



**LIGHT^{MY}
BRICKS**



**LEGO[®] HARRY POTTER
THE MINISTRY OF MAGIC #76403
LIGHT KIT
INSTALLATION GUIDE**

Light My Bricks



LEGO HARRY POTTER THE MINISTRY OF MAGIC 76403 INSTALLATION GUIDE

Hi There!

We're here to help you get started on the LEGO Harry Potter The Ministry of Magic 76403 Light Kit.

This PDF details the instructions for the LED light kit only.

If you run into any issues, please refer to the troubleshoot-ing section towards the end of this guide.

Have fun and enjoy!

INSTALLATION GUIDE





PACKAGE CONTENTS:



- 2x Blue 30cm Bit Light
- 3x Green 30cm Bit Light
- 1x Warm White 30cm Large Bit Light
- 2x White 30cm Bit Light
- 2x White 15cm Bit Light
- 2x Yellow 15cm Bit Light
- 3x Green 15cm Micro Bit Light *
- 2x White 30cm Micro Bit Light *



- 4x 6-Port Expansion Board
- 1x 4-Port Micro Expansion Board
- 1x Flicker Effects Board

10x Adhesive Square



- 1x 50cm Connecting Cable
- 3x 30cm Connecting Cable *
- 2x 5cm Connecting Cable



- 1x USB Power Cable
(Power Source not Included)

ASSORTED BRICKS:



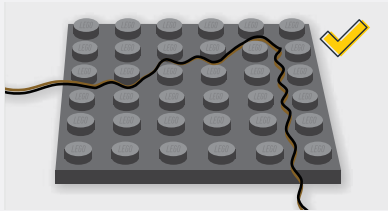
- 3x Round Plate 1x1 Open Stud - Black
- 1x Round 1x1 Plate Open Stud - White
- 1x Plate 1x2 - Any Colour
- 1x Plate 2x2 w/ Rounded Bottom -Trans Clear
- 2x Brick 1x1 Modified with Stud on one side - Black
- 1x Candle Flame

* Indicates components which include spares

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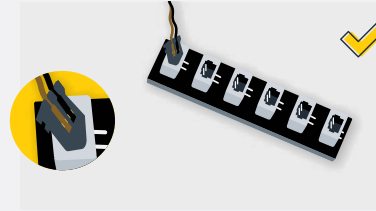
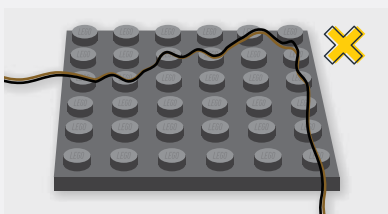
Before You Begin



Laying cables in between and underneath bricks

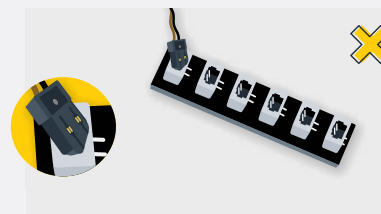
Cables can fit in between and underneath LEGO® bricks, plates, and tiles providing they are laid correctly between the LEGO® studs. Do NOT forcefully join LEGO® together around cables; instead ensure they are laying comfortably in between each stud.

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



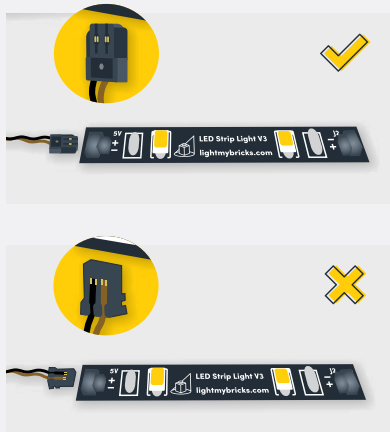
Connecting Cable Connectors To Expansion Boards

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 won’t fit easily into a port connector, do not force it.



Incorrectly inserting the connector can result in bent pins inside the port or possible overheating of the expansion board when connected.

Before You Begin



Connecting Cable Connectors To Strip Lights

Take extra care when inserting connectors to ports on the Strip Lights. Connectors can be inserted only one way. With the Strip Light 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, don't force it. Doing so will damage the plug and the connector.



