A SINGLE NOD AND IT'LL CHANGE THE **WAY WE ALL PLAY**

Microsoft's Natal motion sensor promises to immerse Xbox users in games more deeply than any other control. Mark Harris is among the first to test it

magine controlling a depiction of yourself on a television screen nerely by waving your hands and ittering voice commands — no oypad or Wii remote required. It would allow you to immerse yourself in video games as never before. Or how about shopping for clothes by dressing a virtual mannequin of vourself, akin to the way Tony Stark creates his metal costume in the Iron Man films.

This sounds like a glimpse into the distant future, but consumers will be able to buy this technology in the autumn for the price of a good meal for two. In what could prove the most significant shift in the way we interact with computers and games consoles since the advent of the mouse. Microsoft is about to unveil its Project Natal motion-sensing Xbox control system. It promises to do all this — and much more

With typical lack of understatement, Microsoft describes Natal as being "set to forever change the way we interact with entertainment". Marketing puff aside, Natal is the most eagerly awaited gaming-related gadget for years, fed in

part by the huge secrecy with which it has been developed. The Sunday Times was one of the first media organisations invited to Microsoft's global headquarters in Seattle to see the final version in action.

 Microsoft hasn't revealed the real name yet) is a small black box designed to work with any Xbox 360 console. Imagine a stretched-out motorised webcam (it pans around the room on start-up) with three lenses set in a modest plastic case.

The first lens bathes gamers in an invisible infrared light. This enables the second, a depth-sensing infrared camera, to track your body's initial position and any subsequent movements, which will be mirrored in the actions of your in-game character, or avatar. The final lens is a colour video camera that can be used, among other things, to map a player's face onto an avatar's body (see graphic).

Microsoft says Natal can detect motions of up to 1/10th of an inch. meaning it will spot an itching trigger finger or the difference between a smile and a frown. It can also determine each

player's gender and recognise individual faces, then give each their own onscreen avatar. The most impressive aspect is that the device can do all this accurately, and in three dimensions, as long as gamers are standing within The Natal device (it's a working title about 12ft of the device. In effect, it turns an entire room into a play space.

The device doesn't have a power button. Instead, you grab a virtual zip on the TV screen and pull it sideways to start — or you simply tell it to switch itself on. Almost instantly, I am racing down rapids in a raft in a game called River Rush. There are no complex controls to master; steering is simply a matter of leaning my body or stepping sideways, while if I jump, the raft bobs over logs and waterfalls. The action feels smooth and natural: a small hop inches the raft over obstacles while a big leap fires it into the air for a mighty splashdown. The graphics are bright, albeit cartoony, and I'm soon damp -

> The next game is Reflex Ridge, a self-powered rollercoaster where I hurdle, duck and swerve past barriers jumping all the time to keep my speed up. It's fast and furious but my leaps

from breaking into a sweat.



and bounds aren't always registered, so my character gets bashed repeatedly on his virtual head by passing poles. It turns out I'm playing too close to the cameras; the responsiveness improves dramatically as I back away.

I am testing the device in a vast nference room, but Natal's designers claim the system will work just as well in a crowded British lounge or the tiniest Tokyo apartment. "Families around the world were happy to let us into their homes to map out their living-room dimensions," says Shannon Loftis of Microsoft, "We found out where people put their TVs, their sofas and their coffee tables and took that into account."

The final game is the most fun. Rally Ball is a full-body workout where I punch, kick and headbutt balls that are bouncing around a court. There is apparently a puzzle element to this, but eaping around to keep all the speeding

spheres in play is taxing enough for me When a second player jumps in (most Natal games support multiplayer action), the air swiftly becomes thick with flailing fists and flying legs.

I worry that it would be easy to injure rourself amid this frenetic activity. "We had doctors and ergonomics experts on the design team," admits Loftis. "Over 16 months of testing there have been no significant injuries, just a few bumped heads and scraped knuckles." Perhaps so, but you had better take care if playing on a polished floor.

