Handsets Phones for gadget fans and from heaven those who prefer the simple life those who simple life

Most new mobile phones let you do far more than text and call. These pocketsized multimedia devices take digital snaps, play music, show video clips and surf the mobile internet.

Eight out of our nine Best Buys mix the latest gadgets with solid sound, reception and battery life. But for those of you who want just a cheap handset simply to make calls and whizz off the odd text message, we've also tested more basic models – and found a little gem.

3G phones offer the most advanced functions, such as fast mobile internet surfing and video calling. However, some new 3G models that we've tested, which

are aimed at business users. don't have a built-in digital camera, making it impossible to make video calls. Video calling has never really caught the public imagination and this development may suggest it never will.

And watch out if you've just bought a new personal computer. Many phones come with software to help you transfer files to and from them and a computer. As we went to press, Motorola was the only manufacturer to have changed its software to be compatible with the new Microsoft Windows Vista operating system. Nokia, Samsung and Sony Ericsson should follow suit soon.

Video calling has never really caught the public imagination

What you should look for

STEREO BLUETOOTH

Bluetooth lets you wirelessly transfer files over short distances. The latest version (A2DP) does this with stereo music files, so you can listen to a phone's music player on Bluetooth headphones

MEMORY CARD SLOT

Some phones have a memory card slot - memory cards are the best way to move files from handset to a compatible PC and vice versa. A free card may come with your handset



MINI-USB

A USB connection lets you transfer files from phone to computer. Some phones have a mini-USB socket, a universal connection which is independent of any manufacturer

DIGITAL CAMERA

Choose a camera phone with at least two megapixels (Mp) and stick to taking shots in good light conditions and you'll be able to print 6x4-inch photos

HEADPHONES

Most music phones work only with their own headphones. To use a different pair, look for a phone with a standard headphone adaptor socket (see table p66)

1 3G 69% Sony Ericsson **W850i** £240

This 3G slide-design handset is the highestscoring phone we've ever tested. The easy-tonavigate music player is great and its sound can be improved with Best Buy headphones. The crisp display is great for looking at pictures and there's a generous 1GB memory



card for pictures and music. Its battery gives more than nine hours of calls on a GSM network - 50 per cent more than most phones.

GOOD-VALUE CONTRACT Handset free on Virgin's £25-a-month tariff, which gives 300 anytime/any network minutes and 300 texts a month. Available from Virgin.

Cheapest PAYG network Virgin Weight 117g Camera 2Mp Memory 1GB Memory stick pro duo card Audio formats supported MP3, AAC, AAC+ FM radio Yes with RDS Data transfer Stereo Bluetooth, Infrared, USB Flight mode Yes Headphone adaptor Yes Email synch No

2 GSM 67% Motorola Z3 Motorizr £150

The latest incarnation of the hugely popular Razr has a pretty good 2Mp camera that's great for taking snaps in good light. There's a memory card slot but no card. You do get a Bluetooth headset, so you can listen to music wirelessly or use the phone handsfree. However, Motorola's menu system is unclear and

irritating to navigate. **GOOD-VALUE CONTRACT**



Handset free with O2's Online 20 deal (£20 a month), which gives 50 anytime/any network minutes and 200 texts a month. Available online from O2.

Cheapest PAYG network O2 Weight 109g Camera 2Mp Memory Micro-SD card slot Audio formats supported MP3, AAC, AAC+ FM radio No Data transfer Stereo Bluetooth, mini-USB Flight mode Yes Headphone adaptor No Email synch Yes

GSM 67% Nokia 5300 Xpress Music £130

This Nokia gives the Walkman range (the best and most high-profile music phones) a run for its money. The music player is simple to use and you can connect your own headphones to improve the sound. It has

a 256MB memory card which can store about 40 songs. The large display is great for texting and looking at photos. GOOD-VALUE CONTRACT Handset

free on O2's Online 20 deal

(£20 a month), which gets you 50 anytime/any network minutes and 200 texts a month. Available online only from O2.

