



KP103 and KP106 Wireless 3, and 6-Button Keypad Installation Guide



Supported Models and Requirements

- 3 Button Keypad:
Europe: EFKP106/N1W
UK: EFKP106/N1W
- 6 Button Keypad:
Europe: EFKP103/N1W
UK: EFKP103/N1W

This device requires a neutral AC connection.

Specifications

This multi-button keypad is intended for use in a Escient system. It installs in a standard U.S. wall box (one that meets the U.S. National Electrical Code [NEC] requirements) using typical wiring standards and communicates to the Escient system using a wireless connection. The specifications are described below.

- Power:** 220 - 240 VAC +/- 10%, 50 Hz, 1.8 W
- Operational Temperature:** 0° C to 40° C
- Communications:** IEEE 802.15.4, 2.4 GHz, 15-channel, spread spectrum radio

- WARNING!** The 3 and 6 Button Keypad must be protected by an external circuit breaker or a fuse rated at 6A maximum.
- WARNING!** This unit should only be installed by a “competent person” or qualified electrician in accordance with the National Wiring Regulations and other applicable regulations.
- WARNING!** To reduce the risk of SERIOUS INJURY or DEATH, turn OFF local electrical power before installing this product, and before installing, removing, or replacing any wall plate or keycaps.
- IMPORTANT!** Using this product in a manner other than outlined in this document voids your warranty. Further, Escient is NOT liable for any damage incurred with the misuse of this product. See “Limited 2 Year Warranty.”
- IMPORTANT!** Do NOT use a power screw driver to install this device. If you do, you may overtighten the screws and strip them.
- IMPORTANT!** This is an electronic device with intricate components. Handle and install with care!
- IMPORTANT!** Changes or modifications not expressly approved by Escient could void the user’s authority to operate the equipment.

Installation Instructions

- Ensure that the location and intended use meet the following criteria:
 - When replacing a traditional 3-way switch, refer to the “Two-Location” sample wiring configurations provided in the following documents:
Wireless Dimmer Installation and User Guide
Wireless Switch Installation and User Guide
 - Install in accordance with all national and local electrical codes.
 - The required wall box size is specified by the U.S. NEC (U.S. National Electrical Code). The internal wall box volume occupied by this multi-button keypad is 5.0 cubic inches.
 - The range and performance of the wireless control system is highly dependent on the following: (1) distance between devices; (2) layout of the home; (3) walls separating devices; and (4) electrical equipment located near devices.
 - If you are planning to use engraved keycaps for 3-Button and 6-Button Keypads, DO NOT continue until you have read the “Replace Keycaps After Keypad Installation” section.
 - If installing a multi-button keypad in a multi-gang installation, DO NOT continue until you have read the “Multi-Gang Installations” section.

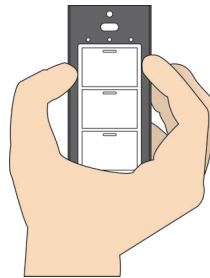
WARNING! To reduce the risk of SERIOUS INJURY or DEATH, turn OFF local electrical power before installing this product.

- Switch off and isolate the mains power at the main consumer unit or fuse box before starting any installation or maintenance work.

WARNING! As with any electrical device, improper use or installation can cause SERIOUS INJURY or DEATH. It is important that you understand the particular wiring configuration of your installation before proceeding. Note: The wall box wiring shown in this document is an example. Your wire colours and functions may differ. If you are not sure which wires are the Live, Neutral, and Earth wires, have a trained electrician do the installation.

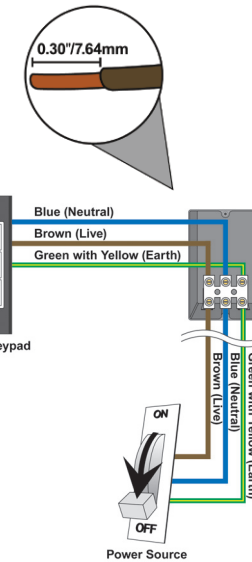
- For 3-Button and 6-Button Keypads only: Escient offers *standard engraved keycaps* and *custom engraved keycaps* (both sold separately) to enable you to personalize 3-Button and 6-Button Keypads. If you are replacing keycaps now (during this installation), complete the following steps:

- Pinch both sides of the keycap retainer at both ends—working gently, first at the top, then the bottom—to release the retaining clips and remove the retainer. *DO NOT pry the retainer off with a screw driver.*
- Remove the default keycaps from the keycap retainer and replace each one with the engraved keycap of your choice. Be sure to place the LED at the top.
- Carefully snap the retainer back into place, taking care not to damage the retainer clips.



- Prepare each wire: Strip the wire insulation back 0.30 inch (or 7.64 mm) from the wire end (as shown).

WARNING! This is a Class 1 product and must be Earthed.



- Connect the multi-button keypad terminal block to the wall box wires.

