

# An Introduction to Environmental Control Units (ECUs)

## What is an ECU?

Environmental Control Units (ECUs) are devices that assist individuals in accessing and controlling their environment. ECUs can increase quality of life and independence for individuals who have various types of disabilities by providing devices and systems that are easier to control for individual needs.

## Types of ECUs

### Remote Control

Remote Control ECUs can be used to control almost any part of your environment, from opening doors to turning on appliance. They work like your TV remote works, by sending a signal to the appliance that has been set up to receive that signal. Interfaces or switches can be added to different appliances which allow them to be controlled by remotes.

- **Universal remote controls** can control multiple appliances from one remote with several buttons. There are various sizes of universal remotes, some have large buttons for easier use.
- **Voice input remote controls** recognise the users voice and can learn commands for various different appliances to be controlled. Some remote controls have the ability to scan through available options that can then be selected.
- **Single function remotes** are simple devices that can operate a single operation of an appliance, for example turn the TV on and off. They are very easy to use and can have large buttons to assist those with more severe disabilities.



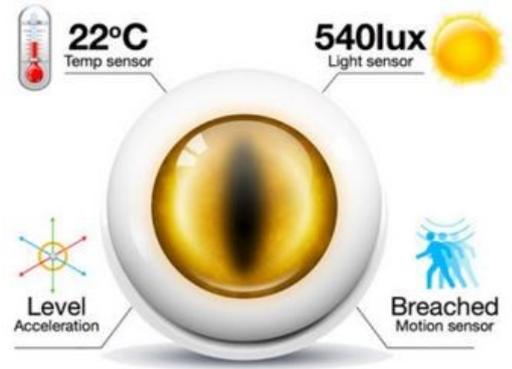
### Switches

Switches are large and often brightly coloured, making them easy to identify and simple to use. Switches can be a single on/off or multipurpose operation. They can also be programmed for more specific functions such as changing the channel or volume on the TV or radio. They are appropriate for someone who may have difficulty pressing small buttons, someone who has difficulty with motor control, or someone with a visual impairment.



## Sensors

Sensor based ECUs are intended to help consumers who may experience difficulties in controlling environmental conditions such as control of lighting, security systems, operating entertainment equipment, opening/closing doors and climate control within the home. Sensor-based ECUs generally work by installation of sensor modules on specific areas of the home, such as on top of a door, or TV which will respond upon sensing the individual approaching. This type of ECU will help promote independence for a consumer who may experience cognitive or physical difficulties, by allowing them to operate and modify systems within the home.



## App-Controlled

App-Controlled ECUs use a mobile application on a smart phone or tablet to control and monitor devices and appliances at home or remotely. After downloading the app and connecting to the home Wi-Fi network, the app will be able to control the devices or applicants in your home (e.g. to turn on or off or adjust operating settings). This requires a strong Wi-Fi connection through the home and a professional to install the system.



## Inbuilt

An inbuilt control ECU is a customised control and management system for commercial buildings and homes. It is used to control lighting and other electrical services such as audio visual devices, motors, etc. Through sensors, timers and system programming, they will operate only when required. The system can be operated from an extensive range of touch-screens and wall switches. Inbuilt control ECU mountings can be for the wall, floor, table, or wheelchair.



## What type of ECU is right for me?

For more information, please contact

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