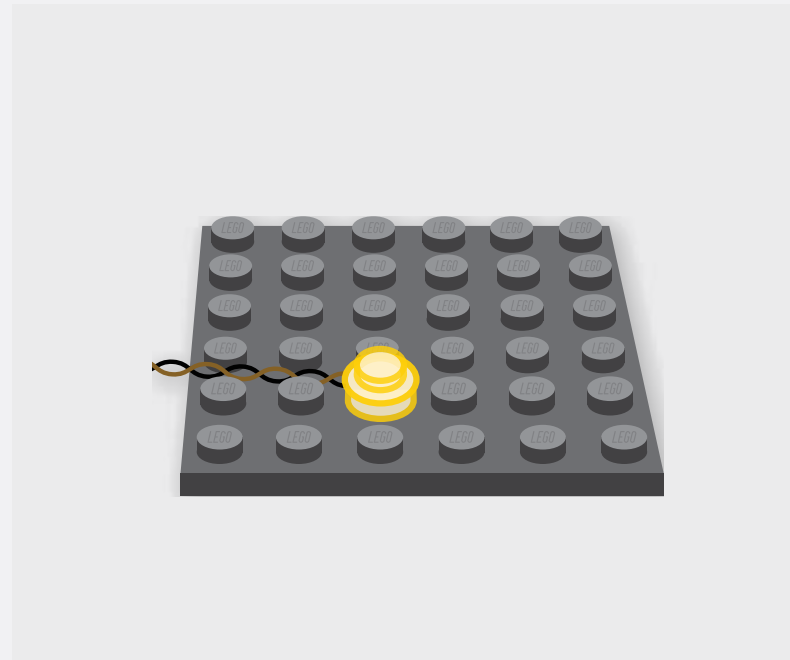
Connecting Micro Cable Connectors To Micro Expansion Board Ports

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.

Before You Begin

Installing Bit Lights Under Lego® Bricks And Plates

When installing Bit Lights under LEGO® pieces, ensure they are placed the correct way up (Yellow LED component exposed). You can either place them directly on top of LEGO® studs or in between.

