

THE HI-TECH Kitchen

Since *Beautiful Kitchens* launched more than 10 years ago, there's been a significant change in the way the kitchen is used. The latest technologies are transforming it into an interactive space where the household can communicate, relax, work, dine and socialise. As a result, manufacturers are working hard to meet our demand for good-looking and practical features by integrating TV, music and the internet and introducing clever appliances to make life easier. Cabinetry, lighting and sink and tap technology also look set to improve in the future.

Many gadgets have been launched but it's the useful ones that have staying power. 'The kitchen has become a statement room in its own right and there's a real trend towards choosing appliances, worktops and all-important finishing details with a dramatic design and functionality,' says Terry Watson, Kitchen Planning Expert at Moben. 'However, practicality is essential and technology that is easy to use is a must.' **BK**

New technologies are changing the way we use our kitchens. Here's how five key areas have been changed and improved

CABINETS IN MOTION

Kitchen cupboards are no longer just simple boxes with fixed shelves behind a door. 'Everything must soft close and open easily and these devices have improved in reliability,' says Graham Robinson, Showroom Manager at Alno.

Thanks to Blum's Servo-Drive mechanical system, it's easy to open drawers effortlessly, which is ideal when they're filled with pots and pans. For a base drawer to glide open smoothly, lightly push on the front. Push again and the drawer will close softly and gently using Blumotion (a soft-close, non-mechanical feature).

Blum's Aventos lift mechanism that works in conjunction with Servo-Drive is also revolutionising the way we open and close wall units, as it can be done electrically. 'Our most important development was to eliminate fixed shelves in base units and replace them with full-extension drawers and pull-outs, so that all the contents would be available,' says Michael Powell, Managing Director of Blum UK. 'Servo-Drive was originally introduced in response to wider and heavier drawers. It's also useful when you've got both hands full.' This solution means units can have flush fronts.

'In the future, expect to see cabinets become more environmentally friendly, with greater use of non-wood materials, such as recycled plastics, paper and cardboard. The new "core board" product (wood joined together in a honeycomb structure) already addresses some environmental issues by using less material but manufacturers need to take this further,' adds Michael.



Blum's Aventos and Servo-Drive systems make it easier to open and close doors. Ask your retailer for details

HI-TECH APPLIANCES

Making the most of your space is key and, as a result, manufacturers are producing compact and clever designs. 'Appliances are becoming more streamlined to fit easily into the kitchen,' says Vic Sinclair, Central Buyer for large electrical appliances at John Lewis. 'Models that are time-saving and do the thinking for you look set to get even better, while energy and water efficient features are improving all the time. The latest touch-screen and LED displays on ovens, fridges and wine coolers are easier to use and offer more accurate information.'

Futuristic features

Another technology that will continue to play a role in appliance improvement is steam. In washing machines, it's used to smooth laundry, while in ovens, it enhances flavour, prevents dishes drying out and helps retain nutrients. Companies such as Caple, Elica and Air Uno are also making their quietest-ever extractor hoods.

Interior features are the focus for fridges, with ice-makers, water dispensers and frost-free functions, as well as integrated wine coolers and stay-fresh drawers becoming more widely available.

Energy saving

Efficiency is also a key trend, renewing interest in induction hob technology, which can save 25 per cent more energy than other cooking methods. Belling has just launched its first oven that uses induction in the cavity. 'Induction is smarter, faster, safer and a greener way to cook,' says Steve Dickson, Commercial Manager at Belling. 'As a technology, induction has been slow to find its feet, but with new advances in manufacturing it's fast becoming affordable and we expect it to transform the kitchen appliance market in 2010.'

Dishwashers and washing machines have benefited from technologies that estimate how much water and energy you need for a cycle. 'It seems that the internet connectivity of appliances may now be directed at energy saving,' says Rufus Greenway, Managing Director of installation company Sound Environment. 'For example, a washing machine would be able to check to see when it's the cheapest time to run a cycle to save power.'

