



# Inside the automated home that changed stuntman David Holmes' life

**“W**hen you are lying down for a year, you have a lot of time to think,” recalls Holmes. YouTube videos and websites dedicated to new technology became a daily source of inspiration that would come to fruition half a decade later with a multi-million pound home boasting a home automation system that would give him back the freedom and confidence to live on his own terms.

“I am more able than anyone else in this home,” says Holmes. “This home changed my life.” Aged 25, the very nature of Holmes’ everyday life changed forever when he broke his neck rehearsing a stunt as Daniel Radcliffe’s action double on the set of Harry Potter and the Deathly Hallows. The accident left him disabled to the level of C7 tetraplegia, meaning he was paralysed from the torso down and

David Holmes spent 9 months lying in a hospital bed dreaming up his perfect home after an on-set accident put a tragic end to his career as stuntman. *By Charlotte Ashley*

in need of full-time care.

A debilitating five years followed, surrounded by two 24/7 carers in cramped bungalow that wasn’t fit to accommodate Holmes’ needs. His experience living in his old home inspired the mantra at the core of his newly built home, located in the county of Essex in the north-east of London: disability doesn’t need to be clinical. This is perhaps best epitomised with his lift – crafted in glass, its mirrored surfaces at roof level bring in natural light in to the home. It

is less a spectacle, but effortlessly fits in with the rest of the home – a celebration of all things modern, from his extensive art collection to his sleek, minimalist décor. “Did I want a lift stuck in a corner, behind a cupboard that I’m ashamed of? No, I made it into an architectural feature in the centre of the house.” Now, Holmes only requires one carer to help him in and out of bed in the morning and night.

“I didn’t want the house to look like it was for a disabled person. I didn’t want to grab handles, so I designed it so



it didn't have any of that sort of stuff." Instead Holmes is only reaching for his iPad to manage his home automation system every day - powered by the kind of Crestron system Holmes read about from his hospital bed. The system oversees everything from the indoor shading of his tall windows and TV to his security. Every aspect of the home is now automated, with automatic sliding doors installed throughout, and special access to his Adapted Mercedes-AMG car. Holmes notes that since the accident he has "ten times" the creativity he used to.

"I knew what I wanted, 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, designers and special effects people." He continues: "Ten years of my life was spent working surrounded by these really talented people, who worked to get the best result." The "best" people in this scenario were the installation team at local company Custom Sight & Sound.

Although not renowned for its work in the assisted living sector, the company jumped at the opportunity after being inspired by David's character and endearing personality on meeting him at the start of the project. The tool at the heart of his automation system - the iPad - fortuitously was released around the time he was discharged from hospital.

Following a recommendation via Crestron back in 2011, Holmes and his team (including the architect and consultant he had recruited to the project) connected with the CSS team, who helped make his ambition to control his home via his iPad throughout the five-year project in which Ian Bolt, managing director of CSS, says David became a "passion" and a friend. Together the integration team worked from the start of the project to help build an app that provided all the functionality Holmes needed in the house - all easily accessible via a touch screen. The team

## **"Words can't describe the freedom that I felt [on completing the house]."**

- David Holmes

stuck together to tackle obstacles throughout the process, including the building contractor going out of business Ⓓ of the way through the build.

"CSS gave me the confidence to believe it could be done," notes Holmes. "Now because of what we've designed here in this house and technology I've got my disability is not constantly ever-present."

Although Holmes is able to move his arms, push-button controls are almost impossible. "I learnt in hospital that operating a television is hard when you can't even hold a remote, and when your fingers can't even extend to push the buttons," says Holmes. "When the iPad came out, I could suddenly operate a whole computer system." Large light buttons he can now hit with his knuckle provide greater control of his surroundings.

From his bedroom to his very own "man-cave" basement where Holmes hosts regular gatherings with friends, music can flow through the home via a Sonos system integrated with Crestron. All speakers are hard-wired and point down from the ceiling to avoid excess noise. The basement's home cinema is powered by JVC projection, accompanied by a bar and star-lit ceiling.

"With the Crestron system I've been able to incorporate loads of other third

party technology - so some of my stuff in the house is Bang & Olufsen, some of its Apple based, then there's my lighting and communication systems. To have something that speak unilaterally across those platforms is wonderful," says Holmes.

