the size of the radio - it puts many larger radios to shame. Ustening is by earphones, which are provided - they also double-up as the FM aerial. The sound quality is very good with FM stereo and enhanced bass tone control. Just about the ultimate in miniaturisation, and one of my favourite personal radios.



One of a number of very similar cigarette lighter-sized radios. This is an analogue radio with reasonable stereo sound over earphones. The controls are small, but even so are fairly easy to use. Earphones are provided and double up as the FM aerial. The radio takes one AAA battery.

Reception is fine for stronger stations, but the small size of the tuning dial can

FM 88-108, MW 530-1600

make accurate frequency finding difficult. The radio also featured a 'bass boost' tone control.



(prepeny)

52.0

The AE6745 is a compact digital personal radio, about the size of a cigarette packet. It has a clear LCD display and five preset buttons. Ten presets can be programmed, five from each band. The radio has tone control in a feature it calls 'dynamic bass boost' The radio auto searches up or down, locking on to strong stations. The radio had good FM and MW

reception for the stronger stations. There is stereo on FM. Like all personal radios that use the earphones lead as their FM aerial, for good reception you need to make sure that this lead remains extended. The radio also came with an earphone winder, that worked in a similar way to an extendible dog lead, and kept spare cable out of the way. A competitively priced radio.



Roberts R981 ★★★★

Cigarette lighter sized radio with a loudspeaker. There are a number of very small personal stereo radios. This is the first that I have seen which incorporates a small loudspeaker. I found it useful having loudspeaker, it is not always convenient or comfortable to listen on earphones. These are provided, and need to be used if you want to listen to FM in stereo. The earphone wire

FM 87.5-108, MW 530-1710

doubles up as the FM aerial, so even if you are listening to FM on the loudspeaker, it will need to be connected. There is a bass boost tone control and a FM stereo/mono switch. Reception quality is similar to that of other radios of this type, and is fine for stronger stations.



Roberts - R984 Sportsman

broadcasts.

FM 87.5-108, MW 530-1710, LW 150-280

32.1

23.1

The Roberts R984 'Sportsman' is one of the few personal radio with long wave This radio has LW. MW and FM reception. It looks a well designed radio and has an easy to read tuning display. There is a detachable belt clip at the back of the radio. The radio works well, and the only thing I would like to change are the tuning and volume controls, which I feel are too small.

Reception was good for strong stations. Like most personal radios, searching for weak stations is difficult due to the limited travel on the tuning dial. FM stereo reception was good on the earphones provided. A good buy, particularly for people wanting to tune to long wave



Roberts R972 ****

A gold coloured compact, digital personal radio. The radio features ATS (Automatic Tuning System). This is on some Roberts world band receivers. It works by scanning through the band, selecting strong stations and adding them to the radios memories. It worked quite well on this radio - but did enter a few frequencies that were not strong stations and missed a few that I would

FM 87.5-108, MW 520-1710



have expected it to pick up. An easy to use memory system, with 15 memories for FM and 6 for MW. In addition 3 useful priority memories, either FM or MW, that could be recalled with the touch of a button. These were also not overwritten during ATS searches. A sleep function that turns the radio off after 90 minutes. One of my favourite digital personal radios.





FM 87.5-108, MW 531-1602





Digital personal radio with FM and MW and 10 presets. Presets are structured 5 FM and 5 MW. The presets are operated by 5 one-touch buttons. They were a little tricky to set-up, but once set, they were easy to use. Part of the problem in setting the presets and finding stations, was that the radio scans very slowly through the bands. There is a local/DX switch, but we

found reception was always better with this set to DX. The clock-display shows when the radio is turned off. The radio has a belt clip and earphones are supplied. The key protect system (or travel lock) works to prevent settings from being accidentally knocked. FM reception quality was fine for the stronger stations, with FM stereo on earphones.

Digital personal radio with 15 presets. This is one of two Sonys in this style. The M606 is earphones only. The SRF 806 is very similar, but also has a small loudspeaker. Both radios have a solid well-built feel. There are 15 presets, 10 for FM and 5 on MW. FM reception is fine for strong stations, but like most personal radios using their earphones lead as an aerial, not much good for

searching out weak ones. Raising and extending the earphones lead improves reception. Good stereo sound on earphones with 'mega bass' tone control. A good quality digital personal radio.



Sony - SRF M806 ***

This is a digital personal radio with all the features of the SRF M606, plus a loudspeaker. However you still need to use the earphones as they function as the radio's FM aerial 15 presets allow you to store 10 FM and 5 medium wave frequencies. FM reception fine for strong stations but the limits of using the earphones cable make weak stations more difficult to find. For its

FM 87.5-108, MW 531-1602

small size, the loudspeaker gave very good sound. Like the 606 the radio had a 'mega bass' switch offering limited tone control. Stereo sound over earphones was good.



Roberts - R982 ★★★★

This radio has a small speaker, a clock and alarm. The alarm triggers a buzzer, but does not turn the radio on. The radio has what is called APS (automatic preset system). It scans upwards from the frequency displayed putting in the first 9 stations found. I found it missed some stations I expected it to find, and added others that were too weak. An added

FM 87.5-108, MW 522-1629

disadvantage was that unlike the R972 where you could protect 3 favourite stations, the R982 would overwrite all memories in the band that you were scanning. 18 memories, 9 on each band. The small loudspeaker is useful for occasions when you don't want to listen on earphones. A separate FM aerial was provided for use when earphones are not being used.



SAME - CRE SAIR BIRG ++



FM 87.5-108, MW 531-1602

Fairly large personal radio, with RDS features that include station name, traffic announcement, alternative frequency search and clock. The radio has 15 presets, 10 FM and 5 MW. Small buttons on the side of the radio control scanning up and down the bands. There is no tone control. Listening is on earphones only, with FM stereo. The earphone cord doubles up as the FM

aerial. It is important to make sure the lead is extended or reception will suffer. This was particularly important on the M48 RDS as FM reception sensitivity was poor, and not as good as Sony's SRF M606 and M806. RDS station name worked on stronger FM stations only. I found the RDS features of limited use, the radio was bulky and at £60, was expensive for a personal radio.

ottolad

ANALOGUE PORTABLE RADIOS

Tandy - 2 Band Pocket Radio ★★★

FM 88-108, MW 540-1600

£8



This is a small FM/MW analogue portable that could almost squeeze into the personal range. The catalogue number is 12-9462. It is a simple radio with no frills and only the basic controls. The slide-rule tuning scale is clear and easy to read. The aerial only pivots in one plane. The stiff battery compartment lid would cause problems for anyone with weak fingers. The radio

had good FM sensitivity although the small tuning scale made finding stations a little difficult. The loudspeaker gave good sound for a radio of this size. A reasonable radio for the price.

Morphy Richards - R170 ★★

FM 88-108, LW 150-260, MW 530-1600

610



Basic analogue portable radio with FM, MW and LW. The radio has a green plastic casing with a no-frills design. The slide-rule tuner moves painfully slowly across the dial. There are no earphone or mains sockets. FM reception has limited sensitivity. We found the tuning LED to be of little use, it stayed on while

tuning across the entire FM band. There is good sound volume with a rotary tone control switch. We didn't feel that this radio was a particularly good buy. It was too big and basic to be a useful portable, and the lack of mains capability would make it expensive to run if used frequently.

Tandy - Optimus Shower Radio ★★★

FM 88-108, MW 530-1710

£10



Portable, water resistant FM and MW radio. The radio is promoted as one that could be used in a shower, although there seems no reason why it couldn't be used anywhere where a radio could be splashed. The makers do however point out

that it is water-resistant, NOT waterproof. Disappointing reception and lack of an external telescopic FM aerial, make this radio only suitable for listening to stronger stations. It automatically switches off after an hour. This radio has dropped in price, from £20 last year, and now offers reasonable value.

AIWA - FR-C10 ****

FM 87.5-108, MW 530-1605

3 E

Small portable with FM and MW. Neat looking radio with basic features and no frills. The controls are of reasonable size and easy to use. A useful hinging stand enables the radio to lean-back in a stable position. The slide-rule tuning display operates smoothly and is clear to read, but like many analogue sets the calibration is a little inaccurate. Although the radio has a short (35cm) aerial it was

reasonably sensitive on FM. However the tuning LED is too sensitive for strong reception areas, and stayed on most of the time. Speaker sound quality is reasonable for the size of radio. Mono sound on both ears with earphones. Good choice if you are on a limited budget, and want a basic small portable.





Very compact, budget world band receiver. Apart from a few cosmetic differences, this radio is identical to the Roberts 'Chelsea', and sells for the same price. The lack of long wave is a disadvantage. The small text on the slide-rule display was difficult to read. The basic telescopic aerial rotates in only one plane. There is no lean-back stand. The loudspeaker

sounds fine for radio of this small size. Good mono sound to both ears using a set of in-ear style earphones (not included). FM reception sufficient for stronger stations but very limited for weaker ones. The cheapest set we looked at with short wave, but it had unexciting performance.

Tandy - 2 band portable with stereo ★★★★

FM 88-108. MW 530-1710

277

Analogue FM/MW portable with twin speakers and stereo. Although there are plenty of large radio cassettes offering stereo, this is one of the few portable radios we've seen offering FM stereo on twin speakers. Simple and clear analogue tuning scale, with FM stereo tuning indicator. The radio can be run from the mains with an optional ac adaptor. Reception was fine for the

stronger stations. Sound quality through the two 75 mm speakers was excellent. The stereo quality was good on earphones too. A balance control allows adjustment of output between the speakers. The radio is equipped with a fabric carrying strap. A good buy if you want stereo and volume from your portable.



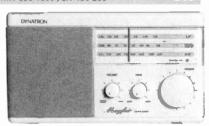
Roberts - Mayfair 6150 ***

FM 88-108, MW 530-1600, LW 150-260

273

The Roberts Mayfair is an analogue portable radio with built-in mains adaptor. It is the same size and is very similar in design to Morphy Richard's R170. The Mayfair however has a white casing like other radios in the Roberts Dynatron range. I was not keen on the colour, which can quickly mark and show grubby fingerprints. The Mayfair has a slide-rule tuning scale, and rotary

tuning, volume and tone controls. A tuning level LED gives a good indication when you find a strong station. Reception quality is sufficient for stronger stations. Sound quality is good for the size of radio, but there is no earphone socket. Reasonable performance and a useful built-in ac adaptor.



Roberts - Chelsea 6169 **

FM 88-108, MW 525-1620, SW 7 Bands

FM 87.6-107.5, MW 531-1602

7313

DYNATRON

MW JW 1.7 PM

W 1 P 1.7 PM

W 1 P

Small, white, world band portable, without long wave. The Chelsea is one of the Roberts Dynatron range. This model is almost identical to the Steepletone MBR 95, sold at the same price by Tandy. The radio we tested had a circular hole in the rear of the casing (where a printed patch was obviously missing) large enough to enable a finger to short circuit the radios circuit board.

Batteries were tricky to remove from the set. Station selection is difficult for weaker stations due to the limited travel of the small slide-rule tuning scale. FM reception was relatively insensitive, and not a patch on the Roberts R862. The small speaker puts out limited sound. Mono sound on earphones. Budget set with limited features, and mediocre performance.

Basic analogue portable, with FM and

for the size of radio. There was no tone control. A good basic radio.

MW but no long wave. This radio is very similar in size and feel to AIWA's FRC 10. A rotary wheel provided volume and on/off control. The radio has an uncluttered and clearly labelled tuning dial. FM reception was good for the radio's price, and considerably more

sensitive than many of Sony's personal radios. Sound quality was crisp - good

W/J88 92 96 100 104 107 werd

- Comments

Large portable radio with FM, MW, LW and SW and a built-in ac adaptor This radio is sold in Tandy stores. Although it is a budget set with simple controls, there is a nice feel to the analogue tuning dial and clear frequency labelling. As the radio's instructions rightly point out, the tuning LED is more suited to MW and LW use, than to FM. In the UK's relatively crowded FM band,

the LED stays on all the time FM reception is reasonably sensitive with good reception for strong stations Fairly loud volume from the large speaker with mono sound to both ears on earphones.



FM 88-108, MW 535-1610

Morphy Richards - Green

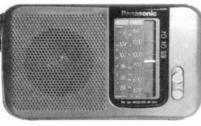
Small solar and dynamo powered radio with FM and MW. The radio's internal Ni-Cad battery can be charged by solar cells on the radio's top, turning a handle to operate a dynamo; inserting batteries into the radio, or using an ac adaptor (not supplied). You can listen to the radio while it is solar charging, although this will slow down the speed of charging. The radio requires strong

11 155 *×

sunlight. Turning the dynamo is noisy so you can't listen at the same time 2 minutes cranking gives about 6 minutes play The handle looks as if it could easily break. The limited travel of the tuning wheel and poor sensitivity means that the radio is only really suitable for listening to strong stations Interesting power supplies, but not a very practical or robust radio.

Panasonic - RF-544 ★★★★





FM 87.5-108, MW 520-1610

Basic analogue portable with FM and MW and a built-in ac adaptor. There is no long wave coverage. A solid radio, with large controls and a large tuning dial pointer. A carrying handle hinges behind the radio The FM telescopic aerial only rotates in one

plane Reasonable FM sensitivity, fine for stronger stations. Good sound volume for the size of radio although it would have benefited from a tone control. On earphones, mono sound from left ear only, Bottom line - basic, well-built radio with limited features and reasonably sized speaker. A good value set, and one of the cheapest with a built-in ac adaptor

Phillips - AE 2140 ***



FM 88-108, MW 520-1610

The Philips AE 2140 is a basic analogue portable with a built-in ac adaptor The radio has a carrying handle that hinges neatly into a recess at the back of the set. The radio takes 3 D type batteries, which Philips claim will give 200 hours of battery life. The radio has a fairly clear layout and display, although the tuning dial

was difficult to use unless the radio was at eve level. Good FM and AM reception for

stronger stations. Sound quality was very good.

Roberts - Knightsbridge 6155 ★ * *

FM 88-108, MW 530-1600, LW 150-260, SW 5900-18000

speakers and a built-in mains adaptor This is the largest radio in the Roberts Dynatron range. There is a slide-rule tuning scale, large tuning wheel and bass and treble controls. A cosmetic line of 5 LEDs on the left side of the tuning scale give an indication of volume level, not signal strength. Reception quality is

Large white analogue radio with twin

quality is good and the radio can be played at a fairly loud volume before distortion sets-in With earphones, the radio gives mono output to the left earpiece only.



sufficient for strong stations. The sound



3 band analogue portable with a built- in ac adaptor This is a solid-looking radio, with large easy to use controls. The slide-rule tuning display is clear to read and has the approximate positions.

of some national stations ready marked. Reception is fine for the stronger stations. Loudspeaker volume is very good and there is a high/low tone switch. Mono reception on earphones. The RP15 is a good basic household radio.

Sony - ICF 798L ***

FM 87.6-107.5. LW 153-255. MW 5341-1602



This is a 3 band radio with a built-in mains adaptor, It is a medium size portable about the same size as the Sony M50 RDS. It has a simple slide-rule display, with rotary tuning, volume and tone controls on the side

of the set. A retractable carrying handle, hinges back when the set is in use. The LED tuning indicator works well to show the position of stronger stations and the set itself shows average FM sensitivity. Sound volume is good from the large speaker. Mono sound only from the earnhone socket.

Panasonic - RF-3500 ***

FM 87.5-108, LW 144-288, MW 520-1611, SW 7 bands

rem

Medium sized analogue portable radio with FM, MW, LW and SW and a built-in ac adaptor. The radio is confusingly also badged with the name GX500. It is a well-built radio with large rotary tuning and volume controls - easy to use even if you have weak or stiff hands. The clear slide-rule tuning scale has reasonably sized lettering. The LED tuning indicator was little use on FM, it

stayed lit all the time. Better than average FM reception - good for stronger stations. Earphone reception was mono, left ear only. The 100 mm speaker gives good sound quality- sufficient to cope with a noisy room. There is a high/low tone switch. The bottom line - a good value household radio.



Roberts - R862 ***

about the best that we found for this

size and type of radio. Useful LED

Very compact world band analogue receiver. This radio is also sold by Tandy as the Realistic DX-351. Simple and easy to use controls, slide-rule tuning dial works well. The FM telescopic aerial rotates in only one plane. Stability would have benefited from a lean-back stand. FM recention sensitivity was

FM 87.5-108, LW 150-28, MW 530-1710, SW 9 Bands

tuning indicator. However reception is still not as good as a top quality digital PLL receiver. Speaker and earphone sound quality very good for its size, although FM reception is mono only. Roberts basic entry level world band portable, and one which we liked a lot.



Sony - ICF S70 Shower Mate ★★★

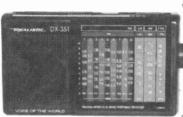
FM 87.6-108, MW 530-1605

三生石

The Sony Shower Mate ICF S70 is a white battery powered portable for use in showers or bathrooms. The radio is splash resistant - not waterproof. The radio gives reasonable reception on FM and MW. The wire FM aerial needed to be extended for good reception. A rubber suction cup is provided to help do this and to orientate the wire. Reception was perfectly acceptable for

stronger stations, but not sufficiently good to find weak ones
A strap was also provided to enable the radio to be hung in the shower. If it is left on, the radio automatically switches off after about an hour to save the batteries.





Very compact world band analogue receiver. This radio is also sold by Roberts as the R862. Simple and easy to use controls. The slide-rule tuning dial works well. Generous 600mm telescopic aerial (for the size of set) rotates in only one plane. Stability would have benefited from a lean-back stand, FM reception sensitivity was about the best that

we found for this size and type of radio. Useful LED tuning indicator. However reception is still not as good as a top quality digital PLL receiver. Speaker and earphone sound quality very good its size, although FM reception is mono only. A useful world band portable, its compact size make it ideal for use when travelling.

FM 87.5-108, LW 149-283, MW 527-1606, SW 9 bands



The AE 3350 is an analogue world band receiver with - FM, MW, LW and 9 SW bands. It has a good layout with large rotary tuning and volume controls that are easy to use. I didn't like the 'play' that was in the tuning knob on the model I tested. A sliding on/off switch acts as travel lock. A useful lean-back stand enables stable

operation. A carrying pouch was included. The radio showed sensitive, and better that average FM reception. There was good sound from the small speaker, but no FM stereo on headphones.

Roberts - RP16 ***

FM 87.5-108, MW 525-1605, LW 147-284

The RP 16 is a 3 band analogue radio with a built-in ac adaptor and presets. This is a solid looking radio, with large easy to use controls. The slide-rule tuning display is clear and easy to read. The 3 FM presets are set-up using 3 associated tuning knobs on the back of the set. They are a little fiddly to set-up However once they are set-up, the presets are straightforward to use. Good reception for the stronger stations. Loudspeaker volume is

very good and there is a high/low tone switch. Mono reception on earphones. At £35 one of the cheapest analogue portables with presets.



Sonv - ICF 990 ***

FM 87.6-107.5, LW 153-255, MW 531-1602, SW 5950-18000

Large analogue portable with a built-in ac adaptor, 3 FM presets and short wave. Solidly built radio with a nice feel to the large controls and clear labelling on the tuning dial. The 3 FM presets are set by 3 separate tuning knobs - neatly hidden away on the back of the set. Operation of presets is by buttons on the top of the set.

pulling-in some weaker stations. The LED tuning indicator works well. Good sound volume from the large 100 mm diameter speaker. One of our top choices if you are looking for a large analogue portable.



FM reception is good, with the radio







A very large portable radio with FM. MW and TV frequencies, but no long wave. There are rotary treble, bass and volume controls. TV channels are found on the UHF bands. Tuning to a TV channel is simply matter of selecting the UHF band for the required channel and tuning with the slide-rule style display. If you are switching from FM to UHF television

reception you need to use a screwdriver to adjust the antenna connectors on the back of the set. The same primitive terminals let you connect an external AM, FM, or UHF aerial. FM reception quality is good. Excellent sound volume for a portable radio from the huge speaker. Recommended for its unique TV coverage. Discontinued by Tandy in 1998 - but possibly still available in some outlets.

The R871 is an FM, MW, LW and SW analogue receiver with a digital clock. The clock includes useful alarm features. and the same LCD display incorporates a calender. The large controls are clearly laid out. The tuning scale is large and easy to read. We did notice on our model that the calibration was a little out; 102 9 appearing at about 104 on the dial. However this is not unusual, as

many analogue tuning scales are relatively inaccurate. A lean-back stand allows stable operation of the radio. A large backlit power button shows that the radio is turned on. Reception quality was good for all the stronger stations. There was good sound quality and volume from the loudspeaker



Sonv - ICF-SW 10 ***





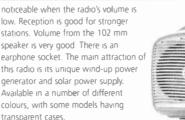
FM 87.6-108, LW 153-279, MW 530-1602, SW 4750-21975

The ICF-SW 10 is a compact analogue world band receiver. Although it offers SW coverage. there is no local/DX switch or socket for an external AM aerial. The tuning knob felt too light and had some play. It has a lean-back stand. The radio has a basic LED tuning indicator. FM reception is good for stronger stations, but not particularly good for weaker ones. SW reception is fine for stronger stations. The average sound quality from the speaker could have been improved by a tone control. Although Sony's brochure indicated that the radio has FM stereo through earphones, the sound quality seemed 'flat' when we tested the radio.

Baygen - Freeplay FPR 2 ****

This radio now comes in three types. Original FPR2, FPR2S (solar assisted) and

FPR2SC (clear case with solar). The radio operates from power generated by a wind-up generator (up to an hour from a 30 second wind), or from power generated by the radios solar cells. These work well in strong sunlight. There is a slight sound while the generator unwinds, but this is only FM 88-108, MW 500-1700







FM 87.6-108, MW 530-1605, SW 4750-21750

Small cigarette packet-sized world band radio with a hinging lid. Don't confuse this radio with the digital Sony SW 100E, which looks similar, is also cigarette-packet sized, but costs three times the price! Unlike the SW 100E this set is analogue, and lacks long wave coverage. It has no FM stereo and no tone control. The clock shows on a separate liquid crystal display and has

an alarm. Average FM reception with a tuning indicator that works well to show stronger stations. There is reasonable sound volume for the size of loudspeaker. Mono sound on earphones.

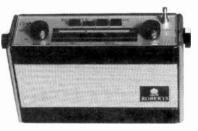
Roberts - R768 ***

The R760 is a 3 band analogue radio with FM, MW, LW. This is one of Roberts' Classic range It has an all-wood front. The rotary tuning and volume controls, and push button band selectors are all on the top of the radio Reception quality is good and the set easily picks up the stronger stations Sound quality from the speaker is good, with mono sound on earphones.

FM 87.5-108, MW 552-1620, LW 150-281

Traditionally styled portable with hardwood ends. One of Roberts' 'Classic' range. The radio picks-up FM, MW and LW with an ac adaptor included. Stable radio, with all controls clearly labelled on the top of the radio. The rotary tuning and volume controls are smooth to operate, with a clearly labelled slide-rule tuning dial. The main national stations were marked in their

approximate position on the dial. Push buttons are used to select bands and tone options. Good FM sensitivity and selectivity, we even picked up a few weaker stations. Good sound from the speaker, with mone FM reception on earphones. For £80 we felt that the radio had limited features (and no presets), but if you are prepared to pay for the styling, the set is a good buy.



FM 87.5-108, MW 552-1620, LW 150-281

661010



1950's styled portable with wood frame and leather finish and a choice of colours - blue, red or green Underneath the styling, the features and performance are almost identical to Roberts R757 Battery or mains operation with ac adaptor included Stable design, with all controls clearly labelled on the top of the radio Smooth to operate, and clearly labelled slide-rule

tuning dial. The main national stations were marked in their approximate position on the dial. Push-buttons select bands and tone options. Rotary tuning and volume knobs. Good FM reception and good sound from the speaker; with mono FM reception on earphones. Even more expensive than the Roberts R757, but again, if you are prepared to pay for the styling, the set could be a good buy

**

FM 87.5-108, MW 552-1620, LW 150-281

Large portable, traditionally styled with hardwood ends 6 push-button presets - (4 FM, 1 MW, 1 LW). We found the presets tricky to set up. Each preset button has an associated tuning knob that acts as a mini frequency dial. This is used to find the frequency you want to preset. It helps to have another radio playing nearby so that when you find a station you can check that it is the right.

one Reception is reasonable, but limited tuning features make weaker stations difficult to find. Reception is not as good as the Roberts R757. The loudspeaker's sound volume is very good. Sound only from the left earphone. Not the easiest presets to setup, but once they are programmed, the radio is easy to use.



Roberts - Revival 550 +

FM 87.5-108, MW 552-1620, LW 150-281

0 E F 7.



Large analogue 1950's style portable, with a wood frame and leather finish, and a choice of colours - blue, red or green. This is a larger version of the Revival 250. Battery or mains operation with an ac adaptor included. This is a stable radio, with all controls on the top of the radio. Controls are smooth to operate, with a clearly labelled slide-rule tuning dial. The main national stations

were marked in their approximate position on the dial. Push buttons to select bands and tone options. Rotary tuning and volume knobs. Good FM reception. Very good volume from the speaker, with mono FM reception on earphones. If you are prepared to pay for the styling, the set could be a good buy.

DIGITAL PORTABLE RADIOS

Tandy - Realistic Radio with Clock ★★

FM 87.5-108, LW 146-281, MW 531-1602

The Realistic Radio with Clock is a PLL portable with FM, MW, LW and a clock with alarm features. The Tandy catalogue number is 12-9150. The 15 presets (5 FM, 5 MW and 5 LW) are straightforward to set. The radio comes with simple but effective plastic rectangle that 'plugs' into the back of the radio and allows it to recline. The auto seek tuning worked to pick out.

strong stations FM reception quality is poor for a PLL digital radio, with only limited sensitivity and selectivity. The small speaker has a tinny sound - with mono reproduction on earphones A very cheap digital portable, with very limited performance.



Boots - RX 200 (RX 210)★★★

FM 87.5-108, MW 531-1602, LW 146-281, SW 5950-15600

EETI

A compact digital portable with short wave Straightforward layout, although the small lettering alongside the buttons can be difficult to read. Awful feel to the volume sliding control. The set is not particularly stable, and would have benefited from a back stand. The clear LCD display, shows either the frequency or clock time. The 20 presets, 5 for each band were very simple to set-up and

use Auto seek tuning works well to pick out stronger stations. Reception quality was fine for stronger stations. Reasonable sound quality from the loudspeaker. We noticed a slight hiss on FM stereo on earphones. It was good to find that batteries and earphones were included.

The RX 200 is due to be replaced by the RX 210.



Searcy - Int Basish +++

FM 87.5-109, MW 533-1602

Sony's cheapest digital portable radio. This is a compact portable with 15 presets, 10

FM, 5 MW The radio doesn't have long wave. The radio uses a 'Jog' dial to tune up and down the bands - this didn't seem as precise and easy to control as a tuning knob or up/down tuning buttons. The key

protect system, found on many digital Sonys, works to prevent settings being accidentally changed, or as a travel lock to prevent the radio being accidentally turned on. FM reception was fine for stronger stations. There was no tuning indicator. Reasonable sound from the speaker and mono sound in only the left ear with earphones.

Schiya leadinged ***

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FM 87.6-107.5, LW 153-279, MW 534-1602

Digital portable radio with 15 presets. Although this radio had a solid well-built feel and had clock and alarm features, it lacked some basic features that make life easier for the radio listener There was no tone control, no tuning indicator, and no auto seek feature to help hunt-out the stronger stations. There were 5 presets on each band FM reception was nothing to

Sony - ICF M350L ***

write home about, good for strong

stations, but with a fair amount of interference coming through on the weaker ones. Loudspeaker sound quality was good. Reception on earphones was mono, left ear only.





4 band, PLL digital radio

with 5 presets for each band. This is a fairly large portable with a built-in ac adaptor. The controls are large and straightforward to use. In particular the presets were a very useful feature, and were simple

to set-up. The radio has a built-in digital clock, with alarm features. The auto-seek tuning feature worked well, and reception was good for all the stronger stations. There was good sound volume and quality from the large speaker with tone control.

Panasonic - RF-3700 ★★★★

FM 87.5-108, LW 144-288, MW 522-1611

I-E

Digital portable radio with 32 presets and built-in ac adaptor. Although Panasonic call this model the RF-3700 it is somewhat confusingly also badged with GX700 in large letters. The radio has 2 FM bands, MW and LW. The benefit of 2 FM bands is that it gives an extra 8 presets for FM stations. Manual memory setting works well, but the auto memory feature didn't work

particularly well - it stored too many weak stations - otherwise a well designed radio. Clear LCD frequency display, easy to operate controls - tuning knob, presets and up/down tuning buttons FM sensitivity better than average for this type of set Good sound volume from the 100mm speaker with 2 position tone control. Mono sound on earphones



Sony - ICF M760L ***

FM 87.5-108, LW 153-279, MW 531-1602



This is a large portable with 28 presets and a built-in ac adaptor. It is a relatively new addition to Sony's range that should sell well. There are 7 presets on each band, with 2 FM bands this gives a total of 14 FM presets. The large rotary tone and volume controls.

are easy to use. Tuning is by a Sony 'jog' style tuning knob, which is straightforward to use. There is no tuning indicator. FM reception was good Sound quality and volume were good from the large loudspeaker. Mono reception on earphones.

The radio comes in three versions.

760L FM/MW/LW, 760S FM/SW/MW and 760SL FM/SW/LW.

Roberts R979 ****

FM 87.5-108, LW 144-281, MW 522-1620

£50

The R979 is an RDS portable, with PS name, Clock Time, AF, Traffic reports and EON. (See page 19 for an explanation of RDS features.) The radio has easy to use controls and a clear LCD display. There are 10 presets for each of the bands - giving 30 in all. There is a built-in ac adaptor.

I tested the R979 alongside the Sony M50 RDS. The R979's RDS was less

sensitive than the Sony's. In other words, at times the Sony would be showing RDS programme names, when the Roberts wasn't. The Roberts sounded better however, as it was picking up less interference! The R979's auto scan worked well. There was a useful alarm. The display also had a backlight Good overall reception and good sound volume.



Sony - ICF M50 RDS L ***

FM 87.5-108, LW 153-279, MW 532-1602

£60

A RDS radio, with a built-in ac adaptor. If you're listening to an FM RDS station, the radio display gives a station name (eg 'BBC R4') and auto switching to EON-linked stations when traffic announcements occur. The clock can be automatically updated by RDS time signals. The controls are easy to operate, but we found the display difficult to read in some conditions. 15

presets, 5 allocated to each of the bands, FM, MW and LW. They are simple to set and use. Reasonable FM and AM reception. Loudspeaker sound volume is good, with mono reception on earphones. Slightly smaller than the Roberts R979 above. The lack of a scan feature to search out stronger stations is a drawback compared to the R979.





Small digital PLL portable with FM, MW and 2 short wave bands. There is no long wave or tone control, and only a very basic tuning indicator. I didn't really like the feel of the up/down tuning keys mounted on the edge of the radio A clock shows when the radio is turned off. A useful flap enables the set to lean-back. FM auto seek

tuning only locks onto stronger stations and scans slowly. There is an annoying lag as the speaker cuts out for about 1.5 seconds every time you press the tuning buttons. Reasonable reception quality. Sound quality fine for a radio of this size. Stereo sound on earphones was very clear without any hiss The radio comes with a carrying pouch and earphones.

Roberts - R802 **



FM 87.5-108, MW 522-1620, SW 2300-7300 and 9500-26100

A small world band digital radio without long wave. It has 20 presets, 5 FM, 5 MW and 10 SW. An LCD display shows the frequency selected, as well the preset you have chosen. Auto seek works well, with an LED tuning indicator showing when you have found a strong station. There is no lean-back stand. A key lock button, prevents settings from being

changed accidentally or the radio being accidentally turned on. There is a clock with alarm and sleep timer. Short wave coverage is split into 2 chunks, so check it doesn't miss out your favourite SW frequencies before you buy. The radio had good sound for its size, and gave FM stereo on earphones.

Discontinued. Only buy it if the price is reduced.

Roberts - R881 ****

The R881 is a compact receiver and the cheapest radio reviewed, with direct keypad frequency entry. The 45 memories , 18 FM, 18 SW and 9 MW were quick and easy to use. Auto scan works well to find strong stations; or you can use what is called the Auto Preset System (APS). This is a useful feature that finds and puts the strongest 18 FM or 9 MW stations into memory.

FM 87.5-108. MW 520-1710. SW 2300-26100

The Roberts R876 and R881 also have this feature. The only drawback is that operating APS erases your previous presets. The radio has an on-time, sleep function and a dual time clock. Sound quality was good, with stereo on earphones. Reception was good on both FM and AM. If the lack of long wave doesn't worry you, this radio is a very good buy.



Sony - ICF-SW 30 ***

This is a basic world band radio with presets, but lacking long wave. It didn't feel as solid as other Sony world band radios. It was straightforward to operate with good performance. There was a 2 setting tone control switch. The radio has 15 presets, 5 for each band. The radio has a socket for an ac adaptor. FM reception was generally good, although the small LED tuning indicator was not

FM 76-108, MW 531-1710, SW 3700-21950

much use. Speaker volume was reasonable, with good FM stereo reception on earphones.

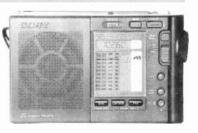


Sony - ICF-SW 48 ***

A digital radio designed to look like an analogue set - even down to a dial pointer consisting of a line on the liquid crystal display! The pointer gives a fairly rough position 'on the dial' but can be difficult to read in strong light. This is backed up by a digital display showing the frequency to the nearest 1kHz on SW. We liked that the 20 memories can be assigned to any wave band - not just

FM 76-108, LW 150-285, MW 530-1602, SW 3850-26100

5 from each band. Once set-up, it is quick to scan through the presets. Good sound quality with a 2 setting tone control. Straightforward to use, with reasonable FM reception, although the 'mock' analogue dial seems a little pointless.





Philips top of the range world receiver. The radio comes with SW wire aerial, case and earplugs. The radio has a solid feel, clearly labelled controls and a clear display showing both frequency and time. The radio has a dual time clock and on-time function. I liked the memory presets. 40 memories could be allocated, mixed from any of the wavebands. This is a simpler way of

working than many other world band radios. The side mounted tuning buttons were not to my liking, but that is probably just personal preference. Reception was good on FM, and noticeably better on AM than some other sets in this price band. Sound quality was fine with stereo FM on earphones.

Roberts - R809 ****

FM 87.5-108, LW 150-519, MW 520-1710, SW 1711-29999

£110



Multi-band PPL radio with 45 presets, and one of the cheapest radios with keypad frequency entry. Clear layout, a nice feel to keys and easy to operate. Large and clear LCD frequency display. Tuning by tuning knob, up/down buttons and presets. 'Standby' or alarm function turns radio on at set time to either buzzer or radio. The only real complaints are that

the display can not be illuminated and that the indistinct 'moulded' lettering of the side switches is difficult to read. This unfortunately is a feature on a large number of both Roberts and Sony radios. Very good overall reception performance. Sound quality is very good, with FM stereo on earphones. Overall an excellent radio for general listening.

Clarke and

FM 87.5-108, LW 146-281, MW 531-1602

A rugged-looking digital radio with basic built-in cassette player/recorder and ac adaptor. Designed for people who have visual or physical difficulties in using normal radios. Up/down tuning buttons are accompanied by an audio tone which gets higher or lower depending on whether you are moving up or down the wave band. Press and briefly hold the buttons and the radio.

scans to the next strong station. 15 presets, 5 on each band, operate via large yellow preset buttons labelled with raised dots. A clock shows when the radio is off. The speaker has good sound volume with a tone control. Well thought-out, and the best radio we have seen for anyone with a visual handicap. VAT can be reclaimed if you are registered disabled.

Excellent PLL portable, now



- Yacht Boy 400

★★★★ FM 87.5-108, LW 144-353, MW 520-1710, SW 1711-30000

discontinued by Grundig in the UK. We've included it, as it is still available overseas. Paperback booksized, with keypad entry of frequencies, tuning up/down buttons and 40 presets. Presets can be programmed in any order and mixed

shows the time as well as frequency. Reception quality is excellent with good FM sensitivity. Loudspeaker sound quality is very good with a relatively loud volume for the size of radio, and a mellower and more 'bassy' sound than many quality world band portables. FM stereo over earphones. Well worth buying, if you spot one on your travels



Roberts - R617 ***

FM 87.5-108, LW 153-513, MW 520-1710, SW 1715-29995

EREIL



Compact digital PLL world band radio with 45 presets. Although our picture says 'NEW', this radio is due to be superseded by the Roberts 876, which is very similar but boasts more features. Compact size with controls that are straightforward to use. The auto tuning system scans either the FM, MW or LW bands putting the 9 strongest signals into memory. Useful

from the 4 wave bands. Operation is

straightforward and the display

feature if travelling, when you arrive at a new destination and want to quickly find the strongest stations. Good FM reception and good audio quality for its size. A good receiver, but given the choice, and both models at the same price, I would choose the R876 instead of this radio. Discontinued. Could be a good buy if the price is reduced.

portables

Compact PLL digital world band receiver. A good-looking radio with a nice feel to the controls and with keypad frequency entry. This radio is replacing the R617. I liked the 'Auto-Tuning System' which quickly puts the strongest stations on FM, LW and MW into memory. 'Memory scan', scans through the memories stopping for several seconds at each one. Clock display can be switched on and off while the radio is on -

and displays when the radio is turned off. Simple LED tuning indicator. Good reception, with sensitive FM. Reasonable sound from the small speaker. Excellent sound through earphones. The radio comes with an auto switching ac adaptor, earphones, SW washing line type aerial and carrying pouch.



Tandy - Realistic >> 352 ★★★★ FM 87.5-108, LW 150-519, MW 520-1710, SW 1711-29999

A world band radio with a built-in cassette player/recorder Made by Sangean and sold abroad as the ATS-818CS. This is the same radio as the Roberts RC828 - but is £70 cheaper! Note however, that the Roberts RC828 comes with an ac adaptor whereas the DX 392 does not (An ac adaptor will cost about £10.) This is a very large radio, and is probably best suited for

home use, rather than for travelling. If you need a very good quality short wave radio, with a built-in cassette, plus the ability to make basic one-event timed recordings, this could be the radio for you. Its main competitor, the Sony ICF-SW 1000T (also with a built-in cassette player) is less than a quarter the weight, but costs £429. Good value if you don't find its size a problem.



Roberts - RR27 + + +

FM 87.5-108, LW 150-519, MW 520-1710, SW 1711-29999

3337V



Very large digital multi-band PLL world band receiver, with single side-band. Everything about this radio is on a large scale - from the LCD frequency display, to the control buttons and the speaker! There are 9 presets on FM, MW, LW and 18 on SW, although serious SW listeners would probably like more. Very good SW

performance with the usual top of the range tuning features, including a large tuning knob and an AM RF gain control knob. Sensitive FM reception. Sound volume from the large speaker is very good, with FM stereo on earphones. Sold as RC828 with built-in cassette player/recorder. (Check out the Tandy - Realistic DX 392 above, which is the same radio, plus cassette/recorder.)