BELOW The CBNes3967 fridge freezer's drawers have independent temperature controls. £1,659, Liebherr



LEFT Air Uno's Parsifal extractor hood is available in stainless steel, black and white gloss or the 72 colours of Corian. It comes with four-speed, soft-touch control, automatic switch-off and filter cleaning warning. From £2,250 for a stainless-steel version



RIGHT Belling's BI60i Eco Induction Oven is the first of its kind and uses an impressive 50 per cent less energy than a standard A-rated oven. Priced from £599



LEFT Hotpoint's A-rated OS897DPIX Openspace oven has a 70-litre capacity, giving 20 per cent more space than a standard oven while retaining the same outer dimensions. The oven also splits into two cooking zones. It costs £699



RIGHT Simply tell the Electrolux Inspire EOC69400X oven what food you are cooking and it will decide the heat and optimum time required. From £899



Gorenje's made-to-order SmarTable houses a chiller in the middle, which can be raised via a remote to keep drinks and refreshments close to hand. From £12,000

INTERACTIVE KITCHEN MEDIA

The latest LCD touch-screen computers are set to have the biggest impact on how we live. Sony's L Series computer is one of many new products that provide online access in the kitchen, allowing you to check a recipe as you cook, play Blu-ray movies or connect to a PlayStation.

Sleek screens

At the most basic level, you can now fit flip-down TV and DVD players under your wall cabinets or place freestanding flatscreen units on a table. Alternatively, you can call upon the services of home automation specialists, such as Crestron, Sound Environment or Gibson Music, to fit screens into the worktop or place them on wall brackets. You can even fit screens that are flush with cabinet doors, place them behind glass panels or above your cooker. Hi-tech televisions include Samsung's 8000 Series, which has a 'Cooking Widget' to give you access to a recipe library, so you can follow instructions on screen.

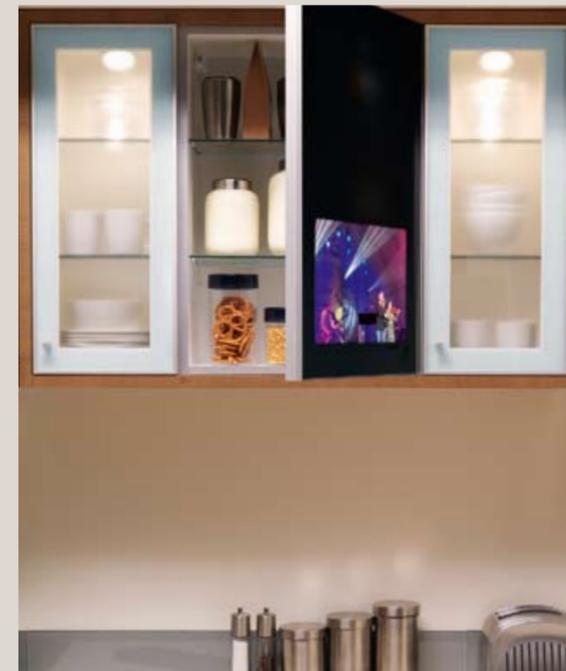
Listening to music all through the house is becoming a popular trend. You can do this using one of the many new wi-fi streaming devices available from companies such as Philips, Bose or Sony. 'These systems let you "stream" music that is stored on one system or your computer to other rooms in your house,' says Helen Keppel-Compton, head of consumer electronics at John Lewis. Many kitchens now also have ceiling speakers that are operated by a remote or wall-mounted keypad.

