

148mm

74mm

52.5mm

210mm



## Wiring Accessories

13A Socket with USB Charger

### Safety Warning

For your safety, this product must be installed in accordance with local Building Regulations. **If in any doubt, or where required by the law, consult a competent person who is registered with an electrical self-certification scheme.** Further information is available online or from your Local Authority.

Please read carefully and use in accordance with these safety wiring instructions. Before commencing any electrical work ensure the supply is switched off at the mains. Either by switching off the consumer unit or by removing the appropriate fuse or turning off MCB (trip). Wiring should be in accordance with the latest edition of the IET regulations (BS 7671). To prevent fire hazard always use cable of the correct rating & type for the application.

**Warning do not exceed the load rating of this device as stated on the rear of the product.**

#### Wire Identification - Twin & Earth Cable

Note - As from 1st April 2004 new colour codes for hard wire installations were introduced.

**EARTH** = Green/Yellow Steeving

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

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



### Wiring Instructions

#### 1. Power Off

Before commencing work always isolate the power at the consumer unit / fuse box.

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

#### 2a. Replacing an existing accessory

- Unscrew the accessory from the wall/mounting box.
- Note the cable connections: The illustration shows 1 wire of each colour connected to each terminal. There should be an additional connection between the mounting box earth terminal and the accessory earth terminal.
- Unscrew each terminal to release the wire.

#### 2b. New installation

- Install mounting box (metal or moulded) for either flush or surface mounting, ensuring appropriate size of product.
- Select the most suitable entry point of the mounting box (knock-out) and route the cables through.

If a metal box is used, a cable grommet should be fitted to the entry point. Cables should be prepared so a sufficient conductor length reaches the terminals.

Strip the ends of the individual conductors leaving an adequate length bare to enter terminals.

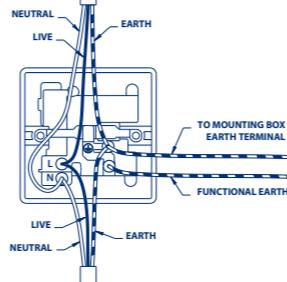
#### 3. Connection (See diagram)

- Line up the new accessory to mounting box and take note of where each terminal is located.
- Connect each wire to the matching terminal. An earth connection should always be made between the mounting box earth terminal and the accessory earth terminal, where fitted. All bare earth wires must be sheathed with green/yellow sleeving. When connecting the new accessory ensure that only the bare end of the wire enters the terminal and no bare wires are visible.
- Tighten terminal screws securely. (Do not over tighten)
- This socket is fitted with two linked terminals to provide a dual earth facility. This is for use in "clean" installations where additional earth capacity is required to comply with Regulation 607 IEE Wiring Regulations.

#### 4. Complete Installation & Test

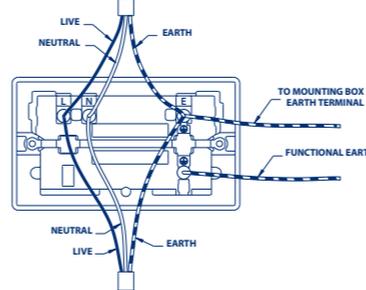
- Carefully position the accessory into the mounting box, ensuring that no wires are trapped between the plate and the wall and secure with screws (do not over tighten) then insert screw covers (optional).
- Once the installation has been completed correctly, replace the fuse/ reset MCB (trip), switch the power back on at the consumer unit and test.

#### 1 Gang 13 Amp Switched Socket with USB Charger



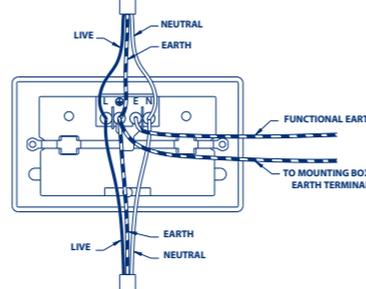
USB charge shared between outputs

#### 2 Gang 13 Amp Switched Socket with USB Charger



USB charge shared between outputs

#### 2 Gang 13 Amp Unswitched Socket with USB Charger



4.2A USB charge shared between outputs.

Each pair of USB outlets provides a 2.1A charge, shared between both outputs.

### Additional Advice for Decorative Products

Fixing method varies depending on which product range is supplied. Always ensure wall surface is reasonably flat and smooth, with no bumps or projections. Metal frontplates WITH screw fixing holes. These products comprise main unit with integral frontplate, and rear gasket. Fix unit to back box using two fixing screws supplied. All Decorative products MUST have an earth connection between the frontplate and back box. Frontplates WITHOUT screw fixing holes. These products comprise main unit with integral gasket, and frontplate as separate item. Fix unit to back box using two fixing screws supplied. Clip frontplate onto main assembly, ensuring screwdriver notch is located bottom right hand corner. To remove plate, place medium size flat bladed screwdriver in notch and lever off against gasket.

### USB Charger Information

13A sockets with USB charging ports for charging mobile devices such as mobile phones, MP3 players and tablets.

Total charger current can be delivered from one USB socket or divided between outputs as required. For a 2.1A output charger, if a device needing 1.5A would leave the other port at 0.6A, so devices may charge more slowly than with a normal single plug charging.