Microsoft says Natal takes gaming to a new level and that you will be able to interact with in-game characters using words and gestures instead of guns and bullets. More intriguingly, if traditional controllers or keyboards are replaced by voice commands and hand movements, it will bring a new dimension to everyday digital activities. The compan

says Natal buffs will soon be able to control playback of films and TV using only voice and gesture commands, or shop by dressing a photo-realistic mannequin in virtual clothes before ordering these online. It did not, however, show any of this in action.

Will Natal replicate the gesturecontrolled success of the Nintendo Wii. which has racked up sales of 70m to date - nearly as many as the Xbox 360 and PlayStation 3 combined? Natal's controller-less games are energetic and almost as enjoyable to watch as they are to play — a far cry from the Xbox's roster of solo, thumb-twitching shoot 'em ups. But all the titles seen so far are simple party pastimes rather than the rich, deep worlds created by most console games. "We've no intention of abandoning hardcore gamers and we're adding a whole set of new consumers: socially connected females with large

friend groups and families," says Rob Matthews of Microsoft. Maybe so, but the system still

suffered from technical hiccups. My on-screen avatar had a distracting nervous tic, occasionally twisted into impossible positions and consistently lagged a fraction of a second behind my body movements. "We're going to aggressively attack these [problems] between now and launch," says Loftis.

People may put up with niggles in party games but these gremlins would destroy the quick-reaction appeal of Grand Theft Auto or Call of Duty. Likewise, the lack of buttons may greatly reduce the learning curve demanded by many console games, but it also reduce the gameplay options that a traditional joypad provides. Perhaps this is why Sony has taken a halfway-house approach with the imminent launch of

Captures an infrared

view, recording the

movement of anyone

in front of the unit,

position and

which is ther mirrored on screen

Listens for voice

Natal's wizardry

Fires a beam of

invisible infrared

light to illuminate

of lighting in the

of up to 12ft

players regardless

Recognises faces: scans real-world objects to

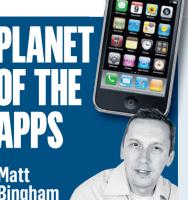
Connects to any Xbox put in games

The unit's own computer chip tracks the speech and movement of up to four players simultaneously, including gestures and facial expressions

> motion-sensing features with a more conventional controller

Many experts believe some of these problems are a result of Microsoft cutting the processing power of Natal to hit an attractive price — it is expected to cost about £125, and will be offered for sale with the option of a new slimmeddown Xbox console. And though most of the big game-makers are talking up the system's potential, few have (yet) committed to making specific titles. Having spent some quality time with Project Natal, I have been convinced that less can certainly be more — but I won't be throwing out my gamecontrollers just vet.

AY TIMES ONLINE See our video of Project Natal in action thesundaytimes.co.uk/tech



We find the best software for your smartphone. This week: . World Cup apps.



THE OFFICIAL **ENGLAND APPLICATION** £2.99: iPhone. iPod Touch

Clunky name, classy software. This Football Association app looks smarter than a Wag's handbag, and lets you customise its home screen to follow the fortunes of a favourite player or reorder elements such as team news and videos. The latter includes classic England goals and matches — which might prove a comfort if the action on the pitch becomes too painful to watch. It's a tad expensive for an app that might have no relevance after the whistle blows on the last Group C match. but still costs less than a half-time pie. Or should that be biltong?



edition. During the run-up to and throughout the tournament, it will gather the latest blogs, podcasts, news stories and match reports, many of them available up to a day before they go into The Times (like Official England there's no offline option — you'll need an internet

onnection to view them). For serious stattos, completed fixtures will be saved in a minute-by-minute timeline. Recommended for anyone who wants World Cup reporting with a bit more attitude than a series of bland FA pronouncemen



leagues, championships or teams from around the world, receiving "nush" notifications whenever a relevant goal is scored or a player is sent off. These text message-like bulletins cost you nothing, and give you the option to click through to a

match-specific page. Impressive stuff, although notifications pop up as much as several minutes after the action occurs.



you with points, with a bonus for guessing the final score. The fun begins when you and a group of friends all run the app: it then collates scores into your own online league table. There's no prize offered — Apple takes a dim view of anything that hints at gaming for money — but if you don't get a few beers bought for you if you win the



WORLD CUP 2010 (OFFICIAL ANTHEMS) 59p; iPhone, Touch Show the spirit of

international friendship that footbal fans are renowned for by carrying recordings of the national anthems of all 32 qualifying teams around with you, with lyrics. Sadly this app misses a trick by mainly displaying them without translation, although the few that are in English — "Arise. arise. O sons of Ghanaland!" — are worth the price of the app alone.

