Imagine switch technology and automated systems that need no wiring, use no batteries and are effortless to install and commission. Echo™ is an innovative range of entirely wireless, batteryless and self-powered switches and controls which can work together offering even more convenience and energy saving opportunities.

Echo™ enables you to create your own automated control system for a domestic or commercial environment. With the ability to incorporate a range of transmitters from switches and presence detectors, alongside a range of receivers, the installer can create a flexible system which can deliver safety, comfort, cost savings and energy efficiency for the building owner or user.

The MK Echo™ portfolio is enabled by EnOcean technology. EnOcean based products make use of the energy generated by slight changes in pressure, light levels or temperature, to provide self-powered, batteryless and wireless solutions. This technology is used by many world leading manufacturers, products from these companies can be used together to provide solutions for energy efficient buildings which are more flexible and cost efficient to design, build and operate.

To find out more visit www.mkelectric.co.uk.

FEATURES & BENEFITS

WIRELESS
Instant installation and location flexibility, reducing disruption and cost, as there is no need to run switching cables.

SELF-POWERED
Innovative patented technology to ‘harvest’ energy means zero maintenance as there are no batteries to change.

ULTIMATE FLEXIBILITY
Each receiver can be controlled by up to 32 switches/transmitters.

ENERGY SAVINGS
With additional local control, alongside the use of presence detectors users can create an energy efficient environment.

HOW TO SPECIFY
A range of switches and controls which are self powered and to be enabled by EnOcean technology. Transmitters to be totally wireless and batteryless, with no direct connection to the final circuit. All transmitter modules to be available in a range of aesthetics and finishes which match to other required wiring accessories. Receivers to have the ability to be controlled by up to 32 switches/transmitters. All products to be manufactured in Europe.

To find out more visit www.mkelectric.co.uk.
APPLICATION EXAMPLE: HOTEL BEDROOM

In this example the installer is able to create an automated system ensuring comfort for the guest, whilst delivering energy efficiency and cost savings for the hotel without disturbing the fabric of the room. In addition, with wireless transmitters, the layout and positioning is completely flexible and can be changed quickly without disruption.

The guest is able to easily control their local environment from a number of locations within the room. A 2 channel transmitter by the entry doorway enables control of both the bedroom and living area lighting. An additional 4 channel transmitter next to the bed gives further control of the bedroom and living area lighting and an all off function. There is additional control in the bathroom and on the balcony.

The hotel is able to control all lighting, heating and cooling by the card switch transmitter, ensuring guests do not leave lighting or air conditioning on when they leave the room. The hotel is also able to ensure a safe environment; the presence detector can be programmed to turn low level lighting on when a guest enters the room. In addition the presence detector can be programmed to turn lighting off, or dim to a low level when no presence is detected in the room but the card switch is still in place. Door contacts ensure the air conditioning is not in use whilst the balcony doors are open, offering further energy savings.
**Modular Transmitters**

<table>
<thead>
<tr>
<th></th>
<th>1 Channel Modular Transmitter</th>
<th>2 Channel Modular Transmitter</th>
<th>Modular Card Switch Transmitter</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FINISHES</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>WHITE</strong></td>
<td>K5786WHI 1</td>
<td>K5789WHI 1</td>
<td>K5744CWHI 1</td>
</tr>
<tr>
<td><strong>BLACK</strong></td>
<td>K5786BLK 1</td>
<td>K5789BLK 1</td>
<td>K5744CBLK 1</td>
</tr>
<tr>
<td><strong>ALUMINIUM</strong></td>
<td>K5786ALU 1</td>
<td>K5789ALU 1</td>
<td>K5744CALU 1</td>
</tr>
</tbody>
</table>

For use with K5776, K5779 frames and K5412 locator.

**OPERATING FREQUENCY**
868.3MHz

**IP RATING**
IP2 x D

**DIMENSIONS**
55 x 55mm
ETSI EN 301489-1/3
ETSI EN 300220-1/2

**MOUNTING SWITCH TRANSMITTERS:**
All can be mounted directly to the wall surface – screws supplied.
All can be mounted to back boxes – screws supplied.
Logic Plus™ and Aspect type transmitters can also be mounted using supplied adhesive pads.
Modular Frames

1G FRAME
GLOSSY FINISH

2G FRAME
GLOSSY FINISH

1G FRAME
GLOSSY FINISH

2G FRAME
GLOSSY FINISH

FINISHES

WHITE
K5776WHI 1
K5779WHI 1

BLACK
K5776BLK 1
K5779BLK 1

ALUMINIUM
K5776ALU 1
K5779ALU 1

GLASS, BLACK
K5776GLAB 1
K5779GLAB 1

GLASS, GREEN
K5776GLAG 1
K5779GLAG 1

GLASS, GROOVED ALUMINIUM
K5776GLAA 1
K5779GLAA 1

For use with K5412 locator and K5786, K5789, K5744, K5744C transmitters. Surface mount installation only.