The speed of charging will depend on the battery capacity of the device and not charge output of the socket. A device with a battery capacity of 1500mAh will not charge any faster with a 3.1A charger compared to a 2.1A charger.

The total output current achieved is dictated by the specific device being charged and other external factors, such as the quality of charging cable being used.

Overload protection for connected devices.

#### Low energy stand-by mode

When not in use the USB sockets are in a low energy stand-by mode.

The usb circuits in this socket are designed to withstand insulation resistance tests at 500V. A reading of 10MΩ minimum is typically achieved by the USB socket.

### Technical

Voltage : 220-240V ac  
Frequency : 50/60Hz  
Rating : 13A

Terminal capacity : 3 x 2.5mm<sup>2</sup> 3 x 4mm<sup>2</sup> 2 x 6.0mm<sup>2</sup>

Min box depth (profiled plates) : 25mm

Min box depth (flat plates) : 35mm or 25mm with spacer provided.

**Note - The front surface of this product may become warm in use. This is normal and not cause for concern.**

### Care

For all Decorative plates - It is essential the gasket is fitted between product and wall, to reduce possibility of discolouration of frontplate edges due to natural moisture in some wall finishes.

To maintain the high quality appearance of decorative finish switches and sockets, BG Electrical recommend the use of a soft cloth periodically to clean the front face. When installing a decorative product please ensure that the wall is decorated, finished and free of moisture prior to installation.

Please note that it can take several weeks for the chemicals in paint or wallpaper paste to become inert. Before this time there is a danger that they will react with the product if it has a metal faceplate.

BG electrical recommends avoiding using, but not restricted to, these substances from becoming in contact with the decorative metal frontplates when cleaning or decorating:

- Adhesive tape, including low tack masking tape
- Solvents
- White spirit
- Multi surface cleaners
- Industrial multipurpose cleaning wipes
- Wet wipes

Using items like those listed above may cause a degrading effect to the frontplates lacquer/plated finish, although the function will remain unaffected.

### Batch Code explanation

yyWxx Manufacturing date code, year of manufacture (yy) and week of manufacture (Wxx)

### Address/Hotline

**Luceco PLC**  
Stafford Park 1  
Telford TF3 3BD  
ENGLAND

**(EU) Luceco SE**  
C/ Bobinadora 1-5  
08302 Mataró  
SPAIN

If you have further technical assistance you can get in touch with our

**Technical Helpline on:**

**+44 (0)3300 249 279**

[technical.support@bgelectrical.co.uk](mailto:technical.support@bgelectrical.co.uk)

### Environmental Protection



This symbol is known as the "Crossed-out-Wheelie-Bin Symbol". When this symbol is marked on a product or battery, it means that it should not be disposed of with your general household waste. Some chemicals contained within electrical/electronic products or batteries can be harmful to health and the environment. Only dispose of electrical/electronic/battery items in separate collection schemes, which cater for the recovery and recycling of materials contained within. Your co-operation is vital to ensure the success of these schemes and for the protection of the environment.

USB Output	5V DC 2.1A, 10.5W MAX (4 Port, 2.1A per pair)	5V DC 3.1A, 15.5W MAX	Type A: 5V DC 2.4A, 12W MAX Type C: 5V DC 3.0A, 15W MAX	Type C: 5V DC 3.0A 15W MAX 9V DC 3.0A 27W MAX 12V DC 2.5A 30W MAX 20V DC, 1.5A 30W MAX Type A: 5V DC 3.0A 15W MAX 9V DC 3.0A 27W MAX 12V DC 2.25A 27W MAX
Input	220-250V- 50/60Hz	220-250V- 50/60Hz	200-250V- 50/60Hz	220-250V- 50/60Hz
Average active efficiency	>79.04%	>81.59%	Type A: 5V DC 2.4A: >79.94% Type C: 5V DC 3.0A: >81.39%	Type C: 5V DC 3.0A: >81.39% 9V DC 3.0A: >86.62% 12V DC 2.5A: >86.95% 20V DC, 1.5A: >86.95% Type A: 5V DC 3.0A: >81.39% 9V DC 3.0A: >86.62% 12V DC 2.25A: >86.62%
Efficiency at low load[10%]	>70.08%	>72.70%	Type A: 5V DC 2.4A: >71.00% Type C: 5V DC 3.0A: >72.48%	Type C: 5V DC 3.0A: >72.48% 9V DC 3.0A: >77.30% 12V DC 2.5A: >77.70% 15V DC 2.0A: >77.70% 20V DC, 1.5A: >77.70% Type A: 5V DC 3.0A: >72.48% 9V DC 3.0A: >77.30% 12V DC 2.25A: >77.30%
No load power consumption	<0.10W	<0.10W	<0.10W	<0.10W
Model identifier	x21U2* x21DPU2* x22U* x22UWR* x24U44*	x22U3* x22U33* EMUSB*3	x22UAC*	x22UAC30*
Note	x = range, B, 9, PCy, Nz, Sz Fz, Lz, Tz, Mz * = insert colour, 'W', 'B' or 'G'; y = PC finish 'WH', 'SL', 'CH', 'PW'; z = Metal finish 'BS', 'PC', 'BN', 'PR', 'PB', 'MB', 'AB', 'BI', 'CR', 'PW', 'BC', 'BG'.			