



# Technical Data

## 10 Amp 10 AX Switches

### Brief product description:

BG's Nexus range of plate switches have been designed to perform at 10AX inductive loads. A rugged, scratch resistant range, suitable for everyday use in commercial and industrial environments.

Manufactured in heavy gauge steel and finished with epoxy powder coating.

The Fan Isolator switch has a triple pole switching design, however can be used for double pole applications if required.

### Features:

- Flat profile with rounded edges
- Backed out captive screws for easy installation
- 10 Amp, 10AX inductive rated

### Product Images



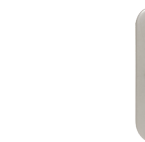
MC512/MC513



MC514



MC542



MC543



MC544

### Technical Specifications

Standard(s)	BS EN 60669-1
Rating	10 Amp, 250V~(10AX – no derating for inductive or fluorescent loads)
Contact Gap	3.0mm minimum
Terminal Capacity	4 x 1.0mm <sup>2</sup> 4 x 1.5mm <sup>2</sup> 2 x 2.5mm <sup>2</sup> 1 x 4.0mm <sup>2</sup>
RoHS Directive	No
WEEE Directive	No
Size	81.5mm x 81.5mm x 50mm (MC512, MC513, MC514, MC542, MC543 products) 142mm x 81.5mm x 50mm (MC544 products)

### Packaging Information

Cat No.	Description	Packaging Type			Pack Quantity			Barcode		
		Product	Inner Box	Outer Box	Each	Inner Box	Outer Box	Individual	Inner Box	Outer Box
MC512	10AX 1G,2W	Plain PolyBag	Plain Inner	Plain Outer	1	10	50	/	5021166051298	5021166051281
MC513	10AX Intermediate	Plain PolyBag	Plain Inner	Plain Outer	1	10	50	/	5021166051397	5021166051380
MC514	10AX 1G, Bell Push	Plain PolyBag	Plain Inner	Plain Outer	1	10	50	/	5021166051496	5021166051489
MC542	10AX 2G,2W	Plain PolyBag	Plain Inner	Plain Outer	1	10	50	/	5021166054299	5021166054282
MC543	10AX 3G,2W	Plain PolyBag	Plain Inner	Plain Outer	1	10	50	/	5021166054398	5021166054381
MC544	10AX 4G,2W	Plain PolyBag	Plain Inner	Plain Outer	1	5	25	/	5021166054497	5021166054480

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## Weights & Dimensions

Cat No.	Description	Dimension (W x L x H) cm			Weight (g)			CMB (m <sup>3</sup> )
		Product	Inner Box	Outer Box	Each	Inner Box	Outer Box	Outer Box
MC512	10AX 1G,2W		16.6 x 25.8 x 8.3	17.6 x 45 x 27			12610	0.021384
MC513	10AX Intermediate		16.6 x 25.8 x 8.3	17.6 x 45 x 27				0.021384
MC514	10AX 1G, Bell Push		16.6 x 25.8 x 8.3	17.6 x 45 x 27				0.021384
MC542	10AX 2G,2W		16.6 x 25.8 x 8.3	17.6 x 45 x 27			13210	0.021384
MC543	10AX 3G,2W		16.6 x 25.8 x 8.3	17.6 x 45 x 27			13940	0.021384
MC544	10AX 4G,2W		14.5 x 25.8 x 8.3	15.5 x 45 x 27			11260	0.0188325

## Installation Information

### Safety Warning

Before use please read carefully and use in accordance with these safety wiring instructions.

Before commencing any electrical work ensure the supply is switched off. Either by switching off the consumer unit or by removing the appropriate fuse.

Wiring should be in accordance with the latest edition of the IEE regulations (BS 7671).

### Wire Identification – Twin & Earth Cable

= Green/Yellow Slewing

= Black (pre Apr 04) / Blue (after Apr 04)

= Red (pre Apr 04) / Brown (after Apr 04)



**Technical Helpline: 0845 194 7584**  
If in doubt consult a competent electrician.

The ends of the individual conductors should have the insulation removed by approx. 12mm. Any bare earth conductors should be sleeved to within 12mm of the ends. (These details are for general information only and conductor lengths may need to be trimmed in certain installations).