DIMENSIONS
83 x 83mm

DIMENSIONS
83 x 154mm

DIMENSIONS
83 x 83mm

DIMENSIONS
83 x 154mm

DIMENSIONS
85 x 85mm

DIMENSIONS
85 x 157mm

MOUNTING SWITCH TRANSMITTERS: All can be mounted directly to the wall surface – screws supplied. All can be mounted to back boxes – screws supplied. Logic Plus™ and Aspect type transmitters can also be mounted using supplied adhesive pads.
### Finishes

<table>
<thead>
<tr>
<th>Transmitters</th>
<th>Logic Plus™</th>
<th>Aspect</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>White</strong></td>
<td>K4786WHI 1</td>
<td>K23476BSS* 1</td>
</tr>
<tr>
<td></td>
<td>K4789WHI 1</td>
<td>K23477BSS* 1</td>
</tr>
<tr>
<td><strong>Graphite</strong></td>
<td>K4786GRA 1</td>
<td>K23476LBS* 1</td>
</tr>
<tr>
<td></td>
<td>K4789GRA 1</td>
<td>K23477LBS* 1</td>
</tr>
</tbody>
</table>

**Finish Specifications:**

- **Operating Frequency:** 868.3MHz
- **IP Rating:** IP2 x D
- **Dimensions:** 86 x 86mm
- **ETSI EN 301 489-1 + -3:** ETSI EN 301 489-1 + 3
- **LEAD TIMES:** Please contact our Customer Services Department on: 01268 563 404

*Available with the option of either White or Black inserts. Add Suffix ‘W’ or ‘B’ to part number when ordering, E.g. KxxxBSW.

Where there is no asterix, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxWHIW = Porcelain White finish with White inserts.

**MOUNTING SWITCH TRANSMITTERS:** All can be mounted directly to the wall surface – screws supplied. All can be mounted to back boxes – screws supplied.

Logic Plus™ and Aspect type transmitters can also be mounted using supplied adhesive pads.
**Edge™**

1 CHANNEL TRANSMITTER

2 CHANNEL TRANSMITTER

**Albany Plus™**

1 CHANNEL TRANSMITTER

2 CHANNEL TRANSMITTER

<table>
<thead>
<tr>
<th><strong>K13476BSS</strong></th>
<th><strong>K13477BSS</strong></th>
<th><strong>K4766BSS</strong></th>
<th><strong>K4767BSS</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>K13476LBS</strong></td>
<td><strong>K13477LBS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>K13476BRC</strong></td>
<td><strong>K13477BRC</strong></td>
<td><strong>K4766BRC</strong></td>
<td><strong>K4767BRC</strong></td>
</tr>
<tr>
<td><strong>K13476POC</strong></td>
<td><strong>K13477POC</strong></td>
<td><strong>K4766PCR</strong></td>
<td><strong>K4767PCR</strong></td>
</tr>
<tr>
<td><strong>K13476SAG</strong></td>
<td><strong>K13477SAG</strong></td>
<td><strong>K4766SAG</strong></td>
<td><strong>K4767SAG</strong></td>
</tr>
<tr>
<td><strong>K13476WHIW</strong></td>
<td><strong>K13477WHIW</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>K13476LIVW</strong></td>
<td><strong>K13477LIVW</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>K13476LBKB</strong></td>
<td><strong>K13477LBKB</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>K13476PBR</strong></td>
<td><strong>K13477PBR</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>K13476TIRB</strong></td>
<td><strong>K13477TIRB</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>K13476DBZB</strong></td>
<td><strong>K13477DBZB</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>K13476ABSB</strong></td>
<td><strong>K13477ABSB</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>K13476TCOB</strong></td>
<td><strong>K13477TCOB</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Available with the option of either White or Black inserts. Add Suffix ‘W’ or ‘B’ to part number when ordering, E.g. KxxxxBSSW.

