



LIGHT ^{MY} BRICKS

USER GUIDE
for component handling



COMPONENT TYPES

Welcome to the **LIGHT MY BRICKS USER GUIDE**.

Light My Bricks produce LED lighting components designed to complement the LEGO® building system.

This user guide is designed to help you correctly identify and handle the various Light My Bricks components - ensuring a trouble free installation.

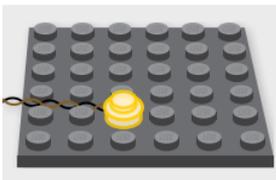
STRIP LIGHTS

Strip Lights contain two individual LEDs and have a self-adhesive backing which can be used to stick directly on LEGO® 1x6 plates for easy mounting. Strip lights are available in variety of colours.



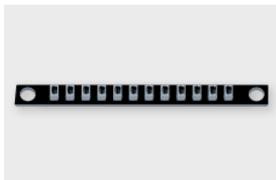
BIT LIGHTS

Bit Lights are tiny LEDs that can fit underneath and in between LEGO® pieces. Bit lights are available in variety of colours and effects.



EXPANSION BOARDS

Expansion Boards allow connection of multiple components. Simply connect your lights, connecting cables and power options to an available port on an expansion board to create a circuit.



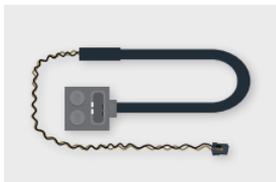
CONNECTING CABLES

Connecting Cables can be used to link components like strip lights and expansion boards together.



POWER OPTIONS

Light My Bricks have a wide variety of powering options, including power sourced from **Batteries**, **USB** or **LEGO Power Functions**.

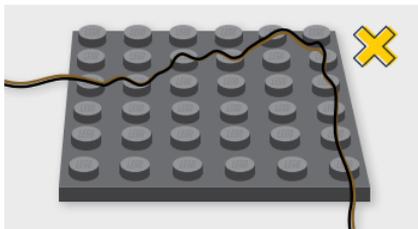
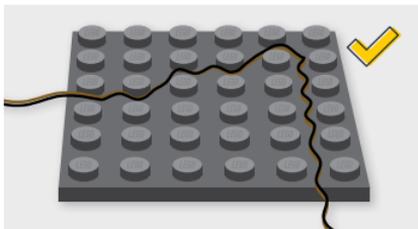


IMPORTANT THINGS TO NOTE

Light My Bricks components are purposely built to be small enough to fit underneath and between LEGO® bricks. However, this means the components are delicate and should always be handled with care.

LAYING CABLES IN BETWEEN LEGO

Cables can fit in between and underneath LEGO® piece, plates and tiles providing they are laid correctly between the LEGO® studs. **Do NOT forcefully join LEGO® together around cables**; instead, ensure they are lying comfortably in between each stud.



CAUTION: Forcing LEGO® to connect over a cable can result in damaging the cable and light.

CONNECTING CABLES TO STRIP LIGHTS

Take extra care when inserting connectors to **Strip Lights**. Connectors can be inserted only one way. With the **strip light facing up**, ensure the side of the cable Connector with the wires is exposed facing down.



CAUTION: If plug won't fit easily into a port, don't force it. Doing so will damage the plug and the port.

CONNECTING CABLES TO EXPANSION BOARDS

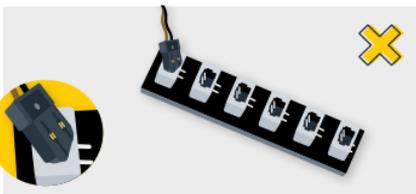
Take extra care when inserting connectors to ports of **Expansion Boards**. Connectors can be inserted only one way. With the **expansion board facing up**, look for the soldered “=” symbol on the left side of the port.

The connector side with the wires exposed should be facing toward the soldered “=” symbol as you insert into the port.

If a plug doesn't fit easily into a port connector, **don't force it**. Check that the plug is facing the right way before trying to connect again.