BEST BUY

Cheapest PAYG network Orange Weight 107g Camera 1.3Mp Memory 256MB Micro-SD card Audio formats supported MP3,AAC,AAC+, WMA FM radio Yes Data transfer Stereo Bluetooth, Infrared, mini-USB Flight mode Yes Headphone adaptor Yes Email synch No

4 3G 67% Nokia 6288 £180

Calling, texting and mobile internet surfing are a pleasure with this outstanding 3G phone, an update of the old 6280 Best Buy. The 2Mp camera is very good and even manages to produce reasonablequality pictures in artificial light. The

high-resolution display is great for viewing pictures and sending texts. The music

and sending texts. The music player's sound quality is a letdown, though, and you can't plug in your own headphones to make it better.

GOOD-VALUE CONTRACT Free with a £35-a-month Vodafone deal which gets you 500 anytime/any network minutes and 250 texts a month.

Cheapest PAYG network n/a Weight 119g Camera 2Mp Memory 512MB mini-SD card Audio formats supported MP3, AAC, AAC+ FM radio Yes Data transfer Stereo Bluetooth, Infrared, USB Flight mode Yes Headphone adaptor No Email synch Yes

Calling, texting and mobile internet surfing are a pleasure with the Nokia 6288

67% Sony Ericsson W950i £380

Music-loving business travellers are the target audience for this Walkman-branded 3G smart phone. The



excellent and easy-to-use music player has a hefty 4GB memory – enough to store about 1,000 songs.

It's outstanding for text messaging, thanks largely to the huge highresolution touchscreen display. You can also check email. The battery charges in an hour – half the time of most phones. **GOOD-VALUE CONTRACT This**

handset is £29.99 on Orange's £35 a month Dolphin deal – 300 anytime/ any network minutes and 300 texts a month. From Orange (unlimited texts at weekends if bought online).

Cheapest PAYG network O2 Weight 113g Camera No Memory 4GB internal flash Audio formats supported MP3, AAC FM radio Yes with RDS Data transfer Stereo Bluetooth, Infrared, USB Flight mode Yes Headphone adaptor Yes Email synch Yes

Jargon buster

Our guide to understanding your mobile phone

MOBILE STANDARDS

GSM Stands for the general system for mobile communications. It's the most popular mobile phone standard, meaning you can use yours abroad. It covers around 99 per cent of the UK population.

GPRS Also known as 2.5G. This lets you surf the mobile internet on your GSM phone.

EDGE This enhanced version of GPRS lets you surf the internet and transfer data more quickly.

3G Also known as UMTS. Third-generation phones and networks offer video calling, and the fastest mobile internet surfing and downloading. Coverage is between 80 and 90 per cent of the population, depending on the network.

PHONE FEATURES

Audio formats Digital music is available in different formats. MP3 is the best known, AAC is used by Apple's iTunes, while WMA is a Microsoft format. If you plan to share music between devices, they must use the same formats.

Email synchronisation

Some phones can be synchronised with computer email programmes (usually Microsoft Outlook or Lotus Notes) so you can receive, check and reply to emails sent to your computer.



■ Flight mode This lets you play music when your phone is switched off – handy on aircraft, where phones cannot be left on.

■ Java Most phones have Java - software that produces and plays games. Many phones come with a couple of games and you can download more from the internet for about £5 a time.

MMS Multimedia messaging lets you send photos to other handsets, as you would a text. Smart phone A combination of a mobile phone and a personal digital assistant (a handheld computer/personal organiser). Smart phones are aimed mainly at business users.

■ Wi-Fi Laptops and a handful of mobile phones can connect wirelessly to the internet in Wi-Fi hotspots such as at airports, coffee shops and public buildings. You can also do this at home if you're set up for wireless internet access.

