

THIS HOUSE CHANGED MY LIFE

Former stuntman David Holmes refuses to let a life-changing accident define who he is or where he lives. With CSS he designed a home automation to ensure “my brain moves as fast as my body wants to”



■ No bachelor pad is complete without a home cinema with bar and star-lit ceiling

David Holmes manoeuvres his wheelchair silently over the polished kitchen floor to his dining table. We look out through full-length windows across the lawn towards the swimming pool.

Ten months after moving into his innovative and beautiful home, where he uses an iPad to control everything from the curtains to the underfloor heating, he is still buzzing with excitement. “I am more able than you are in this house,” he says jokingly. “In fact, this house has changed my life.”

That is some statement. The 31-year-old former stuntman knows about life-changing moments: at the age of 25, David broke his neck while rehearsing a stunt as Daniel Radcliffe’s action double in the film of Harry Potter and the Deathly Hallows. The accident left him paralysed from the torso down and he was forced to rely on carers to attend to most of his daily needs for the next five years.

Now, having regained some of his independence, David is determined to see that the advances in home automation he

and his technical team have achieved are used to better the lives of other people living with severe disabilities. “Breaking my neck has made me 10 times more creative. My brain is still moving as fast as my body wanted to,” he says.

As David talks, his passion and energy fill the room. He is dynamic; a man who has found a mission in life. “I’ve learnt so much in building this house, I could build another one tomorrow. We were the first to do this, which is why it cost the money. But let’s learn from that now to make it cheaper for everyone. Why can’t we do that?”

David’s original aim was to build a house that would, through its structure and automated functionality, minimise his need for care. His approach was determined and unique. He wanted to make a virtue of certain necessities and at the same time create an environment that didn’t constantly remind him of his disability.

An example of what this meant for the structure of the building is the glass lift shaft. The mirrored surfaces at roof

level guide natural light right through the core of the building.

“If you’re building a house for a person with disabilities, there is a good chance you will want a lift. Did I want a lift stuck in a corner behind a cupboard that I am ashamed of? No, I made it an architectural feature in the centre of the house. I didn’t want this home to look like it was for a disabled person, with grab handles and that sort of stuff, so I designed it so it didn’t need any of that.”

David started planning from





■ The home required a higher-than-usual level of automation, for doors and windows, heating and ventilation, security CCTV, door entry, telephony and audio-visual systems

his hospital bed: “When you are lying in bed for a year, you have a lot of time to think. I knew, with the compensation, there might be an opportunity to build a house. So that was it, I was researching, going online, looking at YouTube videos, checking out the new technology.”

He started reading about the latest control systems from automation specialists such as **Crestron** and lighting specialist **Lutron** and began to think about how they could be employed in a domestic setting to his benefit. A vision began to emerge. David built painstakingly in his mind, thinking every detail, developing a blueprint for the perfect home he was determined to make a reality.

“I broke my neck to pay for this house, so the compromise was that there was no compromise. I knew what I wanted and how I wanted it and I wasn’t going to be told it couldn’t be done. I come from an industry where anything is possible, where you’ve got the best set decorators, the best designers, the best special-effects people. Ten years of my life were spent working surrounded by these really talented people, all of them working to get the best result.”

What David’s plans relied on, more than anything else, was a new level of home automation. This, in turn, would require the expertise of a technical specialist capable of working as his creative partner. Given his high standards and expectations, it was going to be a tall order, but he says he found just that in **Custom Sight & Sound (CSS)**.

“Those guys were brilliant. It was CSS that gave me the confidence to believe it could be done. They said they could do it, and yes, it could all be controlled from an iPad.”