Sony - ICF-SW 7600G ****

FM 76-108, LW/MW/SW 150-29999

SC 1074

World band receiver with synchronous detection. Good layout with clear labelling of buttons and good LCD frequency display. The clock (with timer) displays when the radio is turned off. The 22 presets are straightforward to use, but a little limited in numbers for a quality world band radio. Useful auto tuning feature scans through the wave band, stopping briefly at strong stations.

Very good reception on FM and AM, and above average audio quality from the loudspeaker, with FM stereo on earphones. Allini-all a good value receiver, particularly for serious SW listeners, and one of the cheapest with synchronous detection.



Sony - ICF-SW 100E ****

FM 76-108, LW/MW/SW 150-29999

An extremely small world band radio that is of particular appeal to travellers. Basically this is a high quality digital short wave 'Walkman'. The unit opens like a laptop computer with the speaker and display up top, and the keyboard and controls on the base. 50 presets are available. Despite its small size, (about the size of a cigarette packet), the radio boasts sophisticated technology

including synchronous detection.

Reception is very good for such a small radio, but can be improved in weak signal areas by running the radio on an optional ac adaptor and active antenna. Loudspeaker sound quality was good for its size. On earphones sound quality was very good with FM stereo. A good choice for travelling short wave listeners with £200 to spare.





The R861 is a fairly large digital world band radio with RDS. RDS features comprise station name and clock time. The useful auto tuning system. scans the FM. MW or LW bands putting the 9 strongest signals into memory in signal strength priority. 306 presets: 261 SW, 18 FM, 18 MW, 9 LW There are preprogrammed SW stations and an editable SW

station name display. The 3 alarm/on times, can be programmed with 3 discrete frequencies. Line output and standby sockets for tape recording when linked to a suitable recorder. Very good reception and relatively sensitive RDS. Good sound from speaker, with 3 position tone control. A good buy if you want a quality world

Roberts - RC828 ***

All the features of Roberts R827 plus a built-in cassette player/recorder. This is done at the expense of loudspeaker size which is reduced in the RC828. This radio is sold by Sangean as the ATS-818, and badged in the UK by Roberts and sold as the RC828. It is an very good quality world band radio, with a fairly basic cassette recorder. (This radio is also available in the UK from Tandy, as

FM 87.5-108, LW 150-519, MW 520-1710, SW 1711-29999

the Realistic DX 392, at only £150, although this price does not include a mains adaptor.)



band receiver with RDS.

FM 76-108, LW/MW/SW 150-29999

A sophisticated looking world band radio, with many features to interest serious short wave listeners - but no synchronous detection. A large LCD display dominates the front of the radio, giving frequency, time and signal strength information. It is possible to give preset stations an alphanumeric name that shows on the display.

The radio also boasts sophisticated recording functions when coupled to a suitable recorder. Very good overall performance on AM and excellent reception on FM. Good audio quality with an unusual speaker design - the sound is ducted to the front of the set and out through a letterbox style opening.

Not reviewed

A high end world receiver with a wide variety of features to satisfy the enthusiast. It can prove complex to operate for the 'technologically challenged'! Many features to interest serious short wave listeners including synchronous detection. A built in timer can control up to 5 events and can be linked to a cassette recorder. Large speaker and FM stereo on earphones.

FM 76-108, LW/MW/SW 150-29999



iony - ICF-SW 1000T ***



FM 76-108, LW/MW/SW 150-29999

World band radio with a built-in stereo cassette recorder. The first thing to say about this radio is how surprisingly compact it is. Unlike the Roberts RC 828 which is a substantial radio, this is a marvel of miniaturisation. However you pay for this in the price of the set. Parts of the cassette/recorder design look a

little flimsy. The radio has two programmable on/off event times that can be set to record programmes while you are out. Excellent world band receiver with good FM performance. The loudspeaker gives reasonable audio quality, with FM stereo on earphones. The bottom line - a very good receiver, unusual with its built in tape, - but you pay a hefty price for the miniaturisation.

£430

50

RADIO - BEST BUYS

THERE is no one radio that suits all needs, so we have picked our favourites of various types.

Looking for a really small radio?

Inevitably when you miniaturise a radio you make sacrifices. Small speakers offer limited volume. Radios relying on their earphones lead as their FM aerial, do not have such good FM reception as a similar quality portable with a good telescopic aerial.

For a tiny personal radio, choose between the **AIWA CR-A55** £25, or the **Philips AE6360** £25. If you want a loud speaker as well, the **Roberts R 981** £30, is a good choice.



AIWA CR-A55

For a slightly larger personal radio my choice would be the **Sony SRF 49**. It is only £20, more robust looking than the cigarette lighter sized radios above, and has good reception. For a personal digital radio, I liked the **Roberts R972** £40, mainly because it is smaller than most other personal digital sets and had a good system for storing preset stations.

Cricket fans wanting long wave

If you are looking for a personal set with long wave coverage, I would choose the **Roberts R984 Sportsman** £30. Although more expensive than the **Boots RX 45 Sport** £10, it is more compact.

Looking for a compact portable?

If you are looking for a radio offering good reception to use while travelling there is a wide choice of both analogue and digital radios. Top of my analogue list would be the **Roberts R862** £30 (also sold as the **Tandy Realistic DX 351**). The **Philips AE 33S0** £35, is also worth considering.

Quality digital portables are more expensive than analogue. If you want the smallest and best, look



Sony ICF-SW 100E £200, pictured above. However it is really only worth buying if you intend to use its short wave capabilities. The **Roberts R881** £80, is compact, and crucially for me, has direct keypad entry of frequencies. Note however that it lacks long wave coverage.



If you are looking for a cheaper compact digital portable, you will have to sacrifice keypad frequency entry. **Sony's ICF M260** £40, or **ICF M350L** £50, are worth considering. Note however that neither radio has short wave and the M260 also lacks long wave coverage.

Larger portables

If you are looking for a digital portable with good performance, and full coverage of the wave bands, my choice would be the **Roberts R809**. At £100 it is more expensive than the **Roberts**

RADIO - BEST BUYS

R881, but is still relatively cheap for a radio with digital keypad frequency entry. This radio also offers long wave coverage, whereas the Roberts R881 does not

If you are looking for a radio with very good short wave performance and synchronous detection, look at Sony's ICF-SW 7600G £180.



Sony ICF-SW 7600G

A radio for use round the house

With good reception, sufficient volume to cut through a noisy kitchen, a built-in mains adaptor, and presets the Sony ICF M760 £55 is one of my top choices.

Also worth considering are the Panasonic RF-3700 £55, and Roberts R309 £50.

If you plan to use the radio when travelling. consider buying a portable with RDS. There are two to choose from: the Sony ICF M50 RDS L £60, and the recently launched Roberts R979. £60. I preferred the Roberts for its clearer display and scan tuning.



If you are a traditionalist and dislike the idea of a digital set, the Sony ICF 990 £40, with 3 FM presets is a good buy.

Looking for a cheap radio?

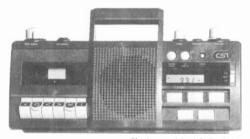
Choose between the compact and solid looking AIWA FR-C10 £13, the Sony ICF 390 £15, or the Panasonic RF-S44 f20



AIWA FR-C10

If you have special needs

When looking at radios for people with special needs, we considered the ease of tuning, the use of presets, stability, and the overall ease of operation



Clarke and Smith Easiplay

Although expensive, Clarke and Smith's Easiplay £115, was our top choice for anyone with a visual handicap. It is designed with unique features to aid tuning, has easy to use presets and looks robust.

Other radios worth considering for those with special needs are the Panasonic RF-3700 £55, Sony ICF M760 £55, and Roberts R309 £50. The Roberts RP 28 £100, was straightforward to use once set up, but setting the presets was difficult.

LETTERS

Try your corners

Thanks to assistance from the 1998 Radio Listener's Guide I have purchased a number of radios. With one, the Roberts R861, I use the supplied reel wire aerial and wrap about ten turns round the telescopic aerial to improve reception.

It has led me to wondering if any portables have the sensitivity or selectivity (at least on FM) of a good quality digitally tuned car radio. I have an own brand RDS car radio in my Ford Fiesta that can pick up a distant (over 50 miles away) local station. Even a good portable like the R861 seems unable to do this, with the distant local station swamped by a stronger nearby one. I have seriously contemplated buying a second-hand RDS car radio, rigging it up to a 12 volt supply and car aerial, just to use it in the house! Now there's a thing, what about a review of car radios in the next issue?

I have also found that if I am just using any of my radios with telescopic aerials, that distant stations are not really best received by having the radio at a window. Best reception is actually in a corner of the room, which if I could follow the corner outside, is nearest in line with the transmitter. If you haven't tried your corners you should!

For television I have an 18 element group B aerial clamped to an old wooden standard lamp pole. It works well, but takes up quite a bit of space in the flat. Needless to say I'm not married! What partner would want to have an 18 element group B aerial crossing over and above the bed? Perhaps if it had only been a group C/D with its shorter elements.....

Jim Howison Lockerbie, Dumfriesshire

Pirates

How about doing an article on pirate radio in the UK? I know you'd have to be careful about what you write, but I feel that the dance music scene wouldn't be where it is today without the help of the illegal pirates. For instance, while all the licensed stations were playing 'cheesy chart', the pirates were giving air-play to all the experimental stuff that people were creating in their small bedroom-studios, and also playing a lot of the US imports.



The BBC have finally woken up to this by making their weekend evening shows, mainly dance orientated, and local stations such as Kiss, Choice, Galaxy, Vibe and Surf 107 are doing the same. But while enjoyable, the licensed stations will never have the same 'underground' atmosphere that the illegal pirates had and indeed still have today.

Ben Cleary Hayling Island, Hampshire

interference problems

I have several radio receivers, dating from the nineteen thirties to date. Due to various illnesses I have had very little sleep for many years now and use a Sony PLL receiver, the ICF 2001D, which with the appropriate aerial system can pick up just about any station that is operating.

A few months ago I lost the use of about twenty stations on the medium wave (AM) band. Subsequent enquiry found that the next door neighbour had upgraded her computer to access the internet, and was now producing large doses of interference, which was penetrating two six inch thick concrete walls, and wiping out most of my AM reception.

I bought some large sheets of aluminium foil and 'papered' the wall around my bed. When earthed to the nearest water pipe, reception was restored. I wonder if any of your readers have had this type of interference and what remedy they used? WP Moran Epsom, Surrey

News from Lake Wobegon

On the subject of satellite, I thought that you would be interested to know that Garrison Keillor's show, A Prairie Home Companion is carried by 'National Public Radio Worldwide' on the Astra satellite. You can hear it, and all the news from Lake Wobegon on Sunday mornings at eleven o'clock.

James Main Bristol

Letters do not necessarily express the views of the editior, and may be edited for publication.

BBC FM RADIO IN ENGLAND

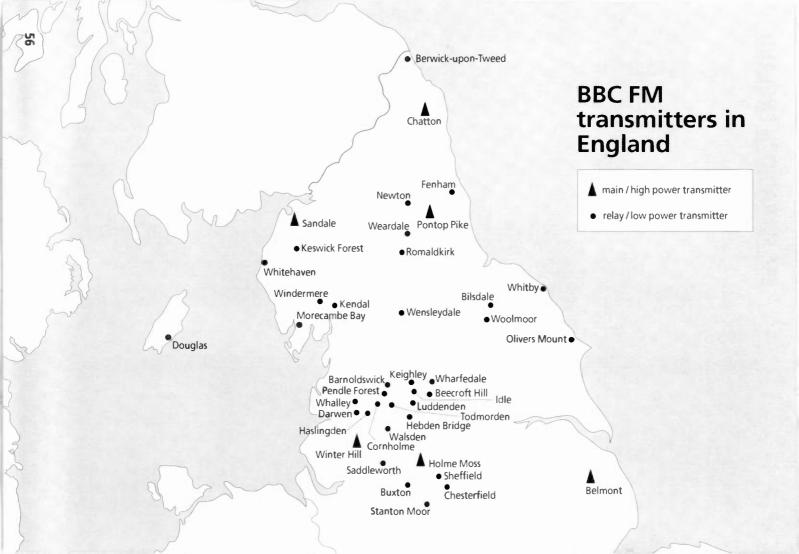
Use the map on page 56 to locate your nearest main transmitter. These are printed in bold below and listed alphabetically. Tune your radio to the relevant frequency. If reception is poor, either retune to a nearby relay station (also listed alphabetically), or to another main station. (All Frequencies in MHz)

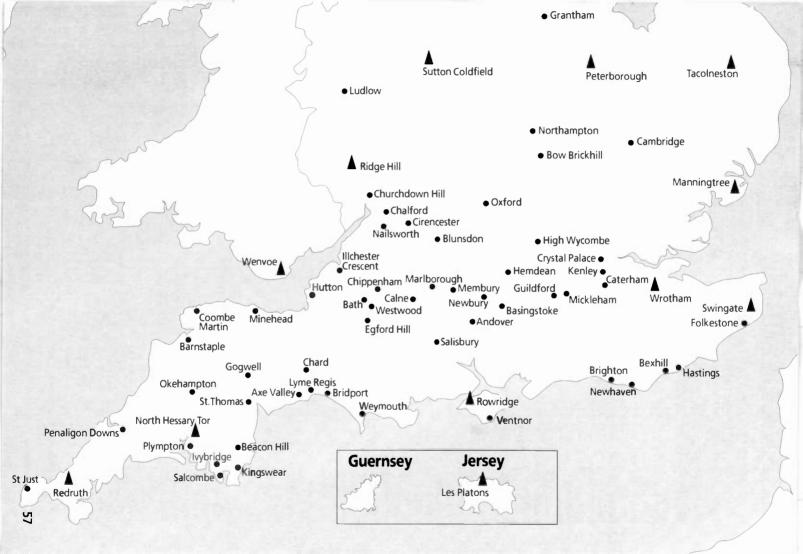
Transmitter	Radio 1	Radio 2	Radio 3	Radio 4	POL	Power max ERP kW
Belmont Chatton Holme Moss Les Platons (Channel Islands) Manningtree North Hessary Tor Oxford Peterborough Pontop Pike Redruth Ridge Hill Rowridge Sandale (also Scotland) Sutton Coldfield Swingate Tacolneston Wenvoe (also Wales) Winter Hill Wrotham Wrotham	98.3 99.7 98.9 97.1 97.7 97.7 99.1 99.7 98.1 99.3 98.2 97.7 97.9 99.5 99.5 99.5	88.8 90.1 89.3 89.6 88.1 89.5 90.1 88.5 89.7 88.6 88.3 90.0 89.7 89.9 88.6 89.1	90.9 92.3 91.5 91.1 90.3 90.7 92.3 90.7 91.9 90.8 90.7 90.3 90.5 92.4 91.9 92.1 90.8 91.3	93.1 94.5 93.7 94.8 92.5 92.5 93.9 94.5 92.9 94.1 93.0 92.5 92.7 94.4 94.1 94.3 93.0	M M M M M M M M M M M M M M M M M M M	16.000 5.600 250.000 16.000 5.000 160.000 40.000 134.000 25.000 250.000 250.000 250.000 250.000 250.000 250.000 250.000 250.000 250.000 250.000 250.000 250.000
Egford Hill (Frome) Fenham	99.0 99.1 99.3 98.1 99.7 98.6 98.4 99.4 98.2 99.2 98.6 98.2 98.7 99.7 99.8 98.5 99.3 98.5 98.5 98.6 98.7 99.3 98.5 98.7 99.3 98.7 99.3 98.7 99.3 98.7 99.3 98.7	89.3 89.5 89.7 88.5 90.1 89.0 88.6 88.6 89.0 88.6 89.1 90.0 88.2 88.9 89.7 89.7 89.2 88.9 89.0 88.8 89.0 88.8 89.0 88.8 89.0 88.8 89.0 88.8 89.0 88.8 89.0 88.8 89.0 88.8 89.0 88.8 89.0 88.8 89.0 88.9 89.0 88.9 89.0 88.9 89.0 88.9 89.0 88.9 89.0 88.9 89.0 88.9 89.0 88.9 89.0 88.9 89.0 88.9 89.0 88.9 89.0 88.9 89.0 88.9 89.0 88.9 89.0 88.9 89.0 88.9 89.0 88.9 89.0 89.0	91.5 91.7 91.9 90.7 92.3 91.2 90.9 92.0 91.2 91.3 92.3 91.3 92.3 91.4 91.1 91.9 91.4 91.1 91.2 91.9 91.0 91.2 91.3 91.9 91.0 91.7 90.8	93.7 93.9 94.1 92.9 94.5 93.0 94.6 93.4 93.5 94.5 94.5 93.3 94.1 93.3 94.1 93.3 94.1 93.2 93.4 93.2 93.4 93.5 94.1 93.2 93.5 94.2 93.9	>>> M > >	0.200 0.080 0.020 1.000 0.200 0.082 1.000 0.200 0.025 0.100 5.000 0.200 0.200 0.600 0.100 0.032 0.260 0.015 0.100 0.033 0.400 0.010 0.072 0.010 0.072 0.010 0.072 0.010 0.072 0.010 0.072 0.010 0.072 0.010 0.072 0.010 0.072 0.010 0.072 0.010 0.072 0.010 0.072 0.010 0.004 0.020 4.000 0.010 11.000 0.060 0.042 0.100 0.300

BBC FM RADIO IN ENGLAND

Transmitter	Radio 1	Radio 2	Radio 3	Radio 4	POL	Power max ERP kW
Grantham Guildford Haslingden Hastings Hebden Bridge Hemdean (Reading) High Wycombe Holcombe Down Hutton Idle Ilchester Crescent Isles of Scilly Ivybridge Keighley Kendal Kenley Keswick Forest Kingswear Luddenden Ludlow Lyme Regis Marlborough Membury Mickleham Minehead Morecambe Bay Nailsworth Newbury Newhaven Newton Northampton Okehampton Okehampton Okehampton Okehampton Okehampton Okehampton Romaldkirk Saddleworth Salcombe Salisbury Sheffield St Just St Thomas (Exeter) Stanton Moor Todmorden Ventnor Walsden South Weardale Wensleydale	97.7 97.7 99.5 97.7 99.6 99.0 99.0 98.1 98.9 98.5 98.6 99.2 99.3 99.3 99.3 99.3 99.3 99.3 99.3	88. 1 88. 1 89. 9 89. 6 88. 4 89. 8 90. 0 89. 4 88. 5 89. 9 89. 0 88. 8 89. 9 89. 0 88. 7 89. 6 89. 7 89. 0 88. 7 89. 0 88. 7 89. 0 88. 2 89. 7 89. 0 88. 2 89. 7 89. 0 88. 2 89. 7 89. 0 88. 9 89. 0 89. 0 80. 0	90.3 90.3 90.3 92.1 91.8 90.6 92.0 92.2 91.6 91.5 91.0 92.1 91.2 90.6 91.8 92.0 90.9 91.8 92.3 91.1 91.9 92.3 91.1 91.9 92.2 90.4 90.9 91.1 90.6 91.1 91.2 92.2 90.4 90.9 91.7 92.1 90.7 91.7 91.0 92.1 91.0 92.1 90.5 91.0 90.9	92.5 92.5 94.3 94.2 94.4 93.8 93.7 93.2 94.3 93.3 93.4 92.8 94.0 94.1 94.5 93.3 94.1 94.5 93.3 94.1 94.5 93.3 94.1 93.8 94.2 93.1 94.3 93.8 93.9 93.7	POL	
Westwood Weymouth Whalley Wharfedale Whitby Whitehaven Windermere Woolmoor	97.9 99.6 99.2 98.0 99.2 99.3 97.9 99.6	88.3 90.0 89.6 88.4 89.6 89.7 88.3 90.2	90.5 92.2 91.8 90.6 91.8 91.9 90.5 92.2	92.7 94.4 94.0 92.8 94.0 94.1 92.7 94.4		

^{*} transmitters or frequencies marked with an asterisk (*) are proposed, but are not yet in service





BBC FM RADIO IN SCOTLAND

To find a station, first use the map to locate the nearest main transmitter. These are printed in bold and listed alphabetically. Tune your radio to the relevant frequency. If the reception is poor, either retune to a nearby relay station (also listed alphabetically), or to another main station. (All Frequencies in MHz)

Tra ns mitter	Radio 1	Radio 2	Radio 3	Radio 4	Radio Scotland	Radio Nan Gaidheal	Pol	Power kW max erp
Ashkirk	98.7	89.1	91.3	103.9	93.5t	-	М	50.000
Black Hill	99.5	89.9	92.1	95.8	94.3	-	M	250.000
Black Hill	07.0	- 00.3		- 04.0		104.7	М	10.000
Bressay (Shetlands) Darvel	97.9 99.1	88.3 89.5	90.5 91.7	94.9 104.3	92.7aoz 93.9	-	M	43.000 10.000
Eitshal	99.4	89.8	92.0	95.1	93.9 94.2h	104.3	V	2.000
Forfar	97.9	88.3	90.5	94.9	92.7	-	M	17.000
Fort William	98.9	89.3	91.5	95.9	93.7h	104.2	М	3.000
Keelylang Hill (Orkne		89.3	91.5	95.9	93.7ao	~	M	41.000
Meldrum	98.3	88.7	90.9	95.3	93.1a	-	M	150.000
Melvaig	98.7	89.1	91.3	95.7	93.5h	103.9	M	50.000
Rosemarkie Rumster Forest	99.2 99.7	89.6 90.1	91.8 92.3	10 3 .6 104.5	94.0h	104.9	M	20.000
Sandale	97.7	88.1	90.3	92.5	94.5h 94.7d	-	M	10.000 250.000
Ardgour	98.3	88.7	90.9	95.1	93.1h	104.9	H	0.050
Ballachulish	97.7	88.1	90.3	94.7	92.5h	103.7	M	0.050
Ben Gullipen	98.3	88.7	90.9	104.9	93.1	-	V	1.000
Bowmore	97.7	88.1	90.3	95.7	92.5h(m)	103.6(m)	V	0.080
Cambret Hill	98.3	88.7	90.9	95.3	93.1d	-	M	0.128
Campbeltown	98.0	88.4	90.6	95.2	92.8		M	0.800
Crainkelly	97.7	88.1	90.3	95.1	92.5h	103.7	V	2.000
Craigkelly Crieff	98.9	89.3	91.5	95.3	93.7	104.1	V	5.000
Daliburgh	98.9	89.3	91.5	95.3 95.9	93.7h	104.2	V	0.125 1.000
Durris	99.0	89.4	91.6	95.9	93.8a	104.2	M	2.100
Evemouth	99.3	89.7	91.9	104.6	94.1t	_	V	0.100
Fort Augustus	98.2	88.6	90.8	95.2	93.0h	104.7	v	1.000
Girvan	98.5	88.9	91.1	95.3	93.3	-	V	0.100
Glengorm	99.1	89.5	91.7	96.1	93.9h	103.5	M	5.000
Grantown	99.4	89.8	92.0	104.2	94.6h	-	M	0.690
Innerleithen	99.1	89.5	91.7	96.1	93.9t	-	M	0.020
Kingussie Kinlochleven	98.7 99.3	89.1 89.7	91. 3 91.9	95.7 95.6	93.5h 94.1h	104.4	M	0.064
Kirkconnel	98.3	88.7	90.9	95.3	93.1	104.4	M	0.010 0.040
Kirkton Mailer	98.6	89.0	91.2	104.5	93.4	_	M	0.964
Knock More	97.8	88.2	90.4	94.8	92.6h	_	M	0.500
Lethanhill	97.9	88.3	90.5	94.9	92.7	-	M	0.200
Lochgilphead		88.3	90.5	-	92.7	97.9(m)	Н	0.010
Mallaig	97.7	88.1	90.3	94.7	92.5h	104.3	M	0.040
Millburn Muir Ness of Lewis	97.9 97.9	88.3 88.3	90.5	104.1	92.7	104.0	M	0.050
Oban	98.5	88.9	90.5 91.1	96.1 95.3	92.7h 93.3h	104.9 104.6	V M	0.200 3.600
Peebles	98.0	88.4	90.6	95.0	92.8t	104.6	M	0.020
Penicuik	98.2	88.6	90.8	95.5	98.0	104.4	V	0.200
Penifiler	97.7	88.1	90.3	96.1	92.5h	104.3	M	0.010
Pitlochry	98.8	89.2	91.4	103.9	93.6	-	Н	0.200
Port Ellen	98.6	89.0	91.2	94.7	93.4h(m)	104.9(m)	V	0.065
Rosemount	99.2	89.6	91.8	95.5	94.0	-	V	0.032
Rosneath	98.8	89.2	91.4	103.8	93.6	-	М	0.032
Rothesay Skriaig	98.1 98.1	88.5 88.5	90.7 90.7	95.1 94.8	92.9 92.9h	104.7	M	0.570
South Knapdale	98.9	89.3	91.5	94.8	92.9n 93.7	104.7 104.8(m)	M	30.000 2.200
Strachur	98.2	88.6	90.8	95.1	93.0	104.8(III) 104.2(m)	M	0.018
Stranraer	99.3	89.7	91.9	103.6	94.1d	-	V	0.010
Tullich	99.7	90.1	92.3	104.5	94.5a	-	M	0.042
Ullapool	97.9	88.3	90.5	96.1	92.7h	104.9	V	0.050
West Kilbride	98.7	89.1	91.3	103.5	93.5	-	V	0.050

Radio Scotland opt-out services carry local programmes at various times during the day. For programme details see 'Radio Times'. a Aberdeen, d Dumfries, h Inverness, o Orkney, t Selkirk, z Shetland (m) mono





BBC FM transmitters in Scotland



The changing face of broadcasting Jocelyn Hassaw major national ne

A YEAR which saw independent radio celebrating its 25th anniversary, also saw two of the national commercial networks change hands. Virgin Radio was sold by Richard Branson to Chris Evans' Ginger Group, and Talk Radios owners CLT, have just agreed the sale of the station to a consortium headed by Kelvin MacKenzie.

The year, has also seen considerable change within BBC networks, but it has been changes at Radio 4 which have provoked the most controversy in 1998.

This is of particular concern to VLV, who are concerned that if the BBC's flagship network cannot maintain the loyalty of its audience, the pressure will be on BBC managers to cut its funding. This could lead to a switch of resources from radio to television, especially as competition explodes in the digital future. It is also particularly worrying because the debate on the future of the BBC licence fee starts in earnest in 1999. Although the previous Government renewed the BBC Charter for ten years, it only guaranteed the licence fee for five - until 2001.

The previous Tory government wanted the BBC to move from the licence fee to subscription TV for its funding as recommended by the Peacock Committee in 1986, with the present Government wanting the BBC to supplement its income by increasing its commercial sales abroad. Both of these place the BBC at risk and neither will help BBC Radio which is totally dependent on the licence fee for its income.

In the past ten years we have seen BBC Radio income fall from about a third to about a quarter of the licence fee revenue although with the new bi-media working it is hard to be precise about figures. Without the licence fee there will be no BBC Radio as we know it and every radio listener should be taking an interest in these issues and actively involved in debating on them.

Other areas where VLV has been active are BBC local radio and the World Service.

BBC Local Radio continues, despite continual cutbacks and lack of proper recognition from senior **Jocelyn Hay** looks at 1998, a year that saw major changes in almost all the national networks.

management, to play a unique role in local community life, and the promotion of its Managing Director, Mark Byford, to Chief Executive at the World Service does not bode well for its future.

At international level the World Service does an equally important job in promoting British interests abroad. The World Service has seen traumatic change following a brutal restructuring of its management two years ago. The abrupt departure in September of its Managing Director, Sam Younger, who had steered the Service through those difficult days, belies reassurances that things were improving, and we can only hope that Mark Byford will have the strength to reverse its fortunes, and the cut in its Government grant.

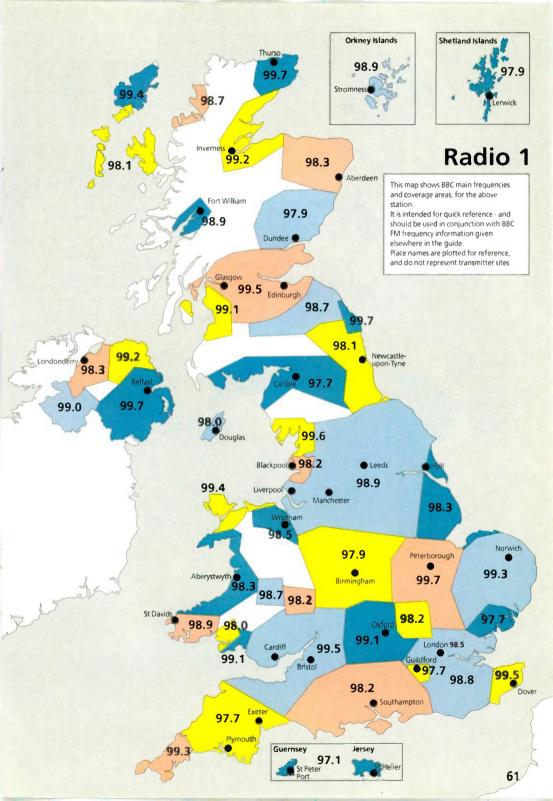
Voice of the Listener and Viewer continues to fight to ensure that BBC Radio gets the funding and resources it needs to meet its remit and serve its audiences.

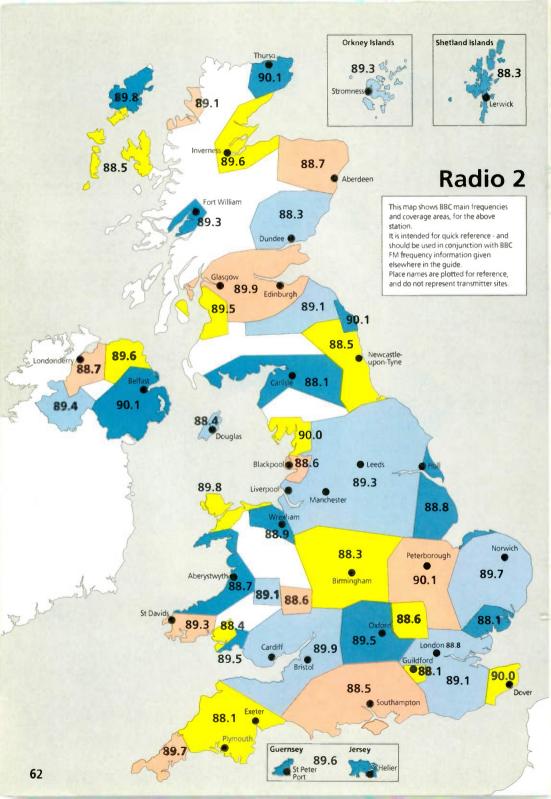
Despite the higher profile and resources thrown at television, more than eight out of ten people continue to listen to radio. Without the richness and diversity of the programmes provided by the BBC at national, local and international level, both we the listeners and British cultural and community life would be all the poorer.

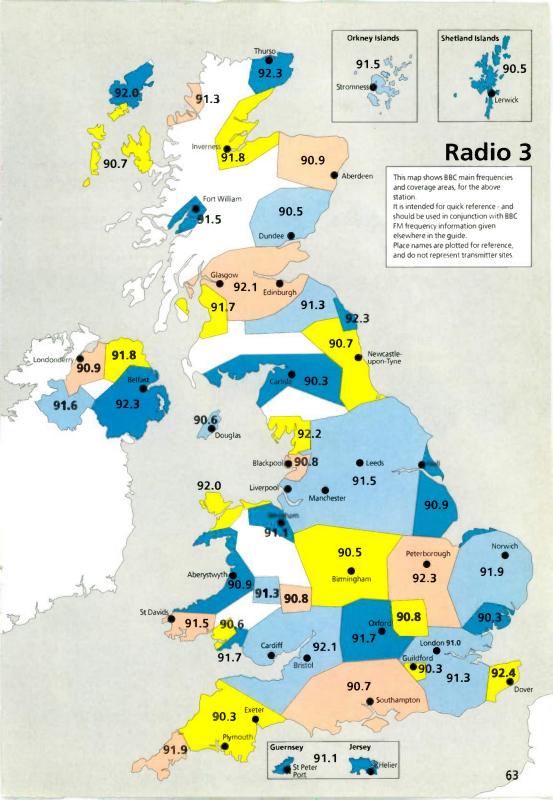
Voice of the Listener and Viewer (VLV) is an independent, non profit making organisation, representing the citizen's and consumer's voice in broadcasting. Originally founded as Voice of the Listener, VLV is concerned with the issues, institutions, structure and funding that underpin the British broadcasting system. VLV does not handle complaints.

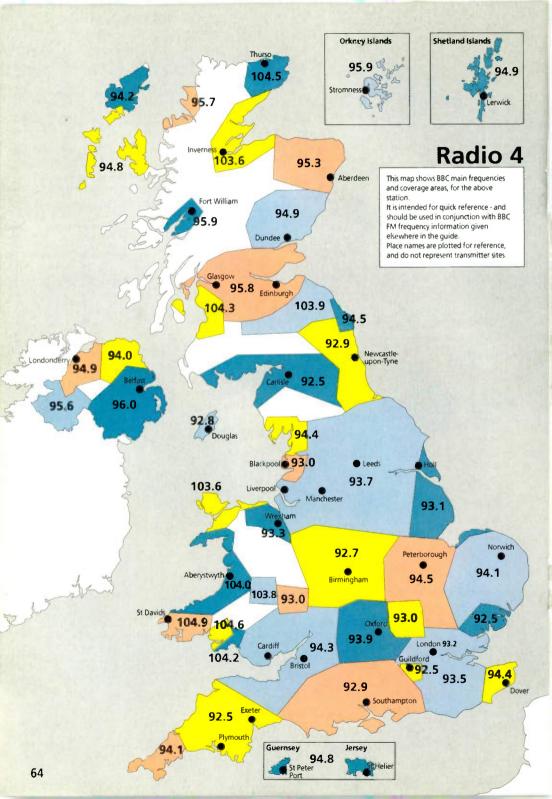
Join the VLV

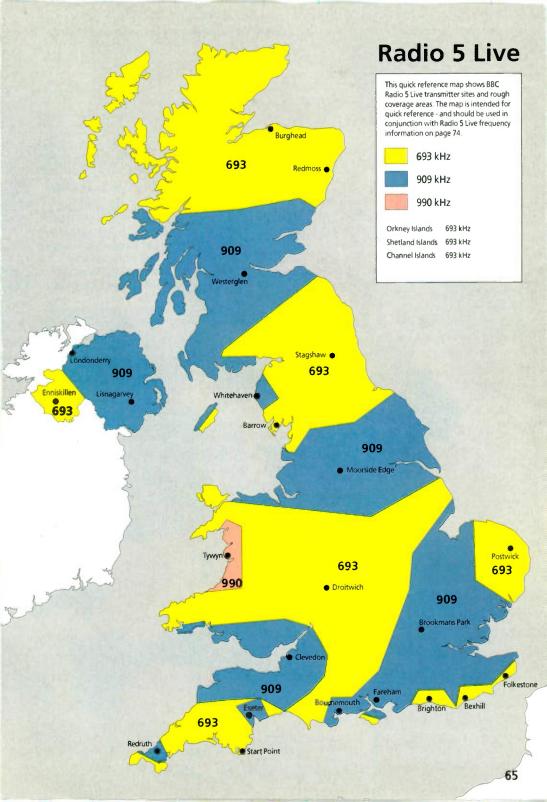
Voice of the listener and Viewer (VLV) is the only consumer body speaking for listeners and viewers on a full range of broadcasting issues. Membership costs £12.50 annually. For full details and a free information pack, contact Anne Liek, Membership Secretary, VLV, 101 Kings Drive, Gravesend, Kent DA12 5BQ. Tel: 01474 352835 Email vlv@btinternet.com

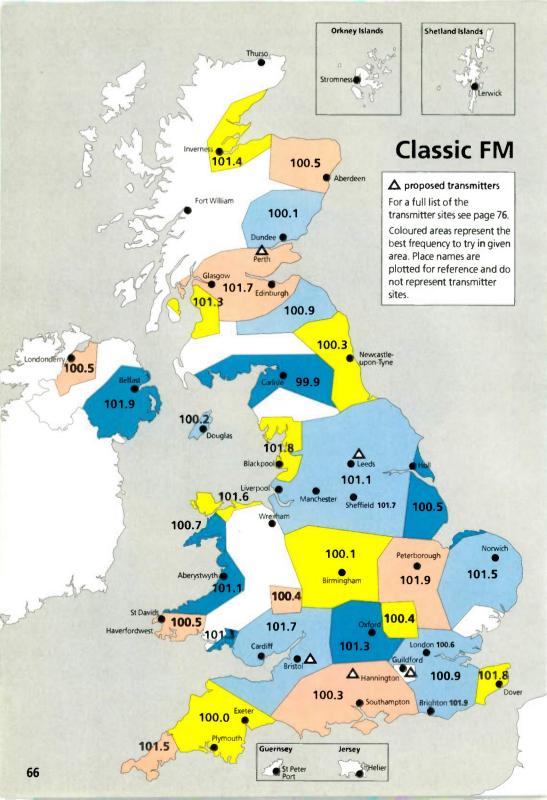


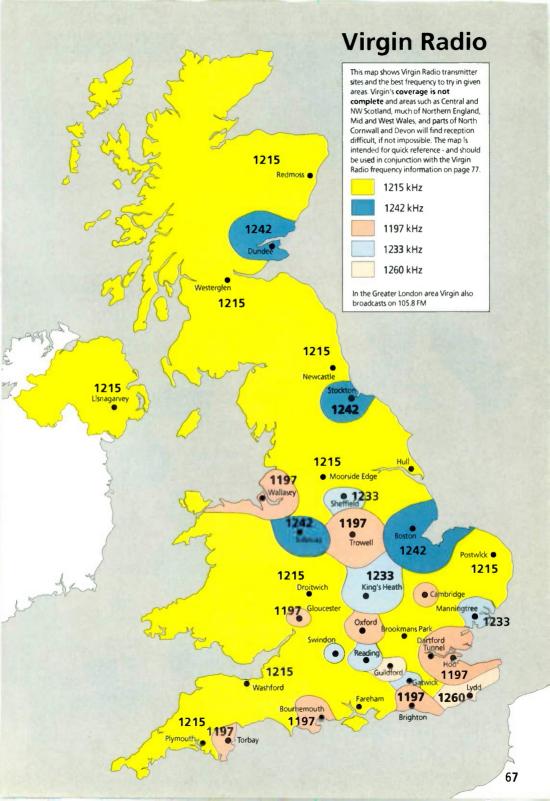


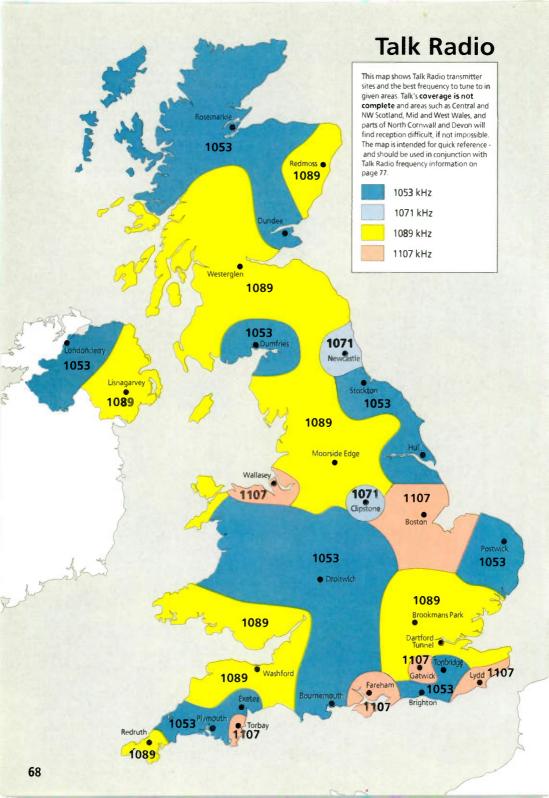












Green, paid to watch all those football matches and let us know just exactly what he thinks about them

But you've got to rise above these things, and I can, you know. After all, the great thing about radio, the thing they always say, and why it is such a companion, is that it's there whatever you're doing - you're not beholden to it.