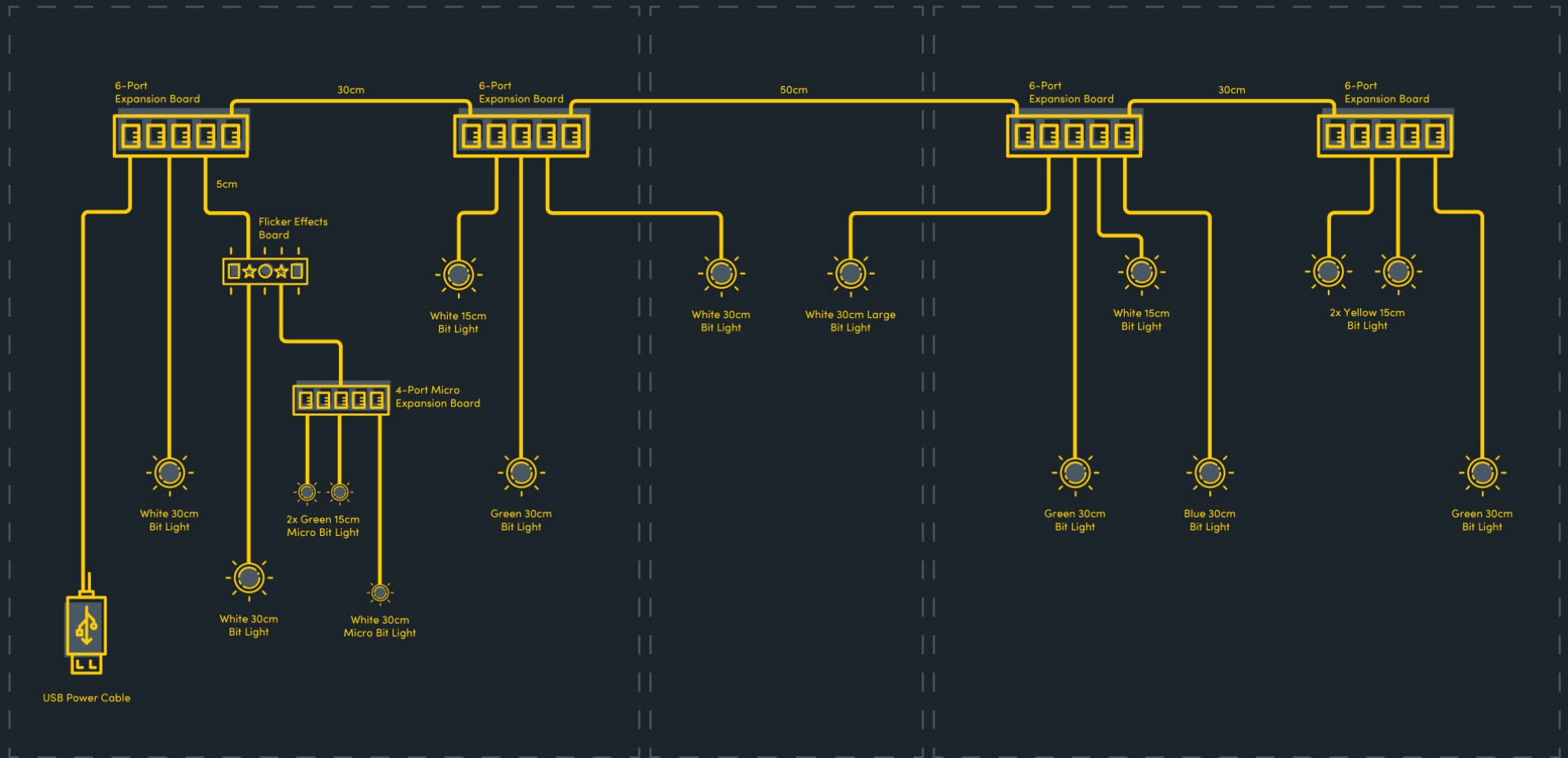


BLUEPRINT

Left Side Tower

Archway

Right Side Tower





INSTRUCTIONS

To ensure a smooth installation of your light kit, please read and follow each step carefully. If you run into any issues, please refer to the online troubleshooting guide.