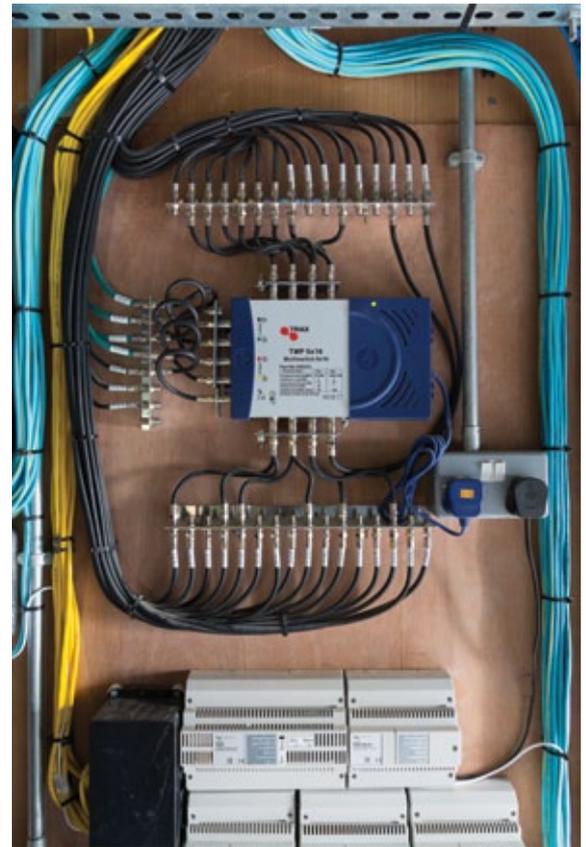
Indeed, it was the launch of the iPad, just after David came out of hospital, which provided the essential interface for the many different systems in the technological jigsaw puzzle that runs the house behind the scenes. Although David has the use of his

arms, his hand functions are limited, making push-button controls almost impossible to use.

Together, CSS and Crestron designed an iPad App that brought together all the functionality of the house into an intuitive, touch-screen interface that took account of David’s physical limitations.

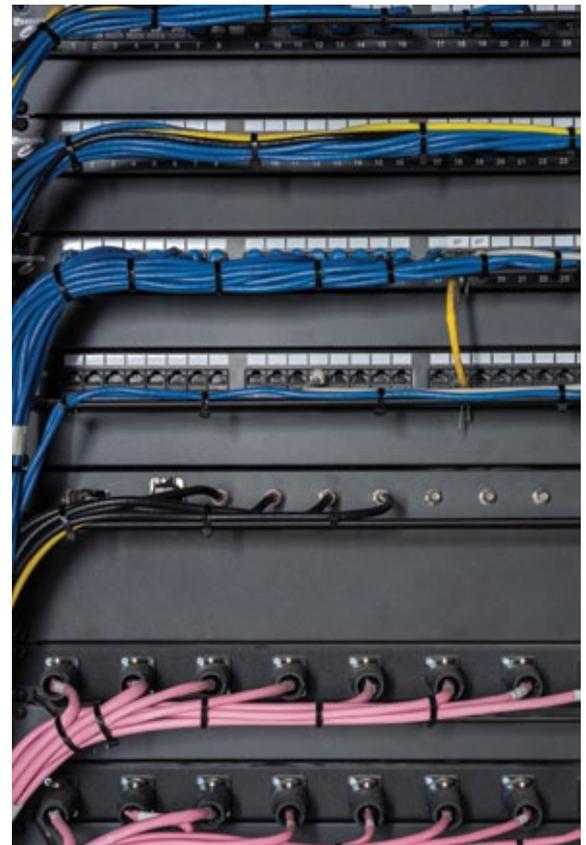
“I learnt in hospital that operating a television remote was hard when you can’t even hold the remote and when your fingers won’t even extend to push the buttons. When the first iPad came out, suddenly I could operate a computer system. We were on the iPhone 3 at the time, so I was getting used to that. Then the iPad made the interface bigger, offering more options for my hands. I knew if there was anything I wanted automated, it had to work through the iPad. That was my idea.”

Like the Sorcerer’s Apprentice, when left on his own for



the first time in the house, he took up the iPad and made the place come alive, all to the tune of his integrated sound system, a feature he is particularly pleased with: “I love music, so having music all around the house is one of the things I am really happy about.”

The multi-room audio system is operated via the iPads





and David can make and access playlists anywhere in the house. "One of the nicest things is in the hallway where there is a double-height ceiling with speakers on the ground floor and the upper floor. The acoustics there are beautiful.