So, if I'm out on my bike on a Saturday afternoon, there's the radio in the rucksack, keeping me up with how Burnley are going on: - usually telling me that " the Clarets have got a mountain to climb": it's that feeling of being in it together like.

Or I'll make the tea and get a decent rundown on the news, not built around whatever irrelevant pictures might happen to be available. Not, mind you, that TV's paranoia about taking too much audience knowledge for granted hasn't spread to radio. Discussion of a three-second air miss over Heathrow, on Radio 4's 6 O'Clock bulletin, was illuminated by the following explanation: "this is three seconds, beep... beep...

Or Saturday night pot-washing and other chores will be brightened by the acute political commentary of 5 Live's Treatment. Take, for example, the suggestion during the 1998 party conference season that the difference between a supermarket trolley and a Labour MP was that more food and drink could be crammed into the MP, instantly trumped by host Stuart Maconie's counter-suggestion that the trolley has a mind of its own.

At sleepytime I'll put on the 'bedman' in deference to my wife and drift off to a play I've recorded earlier; preferably one of those Radio 3 ones with wizzo stereophonic ambient sounds and no plot, so it doesn't keep me awake. Sadly for marital relations, the whirring of the tape makes at least as much noise as John Peel playing the Fall on the biggest radio in the house, but it's the thought that counts . . . isn't it?

And when I've done all that and finally get around to meeting that deadline for the Radio Listener's Guide piece, there's Peter Young's late show on Jazz FM keeping me going.

It's all there - something for every occasion. More for that brain-dead, middle of the road rock occasion than any other, admittedly, but if you know where to look, you're okay.

And radio still has that ability to surprise you with

the discovery that you are, after all, capable of being interested in the bygone correspondence of the second Lord Wotsisname's pantry-maid, or of being hit between the eyes by a new record (catching the infection, perhaps, from Jazz FM's Mike Chadwick - 'blown away' by The Chaff and the Grain, a new jazz recording by Clint Eastwood's son). I remember our Kirsty becoming a lifelong devotee of King St Junior (Radio 4's lighthearted staffroom drama) at the age of about 6 just because it came on after the younger-targeted story we had expected her to like.

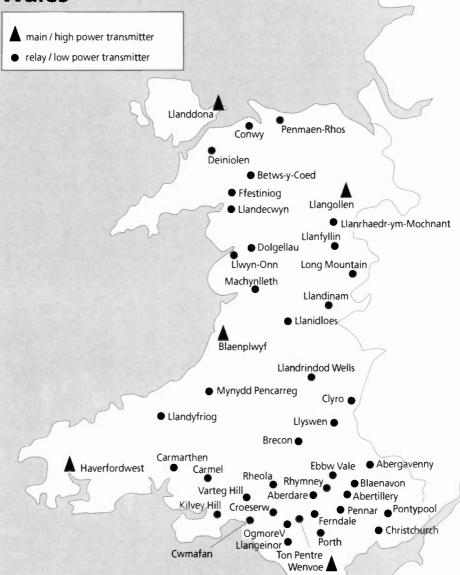
Which all means there's a feast of good stuff on the radio. And more choice on the way in the brave new world of digital broadcasting. Choices about choices about choices, from what they're saying - between the news as presented by Jeremy Paxman, Ken Dodd or Marcel Marceau, for all I know. Just as long as it doesn't lose us the quality.

We need to make sure we value what we've got.

Whether you're sticking with the one station through thick and thin, or you're flicking through this Guide to see what you can find, or you're letting the contours of your local landscape do all that for you, make sure you're enjoying it.



BBC FM transmitters in Wales



BBC FM RADIO IN WALES

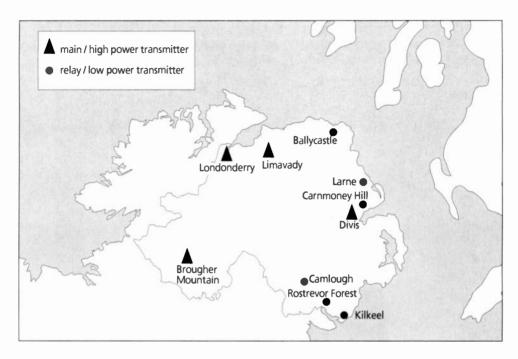
To find a station, first use the map to locate the nearest main transmitter. These are printed in bold and listed alphabetically. Tune your radio to the relevant frequency. If the reception is poor, either retune to a nearby relay station (also listed alphabetically), or to another main station. (All Frequencies in MHz)

	Radio	Radio	Radio	Radio	Radio		Power kw
Transmitter	1	2	3	4	Cymru	POL	max erp
Blaenplwyf	98.3	88.7	90.9	104.0	93.1	М	250.000
Haverfordwest	98.9	89.3	91.5	104.9	93.7	M	20.000
Llanddona	99.4	89.8	92.0	103.6	94.2	M	21.000
Llangollen	98.5	88.9	91.1	93.3	104.3	M	15.600
Wenvoe	99.5	89.9	92.1	94.3	96.8	M	250.000
Aberdare	98.8	89.2	91.4	104.7	93.6	M	0.042
Abergavenny	98.3	88.7	90.9	93.1	103.5	M	0.042
Abertillery	98.6	89.0	91.2	93.4	104.3	V	0.010
		88.2	90.4	104.9	92.6	M	
Betws-y-Coed	97.8						0.050
Blaenavon	98.1	88.5	90.7	92.9	104.0	V	0.010
Brecon	98.5	88.9	91.1	104.7	93.3	M	0.020
Carmarthen	98.5	88.9	91.1	95.5	93.3	M	0.007
Carmel	98.0	88.4	90.6	104.6	92.8	M	3.200
Clyro	99.8	88.1	90.2	104.9	92.4	V	0.010
Conwy	98.7	89.1	91.3	104.4	93.5	V	0.050
Croeserw	98.6	89.0	91.2	103.6	93.4	V	0.010
Cwmafan	98.1	88.5	90.7	92.9	104.5	V	0.010
Deiniolen	97.7	88.1	90.3	104.1	92.5	V	0.050
Dolgellau	99.7	90.1	92.3	103.6	94.5	M	0.050
Ebbw Vale	98.0	88.4	90.6	92.8	104.6	M	0.020
Ferndale	99.2	89.6	91.8	94.0	104.9	V	0.010
festiniog	97.7	88.1	90.3	103.5	92.5	M	0.190
Kilvey Hill	99.1	89.5	91.7	104.2	93.9	M	0.925
Llandecwyn	99.0	89.4	91.6	93.8	104.9	V	0.100
Llandinam	99.7	90.1	92.3	94.5	96.1	M	0.035
Llandrindod Wells	98.7	89.1	91.3	103.8	93.5	M	2.800
Llandyfriog	99.7	90.1	92.3	104.4	94.5	M	0.087
Llanfyllin	98.7	89.1	91.3	93.5	95.7	M	0.014
Llangeinor	98.2	88.6	90.8	93.0	104.6	V	0.010
Llanidloes	97.7	88.1	90.3	104.8	92.5	M	0.050
lanrhaeadr-ym-Mochnant	99.4	89.8	92.0	94.2	103.8	M	0.050
Llwyn-Onn	97.9	88.3	90.5	104.8	92.7	V	0.200
Llyswen	99.2	89.6	91.8	104.4	94.0	V	0.010
Long Mountain	99.2	89.6	91.8	94.0	103.6	M	0.050
Machynlleth	99.0	89.4	91.6	103.6	93.8	M	0.200
Mynydd Pencarreg	99.3	89.7	91.9	103.7	94.1	M	0.384
Ogmore Vale	98.8	89.2	91.4	93.6	103.7	V	0.010
Penmaen Rhos	98.0	88.4	90.6	104.6	92.8	V	0.100
Pennar	99.1	89.5	91.7	93.9	103.7	V	0.005
Pontypool	98.8	89.2	91.4	104.8	93.6	M	0.050
Porth	98.0	88.4	90.6	92.8	104.5	V	0.010
Rheola	97.8	88.2	90.4	104.8	92.6	V	0.010
Rhymney	98.9	89.3	91.5	93.7	104.9	V	0.020
Ton Pentre	98.4	88.8	91.0	104.3	93.2	M	0.005
Varteg Hill	98.5	88.9	91.1	103.5	93.3	M	0.048
	50.5	00.5	- 1.1		Radio Wale		0.0.0
Blaenavon					95.1	V	0.010
Christchurch					95.9	M	0.500
em attraction of					22.2	141	0.500

New Radio Wales frequencies are due in 1999. Llandonna 94.4, Wrexham Rhos 95.4, Kilvey Hill 93.9, Wenallt 103.9 and Carmel 95.1.

^{*} transmitters or frequencies marked with an asterisk (*) are proposed, but are not yet in service

BBC FM RADIO IN N. IRELAND



Transmitter	Radio 1	Radio 2	Radio 3	Radio 4	Radio Ulster	POL	Power kW Max erp	
Brougher Mountain	99.0	89.4	91.6	95.6	93.8	М	9.800	
Divis	99.7	90.1	92.3	-	94.5	М	250.000	
Divis	-	-	-	96.0	-	М	125.000	
Limavady	99.2	89.6	91.8	94.0	95.4	М	3.400	
Londonderry	98.3	88.7	90.9	-	93.1f	М	31.000	
Londonderry	-	-	-	94.9	-	М	10.000	
Ballycastle	98.4	88.8	91.0	93.2	95.1	М	0.100	
Camlough	98.3	88.7	90.9	104.6	93.1	М	4.000	
Carnmoney Hill	98.4	88.8	91.0	93.2	95.3	V	0.020	
Kilkeel	99.0	89.4	91.6	103.9	93.8	М	0.200	
Larne	98.7	89.1	91.3	103.5	93.5	М	0.032	
Rostrevor Forest	97.9	88.3	90.5	103.9	92.7	М	0.040	

Radio Ulster opt-out services carry local programmes at various times during the day. For programme details see 'Radio Times'. f Radio Foyle

REPUBLIC OF IRELAND

Radio Telefis Eireann (RTE) is the statutory corporation for the Irish Republic.

In England and Wales, RTE broadcasts are usually best heard on the medium wave band, with the strongest reception found in the west and south west. Tel: 00 353 (1) 2083111

RTE Radio 1...broadcasts current affairs type programmes, chat shows, and music.

2FM...broadcasts mainly pop music. News is broadcast on the hour.

FM 3 and Radio Na Gaeltachta...share the same frequencies. FM 3 broadcasts predominantly classical music Radio Na Gaeltachta opts-out, with programmes for Irish speaking communities.

Atlantic 252

Independent station owned by CLT and RTE: based near Dublin. Broadcasts pop music 24 hours a day to the UK on 252 kHz (LW) from its 500kW transmitter. In Britain, coverage is best in the South West of England and Wales.

Tel: 00 353 46 36655

Independent Radio and TV Commission

The IRTC supports approximately 40 low power local FM stations. Space prevents us listing the full details here. IRTC Tel: 00 353 (1) 760966

Listening in the UK

Your best bet for listening on radio if you are outside Ireland, is RTE Radio 1 on medium wave. Transmission on 567kHz from the 500 kW transmitter at Tullamore, can be heard over much of England and Wales. You can also listen on satellite. There is more information about RTE Radio 1 on page 100.

RTE FM Transmitters	RADIO 1	2 FM	FM 3 / RnaG	Power (ERP kW)	POL				
MAIN TRANSMITTERS (Frequencies in MHz)									
Clermont Carn	95.2	97.0	102.7	40	V				
Holywell Hill	89.2	91.4	93.6	2	M				
Kippure	89.1	91.3	93.5	40	M				
Maghera	88.8	91.0	93.2	160	\vee				
Mount Leinster	89.6	91.8	94.0	100	V				
Mullaghanish	90.0	92.2	94.4	160	\vee				
Three Rock	88.5	90.7	92.9	10	M				
Truskmore	88.2	90.4	92.6	80	V				

RTE medium wave transmitters	Frequency (kHz)	Power (kW)
Radio 1 (Tullamore)	567	500
Radio 1 (Cork Local Radio)	729	10
2FM (Athlone)	612	100
2FM (Cork/Cork Local)	1278	10
2FM (Dublin)	1278	10

BBC NATIONAL MEDIUM AND LONG WAVE RADIO

	Radio 4		Ra	dio 5 L	ive
Transmitter	Frequency (kHz)	power (kW)	Transmitter	Frequency (kHz)	power (kW)
Burghead	198	50.00	Barrow	693	1.00
Carlisle	1485	1.00	Bexhill	693	1.00
Droitwich	198	500.00	Bournemouth	909	0.25
Enniskillen	774	1.00	Brighton	693	1.00
Lisnagarvey	720	10.00	Brookmans Park	909	150.00
London (Lots Ro	ad) 720	0.75	Burghead	693	25.00
Landanderry	/2u	0.25	Clevedon	909	50.00
Newcastle	603	2.00	Droitwich	693	150.00
Plymouth	774	1.00	Enniskillen	693	1.00
Redmoss	1449	2.00	Exeter	909	1.00
Redruth MF	756	2.00	Fareham	909	1.00
Westerglen	198	50.00	Folkstone	693	1.00
			Lisnagarvey	909	10.00
			Londonderry	909	1.00
Rad	io Scotla	and	Moorside Edge	909	200.00
	io scotii		Postwick	693	10.00
Burghead	810	100.00	Redmoss	693	1.00
Dumfries	585 d	2.00	Redruth MF	909	2.00
Redmoss	810	5.00	Stagshaw	693	50.00
Rednioss	990 a	1.00	Start Point	693	50.00
Westerglen	810	100.00	Tywyn	990	1.00
			Westerglen	909	50.00
D.	dio Wal		Whitehaven	909	1.00
Forden	882	1.00			
Llandrindod MF	1125	1.00	Ra	dio Uls	ter
Penm on	882	10.00			
Tywyn	882	5.00	Enniskillen	873	1.00
Washford	882	100.00	Lisnagarvey	1341	100.00
Wrexham	657	2.00	Londonderry	792 f	1.00

Opt-out services. Marked with a letter, they carry local programmes at various times during the day. For details see 'Radio Times'.

a Radio Aberdeen d Radio Solway f Radio Foyle



CLASSIC FM

General Information

Classic FM, the UK's first national commercial radio station was launched in September 1992. It broadcasts a range of programming based on classical music, 24 hours a day. It is the fourth most popular station in the UK with a weekly reach of 4.7 million listeners. (Source Rajar)

The station was voted Sony National Radio Station of the Year in 1993 and 1997. In 1996 it was taken over by the GWR group.

Engineering information

Classic FM's transmissions are in FM stereo and an RDS signal is transmitted.

The addition of new transmitters has slowed down, and we note that the proposals for sites at Hannington, Guildford, Bristol, Leeds and Perth shown in last year's RLG are still awaiting confirmation. The plans to cover the Channel Islands on 101.3 from Fremont Point seem to have been dropped.

Classic FM is currently running DAB trials in London and will be on Digital One's national DAB multiplex, when launched in October 1999.

Classic's web site at www.classicfm.co.uk/ gives good general information about the station.

			Power kW			
Coverage Area	Transmitter	Frequency MHz	ERP HP	ERP VP		
Tayside	Angus	100.1	2.125	8.500		
North West Wales	Arfon	100.7	3.750	15.000		
Lincolnshire	Belmont	100.5	3.200	3.200		
Glasgow	Black Hill	101.7	125.000	125.000		
West Wales	Blaen Plwyf	101.1	2.000	8.000		
Milton Keynes	Bow Brickhill	100.4	5.000	5.000		
London	Crystal Palace	100.6	0.000	2.000		
Ayrshire	Darvel	101.3	4.000	4.000		
Northern Ireland	Divis	101.9	125.000	125.000		
Isle of Man	Douglas	100.2	0.200	0.800		
Kent	Dover	101.8	1.000	4.200		
Newcastle	Fenham	101.0	0.000	0.050		
North Wales	Great Ormes Head	101.6	0.500	2.000		
Central N. England	Holme Moss	101.1	125.000	125.000		
West Glamorgan	Kilvey Hill	101.3	0.500	0.500		
Northern Ireland	Londonderry	100.5	15.500	15.500		
Grampian	Meldrum	100.5	75.000	75.000		
North Lancs	Morecambe Bay	101.8	3.200	3.200		
Inverness	MountEagle	101.4	2.200	8.800		
Devon	North Hessary Tor	100.0	80.000	80.000		
Oxfordshire	Oxford (Beckley)	101.3	23.000	23.000		
Cambridgeshire	Peterborough	101.9	20.000	20.000		
Durham	Pontop Pike	100.3	65.000	65.000		
South West Wales	Prescelly	100.5	1.400	5.900		
Cornwall	Redruth	101.5	2.000	8.000		
Gloucester	Ridge Hill	100.4	0.900	3.900		
Isle of Wight	Rowridge	100.3	125.000	125.000		
Cumbria	Sandale	99.9	125.000	125.000		
Scottish Borders	Selkirk	100.9	5.000	5.000		
South Yorkshire	Sheffield	101.7	0.250	0.250		
West Midlands	Sutton Coldfield	100.1	125.000	125.000		
Norfolk	Tacolneston	101.5	125.000	125.000		
South Glamorgan	Wenvoe	101.7	125.000	125.000		
Brighton	Whitehawk Hill	101.9	0.250	0.250		
London/Kent	Wrotham	100.9	125.000	125.000		

VIRGIN RADIO

TALK RADIO

Launched in April 1993, Virgin broadcasts pop music nationally on medium wave 24 hours a day. In London it can also be heard on 105.8MHz on the FM wave band. In December 1997 the station was taken over by Chris Evans' Ginger group.

ay emis evans amger group.							
Coverage area (Transmitter)	Frequency kHz	power kW					
Berkshire (Reading)	1233	0.16					
Cambridge (Chesterton Fer	n) 1197	0.20					
Cleveland (Stockton)	1242	1.00					
Dartford Tunnel	1215	0.004					
Dorset (Fern Barrow)	1197	0.25					
Dundee (Greenside Scalp)	1242	0.50					
East Kent (Lydd)	1260	1.00					
Essex (Manningtree)	1233	0.50					
Gloucester (Gloucester)	1197	0.30					
Grampian (Redmoss)	1215	2.30					
Hampshire (Fareham)	1215	1.00					
Humberside (Hull)	1215	0.32					
Lincs (Boston)	1242	2.00					
London (Brookmans Park)	1215	125.00					
Lothian (Westerglen)	1215	100.00					
Medway (Hoo)	1197	2.00					
Merseyside (Wallasey)	1197	0.40					
N. Ireland (Lisnagarvey)	1215	16.00					
Newcastle (Wrekenton)	1215	2.20					
Norfolk (Postwick)	1215	1.20					
Northants (Kings Heath)	1233	0.50					
Notts (Trowell)	1197	0.50					
Oxford (Oxford)	1197	0.25					
Plymouth (Plymouth)	1215	1.10					
Somerset (Washford)	1215	100.00					
South Yorks (Sheffield)	1233	0.30					
Staffs (Sideway)	1242	0.50					
Surrey (Guildford)	1260	0.50					
Sussex (Brighton)	1197	1.10					
Torbay (Torbay)	1197	1.00					
West Sussex (Gatwick)	1233	0.12					
Wiltshire (Swindon)	1233	0.10					
Worcs (Droitwich)	1215	105.00					
Yorks (Moorside Edge)	1215	200.00					

Launched Feb 1995, Talk Radio broadcasts on medium wave 24 hours a day. Mainly phoneins and chat shows, although in 1997 the station moved into live football coverage. The station was taken over by Kelvin MacKenzie's TalkCo consortium in November 1998.

Talked consortiant in two vertiber 1550.						
Coverage area (Transmitter)	Frequency kHz	power kW				
Aberdeen (Redmoss)	1089	2.20				
Bournemouth (Bournemouth)	1053	1.00				
Central Scotland (Westerglen)	1089	125.00				
Cleveland (Stockton)	1053	1.00				
Cornwall (Redruth)	1089	2.00				
Dartford Tunnel	1089	0.004				
Dumfries (Dumfries)	1053	10.00				
Dundee (Dundee)	1053	1.00				
East Kent (Lydd)	1107	2.00				
Exeter (Exeter)	1053	1.00				
Gatwick (Gatwick)	1107	2.00				
Hampshire (Fareham)	1107	1.00				
Humberside (Hull)	1053	1.00				
Inverness (Rosemarkie)	1053	1.00				
Lincs (Boston)	1107	1.00				
London (Brookmans Park)	1089	400.00				
Londonderry (Londonderry)	1053	1.00				
Merseyside (Wallasey)	1107	0.50				
N. Ireland (Lisnagarvey)	1089	12.50				
Newcastle (Wrekenton)	1071	1.00				
Norfolk (Postwick)	1053	18.00				
Nottingham (Clipstone)	1071	1.00				
Plymouth (Pulmer Barracks)	1053	1.00				
Somerset (Washford)	1089	80.00				
Sussex (Brighton)	1053	2.20				
Torbay (Occombe)	1107	1.00				
West Kent (Tonbridge)	1053	4.00				
Yorks (Moorside Edge)	1089	400.00				
Worcs (Droitwich)	1053	500.00				

Virgin Radio London is also available in the Greater London area on 105.8 MHz FM.

DAB (DIGITAL RADIO) - HOW IT WORKS

What is DAB

DAB also called 'Digital Radio' is the latest technological development for radio. If it takes off, it will be the most significant radio development since the launch of FM.

DAB radio signals are converted into 'binary digits'. These are then carried by radio waves in such a way that makes them resistant to interference.

DAB radios carry the DAB logo, only these radios will be able to receive DAB transmissions.



What are the advantages of DAB?

DAB should give a clear signal with no hiss or crackle. Stations will broadcast on one frequency, so there should be no need to retune, unless you move into an area without DAB coverage, or you want to change stations. Finding a DAB station on your radio will be straightforward and like scrolling through the presets (memories) of current radios.

Because DAB is more efficient in its use of space on the airwaves, there will be more stations to listen to.

What else does DAB offer?

DAB also offers broadcasters the ability to send additional information to your radio. This could simply be text, which appears on the radio's display, showing which station and programme you are listening to - in a similar way to which RDS works now. In the future DAB will be able to transmit even more data, including pictures.

When will DAB start?

The BBC began regular DAB transmissions in September 1995, however until this year (1998) there have been no DAB radios available to the public.

How much will DAB radios cost?

The only sets available in November 1998 were car radios and a HiFi tuner. See the write-up from the 'Live' show on the opposite page. Prices are high with the cheapest car radio costing £700.

Will prices fall quickly?

Prices will fall, but it is difficult to tell how quickly this will happen. It depends on the speed at which the public accept DAB, and whether the main manufacturers start to produce sets in volume.

Will I need a new aerial?

Yes. Dab car radios need a small aerial about the same size as used by a car telephone. A home HiFi receiver will operate with a compact indoor aerial.

Can I still use my existing radios?

Yes, but not to receive DAB transmissions. Until the government decides to switch-off analogue transmitters and use the frequencies for something else, existing radio will still work, although you will not be able to pick up any new stations that broadcast only on DAB.

The government has given no timetable for stopping analogue transmissions - best guesses suggest this will not happen for at least 10-15 years.

What stations will be on DAB?

DAB frequencies are bundled together to form what are called multiplexes. In the UK (and remember that DAB is a European initiative) seven multiplexes have been allocated in the frequency range 217.5 - 230 MHz. These multiplexes will be used for BBC and independent national and local radio as follows.

- One for BBC national radio already broadcasting
- One for Independent national radio (the licence was awarded to Digital One in Oct 98). Digital One is due on-air Oct 1999. The multiplex will carry Classic FM, Virgin and Talk Radio, plus seven new channels. These include three 24 hour stations Classic Gold Rock, Soft Adult Contemporary and Teen and Chart hits, plus four part-time stations Club Dance, Plays Books and Comedy, Rolling News and Sports.
- Four multiplexes for local BBC and independent radio
- One multiplex is still to be allocated.

Who will be able to receive DAB?

Currently 60 per cent of the country are covered by the BBC's main network - see page 81 for the location of transmitters. There are no plans published for the remaining 40 per cent.

For more information about DAB write to: BBC Digital Radio, Room 505, Henry Wood House, Langham Place, London W1A 1AA

Email: bbcdab@bbc.co.uk www.bbc.co.uk/dab

DIGITAL RADIO - LAUNCH OF NEW DAB RADIOS

I VISITED the 'Live 98' consumer electronics show held at Earls Court in September 1998, to see what there was to interest radio listeners.

In-car DAB systems were on display from Grundig, Pioneer, Kenwood, Clarion and Blaupunkt. with Sony displaying a prototype in-car system expected to retail at around £1000.

Grundig seemed to be the most advanced in term of promotion of DAB and production of the radio, and this was the only in-car system that I was able to have a really good look at.

Grundig's 5000 Series DAB radio systems come in two parts. There is a dashboard mounted radio with a display and a separate DAB decoder box and receiver, which in Grundig's case is boot mounted to save space. The system also needs a compact DAB aerial. Radios should be available from outlets such as Dixons, with prices starting at around £700.

The 5300 I looked at worked well. Tuning the DAB radio was by initially scanning to find the multiplex, and then scrolling through the stations available - much in the same way as you would through a traditional radio's presets. Stations broadcasting on DAB at the time I listened, were BBC networks 1-4, BBC Sport (rather like a feed from 5 Live), BBC World, BBC Xtra, Virgin, Kiss, Capital, Melody, Liberty, EKR, Sunrise and Talk. There may have been others that I didn't discover.

Grundig 5300



On the home-front, a British company, Arcam, beat the opposition and were proudly showing 'The World's First Digital Radio Tuner'. I had a quick look at the Alpha 10 DRT (Digital Radio Tuner), which should retail for about £800. An uncluttered front to this tuner offered easy tuning, with a large tuning knob, enabling access to the various digital multiplexes, and then simple scrolling up and down through the resident stations. DAB information was displayed with a two line display. The top line gave a station name (very much in the same way as an RDS radio would) with the bottom line giving dynamic (moving) DAB text information. This is broadcast by the radio sta-

tion, and could for example, be the title of the music/track and artist, or on BBC Parliament, the name of the speaker in a debate, with the job they hold.

Full volume production of this model is planned by Jan 1999 - so if you can't get hold of one yet, you should be able to fairly soon.



Arcam Alpha 10 DRT

Sharp were at the show with their prototype DAB home-audio mini-system, the MBX8-DAB. Sharp are planning to launch this system in the second half of 1999. Also built-in should be a Minidisk, giving you the ability to record up to 74 minutes of radio in CD quality. The eventual system is likely to change quite considerably from the prototype and will sell at 'a realistic price point'! Sharp's system differed quite considerably from the in-car systems and Arcam's DAB tuner, in the size of its LCD display.

The style and information available on a DAB radio's display is something that will develop as broadcasters start to exploit the new technology and manufacturers design radios to keep pace with them. It is also something that really differentiates a DAB receiver from a traditional radio.

On the BBC's stand this was clearly demonstrated with a simulation of how a personal computer with a DAB card could look. Adding a DAB card to a computer, is like adding a radio to the computer. You can then control the radio with the computer, and use the computer screen to display tuning information, plus any other DAB information broadcast by radio stations. As well as displaying text, the computer screen could show pictures (even moving pictures), as well as interactive graphics and text linked to the internet. Such a system really blurs the boundaries between radio, televison and the internet

The BBC also had a number of concept radios on show. These included a small portable, but as yet portables seem quite a long way off, and I am not aware of any manufacturer even close to launching one.

DAB - DIGITAL RADIO

Who is currently broadcasting on DAB?

At the time of writing, November 1998, only the BBC have a full national DAB network up-and-running. The BBC's national multiplex carries Radios 1,2,3,4 and 5 Live along with additional BBC 'stations', such as BBC World, BBC Sport and BBC Extra. It covers about 60 per cent of the UK population. (See the map opposite.)

The timings for local commercial digital licence awards are listed on page 15.

The national commercial radio multiplex carrying Classic FM, Talk and Virgin, and various new stations is due-to launch in October 1999. (See details of the new services on page 15.)

However if you are lucky enough to have a DAB receiver, you will probably be able to hear test transmissions before then. For example in the London area stations such as Melody, Sunrise, Capital, WRN and EKR have all been on-air.

The plans are for seven DAB multiplexes. One national multiplex for the BBC and one for commercial radio. Four more are planned to carry local radio services. One multiplex has yet to be allocated

DAB radios will scan the airwaves to find any available multiplexes. Imagine a multiplex like a bundle of radio stations. Once it finds a multiplex, the radio will be able to scroll through any stations carried by the multiplex - much in same way as you would scan through the presets (memories) of a current analogue radio.

How do you retune a DAB radio?

Having to retune a DAB radio, at least for national networks should be a thing of the past. The national networks are 'single frequency'. This means that instead of retuning as you would currently do, as you travel from one transmitter's coverage area to the next, the radio simply stays tuned to one frequency, and will continue to receive your station until you stray outside its coverage area. Then instead of gradually fading away, or breaking down with interference, the DAB set will either switch-off, or (depending on how manufacturers design their radios) it may retune automatically to an FM frequency carrying your station.

BBC National DAB Transmitters -

(BBC National multiplex - block 12B, 225.648MHz)

This is a provisional list, subject to confirmation. Some of these transmitters may not yet be in service. See map the map opposite.

Transmitter	Power
Alexandra Palace	3.2kW
Alsagers Bank	2kW
Belmont	5kW
Bilsdale	5kW
Bluebell Hill	6.3kW
Bow Brickhill	2kW
Crystal Palace	10kW
Daventry	10kW
Divis	10kW
Emley Moor	10kW
Guildford	5kW
Hannington	5kW
Holme Moss	5kW
Kirk o Shotts	10kW
Mendip	5kW
Moel-y-Parc	10kW
Oxford	10kW
Peterborough	5kW
Pontop Pike	10kW
Reigate	1kW
Sandy Heath	5kW
Sheffield	2kW
Sutton Coldfield	10kW
Turners Hill	10kW
Wenvoe	9kW
Winter Hill	10kW
Zouches Farm	3.2kW



BBC Coverage 1998

In the UK, 27 BBC transmitters orovide coverage for the national multiplex. This reached 60 per cent of the population in the Spring of 1998, and will provide coverage for the major urban

centres and most of the motorways in between. No information is yet available for plans to serve areas not yet covered.

Digital One Coverage

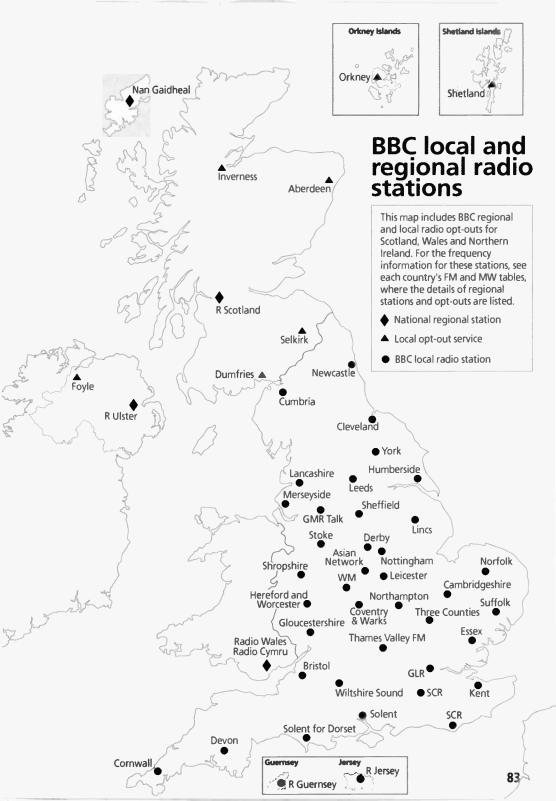
Digital One is the name of the consortium, headed by GWR,

who have been given the UK's national commercial DAB licence. Sharing BBC transmitter sites, Digital One aims for coverage of 69% of Great Britain's population when it launches, rising to 85% in three years.

BBC LOCAL RADIO

Details of BBC local radio stations programmes are published in Radio Times. When not on-air, stations transmit Radio 5 Live. FM broadcasts include at least, basic RDS information.

station	transmitter	MW	Power kW (EMRP)	FM	POL	POWER kW (Max ERP)
Asian Network	Codolou	020	0.200			
Asian Network	Sedgley Freemen's Common	828 837	0.200 0.500	-		
	Langley Mill	1458	5.000			
BBC Essex	South Benfleet		2.000	95.3	М	1.200
	Great Braxted	•		103.5	M	12.000
	Manningtree	729	0.200	-		
	Chelmsford	765	0.500	•		
	Southend	1530	0.150			0.050
Bristol & 5omerset 5ound	Illchester Crescent	-		94.9 95.5	M	0.950
Jound	Mendip Bath			104.6	M	9.000 0.082
	Taunton	1323	0.630	104.0	IVI	0.062
	Mangotsfield	1548	5.000			
Cambridgeshire	Peterborough		3.000	95.7	М	5.100
,	Cambridge	-		96	M	1.000
	Cambridge(Chesterton Fe	en) 1026	0.500	•		
	Gunthorpe	1449	0.150	•		
Cleveland	Bilsdale	-		95	M	10.000
. "	Whitby	•		95.8	М	0.100
Cornwall	Caradon Hill	-		95.2	M	4.300
	Isles of Scilly Redruth			96 103.9	M	0.060 18.000
	Redruth (MF)	630	2.000	103.9	IVI	16.000
	Bodmin	657	0.500			
Coventry and	Meriden	-	0.500	94.8	М	2.200
Warwickshire	Lark Stoke	-		103.7	М	1.400
	Nuneaton	•		104	V	0.050
Cumbria	Kendal	-		95.2	M	0.100
	Sandale	-		95.6	M	15.000
	Morecambe Bay	•		96.1	M	3.200
	Whitehaven (FM)	-		104.1	V	1.000
	Windermere Carlisle	- 756	1.000	104.2	М	0.065
	Barrow	730 837	1.000			
	Whitehaven (MF)	1458	0.500			
Derby	Stanton Moor		0.500	95.3	М	1.200
•	Drum Hill	-		104.5	M	5.000
	Burnaston Lane	1116	1.000	-		
Devon	Huntshaw Cross	-		94.8	M	0.675
	Exeter (St Thomas)	-		95.8	M	0.400
	Okehampton	-		96	М	0.070
	North Hessary Tor	- 801	2.000	103.4	M	15.000
	Barnstaple Plymouth	855	1.000			
	Exeter	990	1.000			
	Torbay	1458	2.000			
Gloucestershire	Stroud			95	M	0.100
	Cirencester	-		95.8	V	0.080
	Churchdown Hill	•		104.7	M	2.000
	Berkeley Heath	1415	0.5	-		
GID (Granter Lander)	Bourton-on-the-Water	1415	0.5	-		4.000
GLR (Greater London)	Crystal Palace	-		94.9	М	4.000
82 radio listener's guide —						



BBC LOCAL RADIO

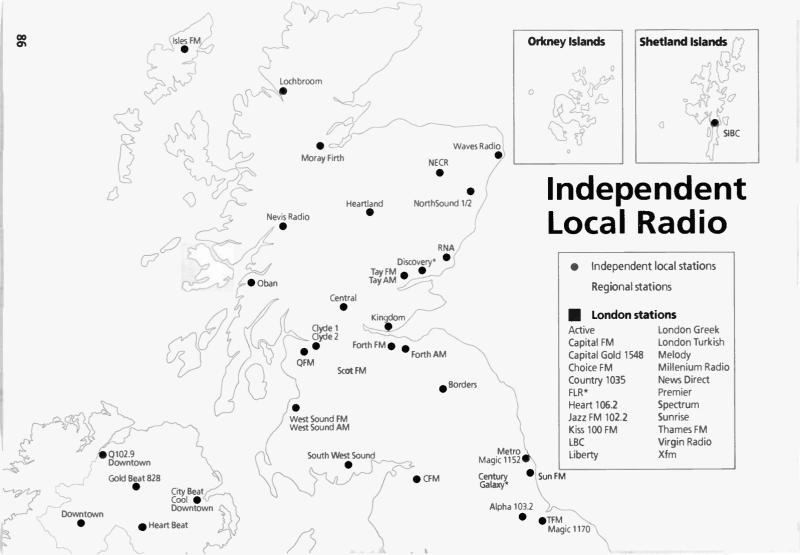
station	transmitter	MW	Power kW (EMRP)	FM	POL	POWER kW (Max ERP)
GMR Talk	Holme Moss			95.1	М	5.600
	Saddleworth	-	-	104.6	V	0.100
Guernsey	Les Touillets			93.2	M	1.000
	Guernsey (Rohais)	1116	0.500			3.000
Hereford/Worcs	Ridge Hill Great Malvern	-		94.7 104	M	2.000 2.000
	Kidderminster	-		104.6	M	0.500
	Worcester	738	0.037	104.0	[8]	0.500
Humberside	High Hunsley	-	0.037	95.9	М	9.600
Transcripte:	Hull	1485	2.000			
Jersey	Les Platons	•		88.8	M	3.800
	Jersey (Trinity)	1026	1.000	-		
Kent	Wrotham	-		96.7	M	8.700
	Folkestone	-		97.6	V	0.100
	Swingate	-		104.2	M	10.000
	Littlebourne	774	0.700	-		
	Rusthall	1602	0.250			4.500
Lancashire	Hameldon Hill	-		95.5	M	1.600
	Winter Hill	-		103.9	M	2.000
	Lancaster		1 000	104.5	M	2.000
	Preston	855 1557	1.000 0.250	•		
Leeds	Oxcliffe Holme Moss	155/	0.230	92.4	M	5.600
reeus	Luddenden	-		95.3	V	0.083
	Wharfedale	-		95.3	M	0.040
	Keighley			102.7	V	0.500
	Beecroft Hill	-		103.9	V	0.100
	Farnley	774	0.500	•		
Leicester	Copt Oak	-		104.9	M	8.000
Lincolnshire	Belmont	-		94.9	M	6.000
	Grantham	-		104.7	V	0.035
	Lincoln (Swan Pool)	1368	2.000	-		
Merseyside	Allerton Park	•		95.8	M	8.000
	Wallasey	1485	2.000			40.000
Newcastle	Pontop Pike	-		95.4	М	10.000
	Chatton	•		96	M	5.600
	Newton	•		103.7	V	0.1
	Fenham Newcastle (Wrekenton)	1458	2.000	104.4	V	0.042
Norfolk	Tacolneston	1436	2.000	95.1	М	5.700
NOTIOIK	Gt. Massingham			104.4	M	4.200
	Postwick	855	1.500	-	141	4.200
	West Lynn	873	0.300	-		
Northampton	Geddington		0.500	103.6	М	0.800
· · · · · · · · · · · · · · · · · · ·	Northampton			104.2	M	4.000
Nottingham	Mansfield (Fishponds Hill)			95.5	M	2.000
	Mapperley Ridge	•		103.8	M	1.000
	Clipstone	1584	1.000	•		
5CR	Newhaven	-		95	M	0.100
(Southern Counties	Horsham	-		95.1	M	0.040
Radio)	Brighton (Whitehawk Hill)	-		95.3	M	1.200
	Reigate	-		104	M	3.800
	Heathfield	-		104.5 104.6	M	10.000 3.000
	Guildford					

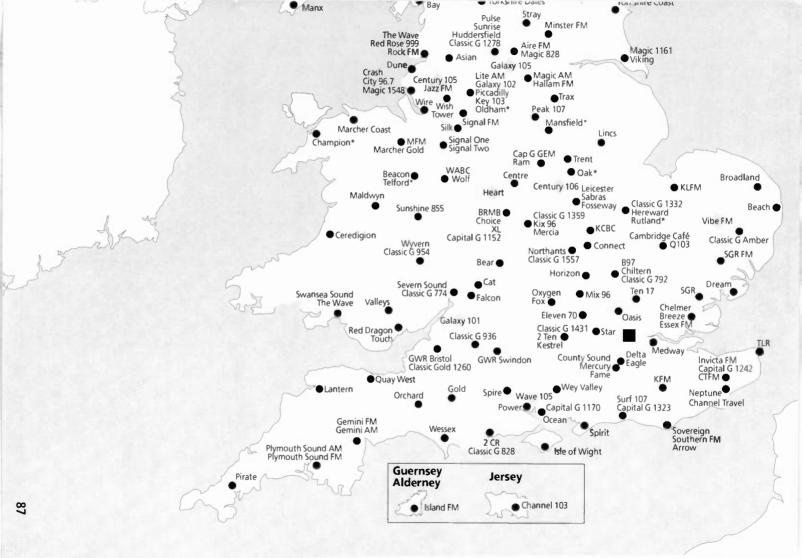
BBC LOCAL RADIO

station	terrore interes	MW	Power kW	FM	DOI	POWER kW
Station	transmitter	IVIVV	(EMRP)	FIVI	POL	(Max ERP)
	0 . 0					
	Burton Down Bexhill	1161	1.000	104.8	V	2.000
	Duxhurst	1368	1.000 0.500	-		
	Brighton	1485	1.000	-		
5heffield	Sheffield	-	1.000	88.6	М	0.160
3	Chesterfield	_		94.7	V	0.400
	Holme Moss	_		104.1	M	4.400
	Sheffield (MF)	1035	1.000	-		
5hropshire	Ludlow	-		95	M	0.010
•	The Wrekin	-		96	M	4.800
	Woofferton	1584	0.300	-		
5olent	Rowridge	-		96.1	M	10.000
	Fareham	999	1.000	-		
	Bournemouth	1359	0.850	-		
Solent for Dorset	Bincombe Hill	-		103.8	V	0.500
5toke	Alsagers Bank	-		94.6	M	6.100
	Stafford	4503	1.000	104.1	V	0.075
5uffolk	Sideway Lowestoft	1503	1.000	95.5	V	0.050
Julioik	Manningtree	-		103.9	M	5.000
	Gt Barton	-		103.9	M	2.000
Thames Valley FM	Henley	_		94.6	M	0.250
	Oxford	_		95.2	M	5.800
	Windsor	_		95.4	V	0.500
	Hannington	-		104.1	M	3.000
	Reading (Fountain House)	-		104.4	M	1.000
Three Counties	Sandy Heath	-		95.5	M	1.000
	Zouches Farm	-		103.8	M	0.500
	Bow Brickhill	-	0.200	104.5	M	2.200
	Luton (Lewsey Farm) Bedford	630	0.200	-		
Wiltshire 5ound	Newton Barrow	1161	0.100	103.5	V	1.000
willshire Journa	Blunsdon	-		103.5	M	0.500
	Naish Hill	_		104.3	M	0.600
	Marlborough	_		104.9	V	0.100
	Lacock	1332	0.300	-	•	000
	Swindon	1368	0.100	_		
WM (W Midlands)	Sutton Coldfield	-		95.6	M	11.000
York	Oliver's Mount	-		95.5	M	0.250
	Aklam Wold	-		103.7	V	2.000
	Woolmoor	-		104.3	V	0.500
	Fulford (York)	666	0.500	-		
	Scarborough	1260	0.500	-		

Local opt-out stations. In Scotland, Wales, and Northern Ireland, BBC National services sometimes broadcast local information. For details about these 'local' opt out services, see the respective FM national sections.

stations, transmitters or frequencies marked with an asterisk are proposed, but are not yet in service





5ee the map on pages 86-87.

emrp - effective mean radiated power, erp - effective radiated power (The horizontally and vertically polarized components of erp, have this year been amalgamated in the guide to save space. Nearly all stations now transmit with mixed polarisation, with just a few of the smaller ones transmitting just vertically polarized signals.)

