

Quick Installation Guide

Wi-Fi Socket Range Extender N300 & Wi-Fi Socket Range Extender N300 + USB Charger

Positioning your Wi-Fi socket

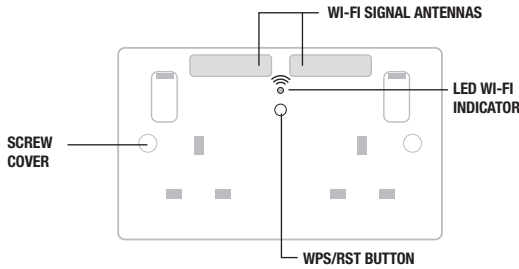
Your Wi-Fi socket should be positioned half way between your router and the Wi-Fi dead-zone. Use the signal strength indicator on your mobile device to determine the mid-signal point.



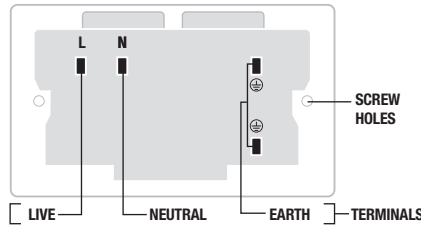
Choose a location away from Bluetooth devices and other household electronics (cordless phone, microwave oven, baby monitor, etc.) to minimise signal interference.

Product overview:

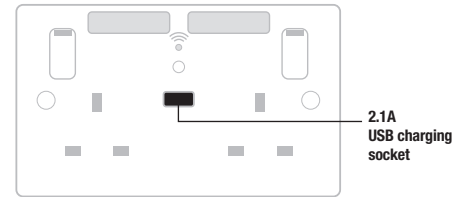
Wi-Fi Socket Range Extender



Rear of Socket



Wi-Fi Socket Range Extender + 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. **INDOOR USE ONLY.**

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

Any bare earth wires must be covered with the appropriate green/yellow sleeving.

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

If in doubt always consult a competent electrician.

ENVIRONMENTAL PROTECTION



Electrical products should not be disposed of with your general household waste. Some chemicals contained within electrical products can be harmful to health and the environment. Only dispose of the items in separate collection schemes which can cater for recovery and recycling of materials contained within. Your co-operation is vital to ensure the protection of the environment.

Wiring Instructions:

1 Power off

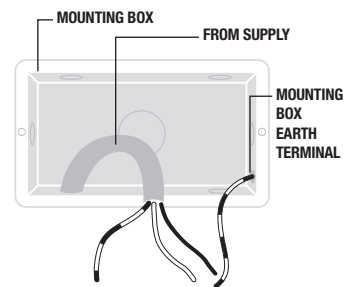
BEFORE COMMENCING WORK ALWAYS ISOLATE THE POWER AT THE CONSUMER UNIT / FUSE BOX.



2a Replacing an existing socket (removal)

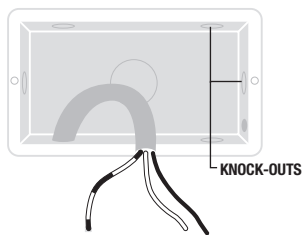
1. Unscrew the socket from the wall/mounting box.
2. Note the cable connections: There will generally be three different wiring configurations, this illustration shows a single wire of each colour connected to each terminal (there could be two or three wires of each colour connected to each terminal) + an additional connection between the mounting box earth terminal and the socket earth terminal.
3. Unscrew each terminal to release the wires.

- **EARTH** = Green & Yellow sleeving
- **NEUTRAL** = Blue (Black pre Apr 04)
- **LIVE** = Brown (Red pre Apr 04)



OR

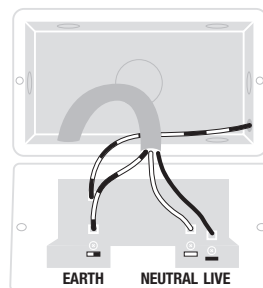
2b New installation



- **EARTH** = Green & Yellow sleeving
- **NEUTRAL** = Blue (Black pre Apr 04)
- **LIVE** = Brown (Red pre Apr 04)

1. Install mounting box (metal or patress) 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 supply cable through.
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 Wire up your socket



1. Line up the new socket to mounting box and take note of where each terminal is located.
2. Connect each wire to the matching terminal. (refer to key in step 2)

An earth connection should always be made between the mounting box earth terminal and the socket earth terminal.

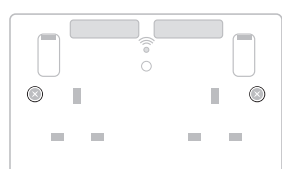
Make sure no copper wire is exposed & that only the bare end enters the terminal.

3. Tighten terminal screws securely. (do not over tighten)

4 Complete the installation

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 set screw covers in place (optional).