Belling's Media Chef features 48 instructional cooking videos from chef Brian Turner on its eight-inch screen. It also works as a general media player, calendar and photo frame and costs £169



ABOVE Gibson Music's Mirror Image TV by Ad Notam is a high-definition screen that beams through the glass feature panel when it's switched on. It costs from £8,500 for a 37-inch screen, including furniture

BELOW The Philips MC1500 hi-fi has a built-in hard drive that can send music to five WAS7500 receiver stations around the house. This lets you move from room to room and enjoy the same music or different tunes in each. The hi-fi costs around £490 and the stations £199 each



ABOVE Crestron offers bespoke systems that can control the technology around your home via a central panel. Systems cost from £3,000

LEFT O2's Joggler makes it easy for household members to communicate

as they come and go. It connects to your wi-fi network so you can play games, listen to music and browse weather, news and traffic updates via the touch screen. You can also send text messages to and from the Joggler to family members. From £99.99



ABOVE The 17-inch Wi-Fi Cabinet TV from Magnet, featuring a 50 x 72cm or 60 x 30cm door, has a Freeview tuner so you can watch up to 48 digital channels. You can also use it as a computer and surf the web. It costs £1,570.90

DESIGNS FOR THE FUTURE

In brief with... Henrik Otto, Head of Electrolux's Global Design Team

What is Electrolux Design Lab? It's a programme we run each year asking students around the world to look into the future and come up with solutions for things such as cooking, cleaning and washing. They need to take into account new technologies and materials likely to be available, as well as consumer needs and wants, which may be very different from those of today. The brief varies each year. For 2009, students had the difficult job of looking up to 90 years into the future.

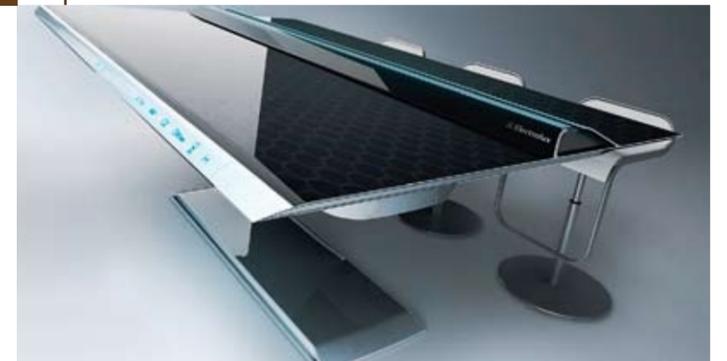
What do you look for in a new design? The best products are created with intelligence and empathy, where everything works beautifully, simply and intuitively to make people's lives easy.

How long before we can control our appliances via the internet? The technology is already there to control

many appliances via the internet. It is more a case of when kitchens and homeowners are geared up and ready to use this type of technology. When the time is right, manufacturers will respond with these types of products.

What dream appliances would you like to create? We have already created some dream concept designs based on key kitchen trends, such as the Rendez-vous. It's an interactive kitchen/dining table that makes cooking a social activity. It has built-in induction technology, so you can cook directly on the tabletop, as well as charge your mobile phone or activate appliances, such as a blender.

A virtual chef programmed into the tabletop can guide you through the cooking process and you can simply tuck the kitchen appliances beneath the table when it's time to eat.



ABOVE Although it's still a concept design, the Rendez-vous, a table-cum-induction hob from Electrolux, hopes to transform the way we cook and live

TOP TIPS FOR A HI-TECH SET UP

Rufus Greenway, Managing Director of installation company Sound Environment, shares his advice on integrating the latest technology into your kitchen.

- Plan it in detail, from the position of every cabinet, light and appliance to how the room will work, remembering to think about the future – children grow, so usage will alter. Ensure the plan reflects those changes so the kitchen and surrounding areas can be modified to reflect the family's changing demands.
- Even if you do not want all the technology to start with, make sure

the wires, cables and infrastructure are in place to facilitate it in the future if you change your mind – new kitchens are not often cheap to replace.

■ Use a CEDIA (Custom Electronic Design & Installation Association) member to design, supply and integrate all the electrical aspects of the build, so you have a controllable and easy-to-use environment that can adapt and evolve with family and modern life. CEDIA has more than 4,000 certified specialists in the integration of electronic systems into home environments. Visit www.cedia.co.uk for details of a CEDIA-certified professional near you.