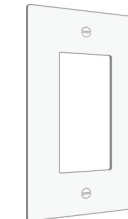
Note: Wall box wires can differ depending upon how the box was wired by your electrician.

Connect the multi-button keypad terminal block to the wall box wires as indicated in the following table.

Multi-Button Keypad Wires (2, 3, or 6-Button)	Wires in Wall Box
Blue (Neutral or N)	Blue (Neutral or N)
Brown (Live or L)	Brown (Live or L)
Green with Yellow (Earth or E or)	Green with Yellow (Earth or E or)

- Secure the keypad to the wall box using the screws provided.

- Attach the Decora-style screw-on wall plate (included).



WARNING! Do not turn power back on until the wall plate is completely back in place.

- When installation is complete, turn on the mains power.

- Ensure that all LEDs on the front are lit.



Replace Keycaps After Keypad Installation

Applies to 3-Button and 6-Button Keypads Only

WARNING! To avoid SERIOUS INJURY or DEATH, turn OFF local electrical power before installing, removing, or replacing keycaps.

Escient offers *standard engraved keycaps* and *custom engraved keycaps* (both sold separately) to enable you to personalize 3-Button and 6-Button Keypads.

Note: Custom engraving is not available for 2-Button Keypads.

If you are replacing keycaps in a 3-Button or 6-Button keypad that is already installed, complete the following steps:

- Turn off local electrical power.
- Remove the wall plate from the multi-button keypad.
- Pinch both sides of the keycap retainer at both ends (as illustrated in step 3 of the Installation Instructions)—working gently, first at the top, then the bottom—to release the retaining clips and remove the retainer. *DO NOT pry the retainer off with a screw driver.*
- Remove the default keycaps from the keycap retainer and replace each one with the engraved keycap of your choice. Be sure to place the LED at the top.
- Carefully snap the retainer back into place, taking care not to damage the retainer clips.
- Reattach the wall plate.

WARNING! Do not turn power back on until the wall plate is completely back in place.

- Turn on local electrical power.

Multi-Gang Installations

Multi-gang installations are configurations in which 2 or more devices are installed side-by-side in the same wall box. Using a Decora-style screw-on multi-gang wall plate (not included), align 2 or more multi-button keypads inside a multi-gang wall box and fasten with screws, then fasten the wall plate to the keypads with screws.

Operation and Configuration

On initial power up, the unit will flash the Red/Green/Blue (RGB) LEDs, which can be programmed with different colours for different states or colour preferences. To set up this multi-button keypad for use with a Escient system, refer to your system setup documentation.

Troubleshooting

If one or more Light Emitting Diodes (LEDs) are not lit:

- Ensure circuit breaker is not turned OFF or tripped.
- Check for proper wiring, such as the example in step 5. You may also need to contact a trained electrician.
- For help on the installation or operation of this product, email or call the Escient Technical Support Center. Please provide your exact model number. Contact info@dm-i.eu or see the web site www.escient.co.uk.

Care and Cleaning

- Do NOT paint the multi-button keypad or its wall plate.
- Do NOT use any chemical cleaners to clean the multi-button keypad.
- Clean surface with a soft damp cloth as needed.

Regulatory Compliance

This product is designed and tested to meet European, Australian, and New Zealand standards for EMC compliance and safety.

Europe—CE Declaration of Conformity



European Contact Information

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Product: **240 Volt 3 or 6-Button Keypad**, model numbers vary (see “Supported Models and Requirements” on page 1).

The undersigned hereby declares, on behalf of Escient, that the above-referenced product, to which this declaration relates, is in conformity with the provisions of:

- Council Directive 89/336/EEC (May 3, 1989) on Electromagnetic Compatibility
- Council Directive 1999/5/EC (Mar 9, 1999) on Radio & Telecommunication Terminal Equipment (R&TTE)
- Council Directive 2006/95/EC (Dec, 12, 2006) on Low Voltage Equipment Safety
- Council Directive 93/68/EEC (Jul. 22, 1993) Amending Directives 89/336/EEC and 73/23/EEC

and has been tested to the requirements of, and shown to be in compliance with, the following requisite standards:

EMC

- EN301489-1 V1.6.1 (2005-09) — Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services—Part 1 Common technical requirements.

Radio

- EN300328 V1.6.1 (2004/11) — Electromagnetic compatibility and Radio spectrum Matters (ERM); Wide band transmission systems; Data transmission equipment operating in the 2.4GHz ISM band and using wide band modulation techniques; Harmonised EN covering essential requirements under Article 3.2 of the R&TTE Directive.

Safety

- EN60669-1: 1999 — Switches for household and similar fixed electrical installations - Part 1: General requirements.
- EN60669-2-1: 2004 — Switches for household and similar fixed electrical installations - Part 2-1: Particular requirements - Electronic switches.

Australian/New Zealand Compliance

- AS/NZS 3100:2002 General requirements for electrical equipment.



Recycling



Limited 2 Year Warranty

Limited 2-year Warranty. Refer to www.escient.co.uk/warranty

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