2. Once installation has been completed correctly, replace the fuse for the circuit, switch the power back on at the consumer unit and test.



USB Charger information:

2.1A USB port for charging mobile devices such as mobile phones, MP3 players and tablets.

2.1A 5V output from the USB output

- 2.1A is sufficient power output to charge the majority of USB products.
- The total output current achieved is dictated by 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 socket is in a low energy stand-by mode.

The USB circuits on this socket are designed to withstand insulation resistance tests at 500V. A reading of 0.4Ω +/-0.05 is typically caused by the USB socket

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

Wi-Fi socket setup instructions:

Ensure that your Wi-Fi socket is connected to the power supply as per 'Wiring instructions' (see reverse).

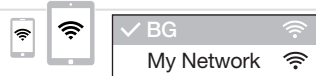
After the initial power up the LED indicator will illuminate with a solid blue light. After a short period of time the indicator will then start to blink and the product will then be ready for set-up. Proceed with your preferred method of connection:

Wireless setup

There are three installation methods to connect to the Wi-Fi socket;

- Web browser – Using your computer, smart phone or tablet's internet browser (Safari, Chrome, Firefox, Edge, Internet Explorer).
- QR code – Scan the QR code to take you directly to the setup page.
- WPS (Wi-Fi Protected Setup) – One touch setup, no configuration needed.

QR code setup



- On your smartphone or tablet, connect to a new Wi-Fi network called "BG" (no password is required).

**Note: if the BG network is not showing, please reset the Wi-Fi socket.*

- Scan the QR code.



- Select the Wi-Fi network to be extended.
- Enter your Wi-Fi router password.
- Ensure the tick-box "Set Local & Internet SSID as the same" is ticked.
- This will change the BG network name to match your current router network name.
- Click 'Next'.

**Note: Should you need to change the network encryption mode, choose from the drop-down menu. Default is WPA2-PSK. Refer to your router handbook for further details.*

- Click 'Apply'.
- The Wi-Fi socket should show a solid blue LED, and is now ready to use.
- Your devices will connect using your existing Wi-Fi network name.

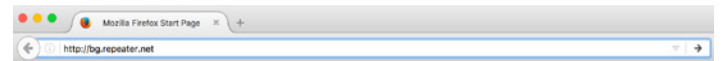
Web browser setup



- Connect to a new Wi-Fi network called "BG". (no password is required)

**Note: if the BG network is not showing, please reset the Wi-Fi socket.*

- Enter <http://bg.repeater.net> into your browser search bar.



- Select the Wi-Fi network to be extended.
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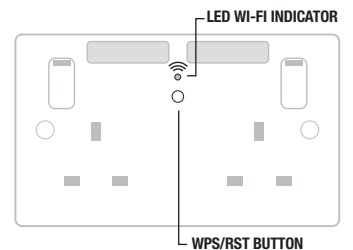
WPS (Wi-Fi protected) setup

- Press and hold the WPS button on your router for 5 seconds.

**Note: WPS connection may differ for each manufacturer, please refer to your router handbook for your specific WPS connection method.*

- Press the WPS/RST button once on the Wi-Fi socket.

- The LED will blink orange whilst connecting to your router.
- Once connected, the LED will light solid blue.
- Your devices will connect using your existing Wi-Fi network name.



Resetting your Wi-Fi socket:

- Press and hold the WPS/RST button on the front of the Wi-Fi socket for 5 seconds
- The LED will blink amber/blue and then extinguish.
- Wait for a blue blinking LED to return
- Your Wi-Fi socket is now ready to setup

Turning off the Wi-Fi function (holiday mode)

- Press the WPS/RST button 3 times to turn off the RF (Wi-Fi) signal. The LED will extinguish.
- To turn the functionality back on, press the WPS/RST button 3 times. The LED will show solid blue and Wi-Fi connectivity will be restored.

**Note: The 13A socket outlets work independently and are unaffected by holiday mode.*

FAQ's

The "BG" network is not showing in my list of networks?

A: Please reset your Wi-Fi socket (Refer to the 'Resetting your Wi-Fi socket' section) then try again.

I can't see the login page after typing <http://bg.repeater.net> in the browser, or by scanning the QR code?

A1: Make sure your computer/phone/tablet is connected to the "BG" Wi-Fi network.

A2: Ensure your Wi-Fi socket is connected to the power and the blue LED indicator is lit. Once connected, reset the socket.

How do I reset the Wi-Fi socket?

A: Refer to the 'Resetting your Wi-Fi socket' section.

My router doesn't have a WPS button, what do I do?

A: Please use the 'Web browser' method to setup your Wi-Fi socket.

Setup advice & how-to guides

Visit www.bgelectrical.uk/wifi for additional support.



Wi-Fi Socket Beginners Guide



What is a Wi-Fi range extended socket?