<mark>в GSM</mark> 66% Nokia 6103 £90

The Nokia 6103 is light on gadgetry but is a delight to use as a phone. The good-sized keypad makes calling and texting simple. There is no music player, only a very basic camera, little internal memory, and no memory card or slot for one. It does have Bluetooth and an FM radio, and the clamshell design shields the main display from

scratching. If you fancy surfing the mobile internet, this Nokia features Edge – a system which offers faster access than a standard GPRS connection.

GOOD-VALUE CONTRACT A £25 a month T-Mobile U-Fix plan, from www.directmobilephones.com, gets

www.directmobilephones.com, gets you 750 off-peak/any network minutes and 75 text messages a month.

Cheapest PAYG network T-Mobile Weight 99g Camera 0.3Mp Memory n/a Audio formats supported MP3 FM radio Yes Data transfer Bluetooth, Infrared Flight mode No Headphone adaptor No Email synch No

7 GSM 66% Sony Ericsson W710i £210

Sporty types will like the rugged-looking W710i Walkman phone. It comes with a pair of clip-on headphones and an arm band for strapping on the handset – ideal for jogging. There's even a pedometer, caloriecounter and stopwatch. Just like the other Walkman phones it has an easy-to-use music



an easy-to-use music player and FM radio with RDS. There's a 512MB memory card and a good-quality 2Mp camera.

GOOD-VALUE CONTRACT Free handset online from the Carphone Warehouse with Orange's £45 a month Panther tariff – 600 anytime/any network minutes and 300 texts a month.

Cheapest PAYG network Virgin Weight 102g Camera 2Mp Memory 512MB MS Micro (M2) card Audio formats supported MP3, AAC FM radio Yes with RDS Data transfer Stereo Bluetooth, Infrared, USB Flight mode Yes Headphone adaptor Yes Email synch Yes The Nokia 6103's good-sized keypad makes calling and texting simple

Which should you choose?

Best for music SONY ERICSSON W950i, £380

Walkman phones always score well in our music player tests. The Sony Ericsson (5) stands out for the scroll wheel, which lets you navigate playlists simply with one hand.



Best for photography SONY ERICSSON K800i, £220

This Cyber-shot branded model is

the best camera phone we've tested. It has a 3.2Mp camera, auto focus, built-in flash and easy-touse photo editing package. Full results on our website.



Best for business

This sleek Nokia (9) features Wi-Fi, 3G and Edge. It can synchronise with Outlook and Lotus Notes, but there's no camera so confidential meetings stay that way.



The way we were



Mobiles had retractable aerials and tiny displays when we tested them in 1993. They weighed 260g on average – more than twice today's svelte models. A

12-hour battery was highly regarded – today a standby time of 200 hours would receive an equivalent score. No wonder most handsets had a spare 'high-

Si.

capacity' battery. The tariffs were just as bewildering as today: peak, off-peak, standard and Lowcall.

Similar models

We test new mobile phones every second month, so we don't have room to include all the results for every one of these models in the magazine.

However, the two phones pictured right are worth picking out as they are similar to our Best Buys but quite a bit cheaper.

ALSO THIS MONTH

To find out more about the unique design of the new Motorizr Z8, see 'Product news' on p11 of this issue.

NOKIA 5200,

Free on contract with Virgin, £80 PAYG with Orange

The Nokia 5200 is a cheaper version of the Nokia 5300 Xpress (3). The 0.3Mp camera and colour display are inferior to the latter Nokia model. There's also no mini-USB socket or Edge.

SCORE 63%

SONY ERICSSON Z710i, Free on contract with O2 and Vodafone,

£130 Sim-free

A non-Walkman branded version of the W710i (7), this comes with none of the sporty extras and a smaller 64MB memory card. You can't use your own headphones and those supplied don't deliver sound quality as good as the Walkman version. However, in every other respect – battery life, use for calling and texting and call reception – the handsets are identical. SCORE 65%



8 3G 66% Sony Ericsson **Z610i** £170

The polished look of this clamshell Best Buy is sure to turn heads. It's a great phone – battery life, call quality and reception are good but the display is small for texts. The 64MB memory card is small and its camera suffers more blur than most 2Mp models. There's a music player but headphones have to be bought separately and there's no standard plug to fit your own.