Exposed wires should face toward the “=” sign



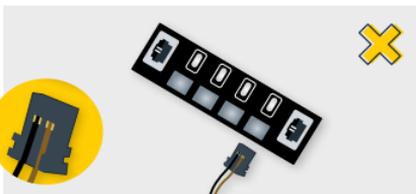
Do not force connection. This can bend connector pins

CONNECTING MICRO CABLE CONNECTIONS TO MICRO EXPANSION BOARD PORTS

Take extra care when inserting the micro connectors to micro ports of **Micro Expansion Boards**. Connecting micro bit lights to micro expansion boards is similar to connecting lights and cables to strip lights. With the expansion board facing up, ensure the side of the connector with the wires exposed is **facing down**. If a plug won't fit easily into a port connector, do not force it. Use your fingernail to push the plastic part of the connector to the micro port.



Exposed wires should face **downward**



Do not force connection. This can bend connector pins



TROUBLESHOOTING

Due to their size, individual components used in Light My Bricks light kits can be easily damaged if mishandled.

It is essential that the user guide section, “Important things to not”, is carefully read and followed. Doing so will prevent faults and damages to your Light My Bricks components.

First, let's take you through some of the most common causes:

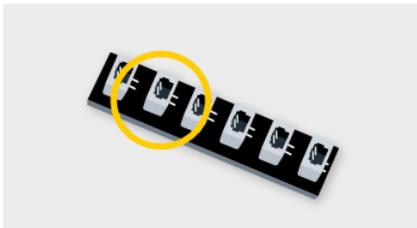
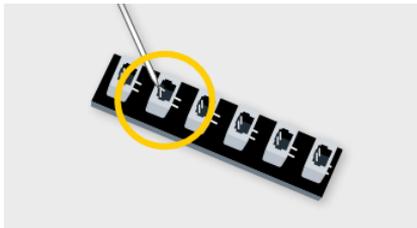
CHECK EXPANSION BOARDS, FX BOARDS AND STRIP LIGHTS

One of the most common problems customers face when installing Light My Bricks lighting kits is a ‘suspected’ faulty expansion board.

- Connectors can only be inserted in the component's ports one way, with the exposed wires facing the '=' symbol.
- Forcefully inserting connectors the incorrect way will damage pins inside the ports of the components.
- Not only will a light connected to the damaged port not work, but if the pins inside the port are bent to a point they are touching each other, it can result in overheating of the wires connected. This is called a short circuit.
- A short circuit can result in overheating of the board, cable or batteries. If you suspect a short circuit **DISCONNECT POWER IMMEDIATELY**. Batteries can fail, catch fire, or even explode if left connected to a short circuit for too long.
- If you suspect you have a faulty expansion board, strip light, or fx board, check to see if the pins are bent. If you look carefully inside each of the ports, they each contain two small pins which should be straight. You will be able to identify the faulty port as the port with a bent pin(s).

CHECK EXPANSION BOARDS, FX BOARDS AND STRIP LIGHTS (CONT.)

- To fix the faulty port, you will need a sharp utensil such as a pin, needle or a pair of tweezers which can be used to straighten the bent pin inside the faulty port.
- Simply use the utensil to bend the pin back in line. Once the pin is straight, your expansion board should function correctly.



CHECK BATTERIES

Ensure that you're using new batteries and that they are inserted the correct way into the battery pack. Check that the '+' side of the battery is facing the '+' side of the battery pack, the '-' side of the battery is facing the '-' side of the battery pack.

CHECK WIRING

Light My Bricks components are very small, and can therefore be easily damaged when not handled appropriately. Be careful when you remove and unpack components out of the packaging to ensure you do not forcefully pull the wires as this can damage the tiny wires soldered onto the LED. If the wires become separated from the LED, it will not work.

**For all support issues and queries please contact customer service at:
info@lightmybricks.com**

LED INSTALLATION DIAGRAM

Below is a wiring diagram example of how the components can be used to light up your LEGO® model.