Range extenders take your existing internet wireless signal and rebroadcast it to areas in your home and garden where Wi-Fi is weak or non-existent.



Why do I need a range extender?

If you suffer from patchy speed and stability in your home and garden, a range extender will increase the reach of your Wi-Fi signal.



How do they work?

By positioning the Wi-Fi socket halfway between your router and the area of poor reception, the range extender will relay the signal to further spread coverage. Wi-Fi socket will work with any wireless broadband router, whether your internet comes through the phone line (ADSL) or from Fibre (Fibre Optic).





Products in the range



Wi-Fi Socket



Wi-Fi Socket + USB

**SQUARE
PROFILE**

FITS
25MM
BOX

WPS

N300
Mbps

2.4
GHz
SINGLE BAND

+

2.1A
CHARGE



How to upgrade to a 2 gang Wi-Fi Extender socket

(Includes Wi-Fi Extender + USB)

Plan It: things you will need



Socket



Pliers



Screwdrivers



Small Spirit level

Green and yellow sleeving (if required)

Positioning your Wi-Fi Socket

Your Wi-Fi socket should be positioned half way between your router and Wi-Fi dead-zone. Use the signal strength on your mobile device to determine the mid-signal point.



Choose a location away from Bluetooth devices and other household electronics (cordless phone, microwave oven, baby monitor, etc.) to minimise signal interference.

1.



To start, make sure you are familiar with the safety warnings in this leaflet, the instructions supplied with the product and the mains supply is turned off.

2.



At the consumer unit, find the trip switch which protects the circuit and turn it all the way off. The indicator window should stay green.

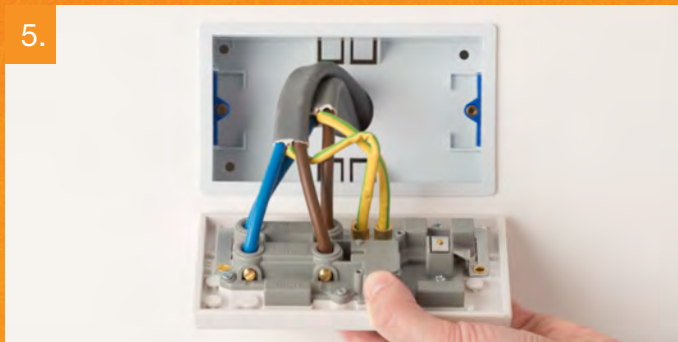
3.



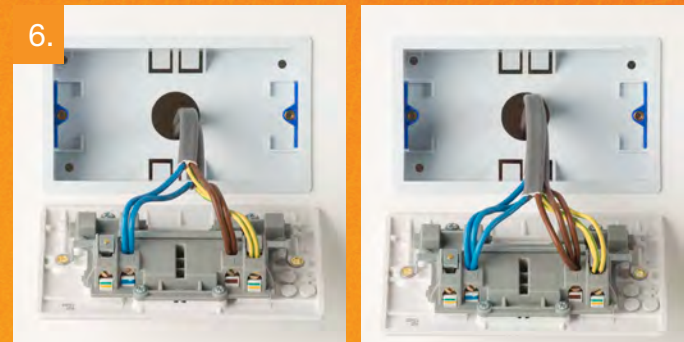
Test power is not supplied to the socket by using a plug in socket tester or multimeter. Unscrew the retaining screws on the socket so that it is released from the mounting box.



4. Gently ease the socket from the mounting box to show the wiring.



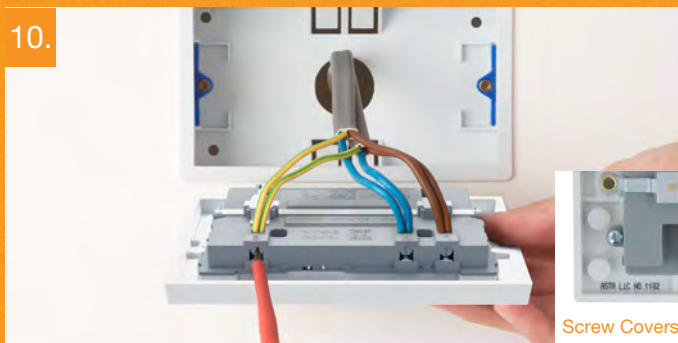
5. There will generally be three different wiring configurations. This photo shows a single wire of each colour connected to each terminal.



6. Alternatively, there could be two or three wires of each colour connected to each terminal.



9. Place the blue wire(s) into the neutral terminal, brown into the live terminal and green/yellow into the earth terminal. The terminals on the socket are colour-coded to help locate the correct one.



10. Make sure that the wires are fully inserted into the terminal and that no bare copper wire is visible. Tighten the screws securely onto the copper wire, not the outer sheathing. Before fixing remove screw covers from rear.