"That first night I was in the house on my own, I said to Tommy, who is my best friend and carer, go home at seven, come back at nine. I had two hours with my iPad on my lap, turning lights on, going up and down in the lift. I discovered Freddie Mercury's Barcelona, listened to it there by the front door and it brought a tear to my eye. I'd done it. Words can't describe the freedom that I felt."

Of course, no modern bachelor pad is complete without a home cinema in the basement, with bar and star-lit ceiling; but perhaps the most important room in the house is his bedroom. "I love the fact that I can go to bed at night and feel safe. I can check my

cameras and turn everything off. If I hear a noise I can turn a light on and check a camera. I have never had that before. I didn't have that in hospital. There you have to bite down on a buzzer for someone to come and help you."

Throughout the process David did his best to get the builders to see things from his point of view, even insisting on a wheelchair being present on site. Anyone who was about to install a fitting was reminded of the chair: "They didn't actually have to sit in it but the chair was there as a reminder."

Disability awareness is now in David's sights. He says on leaving hospital he made a conscious decision not to accept a world that

constantly and unnecessarily made people with disabilities feel their disability.

"A great example was my first experience of using a toilet for people with disabilities. How is someone in a wheelchair supposed to open one of those doors?" he asks, wheeling himself over to take the handle of one of his own automatically controlled doors.

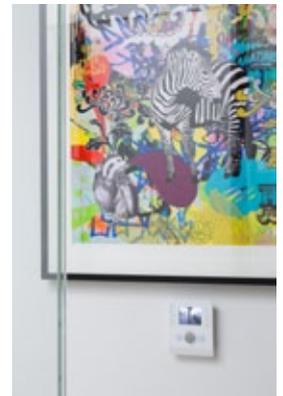
With his other hand he tries to wheel backwards to open the door. Instead his chair immediately swivels on its free wheel, thus demonstrating how most public lavatories for people in wheelchairs are inaccessible to those very people.

The solution, he says, is simple: "Put every door on a two-way hinge. Why not? I understand that I never thought of this until I was in the chair. But I'm in the chair now, so I'm going to say something about it. There's a bloody restaurant in Leigh-on-Sea that's got a disabled toilet up four steps."

Sitting in the midst of his highly-designed and expensively finished home, David recognises the distance between his situation and that of most other people with severe disabilities.

But, he says, it is not just a question of money, but also a lack of thought. "I am not ashamed of being disabled, but why should somebody with a disability have to have a second-class product?"

For example, most wheelchairs have to be custom built for people with his level of disability. His, like any other,



David can choose purple, green or blue accent lighting in certain areas of the home





simple tasks, tasks that otherwise pose big problems for those who find it harder to help themselves.

“I want to see Apps developed that allow you to link via Wi-Fi to a light bulb you can buy off the shelf, so you can turn your light on and off from a phone; Apps that allow you to flush your toilet, turn a shower on and off, open your front door.”

David is also working to support newly injured patients in the early days of recovery, when they are trying to come to terms with life as a person with a severe disability. This includes setting up a production company and David has released a series of podcasts, with two other disabled friends, in which they talk about life since their accidents.

“We talk about life before our accidents, our recovery, our time in hospital, our rehabilitation, learning bowel management and bladder management, sexuality - important stuff to a young man who has just broken his neck: you know, am I gonna use it again, that’s the first thing a 16-year-old boy is going to think. It was the first thing I thought. All the questions that people are too afraid to ask. We just laid it all out.”

Since releasing the podcasts David has been contacted by people who said it had helped them to prepare for life after their injuries. “One was from the brother of a man who dived into a swimming pool while on holiday. The family were just about to bring him home and they sat down and listened to the podcast.

They said they laughed and they cried. When they got him to the UK they were much more prepared for what he and they had to face. Words can’t describe how happy that made me. Because that is what somebody did for me.”

Looking around the house, we come to another basement room, where two large paintings are leant up against the wall, both are works in progress: brushes and paints lie about, as well as the odd over-flowing ashtray. These are works David has commissioned from an artist friend. In fact the house is full of paintings and sculpture, the most dramatic of which is the arms and torso of a gymnast, braced between the rings and sculpted from burnished metal washers.