TA - a TA in this column indicates that the station broadcasts RDS Traffic Announcements.

For more information about RDS see page 19.

Stations, transmitters or frequencies marked with an asterisk (*) were proposed, but were not in service at the time of publication.

station	coverage area	transmitter	MW	emrp	FM	erp	TA	info
2-Ten FM	Reading	Broad Street Mall			97	0.5		hits
	Basingstoke/Andover	Hannington	-		102.9	4		
	Henley	Henley			103.4	0.1		
2CR FM	Bournemouth	Nine Barrow Down	-		102.3	2		chart hits
Active FM	Havering	Lambourne House			107.5	0.1		classic hits
Aire FM	Leeds	Morley	-		96.3	1		recent hits
Alpha 103.2	Darlington	Darlington	-		103.2	0.4		classic hits
Arrow FM	Hastings	Hastings	-		107.8	0.1		current/classic hits
Asian Sound	East Lancs	Haslingden	963	0.2	-			Asian music/news
	East Lancs	Ashton Moss	1377	0.08	-			
B97	Bedford	Sandy Heath	-		96.9	0.9		classic hits
Bay (The)	Morecambe Bay	Morecambe Bay	-		96.9	3.2	TA	contemporary music
	Windermere	Windermere	-		102.3	0.04	TA	
	Kendal	Kendal	-		103.2	0.1	TA	
Beach (The)	Lowestoft/Gt Yarm'th	Lowestoft	-		103.4	2		hits
Beacon	Wolverhampton	Turners Hill	-		97.2	2	TA	recent hits
	Shrewsbury/Telford	The Wrekin	-		103.1	2.7	TA	
Bear (The)	Stratford	Lark Stoke	•		102	3		classic/contemporary
Borders	Selkirk	Selkırk	-		96.8	5		chart/classic hits
	Berwick-upon-Tweed	Berwick-upon-Twe	ed -		97.5	0.01		
	Peebles	Peebles	-		1 03.1	0.07		
	Eyemouth	Eyemouth	-		103.4	0.5		
Breeze AM	Chelmsford	Bakers Wood	1359	0.28	-			easy listening
	Southend	Rayleigh	1431	0 35	-			
BRMB	Birmingham	Sutton Coldfield	-		96.4	10	TA	recent hits
Broadland	Norwich/Gt Yarmouth		-		102.4	3.3		adult contemporary
Cambridge Café	Cambridge	Rustat Road	-		107.9	0.1		classic/current hits
Capital FM	London	Croydon	-		95.8	4	TA	chart hits
Capital Gold 1152	Birmingham	Langley Mill	1152	3	-			classic hits
Capital Gold1170/155		Farlington Marshe		0.12	-			classic hits
	Southampton	Veals Farm	1557	0.5	-			
Capital Gold 1242/603		Littlebourne	603	0.1	-			classic hits
	Maidstone	Hoo St Werburgh		0.32	-			
Capital Gold 1323/945		Bexhill	945	0.7	-			classic hits
	Brighton	Southwick	1323	0.5	-			
Capital Gold 1548	London	Saffron Green	1548	97.5				classic hits
Cat	Cheltenham	Cheltenham	•		107.5	0.1		classic/current hits
Central FM	Stirling	Earls Hill	•		103.1	0.5		hits/oldies
Centre FM	South East Staffs	Lichfield			101.6	0.062		classic hits
	South East Staffs	Burton	-		102.4	0.062	_	

station	coverage area	transmitter	MW	emrp	FM	erp	TA	info
Century 105	North West England	Winter Hill			105.4	5		music/speech
Century 106	East Midlands	Copt Oak			106	8	TA	classic/contemporary
Century Radio	Fenham	Fenham			96.2	0.05	TA	music/speech
-	Hexham	Newton			96.4	0.2	TA	
	Teeside	Bilsdale			100.7	8.9	TA	
	Tyne and Wear	Burnhope			101.8	10	TA	
Ceredigion	Lampeter	Mynydd Pencarreg			96.6	0.4		community stn
-	Cardigan Bay	Penwaun			97.4	0.4		
	Aberystwyth	Blaen Plwyf			103.3	5.8		
CFM	Carlisle	Caldbeck			96.4	3		recent/classic hits
	West Cumbria	Broughton Moor			102.2	0.81		
	Penrith	Penrith			102.5	0.1		
	W Cumbria/Whitehyn	Whitehaven			103.4	0.4		
Champion*	Caernarfon	Arfon			103	nk		billingual - due Dec 98
Channel 103 FM	Jersey	Fremont Point			103.7	4		classic hits
Channel Travel	M20/Channel ports	M20/Channel ports	5 •		107.6	0.02		music/travel service
Chelmer	Chelmsford	Danbury	-		107.7	0.1		current/classic hits
Chiltern FM	Luton/Dunstable	Dunstable			97.6	1		classic hits
Choice Birmingham	Birmingham	Metropolitan House	е •		102.2	0.5		soul/dance/reggae
Choice London	Brixton	Croydon			96.9	0.05	TA	soul/dance/reggae
City 96.7 FM	Liverpool	Allerton Park			96.7	8.2	TA	pop/rock
City Beat 96.7	Belfast	Black Mountain			96.7	0.55	TA	recent hits
Classic Gold 774	Glos/Cheltenham	Little Shurdington	774	0.14				classic gold/oldies
Classic Gold 792/828	Bedford	Kempston	792	0.275	•			classic gold/oldies
	Luton	Lewsey Farm	828	0.2	•			
Classic Gold 828	Bournemouth	Fern Barrow	828	0.27	•			classic gold/oldies
Classic Gold 936/1161	West Wiltshire	Naish Hill	936	0.18	•			classic gold/oldies
	Swindon	Blunsdon	1161	0.16	•			
Classic Gold 954/1530	Hereford	Breinton	954	0.16	•			classic gold/oldies
	Worcester	-	153 0	0.52	•			
Classic Gold 1260	Bristol	~	1260	1.6	•			classic gold/oldies
Classic Gold 1278/1530		,	1278	0.43	•			classic gold/oldies
	Huddersfield/Halifax		1530	0.74	•			
Classic Gold 1332	Peterborough	'	1332	0.6	•			classic gold/oldies
Classic Gold 1359	Coventry		1359	0.27	•			classic gold/oldies
Classic Gold 1431/1485	•		1431	0.14	•			classic gold/oldies
	Newbury		1485	1	•			-la'aal-4/al-4a
Classic Gold 1557	Northampton	9	1557	0.76	•			classic gold/oldies
Classic Gold Amber	Gt Yarmouth/Norwich		1152	0.83	•			classic gold/oldies
	lpswich		1170	0.28	•			
ci i cilicon	Bury St. Edmunds	Great Barton	1251	0.76	•			dassis mold/oldins
Classic Gold GEM	Derby	Quarndon	945	0.2	•			classic gold/oldies
Classic Cald MADC	Nottingham	Trowell	999	0.25	•			classic gold/oldies
Classic Gold WABC	Wolverhampton	Sedgley	990 1017	0.09				classic gold/oldies
Chudo 1 ERE	Shrewsbury/Telford Vale of Leven	Shrewsbury Millburn Muir	1017	0.03	97	0.05	TA	recent pop music
Clyde 1 FM		Black Hill			102.5	15	TA	recent pop music
	Glasgow				103.3	0.1	TA	
	Rosneath	Rosneath	•		103.3	Ų. I	IA	

station	coverage area	transmitter	MW	emrp	FM	erp	TA	info
Clyde 2 AM	Glasgow	Dechmont Hill	1152	3.6	-			easy listening
Connect FM	Wellingborough	Wellingborough	-		97.2	0.05		classic hits
Cool FM	Belfast	Black Mountain	-		97.4	3.2	TA	adult rock, pop
Country 1035	London	Crystal Palace	1035	1	-			country music
County Sound	Guildford	Peasmarsh	1476	0.5	-			adult contemporary
Crash FM	Liverpool	Liverpool Cathedi	ral -		107.6	0.1		rock/dance
CTFM	Canterbury	Canterbury	-		106	0.1		community station
Delta Radio	Haslemere	Haslemere	-		97.1	0.279)	adult music
Discovery FM*	Dundee							due 1999
Downtown	Limavady	Limavady	-		96.4	2	TA	chart/classic hits
	Enniskillen/Omagh	Brougher Mounta	in -		96.6	8.2	TA	
	Ballymena	Portglenone	-		102.3	0.6		
	Londonderry	Londonderry	-		102.4	10	TA	
	South Newry	Camlough	-		103.1	2	TΑ	
	Belfast	Knock-Breckan	1026	1.7	-			
Dream	Tendring	Telstar Nurseries	-		100	2		adult pop/rock
Dune FM	Southport	Gaw Hill	-		107.9	0.1		adult contemporary
Eagle	Guildford	Guildford	-		96.4	3		adult contemporary
Eleven Seventy	High Wycombe	Wycombe Marsh	1170	0.15	-			easy listening
Essex FM	Southend	Benfleet	-		96.3	1.03	TΑ	recent/classic hits
	Southend Town	Southend Town	•		97.5	0.1		
	Chelmsford	Bakers Wood	-		102.6	2	TA	
The Falcon	Stroud	Randwick Farm	•		107.9	0.1		contemporary music on-
	Stroud	Symonds Hall Fari			107.2	0.04		air 29 Nov 98
Fame 1521	Reigate/Crawley	Gatwick	1521	0.64	•			oldies
FLR*	Lewisham/London		•		107.3	0.05		soul/dance due 10/1/99
Forth AM	Edinburgh	Colinswell	1548	2.2	•			hits/Scottish music
Forth FM	Edinburgh	Craigkelly	•		97.3	8.8		chart/classic hits
	Edinburgh	Black Hill	•		97.6	0.1		
_	Penicuik	Penicuik	•		102.2			
Fosseway	Hinkley/S.W. Leics	Barwell water tov	er -		107.9	0.1		classic hits
Fox FM	Banbury	Farthinghoe	•		97.4	0.3	TA	classic hits
- 1 .	Oxford	Oxford	-		102.6	9	TA	
Galaxy*	North East England				•			due Summer 1999
Galaxy 101	Bristol	Pur Down	•		97.2	0.2	TA	dance/soul/reggae
- 1	Severn Estuary	Mendip	-		101	40	TA	
Galaxy 102	Manchester	Sunley Building	•		102	0.5	TA	dance
Galaxy 105	Yorkshire	Emley Moor	•		105.1	2.58	TA	dance
	Bradford	Idle	•		105.6	0.5	TA	
	Sheffield	Tapton Hill	•		105.6	0.25	TA	
	Hull	High Hunsley			105.8	9.4	TA	
Gemini AM	Exeter	Pearce's Hill	666	0.34	•			classic hits
Camini FRE	Torbay	Beacon Hill	954	0.4	-	4	т.	. 125
Gemini FM	Torbay	Beacon Hill	•		96.4	1	TA	current hits
	Exeter	St Thomas	•		97	1	TA	
C-14 B4 000	East Devon	Stockland Hill			103	1	TA	
Gold Beat 828	Cookstown	Cookstown	828	0.16				American/Irish country
Gold Radio	Shaftesbury	Shaftesbury	-		97.4	0.125		classic hits

					<i>-</i>	• • •		CAL MADIO
station	coverage area	transmitter	MW	emrp	FM	erp	TA	info
GWR (Bristol/Bath)	Bristol	Dundry	-		96.3	2		recent hits/oldies
	Bath	Bath	-		103	0.08		
GWR (5windon/Wilts)	Marlborough	Marlborough	•		96.5	0.05		recent hits/oldies
	Swindon	Blunsdon	•		97.2	0.7		
	West Wilts	Naish Hill	•		102.2	0.5		
Hallam FM	Sheffield	Tapton Hill			97.4	0.4	TA	chart/recent hits
	Barnsley	Ardsley	•		102.9	0.5	TA	
	Doncaster	Clifton	•		103.4	1.5	TA	
Heart 106.2	London	Croydon	•		106.2	4	TA	adult contemporary
Heart Beat	Craigavon	Craigavon	1521	0.5	•			contemporary music
Heart FM	West Midlands	Sutton Coldfield	•		100.7	11	TA	adult contemporary
Heartland FM	Pitlochry/Aberfeldy	Faire Mhor	•		97.5	0.11		English/Gaelic
Hereward FM	Peterborough	Gunthorpe	•		102.7	4		recent/classic hits
Horizon FM103	Milton Keynes	Bow Brickhill			103.3	2		adult contemporary
Huddersfield FM	Huddersfield	Ainley Top	•		107.9	0.1		news, music 50s-90s
Invicta FM	East Kent	Thanet	•		95.9	0.27	TA	recent hits
	Ashford	Wye			96.1	0.22	TA	
	East Kent	Dover			97	0.5	TA	
	Canterbury	Dunkirk			102.8	1	TA	
	Maidstone/Medway	Bluebell Hill			103.1	4	TA	
Island FM	Alderney	Fort Albert			93.7	0.01		classic/tuneful hits
	Guernsey	Les Touillets			104.7	1.25		
Isle of Wight	Ventnor	Ventnor			102	0.05		classic hits/news
	Ryde	Ryde Pier			102	0.02		
	Isle of Wight	Chillerton Down	•		107	0.1		
Isles FM	Western Isles	Eitshal	•		103	4		English/Gaelic
Jazz FM 100.4	NW England	Winter Hill	•		100.4	5	TA	jazz/blues/soul
Jazz FM 102.2	London	Croydon	•		102.2	2	TA	Jazz/blues/soui
KCBC	Kettering	Geddington	•		107.4	0.1		classic hits
Kestrel FM	Basingstoke	Fanum House	•		107.6	0.1		classic hits
Key 103	Manchester	Saddleworth	•		103	4	TA	chart hits
KFM	Tonbridge (South)	Tunbridge Wells	•		96.2	0.19		adult contemporay
	Sevenoaks	Wrotham	•		101.6	0.4		
Kingdom FM	Dunfermline	Knock Hill	•		95.2	0.5		classic/current hits
	Glenrothes	Purin Hill	•		96.1			
Kiss 100 FM	London	Croydon	•		100	2		dance
Kix 96	Coventry	Coventry City Ce			96.2	0.1	ΤA	music
KL.FM	Kings Lynn	Great Massingha	m -		96.7	3		recent/classic hits
Lantern	Barnstaple	Huntshaw Cross	•		96.2	2.5		gen entertainment
LBC	London	Saffron Green	1152	23.5		_		comment/debate
Leicester 5ound	Leicester	Billesdon	•		105.4	5	TA	recent hits
Liberty	London	Lea Bridge Road	963	0.95				station for women
	West London	Glade Lane	972	1				. 1.9
Lincs FM	Grantham	Grantham	•		96.7	0.05	TA	recent hits
	Lincoln	Belmont		_	102.2	6.4		
Lite AM	Manchester	Ashton Moss	1458	5				easy listening
Lochbroom FM	Ullapool	BBC Ullapool	-		102.2	0.7		community station
London Greek	London/Haringey	Alexandra Palace	•		103.3	0.05		music and news

station	coverage area	transmitter	MW	emrp	FM	erp	TA	info
London Turkish	London/Hackney	Lea Bridge Road	1584	0.2				Turkish station
Magic 828	Leeds	Morley	828	0.12				classic hits
Magic 1152	Tyne & Wear	Greenside	1152	1.8				classic hits
Magic 1161	Humberside	Goxhill	1161	0.35				classic hits
Magic 1170	Teesside	Stockton	1170	0.32				classic hits
Magic 1548	Liverpool	Bebington	1548	1				classic hits
Magic AM	Doncaster	Crimpsall	990	0.25	•			classic hits
	Barnsley	Ardsley	1305	0.15	•			
	Sheffield/Rotherham	Skew Hill	1548	0.74				
Maldwyn	Montgomeryshire	Newtown	756	0.63	•			bilingual community
Mansfield*	Mansfield	Fishponds Hill	-		103.2	0.1		due on-air 1 Feb 99
Manx	Snaefell	Snaefell			89	2		general entertainment
	Douglas	Douglas			97.2	23		Manx isn't a RA licenced
	Jurby	Jurby			103.7	4		radio station.
	Foxdale	Foxdale	1368	20				
Marcher Coast FM	North Wales	Great Ormes Head			96.3	1.25		hits/Welsh progs
Marcher Gold	Wrexham/Deeside	Farndon	1260	0.64				hits/Welsh language
Medway FM	Medway/Chatham	Gillingham			100.4	0.04		70s,80s,90s music
	Medway	Hoo St Werburgh			107.9	0.1		
Melody	London	Croydon			105.4	4		easy listening
Mercia FM	Coventry	Shilton			97	2		recent hits
	Leamington Spa	Leamington Spa			102.9	0.05		
Mercury FM	Horsham	Horsham			97.5	0.03		current/classic hits
	Reigate/Crawley	Reigate			102.7	3.6		
Metro FM	Tyne & Wear	Burnhope			97.1	10	TA	chart/recent music
	Tyne Tunnel	Tyne Tunnel			97.1	nk	TA	
	Alnwick	Shilbottle			102.6	0.2	TA	
	Tyne Valley	Fenham			103	0.05	TA	
	Hexham	Newton	•		103.2	0.12	TA	
MFM	Deeside	Moel-y-Parc	•		97.1	0.3		chart music
	Wrexham	Wrexham	•		103.4	1.4		
Millenium Radio	Thamesmead	Shooters Hill	•		106.8	0.09		community station
Minster FM	Thirsk	Calvert's Carpets	•		102.3	0.04	TA	hits
	York	Acklam Wold	•		104.7	2.5	TA	
Mix 96	Aylesbury	Quaniton Hill	•		96.2	1		classic hits
Moray Firth Radio	Speyside	Cairn Gorm	•		96.6	0.45		hits/Scottish music
	Fraserburgh	Mormond Hill	•		96.7	0.1		
	Inverness	Mounteagle	•		97.4	10		
	Caithness	Ben Dorrery	•		102.5	1.2		
	Keith	Tor Sliasg	•		102.8	1		
	Inverness	Tarbat Ness	1107	1.5	•			
NECR	Inverurie	Meldrum	•		102.1	1.25		classic hits
(N.E.Community Radio)	Kildrummy	Scar Hill	•		102.6	0.3		
	Colpy	Hill of Foundland			103.2	0.3		
Neptune Radio	Folkestone	Creteway Down	•		96.4	0.1		news/music/info
	Dover	Guston	-		106.8	0.1		
Nevis Radio	Fort William	Trislarg	•		96.6	0.45		community stn
	Glencoe	Glencoe			97	0.25		

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station	coverage area	transmitter	MW	emrp	FM	erp	TA	info
	Skye/Mallarg	Cnoc Malagan			102.3	0.8		
	Loch Leven	Glenachulish			102.4	0.8		
News Direct	London	Croydon			97.3	4	TA	news/info
Northants 96	Northampton	Northampton			96.6	4		recent hits
NorthSound One	Aberdeen	Durris			96.9	10	TA	contemporary hits
	Aberdeen	Balgownie			97.6	0.02	TA	,
	Peterhead	Stirling Hill			103	0.17	TA	
NorthSound Two	Aberdeen	Nigg	1035	0.78				classic memories
Oak*	Loughborough	University Tower	_		107	0.1		hits -due 31 Jan 1999
Oasis FM	St Albans/Watford	Pimlico	-		96.6	0.5		hits
Oban FM	Oban	Pulpit Hill			103.3	0.31		info/music
Ocean FM	Winchester	Crabwood Farm			96.7	0.5		classic hits
	Portsmouth	Fort Widley			97.5	0.85		
Oldham FM*	Oldham	,						due 1999
Orchard FM	Taunton	Taunton	-		96.5	0.07		classic hits
	Yeovil	Cheddington	_		97.1	0.4		
	Somerset	Mendip			102.6	4		
Oxygen	Oxford	Westgate Centre			107.9	0.1		student station
Peak	Matlock	Stanton Moor			102	0.1		contemporary hits
	Chesterfield	Chesterfield	-		107.4	0.1		, ,
Piccadilly 1152	Manchester	Ashton Moss	1152	1.5				oldies - will change to a
								'Magic' format early 99
Pirate FM	East Cornwall	Caradon Hill	-		102.2	2.5		recent hits
	West Cornwall	Redruth	-		102.8	10.2		
Plymouth Sound AM	Plymouth	Plumer Barracks	1152	0.32				easy listening
Plymouth Sound FM	Tavistock	Tavistock	-		96.6	0.04		classic hits
	Plymouth	Plympton	•		97	2		
Power FM	Southampton	Chillerton Down	•		103.2	2	TA	recent hits
Premier	London/Enfield	Enfield FC	1305	0.5	•			Christian based station
	London/North Looe	North Looe	1305	0.5	-			
	London	Bow	1332	1	-			
	London/Dartford	Dartford Marshes		0.5	-			
	London/Heathrow	Heathrow	1413	0.5	-			
Pulse FM	Bradford	ldle	•		97.5	0.5	TA	chart/recent hits
	Huddersfield/Halifax	Vicars Lot	•		102.5	2	TA	
Q102.9	Londonderry	Londonderry	•		102.9	7	TA	current/classic hits
Q103	Newmarket	Icewell Hill	•		97.4	0.004		recent hits/oldies
0514	Cambridge	Madingley	•		103	1		4
QFM	Paisley	Gleniffer Braes	•		96.3	0.2		classic hits
Quay West	West Somerset	Minehead North	•		102.4	1		soft adult contemporary recent hits
Ram FM	Derby Newport	Quarndon Christchurch	•		102.8 97.4	0.6 0.5		chart/classic hits
Red Dragon FM	,		•		103.2	2		Cuary Classic Hits
Red Rose 999	Cardiff Preston/Blackpool	Wenallt Longton	999	0.8	103.2	2		classic hits
RNA FM	Arbroath	Arbroath Infirmiry		0.0	96.6	0.02		hospital radio
Rock FM	Preston/Blackpool	Winter Hill	-		97.4	2		current/80s pop/rock
Rutland*	Rutland	Manton	-		107.2	0.1		classic/chart hits due
National	Stamford	Tinwell	-		97.4	0.02		on-air 13 Dec 98
	Starriord	HITTACH	_		37.7	0.02		Olifali 15 Dec 50

station	coverage area	transmitter	MW	emrp	FM	erp	TA	info
Sabras Sound	Leicester	Freeman's Common	n 1260	0.29				Asian station
Scot FM	Glasgow	Black Hill			100.3	20	TA	adult contemporary
	Edinburgh	Craigkelly			101.1	10	TA	
evern Sound FM	Glos/Cheltenham	Churchdown Hill			102.4	2		recent hits
	Stroud	Stroud			103	0.1		
SGR	Colchester	Wivenhoe Park			96.1	0.5		adult recent music
SGR FM	Bury St. Edmunds	Great Barton			96.4	2		adult recent music
	lpswich	Foxhall Heath			97.1	3.4		adult recent music
SIBC	Shetland Islands	Bressay			96.2	4		contemporary music
	Shetland Islands	Lerwick			102.2	0.025	5	
Signal FM	Congleton	Sutton Common			96.4	0.25		current music
-	Stockport	Romiley			104.9	0.64		
Signal One	Stafford	Pye Green			96.9	0.2	TA	recent/classic hits
g	Stoke on Trent	Alsagers Bank			102.6	4		
Signal Two	Stoke on Trent	Sideway	1170	0.2				oldies
Silk FM	Macclesfield	Sutton Common			106.9	0.15		soft adult contemporar
South West Sound	Stranraer	Cairn Pat			96.5	0.12		classic hits
	Dumfries	Riddings Hill			97	1		
	Kirkcudbright	Cambret Hill			103	0.67		
Southern FM	Newhaven	Newhaven			96.9	0.1		classic hits
	Hastings	Hastings			102	0.2		
	Eastbourne	Heathfield			102.4	8.2		
	Brighton	Whitehawk Hill			103.5	0.9		
Sovereign	Eastbourne	Butt's Brow			107.5	0.1		news/music
Spectrum	London	Crystal Palace	558	1	•	•		music/ethnic info
Spire FM	Salisbury	Camp Hill			102	1.25		classic hits
Spirit FM	Chichester	The Trundle			96.6	0.4	TA	classic & older hits
-	Littlehampton	Hammerpot			102.3	0.48	TA	
Star FM	Slough	Slough			106.6	0.25		mellow adult mix
Stray FM	Harrogate	Harlow Hill			97.2	0.6		adult contemporary
Sun FM	Sunderland	Haining			103.4	0.1		classic hits
Sunrise FM	Bradford	Idle			103.2	0.4		Asian/Afro-Carib.
Sunrise	London	Brookmans Park	1458	125	•	•		Asian/ethnic
Sunshine 8SS	Ludiow	Villa Farm	855	0.15				melodic pop
Surf 107	Brighton	Sussex Heights			107.2	0.1		adult contemporary
Swansea Sound	Swansea	Winsh-wen	1170	0.58		• • • • • • • • • • • • • • • • • • • •		current/classic hits
Tay AM	Dundee	Greenside Scalp	1161	1,4				chart/classic
in y rain	Perth	Friarton Road	1584	0.21				C. 10. 0 C. 1033.C
Tay FM	Perth	Perth		-	96.4	0.8		chart/hits/Scottish
,	Dundee	Angus			102.8	5.25		
Telford FM*	Telford				nk	3.23		due April/May 1999
Ten 17	Harlow	Rye Hill			101.7	0.1	TA	recent hits/oldies
TFM	Teesside	Bilsdale			96.6	8.9	TA	chart/recent music
Thames FM	SW London	Tolworth Tower			107.8	0.1	,,,	pop/local news
TLR	Thanet	Broadstairs			107.2	0.1		current/classic hits
Touch Radio	Newport	Christchurch	1305	0.2		0.1		classic hits
	Hemport	CHIDOGRAPH	1000	9.2				COSSIC TITES

station	coverage area	transmitter	MW	emrp	FM	erp	TA	info
Tower FM*	Bolton				nk			due 1 March 1999
Trax	Bassetlaw/Worksop	Bassetlaw			107.9	0.1		launched 22 Nov 98
Trent FM	Nottingham	Mapperley Ridge			96.2	1		recent hits
	Mansfield	Fishponds Hill			96.5	0.05		
Valleys Radio	Eastern Valleys	Aberdare	999	0.3				current/classic hits
	Western Valleys	Ebbw Vale	1116	1				
Vibe FM	Cambridge	Madingley			105.6	1		dance
	Norwich	Stoke Holy Cross			106.1	4		
	Ipswich	Mendlesham			106.4	20		
	Peterborough	Gunthorpe			107.7	0.2		
Viking FM	Humberside	High Hunsley			96.9	9.4	TA	chart/recent
/irgin Radio	London	Croydon			105.8	4	TA	pop/rock
The Wave(5wansea)	Swansea	Kilvey Hill			96.4	1.38		hits
he Wave(Blackpool)	Błackpool	Blackpool Tower			96.5	0.1	TA	contemporary
Wave 105	Solent	Chillerton Down			105.2	10		soft rock
	Poole	Poole			105.8	0.625	,	
Naves Radio Peterhead	Peterhead/Fraserburgh	Mormond Hill			101.2	1.65		current/classic hits
Vessex FM	West Dorset	Bridport			96	0.062		classic hits
	Dorchester/Weymouth	h Bincombe			97.2	0.625	,	
Vest Sound AM	Ayr	Symington	1035	0.32				middle of the road
Vest Sound FM	Ayr/Darvel	Darvel			96.7	2.2		classic/chart hits
	Ayr/Girvan	Girvan			97.5	0.15		
Vey Valley	Alton/Four Marks	Four Marks			101.6	0.05		classic hits
	Alton	Bordon			101.6	0.01		
	Alton (Hants)	Alton			102	0.1		
Vire	Warrington	High Warren Rese	rvoir -		107.2	nk		adult contemporary
Vish	Wigan	Billinge Hill			102.4	0.1	TA	classic hits
Volf	Wolverhampton	Mander House			107.7	0.1		local news/info
Vyvern FM	Kidderminster	Kidderminster			96.7	0.1	TA	adult contemporary
	Hereford	Ridge Hill			97.6	0.8	TA	
	Worcester	Malvern			102.8	1	TA	
(fm	London	Crystal Palace			104.9	2		rock
(L	Birmingham	Langley Mill	1296	10				Asian music
orkshire Coast	Scarborough	Olivers Mount			96.2	0.625		classic hits
	Whitby	Whitby			103.1	0.08		
Yorkshire Dales	Kendal	Hawes	936	1	•			classic/current hits
	Skipton	Skipton	1413	0.1				

^{*} stations marked with an asterisk were planned but not on-air at the time of publication

INDEPENDENT STATION OWNERSHIP

FOR a number of years I have had requests to publish a list of radio station groupings. In part, requests have stemmed from simple curiosity, but also from concerns about the increasing size of some groups, and the influence this has on the character of local stations that get swallowed by a larger group.

The Radio Authority manage the ownership system, as laid out in the Broadcasting Acts of 1990 and 1996. The rules limit any one person (or company) to a 15% share of the radio market for national and local commercial radio. In addition to limiting persons to one national licence, there are

also limits in relation to providing local services in overlapping areas. Persons may not hold more than two FM or AM local licences which share a potential audience, unless the Authority has determined that this could not be expected to operate against the public interest within the area concerned.

The Radio Authority publish 'Ownership Guidelines' a document giving full details of the rules applying to both analogue and digital licensing, and also publish ownership lists in their 'Pocket Book'.

This list was compiled in November 1998. At the time, the following stations were under offer or likely to change hands - RTL Country 1035, Choice Birmingham

Border Radio Holdings Ltd

Century 105
Century 106
Century Radio
Sun FM

CLT

Atlantic 252 RTL Country 1035 (under offer)

Capital Radio plc

Capital FM BRMB

Capital Gold 1548

Capital Gold - Birmingham Capital Gold - Hampshire Capital Gold - Sussex

Capital Gold Kent

Fox FM (major shareholder)

Invicta FM
Ocean FM
Power FM
Red Dragon FM
Southern FM
Touch Radio

Chrysalis Radio Ltd

Heart FM 100.7 Choice FM Birmingham

Galaxy 101 Galaxy 102

Galaxy 105

Galaxy FM (new N.E. Regional)

Heart 106.2

Aire FM

EMAP Radio

Hallam FM
Key 103
Kiss 100
Magic 105.4 FM
Magic 828
Magic 1152
Magic 1161
Magic 1170
Magic 1548
Magic AM
Metro FM

Piccadilly 1152 (soon 'Magic') Radio City 96.7

Red Rose 999 Rock FM TFM Viking FM

Essex Radio Ltd

Essex FM KFM Oasis FM Ten 17 The Breeze Vibe FM

GWR Group plc

2-Ten FM 2CR FM B97 Beacon FM

Broadland 102 Brunel Classic Gold

Chiltern FM Classic FM

Classic Gold 774 (now back in

the fold!)

Classic Gold 828 Classic Gold 936/1161 Classic Gold 954/1530 Classic Gold 1260

Classic Gold 792/828

Classic Gold 1332 Classic Gold 1359 Classic Gold 1431/1485 Classic Gold 1557

INDEPENDENT STATION OWNERSHIP

Classic Gold (Amber)

Classic Gold WABC

Horizon FM 103

GWR (Bristol/Bath)

GWR (Swindon/Wilts)

Hereward FM

Leicester Sound

Mercia FM

Northants 96.6

O103 FM

Ram FM

Severn Sound FM

SGR Colchester

SGR FM

Trent FM

Wyvern FM

(LBC 1152, News Direct 97.3 - company chairman Ralph

Bernard - also chief exec of the

GWR Group)

Golden Rose Communications plc

Jazz FM 100.4

Independent Radio Group plc

QFM

Wish

Lite AM

Fame 1521

Mercury FM

Scot FM

Wire FM

Lincs FM plc

Fosseway Radio

Lincs FM

Rutland Radio

Trax FM

The Local Radio Company Ltd

CAT FM

Connect 97.2

Gold Radio

Isle of Wight Radio

KCBC

Plymouth Sound AM

Plymouth Sound FM

Spire FM

Wessex FM

Marcher Radio Group

Champion FM

Marcher Coast FM

Marcher Gold

MFM

MFM Wirral

Minster Sound Radio plc

Minster FM

Yorkshire Coast Radio

Orchard Media Ltd

Gemini AM

Gemini FM

Lantern FM

Orchard FM

Scottish Radio Holdings plc

Clyde 1 FM

Clyde 2 AM

Cool FM

Downtown Radio

Forth AM

Forth FM

Moray Firth Radio

Northsound One

Northsound Two

Radio Borders

Radio Tay AM

South West Sound

Tay FM

West Sound AM

West Sound FM

The Radio Partnership

Signal One

Signal FM

Signal Two

Swansea Sound

The Pulse

The Wave 96.4 (Swansea)

The Wave 96.5 (Blackpool)

Valleys Radio

Yorkshire Coast Radio

Tindle Radio Ltd

Channel 103

Island FM

Mellow 1557 (relaunches Nov 98

as Dream 100 FM)

The Beach

UK Radio Developments Ltd

County Sound

Delta Radio

FLR

Pirate FM

Star FM

The Eagle 96.4 FM

Wey Valley Radio

BBC WORLD SERVICE

Simon Spanswick looks behind the scenes at Bush House, home of the BBC World Service. But is it all sweetness and light...

LAST OCTOBER staff at Bush House, home to the BBC World Service in English and 43 other languages, were shocked to hear of the departure of Sam Younger, World Service Managing Director. With only 24 hours notice, but almost 20 years service in the organisation across current affairs, the Arabic Service and latterly a senior manager, Younger left the building. He was replaced by Mark Byford from BBC Regional Broadcasting.

Why this sudden change of personnel? The rumour machine quickly swung into action. putting all sorts of stories into the press and the Bush House canteen. The exact circumstances of Younger's departure may never be known, although the rumour with the greatest currency suggests that he could no longer put up with the Director-General's handling of World Service, and in particular Sir John's desire to have increased control of the international radio jewel in the BBC's crown.