LEGEND:  DISCONNECT



CONNECT / RECONNECT



TURN / FLIP



DIRECTIONAL



TWIST / BRAID



POWER ON / TEST



LEGENDE:  TRENNEN



VERNINDEN / WIEDERVERBINDEN



WENDEN / KIPPEN



DIRECTIONAL



DREHEN / VERDREHEN



EINSCHALTEN / TESTEN



LÉGENDE:  DÉCONNECTER



CONNECTER / RECONNECTER



TOUR / INCLINAISON



DIRECTIONNEL



TORSION / TRESSER



POWER ON / TEST



LEGGENDA:  SCOLLEGARE



CONNETTI / RICONNETTI



ROTARE / INCLINARE



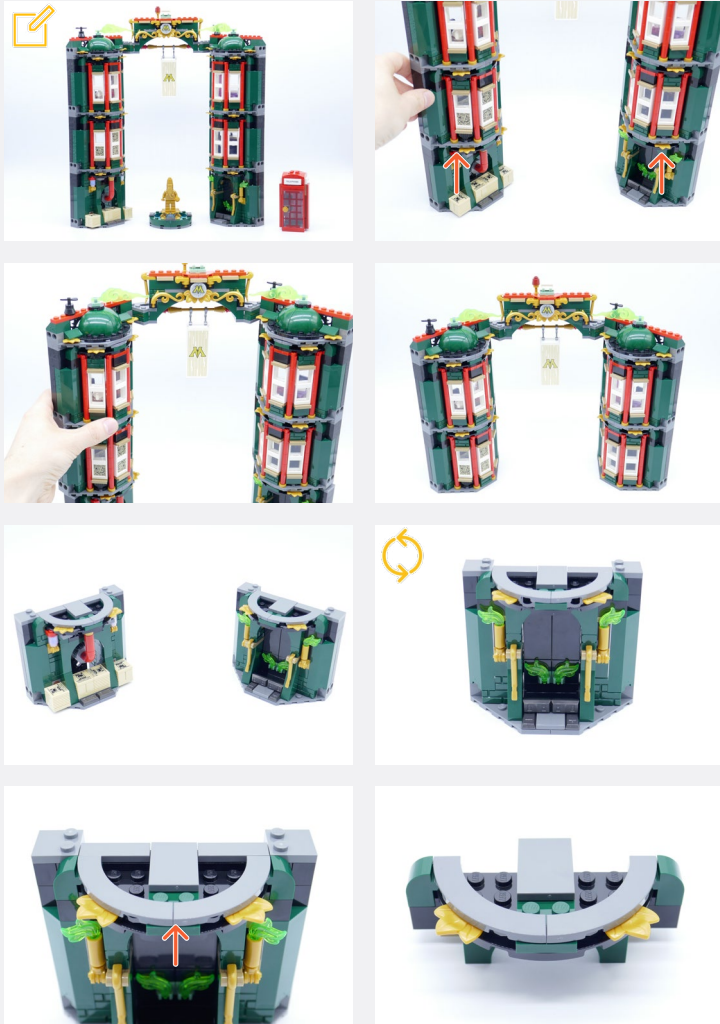
DIREZIONALE



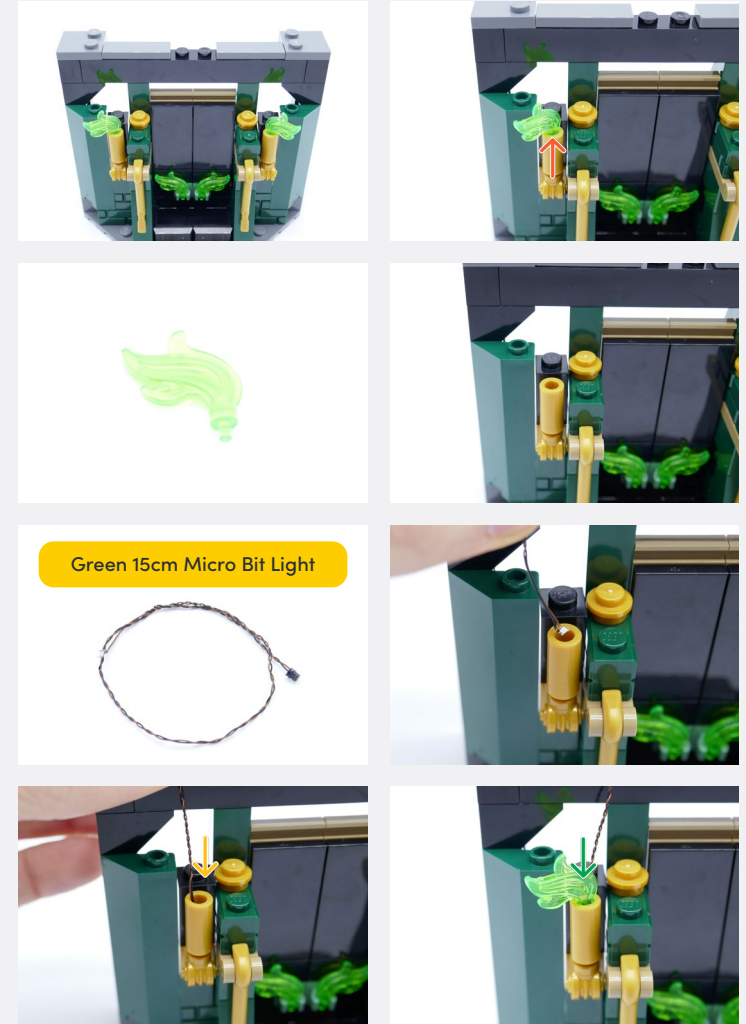
TWIST / TRECCIA



POWER ON / TEST

1


The guide is for this tower configuration only. As the towers cannot be moved after installation, choose your order before starting. (if you choose differently to the guide configuration, some modifications will need to be made manually)