There is something phoenix-like about the work of art, which seems to capture an element of David’s own character. Gymnastics was his ticket into the film industry as a stuntman. And what does he feel now, when he thinks about his former life, or ponders the future?

■ Large windows offer views on to the property’s garden and swimming pool

cost more than £4,500. It is made of heavy-looking black tubing and grey panels. “Look at it. Why is that not designed properly? Why is it not aesthetically pleasing?”

Not only are they ugly, many items produced for disabled people are over-priced - “Because you need it, they charge what they want for it”. David moves over to his kitchen drawer. “Do you know how much it is to buy a fork that I can use? Let me show you this.” He pulls out the fork and comes back to the table. The handle has a thick rubber grip to it.

“This makes me sick. Think of all the people who are on disability living allowance, £150 per week, and they lose their fork: £12 a fork, and it’s just a bit of rubber stuck on a normal fork. There is nothing to that, which someone can’t knock up for 50 pence. If you are going to charge for it, at least design it properly, make it so they don’t feel disabled when using it.”

At this point ideas come tumbling out, ideas that are about the application of existing technology to accomplish



David insisted the lift shaft should not be tucked away but become a fantastic design statement

“It’s supposed to be hard, isn’t it? If it’s not hard, you’re not trying hard enough. I was a gymnast, I then became a stuntman. I was lucky given some people don’t have the opportunities I had. Then that day happened. I had my accident. And from then on you go ‘oh, it’s supposed to be this hard’.”

Sitting inside, as the rain of early autumn pelts against the David’s panoramic windows, most people can only imagine what “hard” must really mean.

SIDEBAR ON CSS

CSS operations director Graham Cox, who led the team working with David Holmes, says one of the principal challenges was the sheer variety of household functions that had to be automated.

“With all projects, the first technical aspect to be dealt with is assessing all the various items of automation that we need to bring together. This means talking to many different contractors, most of whom have little or no experience of home automation.



“In David’s case, this was all the more important because there were many more elements than usual, such as automated doors and windows, heating and ventilation control, security CCTV, door entry, telephony, lighting as well as the audio-visual systems, which needed to be of a very high spec to satisfy not only David’s needs but his tastes.”

All had to be brought together in a single iPad interface. “This had to be set out in a way that David would find not only intuitive but user friendly, taking account

of his physical limitations.”

Most importantly, says Graham, everything had to work first time. “There was very little opportunity for fine-tuning in the house, especially because we are typically the last contractors on site and it was essential David could operate everything on his first day in the home. Project managing this contract required very close attention to detail and equally close liaison with all of the third-party contractors.”

Luckily, says Graham, David was easy to work with and knew what he wanted. “He was always approachable and seemed to have thought everything through in total detail. So we knew from our conversations exactly what was expected from us.”

CSS learnt a lot from working with David, insists Graham, particularly about the needs of people with severe disabilities. “It is very difficult for an able-bodied person to anticipate those needs.

I think if we were approached again by a client who had recently suffered a disabling injury we would be better qualified to advise and guide them on their needs.

“We would also be more aware of how those needs could be met without them having to live with those difficulties for five years, as in David’s case.”

More information on Ripples, David’s production company initiative which looks to support those recently suffering serious injuries and in early days of recovery, can be found at www.rippleproductions.co.uk or by emailing contact@rippleproductions.co.uk

More information:

CSS +44 (0)1708 223 187, www.cssinstall.co.uk

ESSENTIAL KIT LIST

- Lutron lighting control throughout the property, garden and pool house
- Crestron wall-mounted keypads
- BPT door-entry system interfaced with iPad
- Anthem AV processing and amplification for cinema
- JVC projector
- Bespoke games input plate
- Crestron Sonnex, Sonos (Via Sire interface) audio system
- Sonance, Artcoustic and B&O speakers
- Crestron DM video system using Sky, Apple TV and CCTV inputs
- Samsung TVs
- Draytek router, Cisco switches and Ruckus managed
- Wi-Fi points for data
- Middle Atlantic rack
- VPN remote interface control