But does Younger's departure have any real effect on World Service or its listeners? It is probably too soon to say, although a positive outcome has been the indefinite postponement of the decision about closing the BBC German Service, the last remaining western European language service at Bush House. Byford felt he could not take such a monumental decision after only a couple of weeks in his new post. Many of the other changes which were put in train under Younger's stewardship have continued, including the expansion

of news output on World Service English in order to make the programme schedule more attractive to local FM stations around the world which want a high quality international news service

To this end, last year the European English stream launched The World Today, a rolling news and current affairs programme that is on the air for two and a half hours every weekday morning. It is slickly produced and presented by a team that includes former Today presenters like Alex Brodie. It sounds good, and has probably started a trend in modernising World Service news presentation. From the beginning of this year, the North American English stream is offering US rebroadcasting partners a more flexible schedule that allows elegant opt-in and opt-out points and a greater concentration of news and current affairs output which can be used as an overnight sustaining service across the USA.

Talk to journalists in the Newsroom at Bush House and they will tell you that despite being part of BBC News (the rest of which is based in the new News Centre in the final extension of Television Centre in White City), they have independence and access to some of the best brains in the world when it comes to needing regional information and background from around the world - the language service staff of World Service. But it is confusing for the listeners, they say, that there is such a wide variety of news output, from five-minute announcerread bulletins to 15-minute illus-

How to listen

On Short Wave

If you have a short wave receiver, and are listening in Western Europe, try 3.955, 6.195, 7.325, 9.410, and 12.095 MHz.

Remember that higher frequencies tend to work best during the day, lower frequencies at night.

On 648 medium wave

If you live in London, or the South-East of England, you can hear the BBC World Service in English on 648kHz for most of the day.

Overnight on Radio 4

Overnight, BBC World Service is carried on Radio 4's long wave frequency of 198 kHz (1515 m) and FM transmitters, when the national station closes down at 0100hrs.

On Satellite

In Europe listeners can enjoy HiFi quality reception via Astra 1B. Tune to the UK Gold television channel, then select the audio signal at 7.38 MHz.

On Cable

Cable providers such as Cable and Wireless put World Service programmes on to their feeds.

On the Internet

The World Service has a good web site, including live audio streaming.

www.bbc.co.uk/worldservice/

BBC WORLD SERVICE

trated bulletins (in other words, announcer-read but including correspondents' reports and other actuality) to half-hour news programmes like Newsdesk.

But do the listeners worry? If you want the latest, most reliable news source when you are in the Middle East, or in Asia, or anywhere else for that matter, you will tune to the World Service. There are rarely errors in the news - the two source rule is still rigorously applied in the Bush House Newsroom - and there is not the same amount of 'fluffy' news that has permeated so much British TV and radio news programmes. Tabloidism has not reached the World Service.

Combine the news service with all the other high quality programmes on World Service in English, and you have an unbeatable radio service - well, almost! Old favourites like the weekday magazine programme Outlook continue to draw huge audiences and big post bags, and the musical output from A Jolly Good Show (still presented by Dave Lee Travis) to the weekly classical programme Music Review continue to ensure that no genres of music are ignored.

But a key problem for World Service - and for just about every international broadcaster - is that as deregulation occurs world-wide, the competition for the ears of the audience intensifies. The World Service audience has fallen below 140 million for the first time in several years, and now more and more listeners are hearing short news bulletins via local FM stations instead of tuning in direct on short wave.

To counteract this downward audience trend. World Service commissioned branding consultants Lambie-Nairn to devise a new image. Last September they unveiled a new brand which describes Bush House as the 'World's Reference Point'. Whether a shiny new visual identity will mean much to the 138 million people who tune in - and of which only perhaps a million or so will see any print publicity from Bush House - is a moot point. But it seems to me that World Service is still going strong, and has the programme mix to ensure its continued success well into the 21st century.

If you are going on holiday, write to BBC World Service for a copy of the **Pack the BBC** leaflet and the programme guide for the area you are travelling to. Both are available free-of-charge from BBC World Service, Bush House, London WC2B 4PH

BBC On Air



A monthly magazine, **BBC On Air** gives

comprehensive World Service programme details, and frequency news, together with details of *BBC World* and *BBC Prime* television. It is available on subscription for £18.00 a year *BBC On Air*, PO Box 765, Bush House, London WC2B 4PH, UK Tel. 0171 257 2211

Sample Schedule

To give a idea of the range of programmes on the World Service we have reprinted a sample schedule. For an up-to-date schedule with full programme info see BBC on Air - details below.

A daily programme listing is also published in *Radio Times*.

Mondays - Nov 1998

0000 Newsdesk 0030 Westway 0045 Britain Today - News 0100 Newsdesk 0130 Seven Days 0145 Wood, Guts and Brass 0200 Newsday 0230 On Screen 0300 World News 0305 World Business Report 0315 Sports Roundup 0330 Oiling the Wheels 0400 The World Today 0700 World News 0715 Off The Shelf - Readings 0730 The Vintage Chart Show 0800 World News 0810 Pause for Thought 0815 Pop on the Line 0900 World News 0905 World Business Report 0915 Record News 0930 Westway Access 0945 Sports Roundup 1000 Newsdesk 1030 Omnibus 1100 Newsdesk 1130 Jazzmatazz 1200 World News 1205 World Business Report 1215 Britain Today News 1230 Seven Days 1245 Sports Roundup 1300 Newshour 1400 World News 1405 Outlook Features 1430 Chill Out - Youth 1500 World News 1505 Sports Roundup 1515 Westway Access 1530 Pop the Ouestion 1600 World News 1615 Seven Days 1630 Insight 1645 Britain Today News 1700 Europe Today 1730 World Business Report 1745 Sports Roundup 1800 Newsdesk 1830 Brain of Britain 1900 News Summary 1901 Outlook Features 1925 Pause for Thought 1930 Multitrack Hit-List 2000 Newshour 2100 World News 2105 World Business Report 2115 Britain Today - News 2130 Heritage 2200 Newsdesk 2230 Insight 2245 Sports Roundup 2300 World News 2305 Outlook 2330 Multitrack Hit-List

LISTENING TO OVERSEAS STATIONS

THE LIST on the opposite page shows continental medium wave and long wave radio stations that can be heard in the UK. It was compiled by the Foreign Media Unit, BBC Monitoring in October 1998. The reception of the stations listed can vary considerably from one part of the United Kingdom to another. The type of radio used, and differences between day-time and night-time reception conditions mean that this list is simply a guide to some of the stations that may be heard. Many overseas broadcasters now use satellite to transmit programmes without interference.

stations

Whether you are interested in learning a foreign language, or just hearing foreign news - there's certainly a lot to listen to.

Below we have listed a few examples of stations with interesting programmes in English. Times are GMT. Most broadcasters will send a programme schedule if requested, and usually provide tuning and programme information on their web site

Belgium

Brussels Calling is on the air every day on 1512 kHz at 2100-2130 hrs. News from Belgium and interesting features. Radio Vlaanderen International. PO Box 26. B-1000 Brussels, Belgium, www.brtn.be/rvi/

Netherlands

Radio Netherlands the Dutch international service broadcasts to Britain daily from 2130 to 2325 hrs on 1512 kHz medium wave via a 300kW transmitter in Belgium. A wide range on interesting programmes, including Media Network on Thursdays. Radio Netherlands, PO Box 222, 1200 Hilversum. Netherlands, www.rnw.nl/rnw

Radio 10 Gold broadcasts music on 675kHz medium. wave, and can be heard over much of the country.

Ireland

Featuring names like Gay Byrne, Pat Kenny, Marion Finnucane and Des Cahill. RTE Radio One is Ireland's most popular radio station. It can be heard clearly over much of England on 567kHz medium wave. It broadcasts a mixture of speech and music, news and information. Listen out while you still can for Gay Byrne's excellent show. Wed-Fri at 1100hrs - he retires at the end of 1998.

RTE, Donnybrook, Dublin 4, IRELAND www.rte.ie/

Sweden

Radio Sweden broadcasts half-hour programmes in English every day at 1830, 2030 and 2230, plus 2130 at weekends, on 1179 kHz.

Radio Sweden, S-105 10, Stockholm Sweden www.sr.se/rs/

listening guides

Many overseas stations can be heard on radio here in the UK. We have listed some of the stronger long and medium wave stations opposite, but don't have the space to cover more than these. and certainly not the many short wave transmissions that can be heard.

The following publications cover short wave listening in more detail -

The annual World Radio TV Handbook, published in November 1998 at £19.50.

WRTH has comprehensive frequency listings for all countries plus technical information including equipment reviews





1999 Passport to World Band Radio published in October 1998 at £15.50. Short wave listening advice. receiver reviews, short wave frequency and programme information.

Both books are available from Short Wave magazine's book ordering service.

See page 124 for details.

The 32 page Global Radio Guide - £3.95 lists broadcasts in English and is available from Short Wave magazine's book ordering service (see page 124 for details), or from the publishers on 01255 676996.



LISTENING TO OVERSEAS STATIONS

Frequency (kHz)	Country	Station	Language(s)
Long Wave			(* inc English)
153	Germany	Deutschlandfunk	German
162	France	France Inter	French
177	Germany	Deutschland Radio	German
183	Germany	Europe 1	French
216	Monaco	Radio Monte Carlo	French
225	Poland	Polish Radio 1	Polish
234	Luxembourg	RTL	French
243	Denmark	D.R. Radio 1	Danish
252	Eire	Atlantic 252	English
270	Czech Republic	Czech Radio	Czech
Medium Wav	∕e		
531	Faroe Islands	Utvarp Foroya	Faroese
540	Belgium	VRT Radio 2	Dutch
567	Eire	RTE Radio 1	English/Gaelic
585	Spain	Radio Nacional	Spanish
612	Eire	RTE '2FM'	English
621	Belgium	RTBF Radio 1	French
639	Spain	Radio Naçional	Spanish
675	Netherlands	Radio 10 Gold	Dutch
711	France	Radio Bleue	French
747	Netherlands	NOS Radio 1	Dutch
846	Italy	RAI Radio 2	Italian *
855 864	Spain France	Radio Nacional	Spanish
873	Germany	Radio Bleue American Forces	French
900	Italy	RAI Radio 1	English Italian *
927	Belgium	VRT Radio 1	Dutch
963	Finland	Radio Finland	Various *
972	Germany	Nord, Rundfunk	German
1008	Netherlands	NOS Radio 5	Dutch
1062	Denmark	D.R Radio 2	Danish
1098	Slovakia	Slovak Radio	Slovak
1134	Croatia	Croatian Radio	Croatian *
1179	Sweden	Radio Sweden	Various *
1278	Eire	RTE '2FM'	English
1287	Czech Republic	Radio Free Europe	Czech/Slovak
1314	Norway	NRK - Prog 1	Norwegian
1368	Isle of Man	Manx Radio	English
1377	France	Radio Bleue	French
1386	Russia Netherlands	Voice of Russia	Various *
1395 1395	Albania	Business Radio - daytime Trans World Radio - evenings	Dutch English
1422	Germany	Deutschlandfunk	German
1440	Luxembourg	RTL	German
1467	Monaco	Trans World Radio	Various *
1512	Belgium	R.Flanders/R.Netherlands	Various *
1530	Vatican	Vatican Radio	Various *
1539	Germany	Trans World Radio/ERF	German
1593	Germany	Voice of America/Radio Free Europe	Serbo-Croat

SATELLITE RADIO

THERE have been a number of developments in the satellite scene during the year.

Merlin Network One (MNO) launched as a combined satellite and short wave station, producing its own shows, and providing a vehicle for others wanting to get on-air. More of MNO

In February 1998, BSkyB launched a joint venture with the music subscription service Music Choice Europe (MCE). The new service, Sky Music Choice, will offer Sky subscribers up to 44 channels of CD quality music, 24 hours a day. The deal gives BSkyB a 49 per cent share in MCE, alongside existing shareholders the Warner Music Group and the Sonv Corporation of America.

The service carries themed, nonstop channels covering rock, pop, classical and other music genres.

Country Music Radio now offers a 24 hour country music service. Still in the hands of its founder. Lee Williams, the station has received a number of awards, as country fans continue to vote it the best country station in Europe.

European Klassik Rock started as a rock come classic pop service, with the night hours being a sustaining service, offered to other stations, called Night Tracks. The night time service has now been scrapped and the owners have leased that time to a soul station. EKR is now a very automated service with very little of the original presenter driven programming.

World Radio Network (WRN) celebrated their fifth birthday towards the end of 1998. The service has developed into a major distribution service, seen as a specialist in international news. WRN received an award for radio innovation in 1998, and also started their own news service during the year.

Merlin Network One (MNO) is the brainchild of Eric Wiltsher, a long standing supporter of satellite broadcasting. However, his with Merlin Communications has seen the launch of a service combining satellite and short wave. MNO broadcasts to the UK via satellite and to other parts of the world via the network of Merlin Communications shortwave transmitters. It can be heard in the UK on short wave. The service also acts as an umbrella for other broadcasters, in a similar way to WRN.

The first major client to sign with MNO was the service called the Rock Radio Network, RRN boasts a host of well known names within its presenter lineup including Tommy Vance and the long established rock-producer Tony Wilson.

MNO broadcasts on satellite on the Astra transponder 58, 10.847 vertical polarisation, using 7.38 and 7.56 MHz subcarriers. For details of short wave frequencies and programme times, contact the station. MNO's details are on page 123 of the RLG.

Programme details for the majority of satellite radio stations based in the UK can be found in Satellite Times magazine which has a section devoted to satellite radio

Internet users can also find satellite details at Satco Dx's site. www.satcodx.com/

How does it work?

It's simple; if you have satellite TV installed, you have satellite radio. Unless you are listening to one of the few subscription services it doesn't even cost any extra. You don't need any extra equipment. In fact you don't even need a radio. You just press a button on your remote handset, and there it

Each satellite carries a number of 'transponders'. These receive signals beamed up from earth, and, after boosting the signal, send it back to earth, straight to your dish.

Each transponder has enough frequency space to carry one picture channel, and several sound channels. There are typically 16 transponders on a satellite. Unused sound channels can be used to carry radio stations.

Each transponder has a number of different subcarrier frequencies. Typical frequencies are -

7.02, 7.20, 7.38, 7.56, 7.74, 7.92, 8.10 and 8.28 MHz. Once tuned to a transponder, you can tune through these subcarrier frequencies, in much the same way as you tune to frequencies on a normal radio. Alan Beech



Satellite Times £2.20 from newsagents.Tel 0113 2585008

SATELLITE RADIO STATIONS

THERE ARE many radio stations alongside satellite TV stations. Most are relays of radio stations also broadcasting terrestrially. This is a selection of the stations that can be received in the UK, from the three major satellite positions with a 60-80 cm dish connected to the appropriate receiver.

Station	Satellite - system	Programme/language
Radio Vlaanderen Int.	Astra 19°E FM sub	Belgian external radio - including English
Radio Canada Int.	Hot Bird 13°E FM sub	Canadian external radio - French and English
39 French radios	Astra 19°E digital	Commercial and public service radio
33 Trenen radios	Astra 15 E digital	stations - French and Arabic
France Inter, Info,	Hot Bird 13°E FM sub	Three national domestic radio services -
culture Europe	1100 5110 13 2 1101 305	Timee hattorial domestic ladio services
Radio France Int.	Astra 19°E FM sub	French external radio for Europe - French and
		various inc English
Deutsche Welle	Astra 19°E FM sub, ADR	Germany's external radio - various inc English
74 German stations	Astra 19°E various sys.	A large selection of news, music and specialist radio - German
Irish Satellite Radio	Astra 19°E FM sub	Pop station based in Limerick - English
RTE 1	Astra 19°E FM sub	Irish domestic radio - English and Gaelic
RAI Radio 1.2.3.	Hot Bird 13°E FM sub.	Italian national radio stations and
International and Parliament	digital	external radio - Italian and various
RTL Radio	Astra 19°E all systems	Oldies music, very little speech - English
Trans World Radio	Astra 19°E FM sub	Religious radio - various inc English
Radio Netherlands	Astra 19°E digital	Dutch external radio - various inc English
Sky Radio	Astra 19°E FM sub	European music, adverts, little speech - Dutch
11 Spanish stations	Astra 19°E digital	Commercial radio stations - Spanish
Radio Sweden	Hot Bird 13°E FM sub	Sweden's external radio - various inc English
Swiss Radio International	Astra 19°E FM sub, ADR	Swiss external radio - continuous English
Asda FM, Cost Cutter FM	Astra 19°E FM sub	Continuous supermarket music and adverts
BBC Radio 1,2,3,4,5 Live	Astra 19°E FM sub	UK domestic radios - English
BBC World Service	Astra 19°E FM sub	UK external radio - English
Country Music Radio	Astra 19°E FM sub	Country music - English
European Klassik Rock	Astra 19°E FM sub	UK adult rock station - English
Merlin Network One	Astra 19°E FM sub	External radio service, specialist broadcasters -
Student Radio Network	Astra 19°E FM sub, ADR	UK student radio service with music and news
Sunrise, Asian Sound	Astra 19°E FM sub	Asian music &news services - English & Hindi
UCB, UCB Cross Rhythms	Astra 19°E FM sub	Two religious stations - English
Virgin Radio	Astra 19°E FM sub	Adult pop service in parallel with AM service
World Radio Network 1	Astra 19°E FM sub	A selection of radio from the world - English
Sky Digital - Music Choice	Astra 28°E digital	44 pay-music audio services. No speech
CNN Radio	Astra 19°E FM sub,	Radio news feeds from CNN, Atlanta - English
Nat. Public Radio Worldwide	Astra 19°E FM sub	USA public speech and news-based radio
Voice of America	Astra 19°E FM sub	America's external radio service
WBBR - Bloomberg	Astra 19°E FM sub	Bloomberg business news, domestic radio from New York - English
Motos: ADR Astra Digital Radio	Digital MARC 3 DVR: EN	_

Notes: ADR- Astra Digital Radio; Digital - MPEG-2 DVB; FM sub - analogue FM subcarriers

Many thanks to Chris McWhinnie for compiling this list.

INTERNET RADIO

MANY radio stations now have web sites available on the worldwide internet computer network and more are added every day. There are probably about 1500 radio stations on the new 'web band', over 800 from the United States of America alone. In the UK there are around 35 such stations with live audio ranging from Radio 5 Live, to student radio stations and a handful of web-only stations; but there are none from some countries where the internet is less advanced or not accepted.

Many are live and broadcast 'live audio streams' and a few produce selected key programmes available 'on demand', which mean that you can listen to a chosen programme at a time convenient for you. Some web audio sources are not even radio stations: they may be ball-by-ball sports commentaries or even TV stations or music sites.

Sound quality varies from bad to good with stations interrupted when the internet is busy. Beware of varying sound levels between stations. However, if you have an internet-ready computer, web radio provides a taste of radio from outside your area or country for the price of a local telephone call.

What do you need to receive Internet radio?

- An internet connection supplied by an Internet Service Provider such as AOL, CompuServe, Demon, Freeserve or MSN.
- A computer with a modem, the faster the better, to connect to the Internet, using the computers built-in audio capabilities, or with a sound card and audio output to speakers/headphones.
- World wide web browser software such as Netscape, Microsoft Explorer or Opera.
- Streaming audio software. RealAudio software is used by most internet radio stations, although an increasing number use Microsoft's Windows Media Player, a few use Streamworks or MPEG-3. The software, which is free, can be downloaded from web sites.

Finding the stations

The best way to find a station is to use one of the so-called 'portal' sites. These are stepping stones to a host of radio stations around the world. They make it easier to find internet radio stations. Here are some of the most useful web radio lists:

www.frodo.u-net.com/radio.htm - Live



Radio on the Internet lists around 1500 links to live radio stations and is very well maintained.

- www.broadcast.com/radio/ Broadcast.com, formerly known as AudioNet, hosts (provides the facilities for) the BBC World Service and more than 360 live radio and TV stations.
- www.web-radio.com BRS Radio Web lists around 1700 radio stations by format, call-sign and country. The site is easy to use.
- http://wmbr.mit.edu/stations/list.html The MIT list of radio stations on the Internet has links to 700 live radio stations.

Other useful sites

As well as giving the ability to listen to stations live on the internet, a web connection gives you access to vast amounts of information. The following are just a few of the sites that are worth a visit.

The BBC - www.bbc.co.uk/ huge site with programme, news and other info

BBC Eng Info -

www.bbc.co.uk/enginfo/index.htm now also called BBC Reception Advice

Radio Authority - www.radioauthority.org.uk info about the RA, licensing and ind. stations.

Radio Netherlands - www.rnw.nl/ interesting site with amongst other things, good reviews of shortwave radios

DXer's Toolbox -www.geocities.com/SunsetStip/ lots of info about radio, station listings, including lrish and Irish pirate stations

Media UK - www.mediauk.com/directory/radio/ general radio info and extensive UK station links

Shortwave Listening Guide -

www.anarc.org/naswa/swlguide/ excellent shortwave listening programme guide

World Radio Network - www.wrn.org/ info, live audio feeds and links to other sites

Thanks to **Chris McWhinnie** for putting most of this information together.

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THE WORLD RADIO NETWORK - (WRN)



Simon Spanswick, Director of Corporate Affairs at WRN, uncovers the mysteries of World Radio Network.

A LITTLE over five years ago, three people from the BBC decided to go it alone and develop a radio service that is

international in every sense of the word. It would be delivered internationally and it would have programmes from around the world. Today that idea is received in more than 60 countries, with millions of listeners to English and German language services.

World Radio Network brings together programmes from international radio stations around the world and assembles them into single language channels that are branded WRN1 for English and WRN3 for German. All the programmes are linked together by World Radio Network continuity, and then the channels are sent up on satellite to every part of the world except - for the time being at least - Latin America. If you have satellite receiving equipment - for Sky TV in the case of the UK - you can tune in to WRN1 or WRN3 and listen to programmes from around the world in HiFi quality.

World Radio Network's distribution is not limited solely to satellite though. The station markets its channels to cable operators and as a result, WRN1 is carried on cable in London, Birmingham, Edinburgh and Leeds in this country, and in Amsterdam, Berlin, Brussels, Cologne, Vienna, Tokyo, Washington DC and other major cities world-wide.

But the story does not stop there, either. Radio stations world-wide take WRN1 and use the unique mix of programming to complement their existing output. WRN1 can be heard overnight nation-wide across South Africa on SAfm, the English-language station of the South African Broadcasting Corporation. In the USA a newly-launched service provides special sequences of World Radio Network's output to National Public Radio (NPR) affiliates across the country. Within four weeks of the service launching last autumn, WRN from NPR, as it is called, was on the air in Baltimore, Washington DC and Philadelphia, with another 30 stations due to take the service by the Spring of 1999.

And of course being a modern media operation, World Radio Network uses the Internet. If you have a computer linked to the Web, you can listen to WRN1's North America stream and WRN3 German for Europe live, 24 hours-a-day. Besides the live

stream, you can also listen to an enormous variety of programmes 'on-demand'. Simply click on the icon, and you can hear last night's 6 o'clock news from RTE in Dublin, or this morning's 0500 GMT half-hour programme from Channel Africa.

But what's the point if you can listen to these programmes on short wave from around the world on a portable receiver? The key to World Radio Network is the sheer variety of programming. You would be hard-pressed to find this on your short wave radio. without a phenomenal amount of tuning and scanning and importantly the output is in HiFi quality.

World Radio Network provides a truly unique service; where else can you listen to the renowned All Things Considered from National Public Radio? How else can you hear Radio Australia in perfect quality, 365 days a year? What other channel delivers a daily news programme from the Caribbean? The rich-mix of programmes on WRN1 is unique, and the service has brought international radio into more homes by more mainstream means than any of the 25 or so broadcasters represented on WRN1 could possibly have achieved by themselves.

With the European radio industry talking about DAB (Digital Radio), it is worth noting that WRN1 has been on DAB in the London area since November 1996 longer than many mainstream commercial stations including Capital Radio. Elsewhere in Europe, WRN1 is on DAB in Warsaw, Oslo, and this Spring will gain a DAB channel in Lyon, France.

If you want international radio without the hassle and with more choice thrown in - tune to WRN1. From the zany Car Talk, to Garrison Keillor in A Prairie Home Companion, from Nordic news from Radio Sweden to Asia Pacific stories on Radio Australia - it's all there, 24 hours a day in perfect quality.

To tune to WRN1 on satellite, select the VH-1 channel on your receiver (transponder 22 at 11.538 GHz), and choose the audio subcarrier of 7.38 MHz. For WRN3 in German, select Sky Premier (transponder 16 at 11.436 GHz) and the audio subcarrier of 7.38 MHz.

For a free copy of the current programme guides for WRN1 and WRN3, write to WRN, PO Box 1212, London SW8 2TG, or e-mail: letters@wrn.org. Web site: www.wrn.org/

PIRATE RADIO

IF YOU happen to live in London, or one of our larger cities, the chances are that you have heard pirate radio. The term originated with the offshore stations - the likes of Radio Caroline and Radio London - but soon spread to cover land-based unlicensed stations as well

Nobody really knows how many pirate stations there now are in the UK. I searched on the internet, and found details of 60 pirate stations, some of which were probably no longer on-air. The Radio Communications Agency (RCA), which is responsible for policing the airwaves, estimate that there are up to 50 pirate stations operating in London, and a similar number in the rest of the country.

Most UK pirates are on the FM band. There only seem to be a couple on AM, including Radio Free London which seems to be on and off medium and short wave. Most pirates operate part-time others, particularly Dance stations only appear at weekends. Others drop in and out of the airwayes. change names, disappear for a while after a raid. only to reappear soon afterwards.

London pirate stations can really be categorised as Black or Dance; with most stations offering an outlet for culture and music that doesn't have an expression within the radio mainstream. Music types evolve quickly, with styles such as Techno, Trance, House, Garage, Drum & Bass and Jungle. Some is broadcast by mainstream stations such as Kiss (itself an ex-pirate) or even on Radio One, but is so watered down, and in such small doses, that it does nothing to satisfy demand. Not all pirates are aimed at young listeners. At least two stations in London, Station and Galaxy are aimed at middle-aged black audiences.

As well as catering for demands that are not met under the current licensing system, another reason for the the number of pirates around at the moment is the cost of equipment. Nowadays, for between £1000 - £2000 you can set up fairly sophisticated system, including a microwave link between studio and transmitter. A microwave link enables physical separation of the studio from the transmitter, making it more difficult for the RCA to close down the studio. Transmitters confiscated. can be replaced for about £300 a time.

Compare this with the costs of setting up legitimately, and the slim chance of most pirate formats even getting a licence, and you can see why stations choose to broadcast illegally.



That there are more pirate stations out there, is certainly backed up by the increasing number of raids carried out by the RCA.

If caught, pirates face confiscation of their equipment and a fine - usually in the region of £200.

The rights and wrongs of pirate radio are difficult to sort out. For groups unable to get a legitimate licence under the current rules, pirate radio is freedom of speech, and can seem like the only way to get on the airwaves. For those tasked with controlling the airwayes, pirates are a potentially dangerous nuisance, causing interference with listeners to licensed services, and with civil aviation and the emergency services. There are no records of accidents caused by such interference, although the RCA point out that this is because of their prompt response to complaints.

Given the level of RCA raids, why do the pirates do it? Some have claimed that it is for the money, but it seems generally accepted that most pirate stations make very little, broadcasting for the love of the music and the excitement

Kiss FM, now a licensed local station in London, playing predominantly dance music, was itself once a pirate. Neil Russell, marketing director at Kiss says, 'I would think the average pirate gets a few hundred listeners, maybe 1,500 for the biggest'.

Pirates have had, and still have an influence on radio in the UK. In the 60s stations such as Caroline sprang up because the BBC was simply not playing enough rock music. Nowadays, pirates reflects a failure of the system to satisfy the demand for cutting-edge popular music. For more info - www.fused.com

Will the new millennium bring a station with a difference?

Geoff Baldwin wants more for the rock music enthusiast

THERE HAS been a lot of fuss in the press recently about recent programme changes at the BBC. In particular concerning the revamp of the schedules at Radio 4. However, changes in the commercial sector seem to go almost completely without comment. Since my last article in the Radio Listener's Guide, the choice of ILR stations has deteriorated further. The Radio Authority has allowed Capital Radio and GWR to cannibalise local stations they own, turning them into relays of their Capital Gold and Classic Gold brands. For example, here in Essex. Capital Gold is audible on four AM frequencies and Classic Gold on another two. The already limited choice of music that used to be on offer from the likes of Chiltern Radio, Invicta Supergold and South Coast Radio has been replaced with the even more repetitive and bland Capital Gold and Classic Gold networks!

The BBC monopoly of the early 1960's, has been replaced in the late 1990's by a BBC/Commercial radio duopoly. Real competition is not wanted or encouraged. In London the airwaves have been filled with 'politically correct' stations aimed at minority groups, with regional licences tending to go to dance music stations, because this is deemed to be the fashion in the 1990's. The only other new licences being awarded are for low powered small-scale local stations, which only cover small localities. They aren't going to pose much of a threat to the large radio groups, nor are they offering the listener much in the way of alternative formats

If you like classic rock music, adult orientated rock, album music or just a broad mix of pop/rock music from the last 30 years, you'll be lucky to get it from UK independent radio. The emphasis these days is on youth culture and pop/dance style stations on FM. Even the national stations like Atlantic 252, Radio 1 and Virgin seem only interested in catering for a young audience. The choice for the 35-55 group is largely limited to Radio 2, or the aforementioned Gold type stations. Older listeners have become second-class citizens as far as the regulators and programmers are concerned.

Confidence in the Radio Authority must be at an all time low amongst this large and under represented group of people.

Like American radio, UK commercial radio is now often computer programmed. Towns and cities in America all have a Classic Rock station, a Soft & Easy station, a Top 40 pop station, a Sixties/Seventies gold station, a Dance/Pop station and often, additionally, a Soft Rock station and a Country station. In the UK, the choice for most listeners is limited to Pop and Dance music stations on FM, and a Gold service on AM.

Filling a gap in the market, European Klassik Rock (EKR) began transmitting in October 1997 on the Astra satellite. Programming has been from a wide playlist, drawn from over 4,000 rock tracks from the last 30 years or more.

Then in January 1998, the 'presenter free' Dutch cable station Arrow Classic Rock came on the air. On 828 kHz MW from Rotterdam, Arrow plays similar music to EKR but with a somewhat narrower and faster paced format of rock tracks. This station can be heard in Essex. Kent and East Anglia, but unfortunately ILR stations such as Classic Gold in Luton (broadcasting on the same frequency), make it inaudible in other areas of South-East England.

Another outlet for 'alternative programming' appeared in the Spring. In April 1998 Merlin Network One (MNO) started Wednesday evening transmissions on satellite and various shortwave frequencies.

The station is the brainchild of Eric Wiltsher, presenter of the Media Zoo, with transmission services provided by Merlin Communications, a company created by a management and employee buy-out when the BBC Transmitter network was sold-off

Programme-time on the network, is also made available, in two hour segments, to organisations like Radio Caroline and the Rock Radio Network.

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Frequencies are in kHz

153	Deutschlandfunk (Germany)	756	BBC Cumbria (Carlisle)	945	Capital Gold 1323(Bexhill)
162	France Inter(France)	756	Maldwyn(Newtown)	945	Classic Gold GEM(Quarndon)
177	Deutschland Radio(Germany)	756	Radio 4(Redruth MF)	954	Classic Gold 954(Breinton)
183	Europe 1(Germany)	765	BBC Essex(Cheimsford)	954	Gemini AM(Beacon Hill)
198	Radio 4(Burghead)	774	BBC Kent(Littlebourne)	963	Asian Sound(Haslingden)
198	Radio 4(Droitwich)	774	BBC Leeds(Farnley)	963	Liberty(Lea Bridge Road)
198	Radio 4(Westerglen)	774	Classic Gold 774(Lt. Shurdington)	963	Radio Finland(Finland)
216	Radio Monte Carlo(Monaco)	774	Radio 4(Enniskillen)	972	Liberty(Glade Lane)
225	Polish Radio 1(Poland)	774	Radio 4(Plymouth)	972	Nord. Rundfunk(Germany)
234	RTL(Luxembourg)	792	Classic Gold 792(Kempston)	990	BBC Devon(Exeter)
243	D.R. Radio 1(Denmark)	792	Radio Ulster(Londonderry)	990	Classic Gold WABC(Sedgley)
252	Atlantic 252(Eire)	801	BBC Devon(Barnstaple)	990	Magic AM(Crimpsall)
270	Czech Radio(Czech Republic)	810	Radio Scot(Burghead)	990	Radio 5 Live(Tywyn)
531	Utvarp Foroya(Faroe Islands)	810	Radio Scot(Redmoss)	990	Radio Scot(Redmoss)
540	VRT Radio 2(Belgium)	810	Radio Scot(Westerglen)	999	BBC Solent(Fareham)
558	Spectrum(Crystal Palace)	828	BBC Asian Network(Sedgley)	999	Classic Gold GEM(Trowell)
567	RTE Radio 1 (Tullamore)	828	Classic Gold 792(Lewsey Farm)	999	Red Rose 999(Longton)
585	Radio Naçional(Spain)	828	Classic Gold 828(Fern Barrow)	999	Valleys Radio(Aberdare)
585	Radio Scot(Dumfries)	828	Gold Beat 828(Cookstown)	1008	NOS Radio 5(Netherlands)
603	Capital Gold 1242(Littlebourne)	828	Magic 828(Morley)	1017	Classic Gold WABC(Shrewsbury)
603	Radio 4(Newcastle)	837	BBC Asian Net'(Freemen's Cmmn)	1026	BBC Cambridgeshire(Cambridge)
612	RTE 2FM(Athlone)	837	BBC Cumbria (Barrow)	1026	BBC Jersey(Jersey (Trinity))
621	RTBF Radio 1(Belgium)	846	RAI Radio 2(Italy)	1026	Downtown(Knock-Breckan)
630	BBC Cornwall(Redruth)	855	BBC Devon(Plymouth)	1035	BBC Sheffield(Sheffield)
630	BBC Three Counties(Luton)	855	BBC Lancashire(Preston)	1035	Country 1035(Crystal Palace)
639	Radio Naçional(Spain)	855	BBC Norfolk(Postwick)	1035	NorthSound Two(Nigg)
648	BBC World Service	855	Radio Naçional(Spain)	1035	West Sound AM(Symington)
657	BBC Cornwall(Bodmin)	855	Sunshine 855(Villa Farm)	1053	Talk Radio(Bournemouth)
657	Radio Wales(Wrexham)	864	Radio Bleue(France)	1053	Talk Radio(Brighton)
666	BBC York(Fulford (York))	873	American Forces (Germany)	1053	Talk Radio(Droitwich)
666	Gemini AM(Pearce's Hill)	873	BBC Norfolk(West Lynn)	1053	Talk Radio(Dumfries)
675	Radio 10 Gold(Netherlands)	B73	Radio Ulster(Enniskillen)	1053	Talk Radio(Dundee)
693	Radio 5 Live(Barrow)	882	Radio Wales(Forden)	1053	Talk Radio(Exeter)
693	Radio 5 Live(Bexhill)	882	Radio Wales(Penmon)	1053	Talk Radio(Hull)
693	Radio 5 Live(Brighton)	88 2	Radio Wales(Tywyn)	1053	Talk Radio(Londonderry)
693	Radio 5 Live(Burghead)	882	Radio Wales(Washford)	1053	Talk Radio(Postwick)
693	Radio 5 Live(Droitwich)	900	RAI Radio 1(Italy)	1053	Talk Radio(Pulmer Barracks)
693	Radio 5 Live(Enniskillen)	909	Radio 5 Live(Bournemouth)	1053	Talk Radio(Rosemarkie)
693	Radio 5 Live(Folkstone)	909	Radio 5 Live(Brookmans Park)	1053	Talk Radio(Stockton)
693	Radio 5 Live(Postwick)	909	Radio 5 Live(Clevedon)	1053	Talk Radio(Tonbridge)
693	Radio 5 Live(Redmoss)	909	Radio 5 Live(Exeter)	1062	D.R. Radio 2(Denmark)
693	Radio 5 Live(Stagshaw)	909	Radio 5 Live(Fareham)	1071	Talk Radio(Clipstone)
693	Radio 5 Live(Start Point)	909	Radio 5 Live(Lisnagarvey)	1071	Talk Radio(Wrekenton)
711	Radio Bleue(France)	909	Radio 5 Live(Londonderry)	1089	Talk Radio(Brookmans Park)
720	Radio 4(Lisnagarvey)	909	Radio 5 Live(Moorside Edge)	1089	Talk Radio(Dartford Tunnel)
720	Radio 4(London (Lots Road))	909	Radio 5 Live(Redruth MF)	1089	Talk Radio(Lisnagarvey)
720	Radio 4(Londonderry)	909	Radio 5 Live(Westerglen)	1089	Talk Radio(Moorside Edge)
729	BBC Essex(Manningtree)	909	Radio 5 Live(Whitehaven)	1089	Talk Radio(Redmoss)
729	RTE Radio 1(Cork Local Radio)	927	VRT Radio 1(Belgium)	1089	Talk Radio(Redruth)
738	BBC Hereford/Worcs(Worcester)	936	Classic Gold 936(Naish Hill)	1089	Talk Radio(Washford)
747	NOS Radio 1(Netherlands)	936	Yorkshire Dales(Hawes)	1089	Talk Radio(Westerglen)

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109B	Slovak Radio(Slovakia)
1107	Moray Firth Radio(Tarbat Ness)