GOOD-VALUE CONTRACT

Free handset with £30 a month Orange Racoon contract (300 anytime/any network minutes and 50 texts a month). From Orange with unlimited weekend calls to landlines if bought online.

Cheapest PAYG network Orange Weight 110g Camera 2Mp Memory 64MB MS Micro (M2) card Audio formats supported MP3, AAC, AAC+, WMA FM radio No Data transfer Stereo Bluetooth, USB Flight mode Yes Headphone adaptor No Email synch No



17 BASIC 67% Nokia 2610 £40

If you just want to call and text. look no further than the Nokia 2610. A colour screen and polyphonic ringtones are as

advanced as it gets with this basic handset.



It does all the simple

things well. The battery charges in just over two hours but can last 425 hours in standby before another charge is needed - double many handsets. It's the lightest Best Buy and good for calls in weak reception areas.

GOOD-VALUE CONTRACT Handset free with the £25 a month Flext 25 package, which has a £40 usage limit. Flext packages let you vary your balance of text/minute usage each month up to your limit. Available from T-Mobile online and in store.

Cheapest PAYG network Tesco Weight 82g Camera No Memory n/a Audio formats supported n/a FM radio No Data transfer n/a Flight mode No Headphone adaptor No Email synch No

The Nokia **2610** is a fantastic phone that does all the simple thinas well

From buying to recycling

Am I better off with PAYG or a pay-monthly contract? If you want a phone for emergencies or fewer than ten minutes of calls a day, pay as you go is probably your best option. You'll pay for your handset upfront. If you use your phone every day, a paymonthly contract will probably be better value. You'll also have a choice of free or subsidised handsets but will be committed to 12 or 18 monthly payments.

What's a Sim-only tariff?

This is a contract tariff where you don't get a free or subsidised handset, just a Sim card which you insert into your own handset. If you're happy with an existing handset, it

could be worth considering as you may get more minutes for your money and are less likely to be tied in for 12 or 18 months. Some phones are locked to a particular network – you might have to pay to unlock it for use with another network. This shouldn't cost more than about £20. If you have a Sim card already, it's possible to buy handsets Sim-free.

What can I do with my old handset? Most networks and mobile phone shops are part of the Fonebak recycling

scheme. If you return a phone, they'll recycle components or repair, refurbish and send the phone to places such as Africa where phones are expensive. Many charities will take your old phone. Oxfam says a working handset is worth £5 to it.

Ten things to do with your phone

Fun extras for your handset

LISTEN TO THE RADIO Many Nokia and Sony Ericsson phones have an FM radio – the headphones act as the aerial.

SHARE PHOTOS You can send digital snaps to other phones via an MMS message, which costs about 30p depending on your network and contract. It's free if the recipient is nearby, via Bluetooth.

WATCH FOOTY You can get Premiership and Champions League highlights for £5 a month on a 3G Vodafone handset.

CHECK YOUR EMAIL Many phones can be synchronised with email programs, such as Microsoft Outlook, so you can check email on the move.

NAME THAT TUNE Can't 5 remember the name of a song? Dial 2580, hold your phone to the source and website Shazam will text back the artist's name. You pay for the first call plus 50p if it finds a successful match.

GET AN ALARM CALL Most 6 phones have calendars, clocks and alarms - so you can wake to your chosen ringtone.

CHEAT IN THE PUB QUIZ

Text a question to 83773 and ANSA will answer it for 50p plus the cost of the text. You'll get an answer within ten minutes.

WATCH TV Vodafone and 3 customers can get TV from £5 a month. You need a 3G phone and decent reception.

SHOP ON eBAY Download 9 PocketAuctions from bango.bonfiremedia.com on your handset and you can buy, bid and browse for 25p a day.

FREE CALLS Download Skype 10 and you can make free international calls to other Skype users. You'll need a Windows mobile and a Wi-Fi connection.

