



# Wiring Accessories

## 13A Socket with USB Charger

### 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

1. Unscrew the accessory from the wall/mounting box.
2. 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.
3. Unscrew each terminal to release the wire.

#### 2b. New installation

1. Install mounting box (metal or moulded) for either flush or surface mounting, ensuring appropriate size of product [Mounting box to be purchased separately].
  2. Select the most suitable entry point of the mounting box (knock-out) and route the cables through.
  3. If a metal box is used, a cable grommet should be fitted to the entry point.
  3. 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)

1. Line up the new accessory to mounting box and take note of where each terminal is located.
2. 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.
3. Tighten terminal screws securely. [Do not over tighten]
4. 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

1. 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).
2. Once the installation has been completed correctly, replace the fuse/reset MCB (trip), switch the power back on at the consumer unit and test.

#### 5. Insulation Testing

This socket outlet is designed to withstand insulation resistance testing at 500V as defined by BS1363-2.

- Perform insulation test between Line & Neutral at 250V.
  - 500V test may be performed between Line & Earth, Neutral & Earth.
- Or,
- Disconnect all Neutral connection in the socket and connect into terminal block before replacing the socket prior to test.

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.

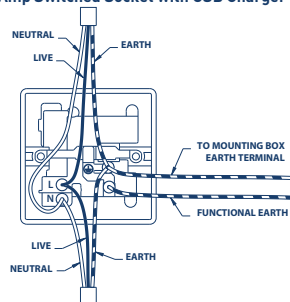
**EARTH** = Green/Yellow Sleeving

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

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

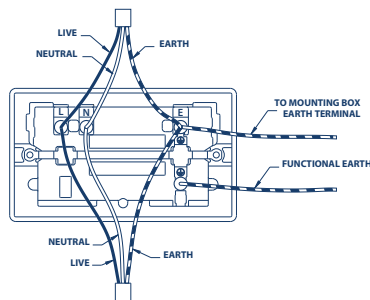


#### 1 Gang 13 Amp Switched Socket with USB Charger



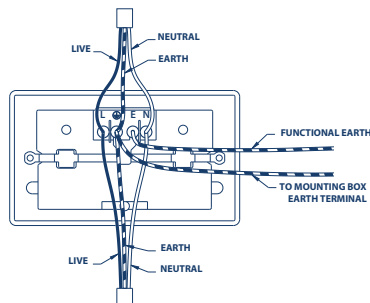
USB charge shared between outputs

#### 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, fix the unit to the 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.

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.**

### ASTA Approved

The ASTA quality mark is evidence that the product has been independently tested to comply with the relevant clauses of the applicable standards.



## USB Charger Information

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

Total charger output can be delivered from one USB socket or divided between outputs as required.

For a 15W output charger, if a device needing 10W would leave the other port at 5W, so devices may charge more slowly than with a normal single plug charging.

The speed of charging depends on many factors, including the device battery state and capacity, whether the device is compatible with fast charging protocols (PD/QC), and also the quality of the 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.

## Care

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.

BG Electrical recommends avoiding using, but not restricted to, these substances from becoming in contact with the decorative metal front-plates 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 front-plates 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/Helpline

**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	5.0V DC 2.1A, 10.5W MAX	5.0V DC 2.1A, 10.5W MAX	5.0V DC 2.1A, 10.5W MAX	5.0V DC 3.1A, 15.5W MAX	Type A: 5.0V DC 2.4A, 12.0W MAX Type C: 5.0V DC 3.0A, 15.0W MAX	Type C: 5.0V DC, 3.0A 15.0W MAX 9.0V DC, 3.0A 27.0W MAX 12.0V DC, 2.5A 30.0W MAX 15.0V DC, 2.0A 30.0W MAX 20.0V DC, 1.5A 30.0W MAX Type A: 5.0V DC 3.0A 15.0W MAX 9.0V DC 3.0A 27.0W MAX 12.0V DC 2.25A 27.0W MAX Type C + Type A: 5.0V DC, 5.0A 25W MAX
Input	220-250V~ 50/60Hz	200-250V~ 50/60Hz	220-240V~ 50/60Hz	200-250V~ 50/60Hz	200-250V~ 50/60Hz	220-250V~ 50/60Hz
Average active efficiency	>79.04%	>79.04%	>79.04%	>81.59%	Type A: 5.0V DC 2.4A: >79.94% Type C: 5.0V DC 3.0A: >81.39% Total:4.2A >83.35%	Type C: 5.0V DC, 3.0A: >81.39% 9.0V DC, 3.0A: >86.62% 12.0V DC, 2.5A: >86.95% 15.0V DC, 2.0A: >86.95% 20.0V DC, 1.5A: >86.95% Type A: 5.0V DC 3.0A: >81.39% 9.0V DC 3.0A: >86.62% 12.0V DC 2.25A: >86.62% Type C + Type A: 5.0V DC, 5.0A: >84.25%
Efficiency at low load (10%)	>70.08%	>70.08%	>70.08%	>72.70%	Type A: 5.0V DC 2.4A: >71.00% Type C: 5.0V DC 3.0A: >72.48% Total:4.2A >74.52%	Type C: 5.0V DC, 3.0A: >72.48% 9.0V DC, 3.0A: >77.30% 12.0V DC, 2.5A: >77.70% 15.0V DC, 2.0A: >77.70% 20.0V DC, 1.5A: >77.70% Type A: 5.0V DC 3.0A: >72.48% 9.0V DC 3.0A: >77.30% 12.0V DC 2.25A: >77.30% Type C + Type A: 5.0V DC, 5.0A: >75.47%
No load power consumption	<0.10W	<0.10W	<0.10W	<0.10W	<0.10W	<0.10W
USB Port Number	2 Ports	2 Ports	4 Ports, 2.1A per pair	2 ports	2 Ports (1 type A, 1 type C)	2 Ports (1 type A, 1 type C)
Manufacturers model identifier	x21U2* x21DFU2*	x22U*	x24U44*	x22U3*	x22UAC*	x22UAC30*
Note	x = range, 3, 4, 8, 9, EBG, Ez, Cz, PCdY, PCy, Ns, Sz, Fz, Lz, Tz, MC5, PM * = insert colour, 'W', 'B' or 'G'; y = PCD/PC finish 'WH', 'CL', 'BS', 'PC', 'BC', 'PB', 'PW', 'AB', 'SB', 'MB', 'MG', 'BL', 'CH', 'SL', 'BN', 'GR', 'WD'; z = Metal finish 'BS', 'PC', 'BN', 'PR', 'MB', 'AB', 'B', 'CR', 'PW', 'BC', 'BG', 'SL', 'SB'.					