Most consoles; £30-£50. Age 7

This racing game is a mind-boggling mash-up of the surreal, cartoon violence of Super Mario Kart and the driving veracity of Gran Turismo which is why you might find yourself

driving a BMW along Brighton seafront firing neon homing missiles at the Mégane in front. For the first few hours the racing is messy and the constant battering dished out by rival racers infuriating. Give it time. however, and Blur transforms into a deeply absorbing racer. For one thing, each of the weapons you pick up has secondary defensive functions, adding a level of tactical depth. For another, the gritty handling starts making sense once you realise that certain tracks are better suited to particular vehicles. Can't win in a Chevrolet Camaro? Try the same race in a Land Rover LRX. As new tracks open up in New York, Los Angeles, Barcelona, and, er, Hackney, be prepared to lose hours in attempts to complete special challenges or take on the next "boss" racer to win their wheels. Online, the action is even better, as up to 20 human racers battle it out at a time. Blur might lack the instant appeal of the five-star Split/Second, reviewed last week, but don't write it off — it's a slow-burning monster of a drive. Stuart Andrews

DS; £30. Age 3+

This is the video game version of those puzzles where you have to move tiles within a grid to form a picture. Its 100 or so examples need to be rearranged to create images of rooms. Within each room, only one tile has an exit door; you

must slide the remainder around until your character, a frock-coated gentleman, escapes. You can move only the tile you're standing in. Move it to a compatible, adjacent tile and your character will walk into the new tile, which can now be moved. Short-cuts such as ladders and magic wardrobes

lead to tiles that aren't adjacent and even onto the next puzzle. There is a daft sub-plot involving a talking book and mysterious artefacts. But it's the puzzles that matter — and these grow increasingly fiendish. It's all elegantly drawn and atmospherically dark, but there is a limit to how many of these mind-frying conundrums you can stomach. Fine for short visits, then, though you'll be scratching at the door if you stay too long. David Phelar

ST To see video trailers of these games, go to thesundaytimes.co.uk/ingear



KNIGHT RIDER *** £2.99 The iPad might be cutting edge in 2010, but in the 1980s the technological high ground was held by a

iPHONE GAMING

reviews TV tie-in

and iPod Touch

games for the iPhone

talking, crime-solving car driven by a man with a bubble perm Knight Rider, originally a TV series, has now been revived for the iPhone, in the form of an aerial-view racing game that sees you taking Kitt (the talking car) for a spin over the course of 15 missions. Fans of a certain age will be pleased with the inclusion of the theme tune and clips from the show. Gamers, however, may be less happy with the actual racing action, with handling that's downright fiddly compared with some recent iPhone driving games such as Car Jack Streets.

UNCENSORE

slightly grown-up US animated series. comes to the iPhon promising "outrageous mini-games. In truth, though, there's little here that would

Family Guy, the offend your granny — but there is some enjoyable gaming to

be had. All the main characters from the show get their moment, so you can play Brian battling Stewie, Peter beating up a giant chicken, and Chris fighting Meg-pigs and monkeys in a spaceship. It makes sense to fans, trust me. The show's simple animation translates naturally into sharp, bright iPhone graphics, and while the mini-game format might not add much long-term depth, this nonetheless offers a few hours of diversion at a bargain price.

FACTORY ★★★☆

MTV's first iPhone game isn't based on a specific show, but looks instead to combine strategy with Guitar Hero-style rhythm action. The pitch is



management agency, putting together bands and helping turn them into stars. That means writing songs, recording albums and performing gigs, with each task being completed by playing a simple but fun mini-game. As your stable of bands takes shape, your success will depend on their positions in a mock MTV music chart. Wrapping this sort of story around the games certainly holds your attention, while the variety of characters and music styles on offer mean you can keep playing Star Factory without repetition.