Facts & scores

Handset hints that we discovered during our testing programme

Mini-USB

The Motorizr and Nokia Xpress Best Buy handsets have mini-USB sockets, as does the lowly Alcatel music player.

3G switching

3G handsets, such as the Nokia 6288, switch to a GSM network where there's no 3G coverage. If you have a 3G handset but don't use the enhanced services, switching to a GSM connection can more than double battery life.

Stereo bluetooth

The Samsung X830 claims to have stereo Bluetooth, but you can listen to music via Bluetooth only in mono, even with a stereo Bluetooth headset.

3790	n							SPECIFICATION				
	NEIWORKS	PRICE (£)	3G	CAMERA (Mp)	MUSIC PLAYER	MEMORY CARD (MB)	STEREO BLUETOOTH	HEADPHONE JACK				
GSM AND 3G												
1 SONY ERICSSON W850i	0 ² 0 Vi Vo	240 <mark>Vi</mark>	\checkmark	2	✓	1GB	\checkmark	\checkmark				
2 MOTOROLA Z3 Motorizr	0 ² 0 T- Vi	150 <mark>0</mark> 2		2	✓	\checkmark	\checkmark					
3 NOKIA 5300 Xpress Music	0 ² 0 T- In	130 <mark>0</mark>		1.3	✓	256	\checkmark	\checkmark				
4 NOKIA 6288	Vo	180	✓	2	✓	512	\checkmark					
5 SONY ERICSSON W950i	O ² O Vo 3	380 <mark>0</mark> 2	✓	n/a	✓	see ^a	\checkmark	\checkmark				
6 NOKIA 6103	T-	90 7-		0.3								
7 SONY ERICSSON W710i	O ² O	210 <mark>Vi</mark>		2	✓	512	\checkmark	\checkmark				
8 SONY ERICSSON Z610i	0	170 0	✓	2	✓	64	\checkmark					
9 NOKIA E60		245	✓	n/a	✓	\checkmark						
10 MOTOROLA W220	O ²	45 <mark>MW</mark>		n/a				\checkmark				
11 SAMSUNG SGH-X680		90 🔽		0.3	✓							
12 NOKIA 7373	O ² O Vo T-	130 <mark>0</mark>		2	✓	128						
13 SAMSUNG SGH-E250	Tn	70 🗜		0.3	✓	✓	\checkmark					
14 SAMSUNG SGH-X830	0 ² 0	140 0		1.3	✓	see ^b		\checkmark				
15 MOTOROLA C261		50 MW		0.3				\checkmark				
16 ALCATEL OT-E801		20 0		n/a	✓	128						
BASIC												
17 NOKIA 2610	O F	40 Te		n/a								
18 NOKIA 1600	Tn T-	30 T Vo O		n/a								
19 NOKIA 2310	Vi	30 <mark>F</mark>		n/a								
20 NOKIA 1112	Vi	25 <mark>Vi</mark>		n/a								
21 SAMSUNG SGH-C130		40 Te		n/a				✓				
22 SONY ERICSSON J220i		20 10		n/a								

a Features 4GB internal memory b Features 1GB internal memory

FIRST LOOK AT NEW PHONES FREE website access

You can find reviews for 18 Best Buys and more than 100 phones by visiting www.which.co.uk/ mobilephones. We give our first impressions on the stylish Nokia 6300, the latest super-slim Walkman and the new Sony Ericsson Cyber-shot handset.

If you would like help with logging in to the site, visit www.which.co.uk/loginhelp.