1107 Talk Radio(Boston)
1107 Talk Radio(Fareham)

1107 Talk Radio(Gatwick)

1107 Talk Radio(Lydd) 1107 Talk Radio(Occombe)

1107 Talk Radio(Wallasey)

1116 BBC Derby(Burnaston Lane)

1116 BBC Guernsey(Guernsey)

1116 Valleys Radio(Ebbw Vale) 1125 Radio Wales(Llandrindod MF)

1134 Croatian Radio(Croatia)

1152 Capital Gold 1152(Langley Mill)

1152 Classic Gold Amber(Brundall)

1152 Clyde 2 AM(Dechmont Hill)

1152 LBC(Saffron Green)1152 Magic 1152(Greenside)

1152 Piccadilly 1152(Ashton Moss)

1152 Plymouth Sound AM(Plumer Bks)

1161 BBC SCR (Bexhill)

1161 BBC Three Counties(Bedford)

1161 Classic Gold 936(Blunsdon)

1161 Magic 1161(Goxhill)

1161 Tay AM(Greenside Scalp)

1170 Capital Gold 1170 (Farlington M.)1170 Classic Gold Amber (Foxhall Heath)

1170 Eleven Seventy(Wycombe Marsh)

1170 Magic 1170(Stockton)

1170 Signal Two(Sideway) 1170 Swansea Sound(Winsh-wen)

1179 Radio Sweden(Sweden)

1197 Virgin(Brighton)

1197 Virgin(Chesterton Fen)1197 Virgin(Fern Barrow)

1197 Virgin(Gloucester)

1197 Virgin(Hoo)

1197 Virgin(Oxford) 1197 Virgin(Torbay)

1197 Virgin(Trowell)

1197 Virgin(Wallasev)

1215 Virgin(Brookmans Park)

1215 Virgin(Dartford Tunnel)

1215 Virgin(Droitwich)

1215 Virgin(Fareham)

1215 Virgin(Hull)

1215 Virgin(Lisnagarvey) 1215 Virgin(Moorside Edge)

1215 Virgin(Plymouth)

215 Virgin(Postwick)

215 Virgin(Redmoss)215 Virgin(Washford)

1215 Virgin(Westerglen)

1215 Virgin(Wrekenton) 1233 Virgin(Gatwick)

1233 Virgin(Kings Heath)

1233 Virgin(Manningtree)

1233 Virgin(Reading) 1233 Virgin(Sheffield)

1233 Virgin(Swindon) 1242 Capital Gold 1242(Hoo St W)

1242 Virgin(Boston)

1242 Virgin(Greenside Scalp)

1242 Virgin(Sideway) 1242 Virgin(Stockton)

1251 Classic Gold Amber(Great Barton)

1260 BBC York(Scarborough)

1260 Classic Gold 1260(Mangotsfield)

1260 Marcher Gold(Farndon)

1260 Sabras Sound(Freeman's Common)

1260 Virgin(Guildford)

1260 Virgin(Lydd)

1278 Classic Gold 1278(Tyersal Lane)

1278 RTE '2FM'(Eire)

1278 RTE 2FM(Cork/Cork Local)

1278 RTE 2FM(Dublin)

1287 Radio Free Europe(Czech Republic)

1296 XL(Langley Mill)

1305 Magic AM(Ardsley)

1305 Premier(Enfield FC) 1305 Premier(North Looe)

1305 Touch Radio(Christchurch)

1314 NRK - Prog 1(Norway) 1323 BBC Bristol(Taunton)

1323 Capital Gold 1323(Southwick)

1332 BBC Wiltshire Sound(Lacock)

1332 Classic Gold 1332(Gunthorpe)

1332 Premier(Bow)

1341 Radio Ulster(Lisnagarvey)

1359 BBC Solent(Bournemouth)1359 Breeze AM(Bakers Wood)

1359 Classic Gold 1359(5hilton)

359 Touch Radio(Hadfield Road)

1368 BBC Lincolnshire(Lincoln)

1368 BBC SCR (Duxhurst)

1368 BBC Wiltshire Sound(Swindon)

1368 Manx Radio(Isle of Man)

1368 Manx(Foxdale)

1377 Asian Sound(Ashton Moss)

1377 Radio Bleue (France)

1386 Voice of Russia(Russia)

1395 Trans World Radio(Albania)1413 Premier(Dartford Marshes)

1413 Premier(Heathrow)

1413 Yorkshire Dales(Skipton)
 1415 BBC Gloucestershire(Berkeley Heath)

415 BBC Gloucestershire(Bourton-OTW)

1422 Deutschlandfunk(Germany)

1431 Breeze AM(Rayleigh)1431 Classic Gold 1431(Manor Farm)

1440 RTL(Luxembourg)

1449 BBC Cambridgeshire(Gunthorpe)

1449 Radio 4(Redmoss)

145B BBC Asian Network(Langley Mill)

1458 BBC Cumbria (Whitehaven) 1458 BBC Devon(Torbay)

1458 BBC Newcastle(Newcastle)

1458 Lite AM(Ashton Moss)

1458 Sunrise(Brookmans Park)

1467 Trans World Radio(Monaco)

1476 County Sound(Peasmarsh)1485 BBC Humberside(Hull)

1485 BBC Humberside(Hull)
1485 BBC Merseyside(Wallasey)

1485 BBC SCR (Brighton)

1485 Classic Gold 1431(Washwater)

1485 Radio 4(Carlisle) 1503 BBC Stoke(5ideway)

1512 R.Netherlands(Belgium)

1521 Fame 1521(Gatwick)

1521 Heart Beat(Craigavon) 1530 BBC Essex(Southend)

1530 Classic Gold 1278(Vicars Lot)

1530 Classic Gold 954(Cotheridge)1530 Vatican Radio(Vatican)

1539 Trans World Radio/ERF(Germany)

1548 BBC Bristol(Mangotsfield)

548 Capital Gold 1548(Saffron Green)
548 Forth AM(Colinswell)

1548 Magic 1548(Bebington)

1548 Magic AM(Skew Hill) 1557 BBC Lancashire(Oxcliffe)

1557 Capital Gold 1170 (Veals Farm)

1557 Classic Gold 1557(Kings Heath)

1584 BBC Nottingham(Clipstone)

1584 BBC Shropshire(Woofferton)1584 London Turkish(Lea Bridge Road)

1584 Tay AM(Friarton Road)

1593 Voice of America(Germany) 1602 BBC Kent(Rusthall)

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88.1 Radio 2(Ballachulish)	88.8	BBC Jersey(Les Platons)	89.5	Radio 2(Romaldkirk)
88.1 Radio 2(Bowmore)	88.8	Radio 2(Ballycastle)	89.5	Radio 2(Salcombe)
88.1 Radio 2(Cirencester Town)	88.8	Radio 2(Belmont)	89.6	Radio 2(Ferndale)
88.1 Radio 2(Clettraval) 88.1 Radio 2(Clyro)	88.8	Radio 2(Carnmoney Hill)	89.6	Radio 2(Gogwell)
88.1 Radio 2(Clyro) 88.1 Radio 2(Deiniolen)	88.8	Radio 2(Chippenham)	89.6	Radio 2(Hastings)
88.1 Radio 2(Ffestiniog)	88.8 88.8	Radio 2(Crystal Palace)	89.6 89.6	Radio 2(Keswick Forest) Radio 2(Les Platons)
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88.1 Radio 2(Llanidloes)	88.9	Radio 2(Brecon)	89.6	Radio 2(Long Mountain)
88.1 Radio 2(Mallaig)	88.9	Radio 2(Cambridge)	89.6	Radio 2(Ludlow)
88.1 Radio 2(Manningtree)	88.9	Radio 2(Carmarthen)	89.6	Radio 2(Rosemarkie)
88.1 Radio 2(North Hessary Tor)	88.9	Radio 2(Chard)	89.6	Radio 2(Rosemount)
88.1 Radio 2(Penifiler) 88.1 Radio 2(Sandale)	88.9	Radio 2(Girvan)	89.6	Radio 2(Whalley)
88.1 Radio 2(Sandale)	88.9 88.9	Radio 2(Keighley) Radio 2(Llangollen)	89.6 89.7	Radio 2(Whitby) Radio 2(Barnoldswick)
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88.2 Radio 2(Bexhill)	88.9	Radio 2(Northampton)	89.7	Radio 2(Cornholme)
88.2 Radio 2(Calne)	88.9	Radio 2(Oban)	89.7	Radio 2(Eyemouth)
88.2 Radio 2(Knock More)	88.9	Radio 2(Todmorden)	89.7	Radio 2(Kinlochleven)
88.2 Radio 2(Nailsworth)	88.9	Radio 2(Varteg Hill)	89.7	- Radio 2(Lyme Regis)
88.2 Radio 2(Newbury) 88.2 Radio 2(Rheola)	89.0	Manx(Snaefell)	89.7	Radio 2(Mickleham)
88.3 Radio 2(Bressay)	89.0	Radio 2(Abertillery)	89.7	Radio 2(Mynydd Pencarreg)
88.3 Radio 2(Forfar)	89.0 89.0	Radio 2(Bath) Radio 2(Bilsdale)	89.7 89.7	Radio 2(Newhaven) Radio 2(Redruth)
88.3 Radio 2(Lethanhill)	89.0	Radio 2(Blunsdon)	89.7	Radio 2(Stranraer)
88.3 Radio 2(Llwyn-Onn)	89.0	Radio 2(Chesterfield)	89.7	Radio 2(Tacolneston)
88.3 Radio 2(Lochgilphead)	89.0	Radio 2(Churchdown Hill)	89.7	Radio 2(Weardale)
88.3 Radio 2(Millburn Muir)	89.0	Radio 2(Croeserw)	89.7	Radio 2(Whitehaven)
88.3 Radio 2(Ness of Lewis)	89.0	Radio 2(Kendal)	89.8	Radio 2(Beecroft Hill)
88.3 Radio 2(Rostrevor Forest)	89.0	Radio 2(Kirkton Mailer)	89.8	Radio 2(Eitshal)
88.3 Radio 2(St Just) 88.3 Radio 2(Sutton Coldfield)	89.0	Radio 2(Minehead)	89.8	Radio 2(Fenham)
88.3 Radio 2(Ullapool)	89.0 89.0	Radio 2(Port Ellen) Radio 2(St Thomas (Exeter))	89.8 89.8	Radio 2(Grantown) Radio 2(Hemdean)
88.3 Radio 2(Wensleydale)	89.1	Radio 2(Ashkirk)	89.8	Radio 2(Kingswear)
88.3 Radio 2(Westwood)	89.1	Radio 2(Bridport)	89.8	Radio 2(Llanddona)
88.3 Radio 2(Windermere)	89.1	Radio 2(Combe Martin)	89.8	Radio 2(Llanrhaeadr-y-M)
88.4 Radio 2(Campbeltown)	89.1	Radio 2(Conwy)	89.8	Radio 2(Saddleworth)
88.4 Radio 2(Carmel)	89.1	Radio 2(Egford Hill)	89.8	Radio 2(Satisbury)
88.4 Radio 2(Douglas) 88.4 Radio 2(Ebbw Vale)	89.1	Radio 2(Kingussie)	89.8	Radio 2(Stanton Moor)
88.4 Radio 2(Ebbw Vale) 88.4 Radio 2(Folkestone)	89.1	Radio 2(Larne)	89.9 89.9	Radio 2(Black Hill)
88.4 Radio 2(Hebden Bridge)	89.1 89.1	Radio 2(Llandrindod Wells) Radio 2(Llanfyllin)	89.9	Radio 2(Haslingden) Radio 2(Ivybridge)
88.4 Radio 2(Kenley)	89.1	Radio 2(Melvaig)	89.9	Radio 2(Oliver's Mount)
88.4 Radio 2(Peebles)	89.1	Radio 2(West Kilbride)	89.9	Radio 2(Sheffield)
88.4 Radio 2(Penmaen Rhos)	89.1	Radio 2(Wrotham)	89.9	Radio 2(Wenvoe)
88.4 Radio 2(Porth)	89.2	Radio 2(Aberdare)	89.9	Radio 2(Wenvoe)
88.4 Radio 2(Walsden South) 88.4 Radio 2(Wharfedale)	89.2	Radio 2(Chalford)	90.0	Radio 2(Buxton)
88.4 Radio 2(Wharfedale) 88.5 Radio 2(Barnstaple)	89.2	Radio 2(Ogmore Vale)	90.0	Radio 2(High Wycombe)
88.5 Radio 2(Blaenavon)	89.2 89.2	Radio 2(Pitlochry) Radio 2(Pontypool)	90.0 90.0	Radio 2(Morecambe Bay) Radio 2(Swingate)
88.5 Radio 2(Cwmafan)	89.2	Radio 2(Rosneath)	90.0	Radio 2(Weymouth)
88.5 Radio 2(Idle)	89.3	Radio 2(Andover)	90.1	Radio 2(Basingstoke)
88.5 Radio 2(Plympton)	89.3	Radio 2(Crieff)	90.1	Radio 2(Brighton)
88.5 Radio 2(Pontop Pike)	89.3	Radio 2(Daliburgh)	90.1	Radio 2(Chatton)
88.5 Radio 2(Rothesay)	89.3	Radio 2(Fort William)	90.1	Radio 2(Divis)
88.5 Radio 2(Rowridge) 88.5 Radio 2(Skriaig)	89.3	Radio 2(Haverfordwest)	90.1	Radio 2(Dolgellau)
88.6 BBC Sheffield(Sheffield)	89.3	Radio 2(Holme Moss)	90.1 90.1	Radio 2(Llandinam)
88.6 Radio 2(Berwick-upon-Tweed)	89.3 89.3	Radio 2(Ilchester Crescent) Radio 2(Keelylang Hill)	90.1	Radio 2(Llandyfriog) Radio 2(Marlborough)
88.6 Radio 2(Bow Brickhill)	89.3	Radio 2(Rhymney)	90.1	Radio 2(Peterborough)
88.6 Radio 2(Fort Augustus)	89.3	Radio 2(South Knapdale)	90.1	Radio 2(Rumster Forest)
88.6 Radio 2(Llangeinor)	89.4	Radio 2(Brougher Mountain)	90.1	Radio 2(Tullich)
88.6 Radio 2(Penicuik)	89.4	Radio 2(Durris)	90.2	Radio 2(Pendle Forest)
88.6 Radio 2(Ridge Hill)	89.4	Radio 2(Holcombe Down)	90.2	Radio 2(Woolmoor)
88.6 Radio 2(Strachur) 88.6 Radio 2(Winter Hill)	89.4	Radio 2(Hutton)	90.2	Radio 3(Clyro)
88.7 Radio 2(Abergavenny)	89.4 89.4	Radio 2(Kilkeel)	90.3 90.3	Radio 3(Ballachulish) Radio 3(Bowmore)
88.7 Radio 2(Ardgour)	89.4	Radio 2(Llandecwyn) Radio 2(Machynlleth)	90.3	Radio 3(Cirencester Town)
88.7 Radio 2(Beacon Hill)	89.4	Radio 2(Newton)	90.3	Radio 3(Clettraval)
88.7 Radio 2(Ben Gullipen)	89.4	Radio 2(Ventnor)	90.3	Radio 3(Deiniolen)
88.7 Radio 2(Blaenplwyf)	89.5	Radio 2(Axe Valley)	90.3	Radio 3(Ffestiniog)
88.7 Radio 2(Cambret Hill)	89.5	Radio 2(Darvel)	90.3	Radio 3(Grantham)
88.7 Radio 2(Camlough) 88.7 Radio 2(Kirkconnel)	89.5	Radio 2(Darwen)	90.3	Radio 3(Guildford)
88.7 Radio 2(Londonderry)	89.5	Radio 2(Glengorm)	90.3	Radio 3(Llanidloes)
88.7 Radio 2(Luddenden)	89.5 89.5	Radio 2(Innerleithen) Radio 2(Kilvey Hill)	90.3 90.3	Radio 3(Mallaig) Radio 3(Manningtree)
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90.3	Radio 3(North Hessary Tor)	91.1	Padio 3/Los Platons	01.0	Radio 3/Catecham)
90.3	Radio 3(Penifiler)	91.1	Radio 3(Les Platons) Radio 3(Llangollen)	91.9	Radio 3(Caterham)
90.3	Radio 3(Sandale)			91.9	Radio 3(Cornholme)
90.3		91.1	Radio 3(Membury)	91.9	Radio 3(Eyemouth)
	Radio 3(Sandale)	91.1	Radio 3(Northampton)	91.9	Radio 3(Kinlochleven)
90.4	Radio 3(Betws-y-Coed)	91.1	Radio 3(Oban)	91.9	Radio 3(Lyme Regis)
90.4	Radio 3(Calne)	91.1	Radio 3(Todmorden)	91.9	Radio 3(Mickleham)
90.4	Radio 3(Knock More)	91.1	Radio 3(Varteg Hill)	91.9	Radio 3(Mynydd Pencarreg)
90.4	Radio 3(Nailsworth)	91.2	Radio 3(Abertillery)	91.9	Radio 3(Newhaven)
90.4	Radio 3(Newbury)	91.2	Radio 3(Bath)	91.9	Radio 3(Redruth)
90.4	Radio 3(Rheola)	91.2	Radio 3(Bilsdale)	91.9	Radio 3(Saddleworth)
90.5	Radio 3(Bressay)	91.2	Radio 3(Blunsdon)	91.9	Radio 3(Stranraer)
90.5	Radio 3(Forfar)	91.2	Radio 3(Chesterfield)	91,9	Radio 3(Tacolneston)
90.5	Radio 3(Lethanhill)	91.2	Radio 3(Churchdown Hill)	91.9	Radio 3(Weardale)
90.5	Radio 3(Llwyn-Onn)	91.2	Radio 3(Croeserw)	91.9	Radio 3(Whitehaven)
90.5	Radio 3(Lochgilphead)	91.2	Radio 3(Kendal)	92.0	Radio 3(Beecroft Hill)
90.5	Radio 3(Millburn Muir)	91.2	Radio 3(Kirkton Mailer)	92.0	Radio 3(Eitshal)
90.5	Radio 3(Ness of Lewis)	91.2	Radio 3(Minehead)		
90.5	Radio 3(Rostrevor Forest)	91.2		92.0	Radio 3(Fenham)
90.5		91.2	Radio 3(Port Ellen)	92.0	Radio 3(Grantown)
90.5	Radio 3(St Just)		Radio 3(St Thornas)	92.0	Radio 3(Hemdean)
	Radio 3(Sutton Coldfield)	91.3	Radio 3(Ashkirk)	92.0	Radio 3(Kingswear)
90.5	Radio 3(Ullapool)	91.3	Radio 3(Bridport)	92.0	Radio 3(Llanddona)
90.5	Radio 3(Wensleydale)	91.3	Radio 3(Combe Martin)	92.0	Radio 3(Llanrhaeadr-y-M)
90.5	Radio 3(Westwood)	91.3	Radio 3(Conwy)	92.0	Radio 3(Salisbury)
90.5	Radio 3(Windermere)	91.3	Radio 3(Egford Hill)	92.0	Radio 3(Stanton Moor)
90.6	Radio 3(Campbeltown)	91.3	Radio 3(Kingussie)	92.1	Radio 3(Black Hill)
90.6	Radio 3(Carmel)	91.3	Radio 3(Larne)	92.1	Radio 3(Haslingden)
90.6	Radio 3(Douglas)	91.3	Radio 3(Llandrindod Wells)	92.1	Radio 3(Ivybridge)
90.6	Radio 3(Ebbw Vale)	91.3	Radio 3(Llanfyllin)	92.1	Radio 3(Oliver's Mount)
90.6	Radio 3(Folkestone)	91.3	Radio 3(Melvaig)	92.1	Radio 3(5heffield)
90.6	Radio 3(Hebden Bridge)	91.3	Radio 3(West Kilbride)	92.1	Radio 3(Wenvoe)
90.6	Radio 3(Kenley)	91.3	Radio 3(Wrotham)	92.1	Radio 3(Wenvoe)
90.6	Radio 3(Peebles)	91.4	Radio 3(Aberdare)	92.2	Radio 3(Bexhill)
90.6	Radio 3(Penmaen Rhos)	91.4	Radio 3(Chalford)	92.2	
90.6	Radio 3(Porth)	91.4		92.2	Radio 3(Buxton)
90.6	Radio 3(Walsden South)	91.4	Radio 3(Ogmore Vale) Radio 3(Pitlochry)		Radio 3(High Wycombe)
90.6	Radio 3(Wharfedale)	91.4		92.2	Radio 3(Morecambe Bay)
90.7	Radio 3(Barnstaple)		Radio 3(Pontypool)	92.2	Radio 3(Weymouth)
90.7		91.4	Radio 3(Rosneath)	92.2	Radio 3(Woolmoor)
90.7	Radio 3(Blaenavon) Radio 3(Cwmafan)	91.5	Radio 3(Andover)	92.3	Radio 3(Basingstoke)
90.7		91.5	Radio 3(Crieff)	92.3	Radio 3(Brighton)
	Radio 3(Idle)	91.5	Radio 3(Daliburgh)	92.3	Radio 3(Chatton)
90.7	Radio 3(Plympton)	91.5	Radio 3(Fort William)	92.3	Radio 3(Divis)
90.7	Radio 3(Pontop Pike)	91.5	Radio 3(Haverfordwest)	92.3	Radio 3(Dolgellau)
90.7	Radio 3(Rothesay)	91.5	Radio 3(Holme Moss)	92.3	Radio 3(Llandinam)
90.7	Radio 3(Rowridge)	91.5	Radio 3(Ilchester Crescent)	92.3	Radio 3(Llandyfriog)
90.7	Radio 3(5kriaig)	91.5	Radio 3(Keelylang Hill)	92.3	Radio 3(Marlborough)
90.8	Radio 3(Berwick-upon-Tweed)	91.5	Radio 3(Rhymney)	92.3	Radio 3(Peterborough)
90.8	Radio 3(Bow Brickhill)	91.5	Radio 3(South Knapdale)	92.3	Radio 3(Rumster Forest)
90.8	Radio 3(Fort Augustus)	91.6	Radio 3(Brougher Mountain)	92.3	Radio 3(Tullich)
90.8	Radio 3(Llangeinor)	91.6	Radio 3(Durris)	92.4	BBC Leeds(Holme Moss)
90.8	Radio 3(Penicuik)	91.6	Radio 3(Holeombe Down)	92.4	Radio 3(Swingate)
90.8	Radio 3(Ridge Hill)	91.6	Radio 3(Hutton)	92.4	Radio Cymru(Clyro)
90.8	Radio 3(Strachur)	91.6	Radio 3(Kilkeel)	92.5	Radio 4(Cirencester Town)
90.8	Radio 3(Winter Hill)	91.6	Radio 3(Llandecwyn)	92.5	Radio 4(Grantham)
90.9	Radio 3(Abergavenny)	91.6	Radio 3(Machynlleth)	92.5	Radio 4(Guildford)
90.9	Radio 3(Ardgour)	91.6	Radio 3(Newton)	92.5	Radio 4(Manningtree)
90.9	Radio 3(Beacon Hill)	91.7	Radio 3(Axe Valley)	92.5	Radio 4(North Hessary Tor)
90.9	Radio 3(Belmont)	91.7	Radio 3(Darvel)	92.5	Radio 4(5andale)
90.9	Radio 3(Ben Gullipen)	91.7	Radio 3(Darwen)	92.5	Radio 4(5andale)
90.9	Radio 3(Blaenplwyf)	91.7	Radio 3(Glengorm)	92.5	Radio Cymru(Deiniolen)
90.9	Radio 3(Cambret Hill)	91.7	Radio 3(Innerleithen)	92.5	Radio Cymru(Ffestiniog)
90.9	Radio 3(Camlough)	91.7	Radio 3(Kilvey Hill)	92.5	Radio Cymru(Llanidloes)
90.9	Radio 3(Kirkconnel)	91.7	Radio 3(Oxford)	92.5	Radio Scot(Ballachulish)
90.9	Radio 3(Londonderry)	91.7	Radio 3(Pennar)	92.5	Radio Scot(Bowmore)
90.9	Radio 3(Luddenden)	91,7	Radio 3(Romaldkirk)	92.5	Radio Scot(Clettraval)
90.9		91.7			
90.9	Radio 3(Meldrum) Radio 3(Okehampton)	91.7	Radio 3(Salcombe) Radio 3(Ventnor)	92.5 92.5	Radio Scot(Mallaig) Radio Scot(Penifiler)
91.0	Radio 3(Ballycastle)	91.8		92.6	
91.0	Radio 3(Carnmoney Hill)	91.8	Radio 3(Ferndale) Radio 3(Gogwell)		Radio 3(Pendle Forest)
91.0				92.6	Radio 4(Calne)
91.0	Radio 3(Chippenham)	91.8	Radio 3(Hastings)	92.6	Radio 4(Nailsworth)
	Radio 3(Crystal Palace)	91.8	Radio 3(Keswick Forest)	92.6	Radio 4(Newbury)
91.0	Radio 3(Isles of Scilly)	91.8	Radio 3(Limavady)	92.6	Radio Cymru(Betws-y-Coed)
91.0	Radio 3(Penaligon Downs)	91.8	Radio 3(Llyswen)	92.6	Radio Cymru(Rheola)
91.0	Radio 3(Procent	91.8	Radio 3(Long Mountain)	92.6	Radio Scot(Knock More)
91.1	Radio 3(Brecon)	91.8	Radio 3(Ludfow)	92.7	Radio 4(St Just)
91.1	Radio 3(Cambridge)	91.8	Radio 3(Rosemarkie)	92.7	Radio 4(Sutton Coldfield)
91.1	Radio 3(Carmarthen)	91.8	Radio 3(Rosemount)	92.7	Radio 4(Wensleydale)
91.1	Radio 3(Chard)	91.8	Radio 3(Whalley)	92.7	Radio 4(Westwood)
91.1	Radio 3(Girvan)	91.8	Radio 3(Whitby)	92.7	Radio 4(Windermere)
91.1	Radio 3(Keighley)	91.9	Radio 3(Barnoldswick)	92.7	Radio Cymru(Llwyn-Onn)