Perhaps most importantly, Holmes says he now has a greater sense of comfort and security at night-time. "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 can hear a noise I can easily turn a light on, and check a camera, and I never had that before. In hospital you had to bite down on a buzzer for someone to come and help you."

"In David's case, talking to all the contractors involved was even more important than usual as there was so many people involved (for doors and windows, heating and ventilation control, CCTV, door entry, telephony and lighting)," recalls Tom Booth, projects director at CSS, who led on the installation. "The iPad interface had to be set out in a way that David would not only find intuitive, but also user-friendly, taking account of his physical limitations."

"There was little opportunity for fine-tuning in the house, especially as we were the last on site for the project," he continues. "It was essential that David could operate everything on his first day of occupancy." David knowing exactly what he desired for his home made this process considerably easier. "He seemed to have thought everything through in detail."

"One of the nicest things about the house is that in the hallway there's a double-height ceiling with speakers on the ground floor and the upper floor. Here the acoustics are beautiful," states Holmes. "The first night I was in the house on my own, I said to my best friend and carer Tommy 'Go home at 7 o'clock, and come back at 9. I had two hours with my



iPad on my lap, just turning the lights on, going up and down the lift and discovered Freddie Mercury's Barcelona. I listened to it there, by the front door and it brought a tear to my eye. I'd finally done it. Words can't describe the freedom that I felt."

A continual project for CSS, the team went on to add 24/7 remote monitoring allowing them to detect any potential problems with products before Holmes goes to use them, with Alexa integration next on the to-do list. "We're constantly evolving the automation as he continues to use the house. We're now in the process of adding Alexa so he can get voice control will be fantastic, so he can be in a room and say 'Alexa, open the blinds in the kitchen,' so we can do a huge amount there," says Bolt, adding that voice will be huge for clients in similar (or worse) circumstances to Holmes.

"We're still very early days with voice, and there are still lots of things to overcome, but for us and people like David, I think it is going to be enormously helpful. For example, David has a friend who we now are looking to help and unfortunately his condition it even worse. He has no movement beneath his neck, so he runs his life through a pad on his chin."

"We're also looking at doing proximity readings, so the house knows where he is in his chair which opens up other possibilities," adds Bolt, speaking on Holmes' home.

Winner in "Best User Experience" category at 2017 Crestron Integration Awards, the project may have brought

a new sense of freedom to Holmes' life, but his work with technology far from finished. "I am not ashamed of being disabled, but why should somebody with a disability have a second-class product."

Holmes recognises this level of technology integration, roughly costing £175,000 to date (including some features added for free), is not attainable for most. "I've learnt so much building this house, I could build another one tomorrow now. We were the first to do this, that's why it cost the money." He adds: "But let's learn from that now and try to make it cheaper for everyone. Why can't we do that?"

What could be the first steps to making things easier? "We need apps that allow you to link to a light bulb that you can buy off the shelf so you can turn them off from a phone. Apps that allow you to flush your toilet, turn the show on and off, and safely open the front door."

Holmes is now an ambassador for the Royal National Orthopaedic Hospital and is working to support newly injured patients in the first stages of recovery with adapting to their disability, and has founded a production company, Ripples, dedicated to sharing experiences of everyday life and their rehabilitation process. His ambition to help create a world where disabled people are constantly made to feel their disability.

A beacon of positivity, and an inspiration to others, Holmes maintains has retained his appreciation for the life he has, and will continue to enjoy. "It's supposed to be hard, isn't it? If

it's not hard, you're not trying hard enough. I was a gymnast, then I became a stuntman. I was lucky that way, and some people don't have the opportunities I had."

For CSS, although a small team at 24 people, the very nature of how it approaches projects has changed. "What we've learnt from this is there's more to life than private clients," says Bolt. "We're very keen to see what else we can do."

"We've spent 20-something years dealing with people that bought these things because they could afford them, and suddenly we did something rather different. And it makes you feel very different and differently attached to the client," he concludes.

## Tech-Spec

- Anthem AV processors and amplifiers
- Artcoustic speakers
- Bang & Olufsen speakers
- BPT door-entry system interfaced with iPad
- Cisco switches
- Creston automation system, DM video system, Sonnex audio distribution system and wall-mounted keypads
- Custom lighting (house, pool house and garden)
- Draytek router
- JVC projector
- Middle Atlantic racks
- Ruckus managed Wi-Fi points
- Samsung TVs
- Sonance speakers
- Sonos audio system (via Sire interface)
- VPN remote interface control