Where there is no asterix, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxWHIW = Porcelain White finish with White inserts

**OPERATING FREQUENCY**

- 868.3MHz

**IP RATING**

- IP2 x D

**DIMENSIONS**

- 86 x 86mm

ETSI EN 300 220-3

**MOUNTING SWITCH TRANSMITTERS:** All can be mounted directly to the wall surface – screws supplied. All can be mounted to back boxes – screws supplied. Logic Plus™ and Aspect type transmitters can also be mounted using supplied adhesive pads
## Echo™

### Transmitters

<table>
<thead>
<tr>
<th>Metalclad Plus™</th>
<th>Masterseal Plus™</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 CHANNEL TRANSmitter</td>
<td>2 CHANNEL TRANSmitter</td>
<td>2 CHANNEL TRANSmitter</td>
</tr>
</tbody>
</table>

#### Finishes

<table>
<thead>
<tr>
<th>Finish</th>
<th>Code</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminium</td>
<td>K3786ALM</td>
<td>K3787ALM</td>
</tr>
<tr>
<td>Grey</td>
<td>K55400GRY</td>
<td>K55406GRY</td>
</tr>
<tr>
<td>White</td>
<td>K55400WHI</td>
<td>K55406WHI</td>
</tr>
<tr>
<td>Black</td>
<td>K55400BLK</td>
<td>K55406BLK</td>
</tr>
</tbody>
</table>

#### K5417R

- **Operating Frequency:** 868.3 MHz
- **IP Rating:** IP2 x D
- **Dimensions:** 95 x 95 x 57 mm
- **ETSI EN 301 489-1 + -3:** ETSI EN 300 220-3

#### K5421

- **Provides interlock functionality for use with multi-function receivers.**
- **Solar powered.**
- **Operating Frequency:** 868.3 MHz
- **IP Rating:** IP40
- **Dimensions:** 110 x 19 x 15 mm and 23 x 14 x 6 mm
- **BS EN 301 489-1/3**
- **BS EN 300 220-1/2**

### Other Transmitters

#### K5417R

- **Operating Frequency:** 868.3 MHz
- **IP Rating:** IP2 x D
- **Dimensions:** 95 x 95 x 57 mm
- **ETSI EN 301 489-1 + -3:** ETSI EN 300 220-3

#### K5421

- **Provides interlock functionality for use with multi-function receivers.**
- **Solar powered.**
- **Operating Frequency:** 868.3 MHz
- **IP Rating:** IP40
- **Dimensions:** 110 x 19 x 15 mm and 23 x 14 x 6 mm
- **BS EN 301 489-1/3**
- **BS EN 300 220-1/2**

---

**Mounting Switch Transmitters:** All can be mounted directly to the wall surface – screws supplied. All can be mounted to back boxes – screws supplied. Logic Plus” and Aspect type transmitters can also be mounted using supplied adhesive pads.
### Receivers

#### 1 Channel Switch Receivers

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>K5432R</td>
<td>1 CHANNEL MULTI-FUNCTION SWITCH RECEIVER</td>
<td>Multi-functional device with repeater functionality providing: single button, stairwell, time-delay, fan, scene operating modes and interlock functions for use with window contact.</td>
</tr>
<tr>
<td><strong>SUPPLY</strong></td>
<td>230V / 50Hz</td>
<td></td>
</tr>
<tr>
<td><strong>LOAD RATINGS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GLS/Incandescent: 2500W</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Halogen: 1200W</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inductive: 600VA</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ELECTRONIC BALLASTS</strong></td>
<td>3 units</td>
<td></td>
</tr>
<tr>
<td><strong>OPERATING FREQUENCY</strong></td>
<td>868.3MHz</td>
<td></td>
</tr>
<tr>
<td><strong>DIMENSIONS</strong></td>
<td>Depth: 27mm</td>
<td>BS EN 60669-2-1 BS EN 301489-1-3 BS EN 300220-1/2</td>
</tr>
</tbody>
</table>