92.7	Radio Scot(Bressay)	93.4	Radio Scot(Kirkton Mailer)	94.2	Radio 4(Hemdean)
92.7	Radio Scot(Forfar)	93.4	Radio Scot(Port Ellen)	94.2	Radio 4(Kingswear)
92.7	Radio Scot(Lethanhill)	93.5	Radio 4(Bridport)	94.2	Radio 4(Llanrhaeadr-y-M)
92.7	Radio Scot(Lochgilphead)	93.5	Radio 4(Combe Martin)	94.2	Radio 4(Salisbury)
92.7	Radio Scot(Millburn Muir)	93.5	Radio 4(Egford Hill)	94.2	Radio 4(Stanton Moor)
92.7	Radio Scot(Ness of Lewis)	93.5	Radio 4(Llanfyllin)	94.2	Radio Cymru(Llanddona)
92.7	Radio Scot(Ullapool)	93.5	Radio 4(Wrotham)	94.2	Radio Scot(Eitshal)
92.7	Radio Ulster(Rostrevor Forest)	93.5	Radio Cymru(Conwy)	94.3	Radio 4(Haslingden)
92.8	Radio 4(Douglas (Isle of Man))	93.5	Radio Cymru(Llandrindod Wells)	94.3	Radio 4(Ivybridge)
92.8	Radio 4(Ebbw Vale)	93.5	Radio Scot(Ashkirk)	94.3	Radio 4(Oliver's Mount)
92.8	Radio 4(Hebden Bridge)	93.5	Radio Scot(Kingussie)	94.3	Radio 4(Sheffield)
92.8	Radio 4(Kenley)	93.5	Radio Scot(Melvaig)	94.3	Radio 4(Wenvoe)
92.8	Radio 4(Porth)	93.5	Radio Scot(West Kilbride)	94.3	Radio 4(Wenvoe)
92.8	Radio 4(Walsden South)	93.5	Radio Ulster(Larne)	94.3	Radio Scot(Black Hill)
92.8	Radio 4(Wharfedale)	93.6	Radio 4(Chalford)	94.4	Radio 4(Buxton)
92.8	Radio Cymru(Carmel)	93.6	Radio 4(Ogmore Vale)	94.4	Radio 4(High Wycombe)
92.8	Radio Cymru(Penmaen Rhos)	93.6	Radio Cymru(Aberdare)	94.4	Radio 4(Morecambe Bay)
92.8	Radio Scot(Campbeltown)	93.6	Radio Cymru(Pontypool)	94.4	Radio 4(Swingate)
92.8	Radio Scot(Peebles)	93.6	Radio Scot(Pitlochry)	94.4	Radio 4(Weymouth)
92.9	Radio 4(Barnstaple)	93.6	Radio Scot(Rosneath)	94.4	Radio 4(Woolmoor)
92.9	Radio 4(Blaenavon)	93.7	Island FM(Fort Albert)	94.5	Radio 4(Basingstoke)
92.9	Radio 4(Cwmafan)	93.7	Radio 4(Andover)	94.5	Radio 4(Brighton)
92.9	Radio 4(Idle)	93.7	Radio 4(Holme Moss)	94.5	Radio 4(Chatton)
92.9	Radio 4(Plympton)	93.7	Radio 4(Ilchester Crescent)	94.5	Radio 4(Llandinam)
92.9	Radio 4(Pontop Pike)	93.7	Radio 4(Rhymney)	94.5	Radio 4(Marlborough)
92.9	Radio 4(Rowridge)	93.7	Radio Cymru(Haverfordwest)	94.5	Radio 4(Peterborough)
92.9	Radio Scot(Rothesay)	93.7	Radio Scot(Crieff)	94.5	Radio Cymru(Dolgellau)
92.9	Radio Scot(Skriaig)	93.7	Radio Scot(Daliburgh)	94.5	Radio Cymru(Llandyfriog)
93.0	Radio 4(Berwick-upon-Tweed)	93.7	Radio Scot(Fort William)	94.5	Radio Scot(Rumster Forest)
93.0	Radio 4(Bow Brickhill)	93.7	Radio Scot(Keelylang Hill)	94.5	Radio Scot(Tullich)
93.0	Radio 4(Llangeinor)	93.7	Radio Scot(South Knapdale)	94.5	Radio Ulster(Divis)
93.0	Radio 4(Ridge Hill)	93.8	Radio 4(Holcombe Down)	94.6	BBC Stoke(Alsagers Bank)
93.0	Radio 4(Winter Hill)	93.8	Radio 4(Hutton)	94.6	BBC Thames Valley FM(Henley)
93.0	Radio Scot(Fort Augustus)	93.8	Radio 4(Llandecwyn)	94.6	Radio 4(Bexhill)
93.0	Radio Scot(Strachur)	93.8	Radio 4(Newton)	94.6	Radio 4(Pendle Forest)
93.1	Radio 4(Abergavenny)	93.8	Radio 4(Ventnor)	94.6	Radio Scot(Grantown)
93.1	Radio 4(Beacon Hill)	93.8	Radio Cymru(Machynlleth)	94.7	BBC Hereford/Worcs(Ridge Hill)
93.1	Radio 4(Belmont)	93.8	Radio Scot(Durris)	94.7	BBC Sheffield(Chesterfield)
93.1	Radio 4(Folkestone)	93.8	Radio Ulster(Brougher Mountain)	94.7	Radio 4(Ballachulish)
93.1	Radio 4(Luddenden)	93.8	Radio Ulster(Kilkeel)	94.7	Radio 4(Mallaig)
93.1	Radio 4(Okehampton)	93.9	Radio 4(Axe Valley)	94.7	Radio 4(Port Ellen)
93.1	Radio Cymru(Blaenplwyf)	93.9	Radio 4(Darwen)	94.7	Radio Scot(Sandale)
93.1	Radio Scot(Ardgour)	93.9	Radio 4(Oxford)	94.8	BBC CWR(Meriden)
93.1	Radio Scot(Ben Gullipen)	93.9	Radio 4(Pennar)	94.8	BBC Devon(Huntshaw Cross)
93.1	Radio Scot(Cambret Hill)	93.9	Radio 4(Romaldkirk)	94.8	Radio 4(Knock More)
93.1	Radio Scot(Kirkconnel)	93.9	Radio 4(Salcombe)	94.8	Radio 4(Les Platons)
93.1	Radio Scot(Meldrum)	93.9	Radio Cymru(Kilvey Hill)	94.8	Radio 4(Skriaig)
93.1 93.1	Radio Ulster(Camlough)	93.9 93.9	Radio Scot(Clangerm)	94.9 94.9	BBC Bristol(Illchester Crescent)
93.1	Radio Ulster(Londonderry)	93.9	Radio Scot(Glengorm)	94.9	BBC GLR(Crystal Palace)
93.2	BBC Guernsey(Les Touillets)	94.0	Radio Scot(Innerleithen)	94.9	BBC Lincolnshire(Belmont)
93.2	Radio 4(Ballycastle)	94.0	Radio 4(Ferndale)	94.9	Radio 4(Bressay)
93.2	Radio 4(Carnmoney Hill)	94.0	Radio 4(Gogwell)	94.9	Radio 4(Forfar)
93.2	Radio 4(Chippenham)	94.0	Radio 4(Keswick Forest)	94.9	Radio 4(Lethanhill)
93.2	Radio 4(Crystal Palace) Radio 4(Isles of Scilly)	94.0	Radio 4(Limavady)	95.0	Radio 4(Londonderry) BBC Cleveland(Bilsdale)
93.2	Radio 4(Sies of Scrify)	94.0	Radio 4(Long Mountain) Radio 4(Ludlow)	95.0	BBC Gloucestershire(Stroud)
93.2	Radio Cymru(Ton Pentre)	94.0	Radio 4(Whalley)	95.0	BBC SCR (Newhaven)
93.2	Radio 4(Cambridge)	94.0	Radio 4(Whitby)	95.0	BBC Shropshire(Ludlow)
93.3	Radio 4(Chard)	94.0	Radio Cymru(Llyswen)	95.0	Radio 4(Peebles)
93.3	Radio 4(Keighley)	94.0	Radio Scot(Rosemarkie)	95.1	BBC GMR Talk(Holme Moss)
93.3	Radio 4(Llangollen)	94.0	Radio Scot(Rosemount)	95.1	BBC Norfolk (Tacolneston)
93.3	Radio 4(Membury)	94.1	Radio 4(Barnoldswick)	95.1	BBC SCR (Horsham)
93.3	Radio 4(Northampton)	94.1	Radio 4(Caterham)	95.1	Radio 4(Ardgour)
93.3	Radio 4(Todmorden)	94.1	Radio 4(Cornholme)	95.1	Radio 4(Clettraval)
93.3	Radio Cymru(Brecon)	94.1	Radio 4(Lyme Regis)	95.1	
93.3	Radio Cymru(Carmarthen)	94.1	Radio 4(Mickleham)	95.1	Radio 4(Rothesay)
93.3	Radio Cymru(Varteg Hill)	94.1	Radio 4(Newhaven)	95.1	Radio 4(Strachur)
93.3	Radio Scot(Girvan)	94.1	Radio 4(Redruth)	95.1	Radio Ulster(Ballycastle)
93.3	Radio Scot(Oban)	94.1	Radio 4(Saddleworth)	95.1	Radio Wales(Blaenavon)
93.4	Radio 4(Abertillery)	94.1	Radio 4(Tacolneston)	95.2	BBC Cornwall(Caradon Hill)
93.4	Radio 4(Bath)	94.1	Radio 4(Weardale)	95.2	BBC Cumbria (Kendal)
93.4	Radio 4(Bilsdale)	94.1	Radio 4(Whitehaven)	95.2	BBC Thames Valley FM(Oxford)
93.4	Radio 4(Blunsdon)	94.1	Radio Cymru(Mynydd Pencarreg)	95.2	Kingdom FM(Knock Hill)
93.4	Radio 4(Chesterfield)	94.1	Radio Scot(Evernouth)	95.2	Radio 4(Campbeltown)
93.4	Radio 4(Churchdown Hill)	94.1	Radio Scot(Eyemouth) Radio Scot(Kinlochleven)	95.2	Radio 4(Fort Augustus)
93.4	Radio 4(Kendal)	94.1	Radio Scot(Stranraer)	95.3	BBC Derby(Stanton Moor)
93.4	Radio 4(Minehead)	94.2	Radio 4(Beecroft Hill)	95.3	BBC Essex(South Benfleet)
93.4	Radio 4(St Thomas (Exeter))	94.2	Radio 4(Fenham)	95.3	BBC Leeds(Luddenden)
93.4	Radio Cymru(Croeserw)	94.2	Radio 4(Hastings)	95.3	BBC Leeds(Wharfedale)
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95.3	PPC CCR (Printen)	96.4	Comini EM/Reason Hill	97.5	Most Found FM/Ginson
	BBC SCR (Brighton)		Gemini FM(Beacon Hill)	97.6	West Sound FM(Girvan)
95.3	Radio 4(Cambret Hill)	96.4	Neptune Radio(Creteway Down)		BBC Kent(Folkestone)
95.3	Radio 4(Crieff)	96.4	SGR FM(Great Barton)	97.6	Chiltern FM(Dunstable)
95.3	Radio 4(Girvan)	96.4	Signal FM(Sutton Common)	97.6	Forth FM(Black Hill)
95.3	Radio 4(Kirkconnel)	96.4	Tay FM(Perth)	97.6	NorthSound One(Balgownie)
95.3	Radio 4(Meldrum)	96.4	The Wave(Swansea)(Kilvey Hill)	97.6	Wyvern FM(Ridge Hill)
95.3	Radio 4(Oban)	96.5	GWR Swindon(Marlborough)	97.7	Radio 1(Ballachulish)
95.3	Radio Ulster(Carnmoney Hill)	96.5	Orchard FM(Taunton)	97.7	Radio 1(Bowmore)
95.4	BBC Newcastle(Pontop Pike)	96.5	South West Sound(Cairn Pat)	97.7	Radio 1(Cirencester Town)
95.4		96.5		97.7	Radio 1(Clotternal)
	BBC Thames Valley FM(Windsor)		The Wave(Blackpool Tower)		Radio 1(Clettraval)
95.4	Radio Ulster(Limavady)	96.5	Trent FM(Fishponds Hill)	97.7	Radio 1(Deiniolen)
95.5	BBC Bristol(Mendip)	96.6	Ceredigion(Mynydd Pencarreg)	97.7	Radio 1(Ffestiniog)
95.5	BBC Lancashire(Hameldon Hill)	96.6	Downtown(Brougher Mountain)		Radio 1(Grantham)
95.5	BBC Nottingham(Mansfield)	96.6	Moray Firth Radio(Cairn Gorm)	97.7	Radio 1(Guildford)
95.5	BBC Suffolk(Lowestoft)	96.6	Nevis Radio(Trislaig)	97.7	Radio 1(Hastings)
95.5	BBC Three Counties(Sandy Heath)	96.6	Northants 96(Northampton)	97.7	Radio 1(Llanidloes)
95.5	BBC York(Oliver's Mount)	96.6	Oasis FM(Pimlico)	97.7	Radio 1(Mallaig)
95.5	Radio 4(Carmarthen)	96.6		97.7	Radio 1(Manningtree)
95.5		96.6	Plymouth Sound FM(Tavistock)	97.7	
	Radio 4(Penicuik)		RNA FM(Arbroath Infirmiry)		Radio 1(North Hessary Tor)
95.5	Radio 4(Rosemount)	96.6	Spirit FM(The Trundle)	97.7	Radio 1(Penifiler)
95.6	BBC Cumbria (Sandale)	96.6	TFM(Bilsdale)	97.7	Radio 1(Sandale)
95.6	BBC WM(Sutton Coldfield)	96.7	BBC Kent(Wrotham)	97.7	Radio 1(Sandale)
95.6	Radio 4(Brougher Mountain)	96.7	City 96.7 FM(Allerton Park)	97.8	Radio 1(Betws-y-Coed)
95.6	Radio 4(Kinlochleven)	96.7	City Beat 96.7(Black Mountain)	97.8	Radio 1(Calne)
95.6	Radio 4(South Knapdale)	96.7	KL.FM(Great Massingham)	97.8	Radio 1(Knock More)
95.7	BBC Cambridgeshire(Peterborough)		Lincs FM(Grantham)	97.8	Radio 1(Nailsworth)
95.7	Radio 4(Bowmore)	96.7	Moray Firth Radio(Mormond Hill)		Radio 1(Newbury)
		96.7			
95.7	Radio 4(Kingussie)		Ocean FM(Crabwood Farm)	97.8	Radio 1(Pendle Forest)
95.7	Radio 4(Melvaig)	96.7	West Sound FM(Darvel)	97.8	Radio 1(Rheola)
95.7	Radio Cymru(Llanfyllin)	96.7	Wyvern FM(Kidderminster)	97.9	Radio 1(Bressay)
95.8	BBC Cleveland(Whitby)	96.8	Borders(Selkirk)	97.9	Radio 1(Forfar)
95.8	BBC Devon(Exeter)	96.8	Radio Cymru(Wenvoe)	97.9	Radio 1(Lethanhill)
95.8	BBC Gloucestershire(Cirencester)	96.9	B97 (Sandy Heath)	97.9	Radio 1(Llwyn-Onn)
95.8	BBC Merseyside(Allerton Park)	96.9	Bay (The)(Morecambe Bay)	97.9	Radio 1(Millburn Muir)
95.8	Capital FM(Croydon)	96.9	Choice London(Croydon)	97.9	Radio 1(Ness of Lewis)
95.8	Radio 4(Black Hill)	96.9	NorthSound One(Durris)	97.9	Radio 1(Rostrevor Forest)
95.9	BBC Humberside(High Hunsley)	96.9		97.9	Radio 1(St Just)
		96.9	Signal One(Pye Green)	97.9	Radio 1(Sutton Coldfield)
95.9	Invicta FM(Thanet)		Southern FM(Newhaven)		
95.9	Radio 4(Daliburgh)	96.9	Viking FM(High Hunsley)	97.9	Radio 1(Ullapool)
95.9	Radio 4(Durris)	97.0	2-Ten FM(Broad Street Mall)	97.9	Radio 1(Wensleydale)
95.9	Radio 4(Fort William)	97.0	Clyde 1 FM(Millburn Muir)	97.9	Radio 1(Westwood)
95.9	Radio 4(Keelylang Hill)	97.0	Gemini FM(St Thomas)	97.9	Radio 1(Windermere)
95.9	Radio Wales(Christchurch)	97.0	Invicta FM(Dover)	97.9	Radio Nan G(Lochgilphead)
96.0		97.0	Mercia FM(Shilton)	98.0	Radio 1(Campbeltown)
96.0	BBC Cornwall(Isles of Scilly)	97.0	Nevis Radio(Glencoe)	98.0	Radio 1(Carmel)
96.0	BBC Devon(Okehampton)	97.0	Plymouth Sound FM(Plympton)	98.0	Radio 1(Douglas)
96.0	BBC Newcastle(Chatton)	97.0	South West Sound(Riddings Hill)	98.0	Radio 1(Ebbw Vale)
96.0	BBC Shropshire(The Wrekin)	97.1	Delta Radio(Haslemere)	98.0	Radio 1(Hebden Bridge)
		97.1		98.0	
96.0	Radio 4(Divis)		Metro FM(Burnhope)		Radio 1(Kenley)
96.0	Wessex FM(Bridport)	97.1	Metro FM(Tyne Tunnel)	98.0	Radio 1(Peebles)
96.1		97.1	MFM(Moel-y-Parc)	98.0	Radio 1(Penmaen Rhos)
96.1	BBC Solent(Rowridge)	97.1	Orchard FM(Cheddington)	98.0	Radio 1(Porth)
96.1	Invicta FM(Wye)	97.1	Radio 1(Les Platons)	98.0	Radio 1(Walsden South)
96.1	Kingdom FM(Purin Hill)	97.1	SGR FM(Foxhall Heath)	98.0	Radio 1(Wharfedale)
96.1	Radio 4(Glengorm)	97.2	Beacon(Turners Hill)	98.0	Radio Scot(Penicuik)
96.1	Radio 4(Innerleithen)	97.2	Connect FM(Wellingborough)	98.1	Radio 1(Barnstaple)
96.1	Radio 4(Ness of Lewis)	97.2	Galaxy 101(Pur Down)	98.1	Radio 1(Blaenavon)
96.1	Radio 4(Penifiler)	97.2	GWR Swindon(Blunsdon)	98.1	Radio 1(Cwmafan)
96.1	Radio 4(Ullapool)	97.2	Manx(Douglas)	98.1	Radio 1(Idle)
96.1		97.2	Stray FM(Harlow Hill)	98.1	Radio 1(Plympton)
		97.2		98.1	Radio 1(Pontop Pike)
96.1	SGR(Wivenhoe Park)	07.2	Wessex FM(Bincombe)		
96.2	Century Radio (Fenham)	97.3	Forth FM(Craigkelly)	98.1	Radio 1(Rothesay)
96.2	KFM(Tunbridge Wells)	97.3	News Direct(Croydon)	98.1	Radio 1(Skriaig)
96.2	Kix 96(Coventry City Centre)	97.4	Ceredigion(Penwaun)	98.2	Radio 1(Berwick-upon-Tweed)
96.2	Lantern(Huntshaw Cross)	97.4	Cool FM(Black Mountain)	98.2	Radio 1(Bow Brickhill)
96.2	Mix 96(Quaniton Hill)	97.4	Fox FM(Farthinghoe)	98.2	Radio 1(Fort Augustus)
96.2	SIBC(Bressay)	97.4	Gold Radio(Shaftesbury)	98.2	Radio 1(Llangeinor)
96.2	Trent FM(Mapperley Ridge)	97.4	Hallam FM(Tapton Hill)	98.2	Radio 1(Penicuik)
96.2	Yorkshire Coast(Olivers Mount)	97.4	Moray Firth Radio(Mounteagle)	98.2	Radio 1(Ridge Hill)
96.3	Aire FM(Morley)	97.4	Q103(Icewell Hill)	98.2	Radio 1(Rowridge)
96.3	Essex FM(Benfleet)	97.4	Red Dragon FM(Christchurch)	98.2	Radio 1(Strachur)
	GWR (Bristol/Bath)(Dundry)	97.4	Rock FM(Winter Hill)	98.2	Radio 1(Winter Hill)
96.3			Rutland*(Tinwell)	98.3	
96.3	Marcher Coast FM(Gt Ormes Head)	97.4			Radio 1(Abergavenny)
96.3	QFM(Gleniffer Braes)	97.5	Borders(Berwick-upon-Tweed)	98.3	Radio 1(Ardgour)
96.4	BRMB(Sutton Coldfield)	97.5	Essex FM(Southend Town)	98.3	Radio 1(Belmont)
96.4	Century Radio (Newton)	97.5	Heartland FM(Faire Mhor)	98.3	Radio 1(Ben Gullipen)
96.4	CFM(Caldbeck)	97.5	Mercury FM(Horsham)	98.3	Radio 1(Blaenplwyf)
96.4	Downtown(Limavady)	97.5	Ocean FM(Fort Widley)	98.3	Radio 1(Cambret Hill)
96.4	Eagle(Guildford)	97.5	Pulse FM(Idle)	98.3	Radio 1(Camlough)
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98.3	Padio 1/Folkostona)	00 1	Padio 1/Innerleithen)	100 4	Classic EM/Bidge Hill)
98.3	Radio 1(Folkestone) Radio 1(Kirkconnel)	99.1 99.1	Radio 1(Innerleithen) Radio 1(Kilvey Hill)		Classic FM(Ridge Hill) Jazz FM 100.4(Winter Hill)
98.3		99.1			
	Radio 1(Londonderry)		Radio 1(Oxford)		Medway FM(Gillingham)
98.3	Radio 1(Luddenden)	99.1	Radio 1(Pennar)		Classic FM(Belmont)
98.3	Radio 1(Meldrum)	99.1	Radio 1(Romaldkirk)		Classic FM(Londonderry)
98.3	Radio 1(Okehampton)	99.1	Radio 1(Salcombe)		Classic FM(Meldrum)
98.4	Radio 1(Ballycastle)	99.2	Radio 1(Bexhill)		Classic FM(Prescelly)
98.4	Radio 1(Beacon Hill)	99.2	Radio 1(Ferndale)		Classic FM(Crystal Palace)
98.4	Radio 1(Carnmoney Hill)	99.2	Radio 1(Gogwell)		Century Radio (Bilsdale)
98.4	Radio 1(Chippenham)	99.2	Radio 1(Keswick Forest)	100.7	Classic FM(Arfon)
98.4	Radio 1(Isles of Scilly)	99.2	Radio 1(Limavady)	100.7	Heart FM(Sutton Coldfield)
98.4	Radio 1(Membury)	99.2	Radio 1(Llyswen)		Classic FM(Selkirk)
98.4	Radio 1(Penaligon Downs)	99.2	Radio 1(Long Mountain)		Classic FM(Wrotham)
98.4	Radio 1(Ton Pentre)	99.2	Radio 1(Ludlow)		Classic FM(Fenham)
98.5	Radio 1(Brecon)	99.2	Radio 1(Rosemarkie)	101.0	Galaxy 101(Mendip)
98.5	Radio 1(Cambridge)	99.2	Radio 1(Rosemount)		Classic FM(Blaen Plwyf)
98.5	Radio 1(Carmarthen)	99.2	Radio 1(Whalley)	101.1	
98.5	Radio 1(Chard)	99.2	Radio 1(Whitby)	101.1	
98.5	Radio 1(Crystal Palace)	99.3	Radio 1(Barnoldswick)	101.2	Waves Radio P'head(Mormond Hill)
98.5	Radio 1(Girvan)	99.3	Radio 1(Caterham)	101.3	Classic FM(Darvel)
98.5	Radio 1(Keighley)	99.3	Radio 1(Cornholme)	101.3	Classic FM(Kilvey Hill)
98.5	Radio 1(Llangollen)	99.3	Radio 1(Eyemouth)	101.3	
98.5	Radio 1(Northampton)	99.3	Radio 1(Kinlochleven)	101.4	Classic FM(MountEagle)
98.5	Radio 1(Oban)	99.3	Radio 1(Lyme Regis)		Classic FM(Redruth)
98.5	Radio 1(Todmorden)	99.3	Radio 1(Mickleham)		Classic FM(Tacolneston)
98.5	Radio 1(Varteg Hill)	99.3	Radio 1(Mynydd Pencarreg)		Centre FM(Lichfield)
98.6	Radio 1(Abertillery)	99.3	Radio 1(Newhaven)		Classic FM(Great Ormes Head)
98.6	Radio 1(Bath)	99.3	Radio 1(Redruth)		KFM(Wrotham)
98.6	Radio 1(Bilsdale)	99.3	Radio 1(Saddleworth)	101.6	
98.6	Radio 1(Blunsdon)	99.3	Radio 1(Stranraer)		Wey Valley(Four Marks)
98.6	Radio 1(Chesterfield)	99.3	Radio 1(Tacolneston)		Classic FM(Black Hill)
98.6	Radio 1(Churchdown Hill)	99.3	Radio 1(Weardale)		Classic FM(Sheffield)
98.6	Radio 1(Croeserw)	99.3	Radio 1(Whitehaven)		Classic FM(Wenvoe)
98.6	Radio 1(Kendal)	99.4	Radio 1(Beecroft Hill)		Ten 17(Rye Hill)
98.6	Radio 1(Kirkton Mailer)	99.4	Radio 1(Eitshal)		Century Radio (Burnhope)
98.6	Radio 1(Minehead)	99.4	Radio 1(Fenham)		Classic FM(Dover)
98.6	Radio 1(Port Ellen)	99.4	Radio 1(Grantown)	101.8	
98.6	Radio 1(St Thomas)	99.4	Radio 1(Hemdean)		Classic FM(Divis)
98.7	Radio 1(Ashkirk)	99.4	Radio 1(Kingswear)		Classic FM(Peterborough)
98.7	Radio 1(Bridport)	99.4	Radio 1(Llanddona)		Classic FM(Whitehawk Hill)
98.7	Radio 1(Combe Martin)	99.4	Radio 1(Llanrhaeadr-y-M)	102.0	
98.7	Radio 1(Conwy)	99.4	Radio 1(Salisbury)		Galaxy 102(Sunley Building)
98.7	Radio 1(Egford Hill)	99.4	Radio 1(Stanton Moor)	102.0	Isle of Wight(Ryde Pier)
98.7	Radio 1(Kingussie)	99.5	Radio 1(Black Hill)	102.0	
98.7	Radio 1(Larne)	99.5	Radio 1(Haslingden)	102.0	
98.7	Radio 1(Llandrindod Wells)	99.5	Radio 1(Ivybridge)	102.0	
98.7	Radio 1(Llanfyllin)	99.5	Radio 1(Oliver's Mount)	102.0	
98.7	Radio 1(Melvaig)	99.5	Radio 1(Sheffield)		Wey Valley(Alton)
98.7	Radio 1(West Kilbride)	99.5	Radio 1(Swingate)	102.0	NECR(Meldrum)
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98.8	Radio 1(Ogmore Vale)	99.6	Radio 1(Buxton)		Forth FM(Penicuik)
98.8	Radio 1(Pitlochry)	99.6	Radio 1(High Wycombe)		
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98.9	Radio 1(Fort William)	99.7	Radio 1(Chatton)		
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99.0	Radio 1(Holcombe Down)	99.8	Radio 1(Clyro) Classic FM(Sandale)	102.4	
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99.0	Radio 1(Ventnor)	100.1	Classic FM(Sutton Coldfield)	102.5	Clyde 1 FM(Black Hill)
99.1		100.2	Classic FM(Douglas)	102.5	
99.1	Radio 1(Axe Valley) Radio 1(Darvel)	100.3	Classic FM(Pontop Pike)	102.5	
99.1	Radio 1(Darwen)	100.3			Essex FM(Bakers Wood)
99.1	Radio 1(Glengorm)	100.3			Fox FM(Oxford)
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102.0	Signal One(Alsagers Bank)	103.7		104.7	
	BBC Leeds(Keighley)	103.8		104.7	
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102.8	Moray Firth Radio(Tor Sliasg)	103.8		104.8	
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102.8	Tay FM(Angus)	103.9	BBC Lancashire(Winter Hill)	104.8	Radio 4(Rheola)
102.8	Wyvern FM(Malvern)	103.9	BBC Leeds(Beecroft Hill)	104.8	Radio Nan G(South Knapdale)
102.9	2-Ten FM(Hannington)	103.9		104.9	
102.9	Hallam FM(Ardsley)	103.9		104.9	
102.9	Mercia FM(Leamington Spa)	103.9		104.9	
	Q102.9(Londonderry)	103.9		104.9	
	Champion*(Arfon)	103.9		104.9	
	Gemini FM(Stockland Hill)	103.9		104.9	Radio 4(Haverfordwest)
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	Isles FM(Eitshal)	104.0		104.9	
103.0	Key 103(Saddleworth)	104.0		104.9	Radio Cymru(Rhymney)
	Metro FM(Fenham)	104.0		104.9	Radio Nan G(Ardgour)
	NorthSound One(Stirling Hill)	104.0		104.9	
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103.0	South West Sound(Cambret Hill)	104.1	BBC 5toke(Stafford)	104.9	Radio Nan G(Ullapool)
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103.2	Sunrise FM(Idle)	104.3	BBC York(Woolmoor)	106.0	Century 106(Copt Oak)
103.3	Ceredigion(Blaen Plwyf)	104.3	Radio 4(Darvel)	106.0	CTFM(Canterbury)
103.3	Clyde 1 FM(Rosneath)	104.3	Radio 4(Ton Pentre)	106.1	Vibe FM(Stoke Holy Cross)
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	Beach (The)(Lowestoft)	104.4	BBC Newcastle(Fenham)	106.9	
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103.5		104.5		107.5	
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103.6		104.5		107.6	
103.6	Radio 4(Croeserw)	104.6	BBC Bristol(Bath)	107.7	Chelmer(Danbury)
103.6	Radio 4(Dolgellau)	104.6		107.7	Vibe FM(Gunthorpe)
103.6	Radio 4(Llanddona)	104.6	BBC Hereford/Worcs(Kidderminster)	107.7	Wolf(Mander House)
103.6	Radio 4(Machynlleth)	104.6	BBC SCR (Guildford)	107.8	Arrow FM(Hastings)
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103.6	Radio 4(Stranraer)	104.6	Radio 4(Camlough)	107.9	
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103.7	Radio Cymru(Ogmore Vale)	104.7	Island FM(Les Touillets)	* not	on-air at time of publication.
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^{*} not on-air at time of publication. - radio listener's guide 115

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SE124197

SJ 412866

SP 296796

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SE 390061

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NJ927104

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TF 217837

NT 980547

SE 553962

SY 678857

11 278727

SX 095681

TF 260448

SP 914342

TL 259050

TG 305077

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ST 997699

SF429819

TL 392594 TL 477608

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INKINDINI
Abandan
Aberdare Abergavenny
Abertillery Acklam Wold Arnley Top
Acklam Wold
Ainley Iop Alexandra Palace
Alexandra Palace Allerton Park
Allesley Park
Alsagers bank
Alton
Andover Angus
Anstey Lane
Ardgour
Ardsley Arfon
Ashkirk
Ashton Moss
Axe Valley Bakers Wood
Balgownie
Ballachulish
Ballycastle
Barnoldswick Barnotania GM
Barnstaple FM Barnstaple MF
Barrow
Barwell Water Tower
Basingstoke Bath
Battersea
BBC Ullapool
Beacon Hill
Bebington Bedford
Beecroft Hill
Belmont
Ben Dorrey
Ben Gullipen Benfleet
Berwick-on-Tweed Betws-Y-Coed Bexhill MF
Betws-Y-Coed
Bexhill MF Bexhill
Billesdon
Billinge Hill Bilsdale West Moor
Bilsdale West Moor
Bincombe Hill Bincombe
Black Hill
Black Mountain
Blackpool Tower
Blaen Plwyf Blaenavon
Bluebell Hill
Blunsdon
Bodmin
Bordon Boston
Bournemouth
Bow Brickhill
Bowmore
Brecon Breinton
Bressay
Briddlesford Farm
Bridport
Brighton Brighton(Whitehawk Hill)
Broad Street Mall
Broadstairs
Brookmans Park Brougher Mountain
Broughton Moor
Brundall
Burghead
Burnaston Lane Burnhope
Burton Down
Burton
Butts Brow
Buxton Cairn Gorm
Cairn Gorm Cairn Pat Caldbeck
Caldbeck
Calne Calvert's Carpets
Cambret Hill
Cambridge (Madingley) Cambridge ChestertonFen
Cambridge ChestertonFen Camlough
Cattilough
116 radio listener's guide

SO 034013 50 244126 50 224023 SE 795619 TQ 297901 SU 722386 SU 378451 NO 394407 SK 564068 NM 989626 SH 476493 NT 470244 SY 283945 NN 059593 SD 897480 55 502289 SS 519298 SU 600488 ST 769654 TO289774 NH 142935 SX 857620 ND 063551 NN 598045 TO 790867 SH 825582 TO 724071 SK 725050 SY 687848 NS 828647 SD 306360 SN 569756 SO 277063 TO 757613 SU 143900 SU 795344 NR 318590 SO 030299 SO 472406 HU 503387 SZ 530900 SY 453915 TQ 234051 TQ 330045 TR 374674 NY058330 NJ 125685 SK 297314 NZ 184474 SU 965131 SK 266227 TO 580015 SK 060753 NX 044563 NY 299425 NX 524578

Camp Hill Campbeltown Canterbury Caradon Hill Carlisle Carmarthen Carmel Carnmoney Hill Caterham Chalford Chard Chatton Chedington Chelmsford Cheltenham Racecourse Cheltenham Chesterfield Chesterton Fen Chillerton Down Chippenham Christchurch Churchdown Hill Cirencester Cirencester Town Clettraval Clevedon Clifton Clipstone Clyro Cnoc Malagan Colinswell Combe Martin Conwy Cookstown Copt Oak Cornholme Cotheridge Coventry City Centre Crabwood Farm Craigavon Craigkelly Creteway Down Crieff Crimpsall Croeserw Croydon Crystal Palace Cwymafan Daliburgh Danbury Darlington **Dartford Marshes** Dartford Tunnel Darvel Darwen Dechmont Hill Deiniolen Derby Divis Dolgellau Douglas (IOM) Dover Droitwich Drum Hill Dumfries Dundee Dundry Dunkirk Dunstable Durris Duxhurst Earls Hill Ebbw Vale Egford Hill Eitshal Emley Moor Enfield Football Club Enniskillen Exeter Eyemouth Faire Mhor Fanum House Fareham Farlington Marshes Farndon Farnley Farthinghoe Fenham Fern Barrow Ferndale Ffestiniog

TR 133592 SX 273707 NY 412526 SN 412213 SN 576153 1336829 TQ 343557 50 883017 ST 358086 NU 105264 ST 501050 TL 660034 SO 959249 SO 948217 SK 383764 TL 477608 SZ 475835 ST 914751 ST 353896 50 880188 SP 004057 SP 023021 NF 751716 ST 400697 SK 518959 SK 583642 50 204432 NG 654081 NT 221861 55 582462 SH 781765 IH837773 SK 483126 SD 918264 SO 805540 SP331795 SU 449295 11024602 NT 233872 TR 229382 NN 814200 SE 566032 SS 858952 TQ 332696 TQ 339712 798936 NF 736216 TL 784 054 N7284187 TQ553769 TO 571769 NS 557341 SD 708223 NS 647578 SH 576621 SK 349367 J 286750 SH 727185 SC 373746 TR 274397 50 929663 SK 375421 NY 055714 NO 431290 ST 551669 TR 078590 TL 044210 NO 763897 TQ 258453 NS 718884 50 159088 ST 764481 NB 305302 SE 222128 TQ341966 H 232457 SX 931881 NT 947599 NN 993583 SU 649 527 SU 546058 SU 688052 SJ 405554 SE 241307 SP 532387 NZ 216648 SZ 070926 ST 006970 SH 709392

Fishponds Hill Folkestone FM Folkestone Forden Forfar Fort Albert Fort Augustus Fort Widley Fort William Four Marks Foxhall Heath Freemans Common Fremont Point Friarton Road Fulford Gatwick Gaw Hill Geddington Gillingham Girvan Glade Lane Glenachulish Glencoe Glengorm Gleniffer Braes Gloucester Gogwell Goxhill Grantham Grantown Great Barton Great Braxted Great Malvern Great Ormes Head Greenside Greenside Scalp Gt Massingham Guernsey (Rohais) Guildford Gunthorpe Guston Hackner Hadfield Road Haining Hameldon Hill Hammerpot Hannington Harlow Hill Haslemere Haslingden Hastings Haverfordwest Hazelshaw Hill Heathfield Heathrow Hebden Bridge Hemdean Henley High Hunsley High Warren Resvr High Wycombe Hill of Foudland Holcombe Down Holme Moss Hoo St Hoo St Werburgh Hoo Horsham Huntshaw Cross Hutton Icewell Hill Ilchester Crescent Innerleithen Isle Of Scilly lvybridge Jersey (Trinity) Keelylang Hill Keighlev Kempston Kendal Kenley Keswick Forest Kettering Kidderminster Kilkeel Kilvey Hill

SK 514609 TR 229382 TR 255389 NO 482409 WA 589086 NH 361049 SU 657065 NN 11777 SU674354 TM 212445 SK 589027 UT 634559 NO 119213 SE 604497 TO 276423 SD 400076 SP 90B839 TO 776667 NX 211981 TO140796 NN 034591 NN 260515 NM 465565 NS 457598 SO 841230 55 9671 TA 108246 SK 905337 NI 003267 TI 886686 TL 870149 50 774464 SH 766834 NZ 151627 NO 431290 TF 788228 02W3349N27 SU 975486 TF 189032 TR 320436 TO359867 ST 165746 NZ 357512 SD 808288 SE 288542 SD 795236 TQ 807100 SN 028261 NY 063767 TQ 566220 TO079773 SD 988267 SU 710762 SU 780822 SE 946350 SJ 614843 SU 856942 NJ 608335 SX 934 752 SE 095041 TQ 788730 TQ 774731 TQ 790720 176307 TA 169258 55 527221 ST 361588 TL 640635 SE 163374 ST 577700 NT 325368 SV 911124 SX 631538 02WO649N13 HY 378102 SE 069444 TL 035464 540912 TQ 329592 SP 855795 SO 808739 J 281180 Kings Heath SP 740633 Kingswear SX 887511 Kingussie NN 769985

TRANSMITTER GRID REFERENCES

Kinlochleven NN 178630 Kirkconnel NS 746150 Kirkton Mailer (Perth) NO 102210 Knock Hill NT 054937 Knock More NJ 321497 Knock-Breckan IJ 372675 Lacock ST 928674 Lambourne House TQ 518889 Lancaster SD 490662 Langley Mill Lark Stoke SP 160968 SP 187427 D 395037 Larne SP 329663 Leamington Spa Lerwick HI1475415 Les Platons (CI) 02W06 49N15 Les Touillets Lethanhill 02W34 49N27 NS 438105 Lewsey Farm Lichfield TI 043241 SK 164 043 C 711296 Limavady SK 956710 Lincoln (Swan Pool) 1258619 Lisnagarvey Little Shurdington SO 913175 Littlehourne TR 203590 Liverpool Cathedral SJ 354894 Llanddona SH 582810 Llandecwyn SH 644371 050877 Llandinam 50 050606 Llandrindod MF 50 018635 Llandrindon Wells Llandyfriog SN 348412 Llanfyllin 151181 55 905886 Llangeinor \$1.209488 Llangollen Llanidloes SN 948844 Llanrhaeadr-Ym-Mochnant \$1.174260 Llwyn-Onn SH 625175 Llyswen 50 13736 Lochgilphead NR 848861 London (Lots Road) TO 264770 C 404176 Londonderry Long Mountain \$1,265057 SD 467252 Longton Lowestoft (ILR) TM 523942 TM 540943 Lowestoft Luddenden SE 048248 Ludlow 50 498741 Luton (Lewsey Farm) ΪL 043241 Lydd TR 049208 Lyme Regis SY 345935 Machynlleth TL 392594 Madingley NM 676965 Mallaid Malvern 774464 50 915986 Mander House Mangotsfield TM 123295 Manningtree Manor Farm Mapperley Ridge SK 583424 Mariborough SU 209688 Meldrum NI 760329 NG 757900 Melvaig SU 307763 Membury ST 563488 Mendin Meriden 255844 SP 055862 Metropolitan House Mickleham TQ 163538 Millburn Muii NS 378796 Minehead North SS 965472 Minehead 55 966452 Moel-y-Pard SJ Moorside Edge SE 070154 SD 239791 Morecambe Bay Morley Mormond Hill SE 283268 NJ 982569 Mottram Towers 51 896898 NH 639580 MountEagle Mynydd Pencarreg SN 577430 ST 849990 Nailsworth Naish Hill ST 947686 Ness Of Lewis NB 533603 Newbury SU 494687 Newcastle (Wrekenton) NZ 274598 TO 435006 Newhaven Newton Barrow SU 099354 NZ 036653 Newton Newtown 50 134917 Nigg NJ 955032 Nine Barrow Down SZ 009811 SX 578742 North Hessary Tor North Looe TO229610

Northampton Nuneaton Oban Occombe Ogmore Vale Okehampton Olivers Mount Oxcliffe Oxford Pearce's Hill Peasmarsh Peebles Penaligon Downs Pendle Forest Penicuik Penifiler Penmaen Rhos Penmon Pennar Penrith Penwaun Perth Peterborough Pimlico Pitlochn Plumer Barracks Plymouth Plympton Pontop Pike Pontypool Poole Port Ellen Portglenone Porth Postwick Prescelly Preston Pulpit Hill Pur Down Purin Hill Pye Green Quainton Hill Quarndon Rayleigh Reading (Fountain House) Reading Redmoss Redruth MF Redruth Reigate Rheola Rhymney Riddings Hill Ridge Hill Romaldkirk Romiley Rosemarkie Rosemount Rosneath Rostrevor Forest Rotherham Rothesay Rowridge Rumster Forest Rustat Road Rusthall Ryde Pier Rye Hill Saddleworth Saffron Green Salcombe Salisbury Sandale Sandy Heath Scar Hill Scarborough Sedgley Selkirk Shaftesbun Sheffield MF Sheffield Shilbottle Shilton Shooters Hill Shrewsbury DF Site Sideway Skew Hill Sknaig Slough South Benfleet

South Knapdale

SP 760647 SP 340938 NM 850290 SX 878630 55 929894 SX 586967 TA 040869 SD 444613 SP 567105 SX 931881 SU 984459 NT 228416 SX 026683 SD 825384 NT 229597 NG 489417 SH 877779 SH 615789 ST 209958 NY 531313 SN 154442 NO 102212 TL 127913 TL088045 NN 923565 SX 490585 SX 490589 SX 531555 NZ 147527 ST 284990 57 037921 NR 338452 ID 008028 ST 029919 TG 303086 SN176306 SD 625253 NM851290 ST 610764 NO 252059 \$1 987145 SP 750213 SK 332419 TO 830904 SU 711733 SU 710709 NJ 942024 SW 709403 SW 690394 TQ 256521 SN 841061 50 127042 NX903779 50 630333 NY 974220 5J 954904 NH 762623 NO 203435 NS 258811 J 189176 SK 432913 NS 125691 SZ 447865 ND 197385 TL 484 555 SZ 593937 TL 449067 SD 987050 TO 216977 SX 753398 SU 136285 NY 266398 TL 204494 NJ 486112 TA 008879 50 905939 NT 500294 ST864235 SK 348849 SK 324870 NU191081 SP 410836 TQ 438767 \$1876434 SK 327933 NG 451408 SU 954814 TO 790867 NR 837748

Southend Town Southend Southwick St Just St Thomas (Exeter) Stafford Stagshaw Stanton Moor Start Point Stirling Hill Stockland Hill Stockton Stoke Holy Cross Strachur Stranraer Stroud Sunley Buildina Sussex Heights Sutton Coldfield Sutton Common Swindon Swingate Syminaton Tacolneston Tapton Hill Tarbat Ness Taunton Taunton Tavistock Telstar Nurseries Thanet The Trundle The Wrekin Todmorden Tolworth Tower Ton Pentre Tonbridge Tor Sliasq Torbay Trislaig Trowe Tullich Tunbridge Wells Turners Hill Tyersal Lane Tyne Tunnel Tyvvyn Ullapool Varteg Hill Veals Farm Ventnor Vicars Lot Villa Farm Wallasey Walsden South Washford Weardale Wellingborough Wenalt Wensleydale Wenvoe Werburgh Littlebourne West Kilbride West Lynn Westerglen Westgate Centre Westwood Weymouth Whalley Wharfedale Whitby Whitehaven FM Whitehaven MF Whitehawk Hill Windermere Windsor Winsh-wen Winter Hill Wivenhoe Park Woofferton Woolmoor Worcester Wrekenton Wrexham Wrotham Wycombe Marsh

Zouches Farm

TQ 234051 SW 382331 SX 898927 \$1923232 NY 986709 SK 246637 SX 814378 NK 124411 ST 222014 NZ 420218 TG 258026 NN 094027 NX 111632 50.836077 SERPARIZ TO 306042 SK 113003 \$1933676 SU 159825 TR 334429 NS 377334 TM 131958 SK 324870 NH 929839 ST 237253 ST240225 SX 485716 TM 192187 TR 366678 SU876111 51 628082 SD 957241 TQ 198659 SS 960955 TO557401 NJ 425581 SX 878630 NN 086749 SK 506398 NO 379984 TQ607440 50 969887 SE 197322 NZ330659 SH 581004 NH 142935 SN 776077 SU 397095 SZ 567783 SE 071172 SO 570707 51 305926 SD 937215 ST 058410 NZ 025384 SP891682 ST153835 SD 992907 ST 110742 TR 203590 NS 215483 TF 612188 NS 868773 ST 817598 SY 663779 SD 729 352 SE 198485 NZ 904113 NX 992123 NX 974172 TQ330045 SD 383980 SU 968770 SS 681966 SD 660144 TM 028239 SO 511691 SE 457881 50 846392 N7 274598 SJ 312497 TQ 595604 SU 881919 TR 066472 TL 045210

STATION TELEPHONE NUMBERS AND ADDRESSES

BBC main switchboard 0171 580 4468

BBC Radio Information Office

Gives info and takes comments. about about BBC Radio. No direct number. Transfer via the main switchboard. Out of hours you can usually leave a very short message.

BBC Audience/Action Lines

Numbers to ring with feedback, or for info following a broadcast. The original Freephone number 0800 044 044 still works but for how much longer I'm not sure! The following national call rate numbers are also used: 08700 100 (100) for Radio One, (200) Radio Two, (300) Radio Three. (400) Radio Four. (500) Radio 5 Live.

e-mail: info@bbc.co.uk

Other BBC e-mail addresses at www.bbc.co.uk/email.html

BBC Website

www.bbc.co.uk/info/

BBC Reception Advice

(Formerly BBC Engineering Info) BBC Television Centre, London W12 7RJ tel 0870 010 0123 e-mail - Enginfo@bbc.co.uk Info on Ceefax p 695 and 698

BBC Scotland

0141 3398844 **BBC Wales** 01222 322000 **BBC Northern Ireland**

BBC World Service

01232 338000

Bush House, Strand, London WC2B 4PH

0171 2403456 e-mail: worldservice.letters@bbc.co.uk

Radio Authority

Holbrook House, 14 Great Oueen Street, Holborn, London WC2B 5DG tel 0171 4302724 e-mail: info@radioauthority.org.uk www.radioauthority.org.uk

Classic FM

Classic House, 7 Swallow Place, London W1R 7AA tel 0171 284 3000 e-mail: enquires@classicfm.co.uk www.classicfm.co.uk/

Virgin Radio

1 Golden Square, London W1R 4DJ tel 0171 434 1215 virgin@vradio.co.uk www.virginradio.co.uk/

Talk Radio

76 Oxford Street, London W1N OTR tel 0171 636 1089

Atlantic 252

Mornington House, Summerhill Road, Trim, Co Meath IRELAND, 00353 463 6677 programming@atlantic252.com www.atlantic252.com

BBC local radio stations

BBC Asian Network, BBC Pebble Mill, Birmingham B5 7SD BBC Radio Bristol, PO Box 194, Bristol BS99 7QT tel 01179 741111

BBC Radio Cambridgeshire.

