

Home Automation: Controlling your home environment

If you have an injury that's impacted your mobility and upper limb function, you may have difficulty accessing your home and controlling devices in your home environment. For example, you may have difficulty using standard remote controls, operating light switches or opening and closing doors. A home automation system is one solution that could enable you to regain control of your home environment.

What is home automation?

Home automation is the use of one or more devices to control home functions and features through an application (app) and/or a voice-controlled hands-free device. Examples of functions that can be automated include:

- opening and closing doors, including the use of a video intercom
- switching lights on and off
- controlling a television and home entertainment/audio-visual systems (TV/AV)
- controlling power points on and off
- temperature control through air conditioning
- opening and closing blinds
- controlling electric / adjustable bed functions.

How does home automation work?

An integrated home automation system typically includes a central hub (or processing unit) that sends instructions to all your connected devices (such as lights, air conditioner, TV etc.) and is controlled via an app on your tablet device or mobile phone. The display and function of certain apps can be customised to cater for different access needs, including:

- adjusting the screen layout
- larger buttons for increased accuracy
- switch scanning for users who don't have the dexterity or accuracy to physically press buttons on a tablet
- integrating voice control through a hands-free device with built-in speakers (e.g. Amazon Echo or Google Home).

How do you review my needs for home automation?

Home automation's purpose is to give you greater control of your home environment and increased independence in day-to-day activities around your home.

Your needs for home automation will usually be identified as part of your assessment for home modifications, with support from a building modifications occupational therapist or a specialist occupational therapist with skills in home automation. A specialist occupational therapist can also assess your home automation needs independently if you have already had your home modifications finalised.

We consider the following circumstances when reviewing your needs and any request for home automation:

- your functional abilities, such as mobility; the amount of your upper limb and hand function; and your ability to understand and use an integrated home automation system
- your care needs and the type and amount of approved attendant care supports you have
- whether a home automation system will promote your independence in day-to-day tasks

- other considerations about your circumstances such as your goals, life roles, family environment, and any safety risks.

Once we've decided on what home automation we can pay for, the building modifications occupational therapist or specialist home automation occupational therapist will work with you, a home automation supplier, electricians, and technicians throughout the installation. If major home modifications are underway, they will work with the home modifications team to coordinate the home automation with your home modifications.

If you've already had your home modified or your needs have changed, talk to your Case Manager or icare contact, and they can arrange for a review of your home automation needs with a specialist occupational therapist.

What home functions and features will icare consider including in a home automation system?

The following may be considered reasonable to include in a home automation system depending on your identified needs and circumstances:

1. **Door openers** – for primary access points to your home. Examples include garage door and gate controls if you're driving independently or you need to access your garage independently for other functions, i.e. gym
2. **Video intercom** – for the main entrance door.
3. **Lights** – in the main rooms you use in your home, such as your bedroom, bathroom and kitchen/living room. If you live in a large home, we may not consider it reasonable to automate features and functions in all rooms in your home.
4. **TV/AV** – in the main room/s you regularly use, such as the living room and bedroom.
5. **Air conditioning** – On/off plus temperature control.
6. **Blinds** – in key rooms, such as your bedroom, so you can open the blind before a support worker or family member comes to assist you in the morning. We may consider automating blinds in other main rooms depending on your circumstances and the amount of time you spend at home alone during the day.
7. Electric/adjustable bed control.

Which home automation systems do icare recommend?

We have consulted with specialist occupational therapists and home automation suppliers to help us identify the most suitable solutions to meet the needs of a range of icare participants. These include:

- A home automation system with an app accessible on a tablet or mobile phone, with a customisable interface that allows all devices to be controlled in one app. It will be able to control multiple functions and program pre-set scenes (e.g. bedtime – turn off main lights, turn on bedside lamp), and will allow different accessibility options (direct/touch, joystick, switch scanning, voice).
- Z-Wave modules – Z-wave is a wireless system that allows control of connected devices such as lights, power points etc., via an accessible app (i.e. RTI) or voice. These modules will allow core functions of the home automation system to operate in the event of internet difficulties / downtime.
- Voice-controlled hands-free devices such as Amazon Echo (using Alexa Voice Service) or Google Home (using Google Assistant voice service).

We recommend these solutions because they're commercially available, commonly used, and relatively easy to set up (including less hard wiring than other automation systems). They are more cost-effective than other solutions, particularly when retrofitting existing homes. They're also customisable to meet the needs of different people. Your options will be discussed with you as part of your home automation review.

Further Information

If you're interested in exploring if home automation is suitable for you, please speak to your Case Manager or icare contact who can discuss your needs and make a referral for an assessment.



icare
GPO Box 4052, Sydney, NSW 2001
Ph: 1300 738 586
Email: care-requests@icare.nsw.gov.au
www.icare.nsw.gov.au