



Introduction

Kinetic switching (also known as wireless or battery-free light switching) is an alternative to traditional wired switches.

It allows lighting and other circuits to be controlled without running switch cables through walls - making it particularly useful in retrofit, renovation, or where additional switching is required without disruption.

What is Kinetic Switching?

Kinetic switches are wireless switches that generate their own power when pressed.

Instead of being wired into the electrical system, they send a wireless signal to a receiver, which controls the lighting or circuit.

This means:

- No cables are required between the switch and the light
- No batteries are required within the switch
- Switches can be positioned without chasing walls or lifting floors

The system consists of two main parts:

- Kinetic switch (the control)
- Receiver (installed within the electrical circuit)

How It Works

When the switch is pressed, it generates a small amount of kinetic energy which powers a wireless signal.

This signal is sent to a receiver connected to the electrical circuit, which switches the lighting on or off.

This happens instantly and does not require batteries or wiring to the switch itself.

Installation & Location Considerations

Because the switch is not wired, it can be positioned without the constraints of cabling — making it ideal for retrofit and finished spaces.

However, the receiver and associated equipment must still be installed correctly within the electrical system and comply with current regulations.

This means:

- They can be positioned without the constraints of cabling
- They can be installed onto most surfaces without disruption
- They are suitable for areas where traditional switching may be impractical

Where required, switches can be installed in locations such as bathrooms, as they do not carry a direct electrical supply at the point of use.

However, the receiver and associated electrical equipment must still be installed in accordance with current regulations, including correct IP ratings and zoning requirements where applicable.

Where Kinetic Switching Works Best

Kinetic switching is typically used where traditional wiring would be difficult, disruptive, or impractical, including:

- Adding or moving switches without damaging walls
- Creating two-way or multi-way switching where no cabling exists
- Replacing pull cord switches with wall-mounted controls
- Retrofitting additional switching in finished rooms
- Garden lighting, outbuildings, and extensions
- Solid walls where chasing is not practical

It is often used to improve usability within a space, particularly where existing switching layouts are limited.

Switching Options Available

Kinetic switching systems offer a range of control options depending on how the space is used and what level of flexibility is needed.

These typically include:

- **Replacement switch plates:** Used to replace existing wired switch positions without the need for new cabling.
- **Additional wall-mounted switches:** Can be installed in new positions where switching does not currently exist - without chasing walls or running cables.
- **Key fobs / portable switches:** Allow circuits to be controlled from a handheld device, useful where flexible or temporary control is beneficial.
- **WiFi-enabled receivers:** Provide remote switching and smart control via a mobile app, allowing lights or circuits to be controlled from anywhere.

These options can be used individually or combined, depending on the requirements of the installation.

Advantages of Kinetic Switching

- No chasing or disruption to walls
- No additional switch cabling required
- Flexible positioning of switches
- Ideal for retrofit and finished spaces
- Can simplify complex switching arrangements
- Battery-free operation

Limitations and Considerations

Kinetic switching is not a direct replacement for all traditional switching.

Things to consider include:

- Receivers still require installation within the electrical system
- Space may be needed behind fittings or within ceilings for receivers
- Wireless signal range and positioning must be considered
- Not all circuits or installations are suitable
- Some systems may have limitations on load or compatibility

For this reason, kinetic switching is typically used as part of a wider installation - not as a complete replacement for standard wiring.

A proper assessment is needed to determine where kinetic switching is appropriate and how it should be integrated into the installation.

Our Approach

Where kinetic switching is appropriate, it is considered as part of the overall design - not added as an afterthought.

We assess whether it improves usability, reduces disruption, and integrates correctly with the rest of the installation.

For smaller projects, it can also be used as part of a wider approach to improving switching layouts without major alteration to the existing wiring.

Where it does not offer a clear benefit, we will always recommend the most suitable and reliable solution for the installation - whether that includes kinetic switching or not.

Common Misconceptions

Kinetic switching is sometimes described as a “wireless lighting system,” but this can be misleading.

The lighting circuit itself is still wired in the usual way — only the switching control is wireless.

It is best understood as a way to improve flexibility, reduce disruption, and add additional control - rather than replace standard electrical wiring.

Understanding this helps ensure it is used in the right situations and delivers the expected result.

Summary

Kinetic switching systems offer a flexible range of control options, from fixed wall switches to portable and app-based control.

They are particularly effective where additional switching is required without disruption, or where existing switching arrangements are limited.

When used correctly, they allow greater flexibility in both positioning and control, while still maintaining a compliant and properly installed electrical system.

Need Advice?

If you're considering changes to your lighting or switching layout and want to understand whether kinetic switching is suitable:

Get in touch - we're happy to advise on the most practical and appropriate solution for your installation.