### General Installation Instructions

- 1) If using the new product to replace an old one, note the cable connections and wire up new product in the same way as the old one, with Earthing as stated in these instructions.
- 2) Ensure the mounting box (metal or patress) for either flush or surface mounting is the appropriate size for the product.
- 3) Route the cable through the most suitable entry point of the mounting box. If a metal box is used, a protective cable grommet should be used.
- 4) Cables should be prepared so a sufficient conductor length reaches the terminals. Strip the ends of the individual conductors so that an adequate length enters the terminals.
- 5) Carefully arrange the wiring to lie along the edges of the product or box, keeping the central area clear.
- 6) To assist with the correct installation please consult the appropriate wiring diagram on this leaflet.
- 7) When connecting the new accessory ensure that only the bare end of the wire enters the terminal, and no bare wires are visible.

Always tighten the terminal screws securely, but do not overtighten.

An earth connection should always be made between the mounting box earth terminal, and the accessory earth terminal, where fitted. If this earth wire is bare, it is essential that it is sheathed with a length of green/yellow sleeving.

8) Carefully position the accessory into the wall box, ensuring that no wires are trapped between the plate and the wall. Do not overtighten the screws. (Fit screw covers + clip-on)

9) Once work has been completed correctly, replace the fuse for the circuit, switch the power back on, and test.

The product is now ready for use.

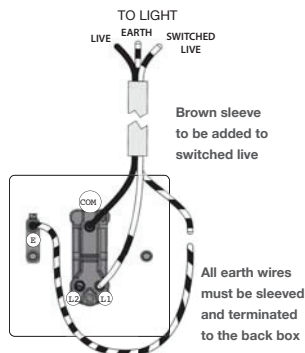
\* Note - If your installation uses a four lug metal mounting box, remove the top and bottom lugs or bend fully back.

### One Way Switching

One way switching is used in installations that require just one switch to control a light (or circuit) i.e. on or off.

A two-way switch can be used for one-way connection, use COM and L1 terminals.

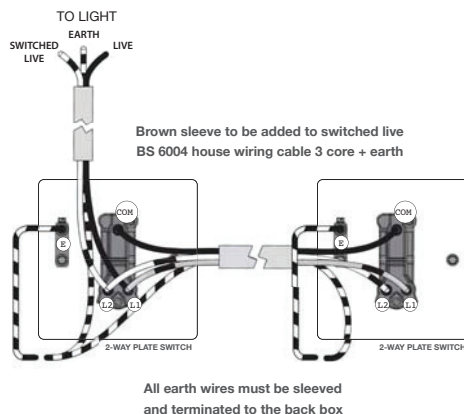
For multiple gang switches (2, 3, 4 & 6) repeat wiring method for each switch.



### Two Way Switching

Two way switching is used where a light is controlled by two switches.

For multiple gang switches (2, 3, 4 & 6) repeat wiring method for each switch.

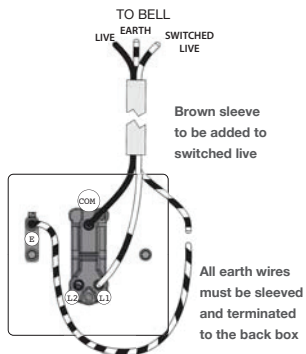


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## Installation Information

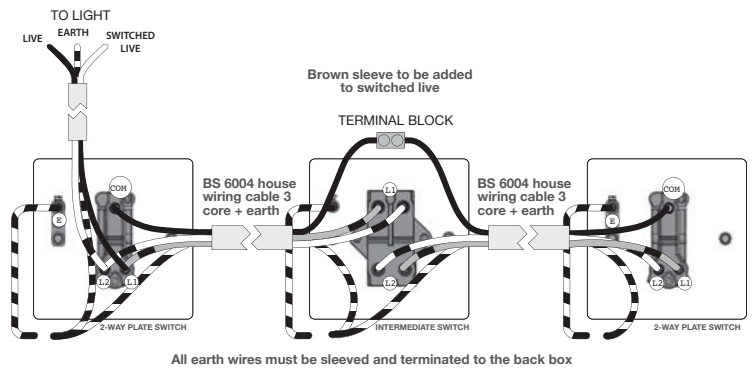
### Bell Push

The bell push is a one way switch with a retractive rocker switch. Before installing, ensure a bell unit is suitable for supply voltage.



### Intermediate Switching

Intermediate switching is used in installations that require three or more switches to control a light, and should be used together with two 2-way switches.



### Fan Isolator - 3 Pole Switch

During repair or installation or routine maintenance the power supply to the fan unit must be disconnected. This isolating switch can be installed as shown in the diagrams to enable the remainder of the circuit to remain live.

These instructions should be read in conjunction with the instructions supplied with the fan unit and the latest IEE Wiring Regulations.

Please follow the appropriate wiring diagram below for your particular installation.

### Important

The continuity of the protective conductors must be maintained. The isolator switch shall be so situated as to be inaccessible to a person using a fixed bath or shower.