MAKING LIGHTING WORK

A decade ago, most lighting was no more than a grid of downlights, with perhaps a few under-cupboard fluorescent tubes. However, the kitchen is now a multifunctional area and manufacturers have changed technology to accommodate different uses. You can now have bright lights on an island, mood lighting to illuminate shelving and plinths and automatic lights inside drawers.

LEDs are a good long-term solution because they are energy efficient and have no bulbs to replace. Now, with new, sharper Super Bright LEDs, this type of lighting looks set to be featured in more areas of the kitchen. 'At their most basic level, halogen downlights have been updated with smaller, low voltage versions,' says Alexandra Bateman, Associate Senior Designer at John Cullen Lighting. 'We are still some way off replacing the halogen light but with Building Regulations looking towards even greater efficiency, it may be sooner than we think.' Coloured LEDs are also rapidly becoming a big trend.

Automatic systems that can be controlled via one panel are also growing in popularity. Lutron, for example, sells a system that lets you control several zones of light and monitor your energy usage, too.

RIGHT LED lighting in Stoneham's Elan kitchen adds warmth to the look and creates a pleasant atmosphere in the evening. Prices start from £15,000 for a kitchen



TAPPING INTO TECHNOLOGY AND STYLISH SINKS

Thanks to advances in tap technology, cold filter and boiling water taps have become an essential fixture in many kitchens. 'My new boiling water tap is my favourite appliance,' says Mark Wilkinson from Mark Wilkinson Furniture. 'It's highly efficient, offering great energy savings by heating up only the amount of water needed. So if I'm making a cup of herbal tea, I only boil one cup of water, rather than a whole kettle as I would have done in the past.' Hot water taps have been around for a while, from companies such as In-Sink-Erator and Quooker, but it's only in the past year that sales have rocketed, probably due to their speed, convenience and green credentials. Water filter taps from companies such as Brita and Deva are also rising in popularity as they give clear, fresh water in an instant, thanks to a replaceable cartridge that sits under the sink.

Slick sense

More recently, electronic control panels and sensors are being incorporated into some high-end taps. The control panel allows you to operate the tap easily, so the temperature can be set to a desired level before you wash up, while sensor taps stop and start the flow

depending on when your hands are placed under the spout. 'How water usage can be lessened without altering the operation of the tap is always a hot topic,' says Christopher Perry from Tap Centre. 'Sensor taps make for a clever, eco choice. There are also many other green developments already in place, such as aerators, which mix air with the water spray to cut water use by up to 50 per cent, and "eco click" features, which offer two flow settings.'

Bright ideas

However, we're not quite ready to give up the gimmicks, as a new breed of illuminated taps entering the market proves. 'These taps feature an LED that glows blue when running cold water, red when running hot water and sometimes purple for when you're using a medium temperature,' says Christopher Perry. 'They're certainly a fun design statement and we should expect to see more manufacturers bringing out versions.'

Not to be outdone, the humble kitchen sink has also been transformed in recent years. Preparation boards that slide smoothly across the sink and drainer surface, and fitted liquid soap dispensers, graters and colanders have all enhanced sink design.



ABOVE The X-Touch electronic tap by Newform is controlled by electronic sensors at the side of the sink, which could become a key feature in many kitchen taps. Available by calling Tap Centre and shown in chrome, it costs around £700

ABOVE The Lumina LED illuminated kitchen tap from ziggiziggi.com features an LED that glows blue when running cold water, red when producing hot and purple when the temperature is lukewarm. It costs £325

RIGHT Franke's DuraKleen Plus technology makes it difficult for bacteria to penetrate the surface of its Fraganite sinks. Prices start from £200



ABOVE The Metris drawer light is available in a range of sizes to suit different widths of drawers and starts at £65

LEFT Lutron sells top-of-the-range light systems that include the option of motorised shades and curtains, as well as allowing you to control several zones of light easily. You can even see

your energy usage on the control panel. Prices for the GRAFIK Eye QS start at £700

RIGHT The one-watt Oslo LED, £103, RGB Slinky, £144, and LED Eyelid undercupboard light, £52, provide an atmospheric cooking experience. All from John Cullen Lighting