11. Gently press the socket back into place over the mounting box. Take care not to trap any wires between the wall and the socket.



12. Insert and tighten the retaining screws provided. Use a spirit level to make sure that socket is level. Restore the power at the consumer unit and test.

After the initial power up the LED indicator will illuminate with a solid blue light. After a short period of time the indicator will then start to blink and the product will then be ready for set-up. Proceed with your preferred method of connection.

Wireless setup information available on the next page.



Wireless Setup

There are three installation methods to connect to the Wi-Fi socket;

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- Enter your Wi-Fi router password.

- Ensure tick-box "Set Local & Internet SSID as the same" is ticked. This will change the BG network name to match your current router network name.

- Click 'Next'.

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- Click 'Apply'.

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**Note: WPS connection may differ for each manufacturer, please refer to your router handbook for your specific WPS connection method.*

- Press the WPS/RST button once on the Wi-Fi socket.

- The LED will blink orange whilst connecting to your router.

- Once connected, the LED will light solid blue.

- Your devices will connect using your existing Wi-Fi network name.





Can I switch connected appliances on/off with this socket?

This product extends Wi-Fi range; it doesn't provide remote switching of connected devices.

Does this socket work with home automation tech such as Apple Homekit/Google Home?

Wi-Fi socket is designed to work solely as a range extender, it won't connect to any home automation system.

What speed should I expect from my Wi-Fi range extender socket?

Depending on the structure of your home and the speed of your existing router, the Wi-Fi socket will produce speeds of up to 300Mbps.

What range should I expect from my Wi-Fi range extender socket?

In open air conditions the Wi-Fi signal can extend to 30 metres. However, obstacles such as walls and ceilings, and interference from other electronic devices (cordless phones, baby monitors, microwave oven, Bluetooth devices) will reduce the range to approx. 15m inside a typical house.

Are Wi-Fi range extender sockets secure?

Wi-Fi socket supports WPS for protected setup (Wi-Fi Protected Access®:256-bit WPA –PSK, 256-bit WPA2-PSK, 256-bit WPA/WPA2-PSK) and Wi-Fi access password.

What are the minimum system requirements?

802.11 b/g/n 2.4GHz wireless router with broadband internet connection.

Mobile/Tablet operating system: Android 3.0, Android 4.X, IOS 5 or above.

Desktop operating system: Windows® XP 32(SP3 or greater), Windows Vista® 32/64, or Windows 7 32/64, Windows 8 32/64, Windows10 32/64; or Mac OS® X v10.5 or above; Internet Explorer® 10.0 or Firefox® 20 or Google Chrome™ 25, or Safari® 5.1.

Can I switch connected appliances on/off with this socket?

Currently we offer a White Moulded finish with a square profile. Metal finishes, and profiles to complement all existing BG ranges are in development.

I want to replace all my switches and sockets to match my Wi-Fi socket, do you manufacturer a wider range?

BG manufacture a complete range of matching accessories. The full range is available to order through all good electrical wholesalers. A limited range is available through selected retail high street retailers.

I have fibre, not traditional ADSL broadband. Will this product work with my router?

Wi-Fi sockets will work with any wireless router that supports a 2.4GHz band and 802.11 b/g/n specification.

Can I turn the Wi-Fi feature off?

Yes, Wi-Fi functionality can be switched off by using holiday mode (the 13A socket outlets will remain unaffected).

Can I use several Wi-Fi sockets in my home?

We recommend using only one Wi-Fi socket; this should be sufficient for most residential properties.



FAQs (continued)

Do I need an electrician to fit this product?

If you are replacing a standard socket for a Wi-Fi socket, then no. BG Wi-Fi sockets come with comprehensive fitting instructions that allow DIY installation. However, if in any doubt, or where required by the law, consult a competent person who is registered with an electrical self-certification scheme. For new installations a qualified electrician should be employed.

What depth of wall box is needed to fit a Wi-Fi socket?

A standard 25mm wall box is required to retrofit this product.

What are the dimensions of the Wi-Fi socket?

We have ensured the Wi-Fi and USB features fit into a standard size socket: 86mm (H) x 146mm (W) x 10mm (D).

Does the USB outlet provide data as well as power?

No, the USB outlets only provide power to the connected device.

Are these products ASTA approved?



Yes, all of our wiring accessories and USB sockets are ASTA approved. ASTA is a universally recognised mark of product safety and testing. Licence Number 1182.

What is the power input/output when no USB device is connected?

The power input/draw and output of the sockets when no device is connected is less than 50mW.





Stuck? Confused?

Contact our Technical Support team on:

T: +44 (0)3300 249 279 or +44 (0)1952 238 128

E: technical.support@bgelectrical.co.uk

Lines are open Mon - Fri (08:30 - 17:00)