#### 2 Channel Switch Receivers

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>K5433R</td>
<td>2 CHANNEL MULTI-FUNCTION SWITCH RECEIVER</td>
<td>Multi-functional device with repeater functionality providing: single button, stairwell, time-delay, fan, scene operating modes and interlock functions for use with window contact.</td>
</tr>
<tr>
<td><strong>SUPPLY</strong></td>
<td>230V / 50Hz</td>
<td></td>
</tr>
<tr>
<td><strong>LOAD RATINGS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(per channel) GLS / incandescent: 500W</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Halogen: 100W</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inductive: 100VA</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ELECTRONIC BALLASTS</strong></td>
<td>1 unit</td>
<td></td>
</tr>
<tr>
<td><strong>OPERATING FREQUENCY</strong></td>
<td>868.3MHz</td>
<td></td>
</tr>
<tr>
<td><strong>DIMENSIONS</strong></td>
<td>Depth: 27mm</td>
<td>BS EN 60669-2-1 BS EN 301489-1-3 BS EN 300220-1/2</td>
</tr>
</tbody>
</table>

#### 1 Channel Dimmer Receiver

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>K5436R</td>
<td>1 CHANNEL MULTI-FUNCTION DIMMER RECEIVER LEADED</td>
<td>Multi-functional device providing: soft start, turn-on memory, switch, stairwell and scene operating modes.</td>
</tr>
<tr>
<td><strong>SUPPLY</strong></td>
<td>230V / 50Hz</td>
<td></td>
</tr>
<tr>
<td><strong>LOAD RATINGS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60-210W</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suitable for use with GLS/Incandescent/Halogen lamps and 12V low voltage lighting powered by dimmable electronic transformers only.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>OPERATING FREQUENCY</strong></td>
<td>868.3MHz</td>
<td></td>
</tr>
<tr>
<td><strong>DIMENSIONS</strong></td>
<td>Depth: 27mm</td>
<td>BS EN 60669-2-1 BS EN 301489-1-3 BS EN 300220-1/2</td>
</tr>
</tbody>
</table>

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**Technical Hotline**

+44 (0)1268 563720

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**Echo™**

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**MK Electric Catalogue**

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**WIRING DEVICES**

---

**WIRELESS**
Echo™

Receivers

Plug-Through Receiver

K5427S
PLUG-THROUGH SWITCH

Multi-functional device providing: single button, stairwell, time-delay, fan, scene operating modes and interlock functions for use with window contact.

SUPPLY
230V / 50Hz

LOAD RATINGS
GLS/Incandescent: 2500W
Halogen: 1250W
Inductive: 600VA
Electronic Ballasts: 3 units

OPERATING FREQUENCY
868.3MHz

DIMENSIONS
130 x 68 x 48mm

BS EN 60669-2-1
BS EN 301489-1/3
BS EN 300220-1/2

1

Alternative Receiver

K5420R
10AX SWITCH RECEIVER/REPEATER

OPERATING FREQUENCY
868.3MHz

IP RATING
IP2 x 0

DIMENSIONS
175.5 x 50.3 x 32.25mm

BS EN 60669-1:
BS EN 60669-2-1:
ETS EN 301 489-1 + -3:
ETS EN 300 220-3

1

Echo™

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**Presence Detector**

**Solar-Presence Detector**

**Accessories**

**K5756**
Sends wireless signals to receiving devices when motion is detected.
Harvests indoor light to power the sensor with optional backup battery.

**Operating Frequency**
868.3Mhz

**IP Rating**
IP50

**Dimensions**
160 x 60 x 37mm
EN501489-1/3
EN300220-1/2

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**K5412L**
Luminous Locator Frame for use with modular transmitters

**K55000**
IP66 enclosure for use with receivers, check individual receiver dimensions

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**K4710P**
Surface mounted pattress for use with Logic Plus™ transmitter

**K55000G**
K55000W
K55000B
K50000GL
K50000WH
K50000BL
K50000GR
K50000GY
K50000WH
K50000BL
IP66 enclosure for use with receivers, check individual receiver dimensions

---

**KPAD**
Adhesive pad for use with Logic Plus™ switch transmitter and Aspect switch transmitter

---

**Solar-Presence Detector**
Sends wireless signals to receiving devices when motion is detected.
Harvests indoor light to power the sensor with optional backup battery.

**Operating Frequency**
868.3Mhz

**IP Rating**
IP50

**Dimensions**
160 x 60 x 37mm
EN501489-1/3
EN300220-1/2

---

**Mounting Switch Transmitters:** All can be mounted directly to the wall surface – screws supplied.
All can be mounted to back boxes – screws supplied.
Logic Plus™ and Aspect type transmitters can also be mounted using supplied adhesive pads.