Contacts

Alcatel www.my-onetouch.com Mobile World

0800 049 5000 www.talktalk mobile.co.uk

Motorola 0870 901 0555 www.motorola.com/uk

Nokia 0870 055 5777 www.nokia.co.uk

O2 0870 241 0202 www.O2.co.uk

Orange 0800 079 2000 www.orange.co.uk

Samsung 0870 242 0303 www.samsung.com/uk

Sony Ericsson 0870 523 7237

www.sonyericsson.com Three 0870 733 0333

www.three.co.uk Tesco 0800 015 2006 www.tesco.com

Toucan 0800 061 3615 www.toucan.com

T-Mobile 0845 412 5000 www.t-mobile.co.uk

Virgin 0845 600 0070 www.virginmobile.com

Vodafone 0870 241 0202 www.vodafone.co.uk

WHICH? TEST PERFORMANCE						SCORE %	
SOUND	BATTERY	DURABILITY	PICTURES	MUSIC	EASE OF USE FOR CALLING	EASE OF USE FOR TEXTING	
****	****	***	***	****	****	****	69
****	****	****	****	***	****	***	67
***	***	****	****	****	****	****	67
****	****	****	****	**	*****	****	67
****	****	****	n/a	****	***	****	67
****	****	****	**	n/a	*****	****	66
****	****	****	****	****	****	****	66
****	****	****	***	n/a	****	***	66
****	****	***	n/a	n/a	****	****	64
****	*****	****	n/a	n/a	****	**	63
****	****	****	**	n/a	*****	****	63
****	***	***	***	**	****	****	62
****	***	****	**	***	*****	***	61
****	***	****	***	* *	****	***	59
****	****	****	**	n/a	****	***	57
***	***	****	n/a	**	***	***	54
***	****	***	n/a	n/a	****	****	67
***	*****	***	n/a	n/a	****	***	63
***	****	***	n/a	n/a	***	***	63
***	*****	***	n/a	n/a	***	***	61
****	****	****	n/a	n/a	****	**	61
***	****	****	n/a	n/a	***	**	58

USING THE TABLE

We tested latest handsets. The more stars the better. Basic phones don't have a camera or music player.

Availability

Networks Availability on monthly contract. MMobile World Orange OO2 TeTesco T-Mobile Toucan 33 Virgin Vodafone.

Some contracts may be specific to certain shops. **Price** The cheapest price a handset could be bought for on a PAYG basis on the high street as we went to press. Prices in *italics* are Sim-free phones available online.

Specification

Camera Resolution in megapixels (Mp). n/a means there is no camera. Music player The phone has stereo headphones and plays MP3 files. Memory card Size in megabytes (MB) of card supplied. ✓ means the phone has a card slot but doesn't come with a card (1GB = 1,000MB). A blank means there is no slot. Headphone jack Standard headphones can connect to the phone via a 3.5mm or 2.5mm plug.

Test performance

Sound On calls. Battery Charging and use times. Pictures Camera quality, display and photo management. Music Sound, memory and ease of use.

Score

Ignores price and base	ed on:
Sound, reception,	30 %
ease of use for calling	
Battery	17.5 %
Ergonomics	17.5 %
Ease of use for texting	10 %
Pictures	10 %
Games, extras,	10%
office functions	
Music player	5 %

How we test

Today's phones are crammed with gadgets but are they easy to use? We separate the simple from the simply annoying

Calls, texts and music

We score each phone on everyday tasks including making a call, storing numbers in the address book, handling missed calls, reading and writing SMS text messages and sending and receiving MMS picture messages.

In 2006 we added tests for models with built-in music players, such as playing tracks, using and creating playlists, adjusting the volume and transferring music files.

Overall impressions

Our five experts carry out tasks such as switching the phone on and off and storing a contact and give written comments on their overall impressions – from the keypad layout to the display size.

How we choose tariffs

For each of our Best Buys we highlight a goodvalue 12-month contract deal that was available as we went to press. You may get more for your money with an 18-month contract but will not be able to switch as soon if you find the contract isn't right for you. Calls are anytime/any network unless otherwise stated. If possible we've chosen a deal where the phone is free and available direct from tariff providers (online or in-store); some tariffs are online exclusives so in-store deals may vary. We picked Virgin tariffs where possible as Virgin did well in our latest satisfaction survey (September 2006). If a phone is not offered on Virgin, suggestions are based on price alone.