Broadcasting House, 104 Hills Road, Cambridge CB2 1LD tel 01223 259696

BBC Radio Cleveland, PO Box 95FM. Newport Road, Middlesbrough, TS1 5DG tel 01642 225211

BBC Radio Cornwall, Phoenix Wharf. Truro, Cornwall TR1 1UA tel 01872 75421

BBC Radio Coventry & Warwickshire, 25 Warwick Road, Coventry CV1 2WR tel 01203 559911

BBC Radio Cumbria, Annetwell Street, Carlisle CA3 8BB tel 01228 592444 BBC Radio Derby, PO Box 269, Derby DE1 3HL tel 01332 361111

BBC Radio Devon, PO Box 5. Broadcasting House, Seymour Road,

Mannamead, Plymouth PL1 1XT tel 01752 260323

Dorset FM, Portfolio House, Princes Street, Dorchester DT1 1TP tel 01305 269654

BBC Essex, 198 New London Road. Chelmsford, Essex CM2 9AB tel 01245 262393

BBC Radio Gloucestershire, London Road, Gloucester GL1 1SW tel 01452 308585

BBC GLR, 35c Marylebone High Street. London W1A 4LG tel 0171 224 2424 BBC GMR, PO Box 951, Oxford Road. Manchester M60 1SD tel 0161 200 2000

BBC Radio Guernsey, Commerce House, Les Banques, St. Peter Port, Guernsey CI tel 01481 728977

BBC Hereford & Worcester, Hylton Road, Worcester WR2 5WW tel 01905 748485

BBC Radio Humberside, 9 Chapel Street, Hull HU1 3NU

tel 01482 323232

BBC Radio Jersey, 18 Parade Road, St. Helier, Jersey CI tel 01534 870000

BBC Radio Kent. Sun Pier, Chatham. Kent ME4 4EZ tel 01634 830505

BBC Radio Lancashire, 26 Darwen Street, Blackburn, Lancs BB2 2EA tel 01254 262411

BBC Radio Leeds, Broadcasting House. Woodhouse Lane, Leeds LS2 9PN tel 0113 244 2131

BBC Radio Leicester, Epic House. Charles Street, Leicester LE1 3SH tel 0116 251 6688

BBC Radio Lincolnshire, PO Box 219. Newport, Lincoln LN1 3XY tel 01522 511411

BBC Radio Merseyside, 55 Paradise Street, Liverpool L1 3BP tel 0151 708 5500

BBC Radio Newcastle, Broadcasting Centre, Barrack Road, Newcastle upon Tyne NE99 1RN tel 0191 232 4141 BBC Radio Norfolk, Norfolk Tower,

Surrey Street, Norwich NR1 3PA tel 01603 617411

BBC Radio Northampton, Broadcasting House, Abington Street, Northampton NN1 2BE tel 01604 239100

BBC Radio Nottingham, York House, Mansfield Road, Nottingham, NG1 3JB tel 0115 955 0500

BBC Southern Counties Radio. Broadcasting Centre, Guildford GU2 5AP tel 01483 306306

BBC Radio Sheffield, Ashdell Grove, 60 Westbourne Road, Sheffield \$10 2QU tel 0114 268 6185

BBC Radio Shropshire, 24 Boscobel Drive, Shrewsbury SY1 3TT tel 01743 248484

BBC Radio Solent, Broadcasting House, Havelock Road, Southampton SO14 7PW tel 01703 631311

BBC Somerset Sound, 14/15 Paul Street, Taunton TA1 3PF tel 01823 252437

BBC Radio Stoke, Cheapside, Hanley, Stoke on Trent ST1 111 tel 01782 208080

BBC Radio Suffolk, Broadcasting House, St. Matthews Street, Ipswich IP1 3EP tel 01473 250000

Thames Valley FM, 269 Banbury Road, Oxford OX2 7DW tel 01865 311444 **BBC Three Counties Radio**, PO Box 3CR, Luton, Bedfordshire LU1 5XL

tel 01582 441000 BBC Wiltshire Sound, Broadcasting House, Prospect Place, Swindon SN1 3RW tel 01793 513 626

BBC Radio WM, Pebble Mill Road, Birmingham B5 7SD tel 0121 414 8484

BBC Radio York, 20 Bootham Row, York YO3 7BR tel 01904 641351

2 Ten FM, PO Box 2020, Reading, Berks RG31 7FG tel 0118 9454400

2CR FM, 5 Southcote Road, Bournemouth, Dorset BH1 3LR tel 01202 259259

Active FM. Lambourne House. 7 Western Road, Romford, Essex RM1 3LD tel 01708 731643

Aire FM, PO Box 2000, 51 Burley Road, Leeds LS3 1LR tel 0113 2835500

Alpha 103.2, Radio House, 11 Woodland Road, Darlington, Co. Durham DL3 7BJ tel 01325 255552

Arrow FM, Priory Meadow Centre, Hastings, East Sussx TN34 1PJ tel 01424 461177

Asian Sound, Globe House, Southall Street, Manchester M3, 1LG tel 0161 2881000

B97, 55 Goldington Road, Bedford. Beds MK40 3LT tel 01234 272400

Bay (The), PO Box 969, St George's Ouav. Lancaster LA1 3LD tel 01524 848747

Beach (The), PO Box 103.4, Lowestoft, Suffolk NR32 2TL tel 07000 001035

Beacon, 267 Tettenhall Road. Wolverhampton WV6 0DO tel 01902 838383

Bear (The), The Guard House Studios, Banbury Rd, Stratford upon Avon. Warks CV37 7HX tel 01789 262636

Borders, Tweedside Park. Galashiels TD1 3TD tel 01896 759444

Breeze AM. Radio House. Clifftown Road, Southend On Sea, Essex SS1 1SX tel 01702 333711

BRMB. Radio House. Aston Road North, Birmingham B6 4BX tel 0121 359 4481

Broadland, St George's Plain, 47-49 Colegate, Norwich NR3 1DB tel 01603 630621

Cambridge Café, PO Box 1079, Cambridge CB5 8FX tel 01223 722300

Capital FM & Capital Gold1548. 30 Leicester Square, London WC2H 7LA tel 0171 7666000

Capital Gold 1152, Radio House, Aston Road North, Birmingham B6 4BX tel 0121 3594481

Capital Gold 1170/1557, Radio House, Whittle Avenue, Segensworth West, Fareham PO15 5SH tel 01489 589911

Capital Gold 1242/603, Radio House. John Wilson Business Park, Whitstable, Kent CT5 3QX tel 01227 772004

Capital Gold 1323/945, Radio House, PO Box 2000, Brighton BN41 2SS tel 01273 430111

Cat, Regent Arcade, Cheltenham, Glos GL50 1JZ tel 01242 699555

Central FM. 201High Street, Falkirk FK1 1DU tel 01324 611164

Centre FM, 5-6 Aldergate, Tamworth, Staffs B79 7DJ tel 01827 318000

Century Radio, Century House, PO Box 100. Gateshead NE8 2YX tel 0191 4776666

Century 105, Century House, Waterfront Quay, Salford Quays, Manchester M5 2XW tel 0161 4001105

Century 106, City Link, Nottingham NG2 4NG tel 01159 106100

Ceredigion, Yr Hen Ysgol Gymraeg, Ffordd Alexandra, Aberystwyth, Ceredigion SY23 1LF tel 01970 627999

CFM, PO Box 964, Carlisle CA1 3NG tel 01228 818964

Champion*, Llys y Dderwen, Parc Menai, Bangor LL57 4BN tel 01978 752202

Channel 103 FM 6 Tunnell Street St Helier, Jersey JE2 4LU tel 01534 888103

Channel Travel, PO Box, 2000. Folkestone, Kent CT18 8XY tel 01303 283873

Chelmer, Cater House, High Street, Chelmsford, Essex CM1 1LN tel 01245 259400

Chiltern FM. Chiltern Road, Dunstable. Beds LU6 1HO tel 01582 676200

Choice FM (Birmingham), 95 Broad Street, Birmingham B15 1AU tel 0121 6161000

Choice FM (London), 16-18 Trinity Gardens, London SW9 8DP tel 0171 7387969

City 96.7 FM, 8-10 Stanley Street, Liverpool L1 6AF tel 0151 2275100

City Beat, Lamont Buildings, Stranmills Embankment, Belfast BT9 5FN tel 01232 205967

Classic Gold 774, Old Talbot House, Southgate Street, Gloucester GL1 2DO tel 01452 423791

Classic Gold 792/828. Chiltern Road. Dunstable, Beds LU6 1HO tel 01582 676200

Classic Gold 828, 5 Southcote Road. Bournemouth, Dorset BH1 3LR tel 01202 259259

Classic Gold 936/1161, PO Box 2000, Swindon SN4 7EX tel 01793 842600

Classic Gold 954/1530, 5 Barbourne Terrace, Worcester WR1 3JZ tel 01905 612212

Classic Gold 1260, PO Box 2020, Watershed, Canons Road, Bristol, BS99 7SN tel 0117 9843200

Classic Gold 1278/1530. Forster Square, Bradford, West Yorks BD1 5NE tel 01274 203040

Classic Gold 1332, PO Box 2020, Oueensgate Centre, Peterborough PE1 1LL tel 01733 460460

Classic Gold 1359, Hertford Place, Coventry CV1 3TT tel 01203 868200

Classic Gold 1431/1485, PO Box 2020, Reading, Berks RG31 7FG tel 0118 9454400

Classic Gold 1557, 19-21 St Edmunds Road, Northampton NN1 5DY tel 01604 795600

Classic Gold Amber (Norfolk). St George's Plain, 47-49 Colegate. Norwich NR3 1DB tel 01603 630621

Classic Gold Amber (Suffolk), Radio House, Alpha Business Park, White House Road, Ipswich IP1 5LT tel 01473 461000

Classic Gold GEM, 29-31 Castle Gate, Nottingham NG1 7AP tel 0115 9527000

Classic Gold WABC, 267 Tettenhall Road, Wolverhampton WV6 0DQ tel 01902 838383

Clyde, Clydebank Business Park, Clydebank, Glasgow G81 2RX tel 0141 565 2200

Connect, Church Street, Wellingborough, Northants NN8 4XX tel 01933 224972

Cool FM PO Box 974 Relfast RT1 1RT tel 01247 817181

Country 1035, PO Box 1035, London W1A 2ZT tel 0171 5461010

County Sound, Dolphin House, North Street, Guildford GU1 4AA tel 01483 300964

Crash FM, 27 Fleet Street, Liverpool L1 4AR tel 0151 7073107

CTFM, 16 Lower Bridge Street, Canterbury CT1 2HQ tel 01227 789106

Delta Radio, 65 Weyhill, Haslemere, Surrey GU27 1HN tel 01428 651971

Discovery FM* c/o Scot FM, 1 Albert Quay, Leith EH6 7DN tel 0131 5546677

Downtown, Newtownards, Co Down, Northern Ireland BT23 4ES tel 01247 815555

Dream, 3rd Floor, Northgate House, St. Peters Street, Colchester CO1 1HT tel 01206 764466

Dune FM, The Power Station, Victoria Way, Southport PR8 1RR tel 01704 502500

Eagle, Dolphin House, North Street, Guildford, Surrey GU1 4AA tel 01483 300964

Eleven Seventy AM, PO Box 1170, High Wycombe, Bucks HP13 6YT tel 01494 446611

Essex FM, Radio House, Clifftown Road, Southend on Sea, Essex SS1 1SX tel 01702 333711

The Falcon, Unit 3, Brunel Mall, London Road Stroud Glos GL5 2BP tel 01453 767369

Fame 1521, The Stanley Centre, Kelvin Way, Crawley, W Sussex RH10 2SE tel 01293 519161

FLR*, (temporary address) PO Box 1073 London SE8 4WU tel 0181 4693556

Forth AM and FM, Forth House, Forth Street, Edinburgh EH1 3LF tel 0131 556 9255

Fosseway, Suite 1, 1 Castle Street, Hinkley, Leics LE10 1DA tel 01455 614151

Fox FM, Brush House, Pony Road, Oxford OX4 2XR tel 01865 871000

Galaxy 101, Millennium House, 26 Baldwin Street, Bristol BS1 1SE tel 0117 9010101

Galaxy 102, 127-129 Portland Street, Manchester M1 6ED tel 0161 2280102

Galaxy 105, Joseph's Well, Westgate, Leeds LS3 1AB tel 0113 2130105

Gemini, Hawthorn House, Exeter Business Park, Exeter, Devon EX1 3QS tel 01392 444444

Gold Beat 828, 2c Park Avenue, Cookstown, Co Tyrone BT80 8AH tel 016487 64828

Gold Radio, Longmead, Shaftesbury, Dorset SP7 8QQ tel 01747 855711

GWR (Bristol/Bath) , PO Box 2000, Watershed, Canons Road, Bristol BS99 7SN tel 0117 9843200

GWR (Swindon/Wilts), PO Box 2000, Swindon SN4 7EX tel 01793 842600

Hallam FM, Radio House, 900 Herries Road, Sheffield S6 1RH tel 0114 2853333

Heart Beat 1521, Carn Business Park, Craigavon, Co. Armagh BT63 5RH tel 01762 330033

Heart 106.2, The Chrysalis Building, Bramley Road, London W10 6SP tel 0171 4681062

Heart FM, 1 The Square, 111 Broad Street, Birmingham B15 1AS tel 0121 6261007 Heartland FM, Atholl Curling Rink, Lower Oakfield, Pitlochry PH16 5HQ tel 01796 474040

Hereward FM, PO Box 225, Queensgate Centre, Peterborough PE1 1XJ tel 01733 460460

Horizon FM 103, The Broadcast Centre, Vincent Avenue, Crownhill Industry, Milton Keynes MK8 0AB tel 01908 269111

Huddersfield FM. The Old Stableblock, Brewery Drive, Lockwood Park, Huddersfield HD1 3UR tel 01484 321107

Invicta FM, Radio House, John Wilson Business Park, Whitstable, Kent CT5 3QX tel 01227 772004

Island FM, 12 Westerbrook, St Sampson, Guernsey GY2 4QQ tel 01481 42000

Isle of Wight, Dodnor Park, Newport, Isle of Wight PO30 5XE tel 01983 822557

Isles FM, PO Box 333, Stornoway, Isle of Lewis HS1 2PU tel 01851 703333

Jazz FM 100.4, The World Trade Centre, Exchange Quay, Manchester M5 3EJ tel 0161 8771004

Jazz FM 102.2, 26-27 Castlereagh Street, London W1H 6DJ tel 0171 7064100

KCBC, PO Box 1074, Centre 2000, Kettering, Northants NN16 8PU tel 01536 412413

Kestrel FM, 2nd Floor, Paddington House, The Walks Shopping Centre, Basingstoke RG21 7LJ tel 01256 694000

Key 103, Castle Quay, Castlefield, Manchester M15 4PR tel 0161 2885000

KFM, 1 East Street, Tonbridge, Kent TN9 1AR tel 01732 369200

Kingdom FM, Haig House, Haig Business Park, Markinch, Fife KY7 6AQ tel 01592 753753

Kiss 100 FM, Kiss House, 80 Holloway Road, London N7 8JG tel 0171 7006100

Kix 96,St Mark's Church, Annexe Bird Street, Stoney Stanton Road, Coventry CV1 4FH tel 01203 525656

KL.FM, PO Box 77, 18 Blackfriars Street, Kings Lynn, Norfolk PE30 1NN tel 01553 772777

Lantern Radio, The Light House, 17 Market Place, Bideford, North Devon EX39 2DR tel 01237 424444

LBC, 200 Gray's Inn Road, London WC1X 8XZ tel 0171 9731152

Leicester Sound, Granville House, Granville Road, Leicester LE1 7RW tel 0116 2561300 Liberty, 7th Floor, Trevor House, 100 Brompton Road, London SW3 1ER tel 0171 8938966

Lincs FM, Witham Park, Waterside South, Lincoln LN5 7JN tel 01522 549900

Lite AM, PO Box 1458, Quay West, Trafford Park, Manchester M17 1FL tel 0161 8721458

Lochbroom FM, Millstreet Industrial Estate, Ullapool, West Ross IV26 2UN tel 01854 613131

London Greek, Florentia Village, Vale Road, London N4 1TD tel 0181 8008001

London Turkish, 185b High Road, Wood Green, London N22 6BA tel 0181 8810606

Magic 828, PO Box 2000, 51 Burley Road, Leeds LS3 1LR tel 0113 2835500

Magic 1152, Swalwell, Newcastle upon Tyne NE99 1BB tel 0191 4203040

Magic 1161, Commercial Road, Hull, Yorkshire HU1 2SG tel 01482 325141

Magic 1170, Radio House, Yale Crescent, Thornaby, Stockton-on-Tees TS17 6AA tel 01642 888222

Magic 1548, 8/10 Stanley Street, Liverpool L1 6AF tel 0151 2275100

Magic AM, Radio House, 900 Herries Road, Sheffield S6 1RH tel 0114 2852121

Maldwyn, The Studios, The Park, Newtown, Powys SY16 2NZ tel 01686 623555

Mansfield*, The Media Suite, Brunts Business Centre, Samuel Brunts Centre, Mansfield, Notts NG18 2AH tel 01623 646666

Manx Radio, PO Box 1368, Broadcasting House, Douglas Head, Douglas IOM IM99 1SW tel 01624 682600

Marcher Coast FM, Media House, Conway Road, Colwyn Bay LL28 5AB tel 01492 534555

Marcher Gold, The Studios, Mold Road, Gwersyllt, Wrexham, LL11 4AF tel 01978 752202

Medway FM, Berkeley House, 186 High Street, Rochester ME1 1EY tel 01634 841111

Melody FM, The Network Building, 97 Tottenham Court Road, London W1P 9HF tel 0171 5047000

Mercia FM, Hertford Place, Coventry CV1 3TT tel 01203 868200

Mercury FM, The Stanley Centre, Kelvin Way, Crawley, W Sussex RH10 2SE tel 01293 519161

Metro FM, Newcastle Upon Tyne NE99 1BB tel 0191 420 0971

MFM (Deeside), Media House, Claughton, Birkenhead L45 6EY tel 0151 6501700

MFM (Wrexham), The Studios, Mold. Road, Gwersyllt, Wrexham, Clwyd LL11 4AF tel 01978 752202

Millenium Radio, Harrow Manor Way. Thamesmead, South London SE2 9XH tel 0181 3113112

Minster FM. PO Box 123. Dunnington. York YO1 5ZX tel 01904 488888

Mix 96. Friars Square Studios. 11 Bourbon Street, Aylesbury, Bucks HP20 2PZ tel 01296 399396

Moray Firth Radio, Scorquie Place, Inverness IV3 6SF tel 01463 224433

NECR (North East Community Radio). Town House, Kintore, Inverurie. Aberdeenshire AB51 OUS tel 01467 632909

Neptune Radio, PO Box 1068, Dover CT16 1GB and PO Box 964, Folkstone CT18 8GG tel 01304 202505

Nevis Radio, Inverlochy, Fort William, Inverness-shire PH33 6LU tel 01397 700007

News Direct, 200 Gray's Inn Road, London WC1X 8XZ tel 0171 9731152

Northants 96, 19-21 Edmunds Road. Northampton NN1 5DY tel 01604 795600

Northsound, 45 Kings Gate, Aberdeen AB15 4EL tel 01224 632234

Oak*. 7 Waldron Court. Prince William Road, Loughborough, Leics LE11 5GD tel 01509 211711

Oasis FM 9 Christopher Place Shopping Centre, St Albans AL3 5DO tel 01727 831966

Oban FM, McLeod Units, Lochavullin Estate, Oban, Argyll tel 01631 570057

Ocean FM, Radio House, Whittle Avenue, Segensworth West, Fareham PO15 5SH tel 01489 589911

Oldham FM* no details avail

Orchard FM, Haygrove House, Taunton, Somerset TA3 7BT tel 01823 338448

Oxygen, Suite 41, The Westgate Centre, Oxford OX1 1TD tel 01865 724442

Peak, Radio House, Foxwood Road, Chesterfield S41 9RF tel 01246 269107

Piccadilly 1152. Castle Ouav. Castlefield, Manchester M15 4PR tel 0161 2885000

Pirate FM, Carn Brea Studios, Wilson Way, Redruth, Cornwall TR15 3XX tel 01209 314400

Plymouth Sound, Earl's Acre, Plymouth PL3 4HX tel 01752 227272

Power FM. Radio House. Whittle Avenue, Segensworth West, Fareham PO15 5SH tel 01489 589911

Premier Radio, Glen House, Stag Place, London SW1E 5AG tel 0171 3161300

Pulse FM, Pennine House, Forster Square, Bradford BD1 5NE tel 01274 203040

O102.9, The Riverside Suite, The Old Waterside Railway Station, Duke Street, Londonderry BT46 1DH tel 01504 344449

Q103, Enterprise House, The Vision Park, Chivers Way, Histon, Cambridgeshire CB4 4WW tel 01223 235255

QFM, 26 Lady Lane, Paisley PA1 2LG tel 00141 8879630

Quay West, Harbour Studios, The Esplanade, Watchet, Somerset TA23 0AJ tel 01984 634900

Ram FM. The Market Place, Derby DE1 3AA tel 01332 292945

Red Dragon FM, Radio House, West Canal Wharf, Cardiff CF1 5XJ tel 01222 384041

Red Rose 999, PO Box 999, Preston PR1 1X5 tel 01772 556301

RNA FM, 11 Bankhead Crescent, Arbroath, Angus DD11 2DP tel 01241 879660

Rock FM. PO Box 974. Preston, Lancs PR1 1YE tel 01772 556301

Rutland*. Rutland Business Centre. Gaol Street, Oakham, Rutland LE15 6AQ tel 01572 757868

Sabras Sound, Radio House, 63 Melton Road, Leicester LE4 6PN tel 0116 2610666

Scot FM, 1 Albert Quay, Leith EH6 7DN tel 0131 5546677

Severn Sound FM, Old Talbot House, Southgate Street, Gloucester GL1 2DO tel 01452 423791

SGR Colchester, Abbeygate Two, 9 Whitewell Road, Colchester CO2 7DE tel 01206 575859

SGR FM Ipswich, Radio House, Alpha Business Park, White House Road, Ipswich, Suffolk IP1 5LT tel 01473 461000

SIBC, Market Street, Lerwick, Shetland ZE1 OJN tel 01595 695299

Signal FM, Regent House, Heaton Lane, Stockport SK4 1BX tel 0161 2854545

Signal One and Signal Two, Stoke Road, Stoke on Trent ST4 2SR tel 01782 747047

Silk FM, Radio House, Bridge Street, Macclesfield, Cheshire SK11 6DJ tel 01625 268000

South West Sound, Campbell House. Bankend Road, Dumfries DG1 4TH tel 01387 250999

Southern FM, Radio House, PO Box 2000. Brighton BN41 2SS tel 01273 430111

Sovereign, 14 St Mary's Walk, Hailsham, East Sussex BN27 1AF tel 01323 442700

Spectrum, International Radio Centre, 204-206 Queenstown Road, London SW8 3NR tel 0171 6274433

Spire FM. City Hall Studios, Malthouse Lane, Salisbury SP2 700 tel 01722 416644

Spirit FM. Dukes Court, Bognor Road. Chichester, W. Sussex PO19 2FX tel 01243 773600

Star FM. The Observatory Shopping Centre, Slough, Berkshire SL1 1LH tel 01753 551066

Stray FM, Stray Studios, PO Box 972, Station Parade, Harrogate HG1 5YF tel 01423 522972

Sun FM. PO Box 1034. Sunderland. Tyne and Wear SR1 3YZ tel 0191 5673333

Sunrise FM (Bradford), Sunrise House, 30 Chapel Street, Little Germany, Bradford BD1 5DN tel 01274 735043

Sunrise (London), Sunrise House, Sunrise Road, Southall, Middlesex, UB2 4AU tel 0181 5746666

Sunshine 855, Sunshine House, Waterside, Ludlow, Shropshire SY8 1GS tel 01584 873795

Surf 107, PO Box 107, Brighton BN1 10G tel 01273 386107

Swansea Sound, PO Box 1170. Victoria Road, Gowerton, Swansea SA4 3AB tel 01792 511170

Tay, 6 North Isla Street, Dundee DD3 7JQ tel 01382 200800

Telford FM*, PO Box 1, Ketley, Telford TF1 4HU

Ten 17. Latton Bush Centre, Southern Way, Harlow, Essex CM18 7BU tel 01279 432415

TFM, Radio House, Yale Crescent, Thornaby, Stockton on Tees, Cleveland TS17 6AA tel 01642 88822

Thames FM, Brentham House, 45c High Street, Hampton Wick, Kingston on Thames KT1 4DG tel 0181 2881300

TLR. Imperial House, 2-14 High Street, Margate, Kent CT9 1DH tel 01843 220222

Touch Radio, West Canal Wharf, Cardiff CF1 5XJ tel 01222 237878

Tower FM*. The Mill, Brownlow Way. Bolton BL1 2OF (01204 534949 temporary number)

Trax, White Hart Yard, Bridge Street, Worksop, Notts S80 1HR tel 01909 500611

Trent FM. 29-31 Castle Gate Nottingham, NG1 7AP tel 0115 9527000

Valleys Radio, Festival Park, Victoria, Ebbw Vale NP3 6XW tel 01495 301116

Vibe FM, Reflection House, The Anderson Centre, Olding Road, Bury St. Edmunds IP33 3TA tel 01284 718800

Viking FM. Commercial Road, Hull HU1 2SG tel 01482 325141

Virgin Radio, 1 Golden Square. London W1R 4DJ tel 0171 4341215

The Wave (Swansea), PO Box 964 Victoria Road, Gowerton, Swansea SA4 3AB tel 01792 511964

The Wave (Blackpool), 965 Mowbrav Drive, Blackpool, Lancashire FY3, 7JR tel 01253 304965

Wave 105, 5 Manor Court, Barnes Wallis Road, Segensworth East, Fareham, Hampshire PO15 5TH tel 01489 481050

Waves Radio (Peterhead), Unit 2, Blackhouse Industrial Estate, Peterhead AB42 1BW tel 01779 491012

Wessex FM. Radio House Trinity Street, Dorchester, Dorset DT1 1DJ tel 01305 250333

West Sound, Radio House, 54a Holmston Road, Ayr KA7 3BE tel 01292 283662

Wey Valley, Prospect Place, Mill Lane, Alton, Hants GU34 2SY tel 01420 544444

Wire*, Warrington Business Park, Long Lane, Warrington WA2 8TX tel 01925 445545

Wish, Orrell Lodge, Orrell Road, Orrell, Wigan WN5 8HJ tel 01942 761024

Wolf. 10th Floor, Mander House Wolverhampton WV1 3NB tel 01902 571070

Wyvern FM, 5 Barbourne Terrace. Worcester WR1 3JZ tel 01905 612212

Xfm. 30 Leicester Square, London WC2H 7LA tel 0171 7666600

XL, KMS House, Bradford Street, Birmingham B12 0JD tel 0121 7535353

Yorkshire Coast, PO Box 962. Scarborough YO12 5YX tel 01723 500962

Yorkshire Dales, YDR House, Gargrave Road, Skipton North Yorks BB23 1YD tel 01756 799991

proposed station not on-air at time of publication

CABLE STATION ADDRESSES

BCB - Community Radio for the Bradford district. Tel 01274 771677

BUBN - Birmingham based hospital & healthcare service. Tel: 0121 554 5522

Castle FM - music, news and sport in Northampton. Tel: 01604 457744

CRMK - Community Radio Milton Kevnes, Local community cable radio station For further information-Tel: 01908 265266

Cruise FM - Music in Andover. Salisbury and Romsey. Tel: 01264 393333

Gemini AM/FM - on cable on Eurobell SW network 01392 444444

Lite FM - Cable radio in Peterborough. Tel: 01733 898106

Max FM - music and news in Southampton, Eastleigh and Winchester. Tel: 01703 222122

Music Choice Europe - music subscription service on cable and satellite. Tel: 0171 2988800

Radio Phoenix - Hospital radio service for Neath General Hospital, also distributed in the Vale of Neath via cable television network.

Tel: 01639 762029 (evenings and weekends only)

Town FM - music and news service based in London. 0181 3731073

Radio Verulam - community radio for west Herts. Tel: 01442 398099

Radio Victory - Broad-based news music and information. Based in Portsmouth. Tel: 01705 358853

STUDENT STATIONS

The Student Radio Association (SRA) represents most student stations. It can be contacted through the Radio Academy telephone 0171 255 2010.

Most stations use a very low power induction loop system, so can't be heard beyond their campus. Stations can apply for up to two Restricted Service

Licences a year. The exception to this is the Oxford-based student station Oxygen 107.9, which was awarded a permanent licence by the Radio Authority in 1996.

There are too many stations to list here, over 70 at last count, so contact the SRA for further information. The SRA run a

useful web site which lists their members and addresses at http://b1000.brunel.ac.uk:8080/sra/ e-mail:

sra-chair@studentradio.org.uk

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Other programmes on-air, that may already be familiar to satellite listeners are *Hard Country* and *The Media Zoo*. From October MNO commenced full-time programming.

For more information Internet users can look at the following websites- www.mno.net/ ,or www.mediazoo.co.uk/mno/

If you do not have access to the Internet, you can request programme and frequency details from, Merlin Network One, Bush House, PO Box 76, Strand, London WC2B 4PH. Tel 0171-419 1035. Email: mno@cix.co.uk

However, in spite of the developments above, people in most parts of the UK still have a limited number of station formats to choose from. In the past this situation would have been addressed by offshore pirate radio. Unfortunately nowadays potential broadcasters are no longer willing to run the risks associated with this form of broadcasting, especially in light of the draconian powers given to the regulatory authorities, by the provisions of the Broadcasting Act, 1990.

One of the solutions to this problem may be legally licensed high-powered commercial stations based outside the UK (and its regulatory system) but beaming programmes to a UK audience. There are currently two such projects. Both of these are high-power long wave stations, that plan to broadcast to UK and European audiences.

The Dutch authorities licensed Delta 171 in 1997. with the company behind the project hoping to come on the air by the end of that year. Planning problems regarding the siting of its aerial masts have prevented this. The station planned to locate its two million watt transmitter at Kootwijk on the Dutch coast. Protests resulted, especially when it was revealed that the station would be using directional aerials and actually putting out ten million watts erp! Plans to broadcast just off the Dutch coast also met with protests from those concerned with the environment and wildlife. The latest plan is to build a man-made island, possibly as far as 12 miles out in international waters, where it wouldn't even be visible from land. However, this has caused debate about the legality of a licensed Dutch station broadcasting in this way.

The other long wave project, is the plan to operate a high-powered station on long wave from the Isle of Man. Negotiations have been going on for several years, with an announcement made in April 1998 that the Radio Communications Agency had allocated 279 kHz long wave to the Isle of Man. The licence for the new station was advertised at the beginning of September and by the closing date of 31st October, three applications had been received.

The Isle of Man Broadcasting company is a leading contender. Formed in 1994 specifically to apply for the licence, it is a Manx company with £10 million backing. It is headed by former offshore radio DJ and engineer Paul Rusling (who was involved with Radio Caroline in the early 1970's and Laser 558 in the mid-1980's). He has been the driving force behind the negotiations which have enabled the frequency to be allocated to the Isle of Man.

Another contender is Indigo 279 which is backed by European media giant CLT. The third applicant is the Manx Broadcasting Corporation, which is backed by the Villiers Group and is based on the island. The company has a number of people on its board with previous involvement in UK broadcasting, notably former Radio Authority chief-executive Peter Baldwin (who has also been linked with the DELTA 171 project). The licence is expected to be awarded at the end of January 1999, with the winner also facing a battle to get planning approval for the necessary aerial mast on the island.

It is my hope that the station will go some way to filling a gap in the UK market, and will offer a broad mix of adult rock/pop music, with the station providing a service for all those mature listeners who feel disenfranchised by the current system.

If you wish to keep up with these events during the year, Geoff will be covering developments in his magazine Radio Review.

Radio Review

Radio Review is a regular magazine that keeps you informed about Radio Caroline, Atlantic 252, Virgin, Arrow, Radio 10 Gold, new radio projects, short wave, satellite and digital broadcasting as well as Dutch and UK radio news.

For a sample issue send a SAE to Dept RLG 99, PO Box 46, Romford Essex RM7 8AY
To receive the next six issues at a special introductory price for RLG readers, send a cheque for £7.80, payable to GJ Baldwin.

FURTHER INFORMATION / ORGANISATIONS

Frequency guides World Radio and TV Handbook (WRTH) 1999

Comprehensive listings of the frequencies for all countries. plus technical advice. Published Nov 98, £19,50

Passport to World Band Radio 1999 - Short wave listening guide with receiver reviews and frequencies. Published Oct 98 £15.50

Global Radio Guide - The 32 page guide lists broadcasts in English and is available from Short Wave's book ordering service for £3.95. See below.

(WRTH, Passport and the Global Radio Guide are available from Short Wave magazine's book ordering service - tel 01202 659930.)

The Radio Authority Pocket

Book is an annual guide, published each June, listing independent stations in the UK. Free from the RA.

Radio Transmitting Stations Lists all domestic BBC radio stations and transmitters. Last revised February 1995. Free from BBC Reception Advice.

General Books

How to Get Into Radio by Bernie Simmons, Published by How To Books of Plymouth. £8.99 ISBN 1-85703-143-1

Ron Smith's Aerial Guide

This free 20 page guide explains basic aerial terminology and gives advice on choosing an aerial. Send a large SAE to -Ron Smith Aerials, 98, Ash Road, Luton, Beds LU4 8AO Tel 01582 736561

From International Waters '60 Years of Offshore

Broadcasting' by Mike Leonard, From Radio

Normandy, to Caroline and the Battle for Roughs Tower, this fascinating book chronicles the history of offshore radio, 582 pages. £19.95 + £4.95 p&p. From Forest Press, PO Box 1, Heswall, Wirral L60 3TH

Radio Times - the best radio

Magazines and Periodicals

coverage of all the TV/Radio guides. Published in regional editions. Daily coverage for the region's BBC National and local stations, as well as Classic FM, and World Service programmes. Published weekly it costs 79p from newsagents. BBC On Air - a monthly magazine giving World Service programme details, plus up-todate frequency news, together with details of BBC World and BBC Prime television services. Subscription £18.00 p.a. contact BBC On Air, PO Box 76S, Bush House, Strand, London WC2B 4PH Tel 0171 557 2211 Short Wave Magazine news, information and features to interest the short wave enthusiast. Monthly from newsagents at £2.75 or by subscription at £30 pa from PW Publishing, Arrowsmith Court, Station Approach, Broadstone, Dorset BH18 8PW

Short Wave magazine). Satellite Times monthly magazine satellite radio stations listings, £2,20. Available from newsagents or by sub. Tel 0113 258 5008

Practical Wireless articles on

radio, satellite, circuit diagrams

the newstands at £2.40, or by

etc.. Available monthly from

subscription at £27 pa from

PW Publishing - (address as

Broadcast a weekly newspaper for the television and radio industry . £2.10. Tel 01732 770823.

World Media, produced by BBC Monitoring, is a weekly digest of broadcasting news, info and monitoring observations from around the world, listed by country. Available as a weekly magazine, online via e-mail, internet FTP, or as a tailored service by country.

Broadcasting Schedules is BBC Monitoring's e-mail service, which delivers the latest freg listings and prog times of broadcasters all over the globe. Around seven schedules per week from international and domestic radio and TV, inc satellite. terrestrial and internet details. World Media £410 pa. or £425 online.

Broadcast Schedules £99 pa. Marketing, BBC Worldwide Monitoring, Caversham Park. Reading RG4 8TZ marketing@mon.bbc.co.uk www.monitor.bbc.co.uk

The Radio Magazine weekly newsletter aimed at the radio industry. Subs £72 per year from 25 High Street, Rothwell, Northants NN14 6AD

Radio Review a magazine that keeps you informed about Radio Caroline, UK radio, Dutch, Irish and satellite radio. For a free sample issue and subscription details send a large s.a.e. to -

Dept RLG 99, PO Box 46, Romford, Essex RM7 8AY

Offshore Echo's reports on the offshore & pirate scene. Available at £20 per year (5 issues) from PO Box 1514. London W7 2LL

FURTHER INFORMATION / ORGANISATIONS

Radio Bygones a magazine for vintage radio enthusiasts. 6 copies pa. A sample copy costs £3.25 and subscription is £18.50pa. 9 Weatherby Close, Broadstone, Dorset BH18 8JB Tel 01202 658474

Trade Bodies & Professional Associations

The Commercial Radio Companies Association

CRCA is a trade association for commercial radio companies. 77 Shaftesbury Avenue, London W1V 7AD Tel 0171 306 2603

Radio Joint Audience

Research (Rajar) is a company set up to perform audience research. It is owned jointly by the BBC and CRCA. RAJAR, Collier House, 163-169, Brompton Road, London SW3 1PY Tel 0171 584 3003 www.rajar.co.uk

The Radio Advertising

Bureau is an independent company within radio tasked with marketing 'radio advertising'. Funded by a levy on national radio advertising. RAB, 77 Shaftesbury Avenue, London WV1 7AD Tel 0171 306 2500

The Institute of Broadcast Sound is for those involved with sound broadcasting. Membership costs £40 pa. Members receive the institute's magazine Line Up. Contact the Membership Secretary, 27 Old Gloucester Street, London WC 1N 3XX

Organisations and Associations

The British Wireless Fund for the Blind is a charity with the aim to help blind people who are unable to buy their own radio. Equipment is provided on free permanent loan. The fund relies on private donations, and contributions to carry out their work. Details from Gabriel House, 34 New Road, Chatham, Kent ME4 4QR Tel 01634 832501

Voice of the Listener and Viewer (VLV) a non-profit making society to support quality broadcasting. Members receive a quarterly newsletter. Membership £12.50 per year, from VLV, 101 King's Drive, Gravesend, Kent DA12 5BQ Tel 01474 352835 vlv@btinternet.com

The Radio Academy a body for those working in, or with an interest in radio. 5 Market Place, London W1N 7AH Tel 0171 255 2010 www.radacad.demon.co.uk

The Community Media Association promotes

Community Radio in the UK. 15 Paternoster Row, Sheffield. Tel 0114 279 5219 www.commedia.org.uk

The Student Radio
Association can be contacted at the Radio Academy.
Tel 0171 255 2010
http://b1000.brunel.ac.uk:8080/sra/

The European Satellite User Group (TESUG) gives information and advice about satellite to its members. A monthly newsletter gives the latest news. Contact TESUG, PO Box 576, Orpington, Kent BR6 9WY Tel 01227 265222 www.mediazoo.co.uk

The Hospital Broadcasting Association is the national representative for hospital broadcasting. HBA, Straite House, Russel Street, Falkirk FK2 7HP Tel 01324 611966 The Churches Advisory
Council for Local
Broadcasting produce a
quarterly newsletter Crosstalk.
Contact Jeff Bonser PO Box
124, Westcliff on Sea, Essex
SSO 0QU Tel 01702 305121

www.caclb.org.uk

Children 2000 is a group
promoting children's radio.
Contact Susan Stranks at,
PO Box 13131, London N8 7BT
(Please include a SAE)

World DX Club - for radio DXers. Monthly magazine Contact. £12 pa (UK), £14 pa (Europe). The World DX Club Sec, 17 Motspur Drive, Northampton NN2 6LY.

British DX Club for DXers.

Monthly magazine Communication. £11 pa (UK), £15 (Europe) BDXC, 126 Bargery Road, Catford, London SE6 2LR bdxc@bigfoot.com

The Medium Wave Circle is a club for listeners on the long and medium wave broadcast bands. 10 issues of magazine, Medium Wave News, published pa. £12 pa (UK) Medium Wave Circle, 137A, Hampton Road, Southport PR8 5DY

The International Listeners Association for individuals interested in broadcast bands, amateur radio, aircraft, ships or weather watching. £5 pa. 1 Jersey Street, Hafod, Swansea SA1 2HF ILAnet@aol.com

WEATHER - TRAVEL - NEWS - TIME SIGNALS

Shipping Forecasts

Radio 4 - 0535hrs, (1201 & 1754 long wave only), 0048

Radio 4 Inshore forecast 0540

General Forecasts

Radio 2 - half-hourly 0500-0900, then 1300, 1700, 1800, 1900, 2200 and midnight Radio 3-1300 news and weather

Radio 4 - 0612, 0657, 0757, 1257, (1757 long wave only), 2008.0027

Radio 4's Farming Today.

includes a 5 day forecast for farmers and growers on Mondays at approx 0557. Three day forecast on Fridays at 0557. Classic FM - on the hour, with the news

Travel Information

Radio 1 - included in news reports

Radio 2 - 0640, 0720, 0750, 0820, 0850, 1550, 1620, 1650, 1720, 1750, 1820, 1850

Radio 4 - included in news reports

Radio 5 - half-hourly 0615-1845 Classic FM - traffic and travel on every half hour from 0600-0830 and 1630-1830.

Most operate local travel round

BBC Local Stations

ups at regular intervals between 0600-0900 and 1700-1900. There is no standard time for for all BBC local stations, so contact your local station if you need detailed information. They all give travel flashes, some incorporated into the RDS network

Independent Stations

Most run travel reports between 0615-0915 and 1615-1845

National News

Radio 1 - on the half-hour plus 0700, 0800, 1700, 0230, 0330 Radio 2 - news on the hour headlines at 0530, 0630, 0730, and 0830

Radio 3 - 1300 - summaries at 0600, 0700, 0800, 1800 Radio 4 - 0600, 0630, 0700, 0730, 0800, 0830, then hourly 0900-2200 and midnight Radio \$ - news and sport bulletins every half hour Classic FM - news on the hour except for 1900 and 2000

BBC and independent

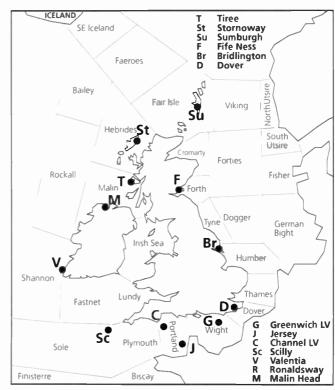
stations offer a mix of local and

national news. Usually however, this is on the hour and half hour during peak times, and just on the hour at other times.

Sports News

Radio 5 - news and sport bulletins every half hour Radio 3 - weekdays at 0600. 0700 and 0800 Sundays at 0700 Radio 4 - weekdays wherever programming makes it possible. every hour on the hour, with Big

Ben at 1800, 2200 and 0000 RDS Time Signals - If you have an RDS radio with the RDS clock time feature, tuning to a station transmitting an RDS time signal should enable your radio to maintain split-second accuracy.



COMMENTS AND COMPLAINTS

BBC

For comments, gueries and criticism write to - Viewer and Listener Correspondence, BBC Villiers House, The Broadway, London W5 2PA

Telephone the BBC Information office via the switchboard on 0171 580 4468. Don't forget to give the programme title, station. transmission date and time. A daily summary of comments is seen by senior programmemakers and written comments will be answered. See also the contact telephone numbers for the BBC shown on

Serious breach of standards -If you think that a BBC programme has contained a specific and serious injustice or inaccuracy, or serious breach of accepted broadcasting standards, write giving details to: Fraser Steel. Head of the BBC's Programme Complaints Unit, Broadcasting House. London W1A 1AA

page 118 of the guide.

Independent

The Radio Authority

recommends that listeners who wish to comment on or complain about something they heard on Independent Radio. should first write to the station. concerned

Radio stations must keep recordings of all their broadcasts for 42 days. After that time there may be no recording to refer to.

The Radio Authority is responsible for the regulation of its licensees' programming, advertising and transmissions. All complaints must be made in writing, giving precise dates and times of broadcasts. The Authority will investigate. When it feels a complaint is justified it will take action with the radio station concerned. Details of complaints accepted for investigation and the Authority's findings are published quarterly.

Reception

BBC Reception Problems

For problems receiving BBC stations write (including a daytime telephone number) to-BBC Reception Advice, BBC Television Centre, London W12 7RJ tel 0870 010 0123 e-mail: reception@bbc.co.uk

Independent Radio

There is no central engineering information bureau for non-BBC services. Enquiries should be made to the station concerned.

Interference

As a last resort the Radio Investigation Service (RIS), part of the DTI's Radio Communications Agency will investigate interference problems. This only covers FM reception, and only within the service area of the transmitter whose transmissions are affected. Before they investigate:

- you must have thoroughly investigated the problem
- you must have an adequate external aerial
- a service engineer or aerial contractor must endorse your request to say that they are unable to solve the problem. A fee of £35 is charged for investigations. Contact - RIS, New King's Beam House, 22 Upper Ground.

London SE1 9SA

tel 0171 211 0211

Independent bodies

The Broadcasting Standards **Commission** considers

complaints about violence. sexual conduct, and taste and decency in programmes and advertisements

7 The Sanctuary, London SW1P 3JS tel 0171 233 0544 www.bsc.org.uk

Acknowledgements

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