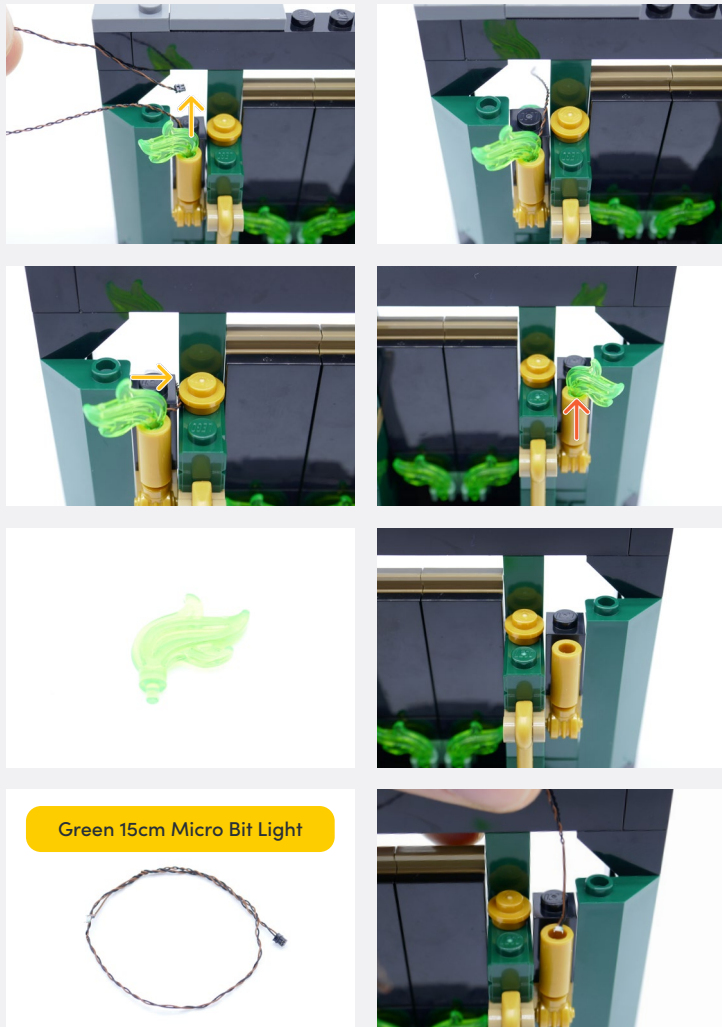
2


Green 15cm Micro Bit Light

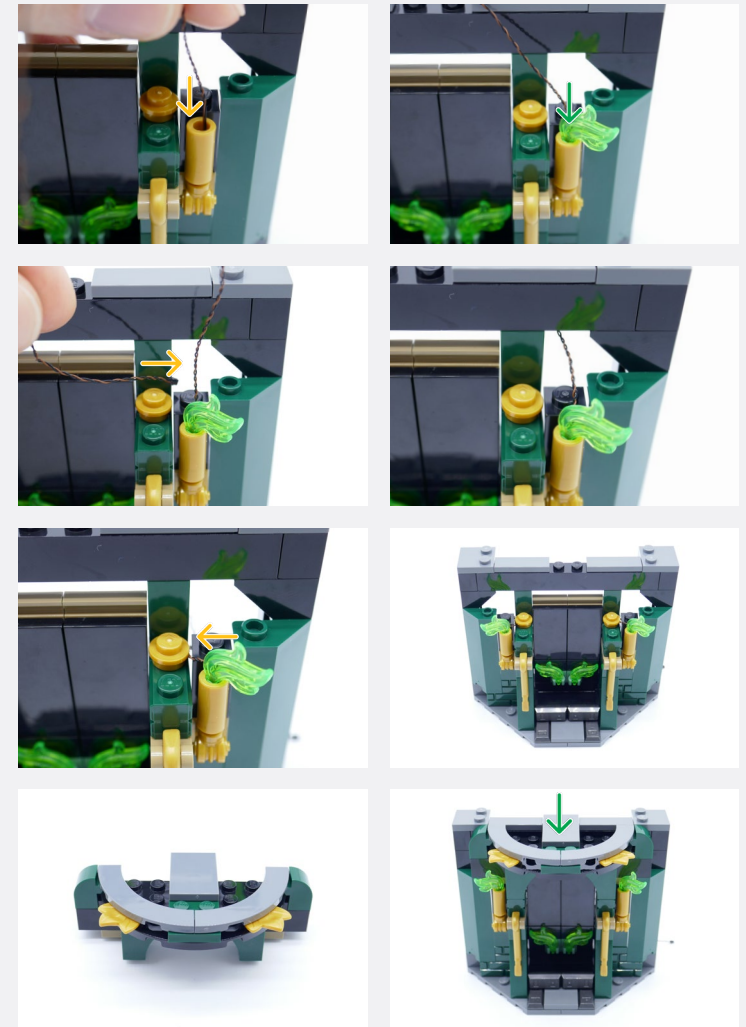
Legend

- DISCONNECT
- CONNECT / RECONNECT
- TURN / FLIP
- DIRECTIONAL
- TWIST / BRAID
- POWER ON TEST
- NOTE ICON

3

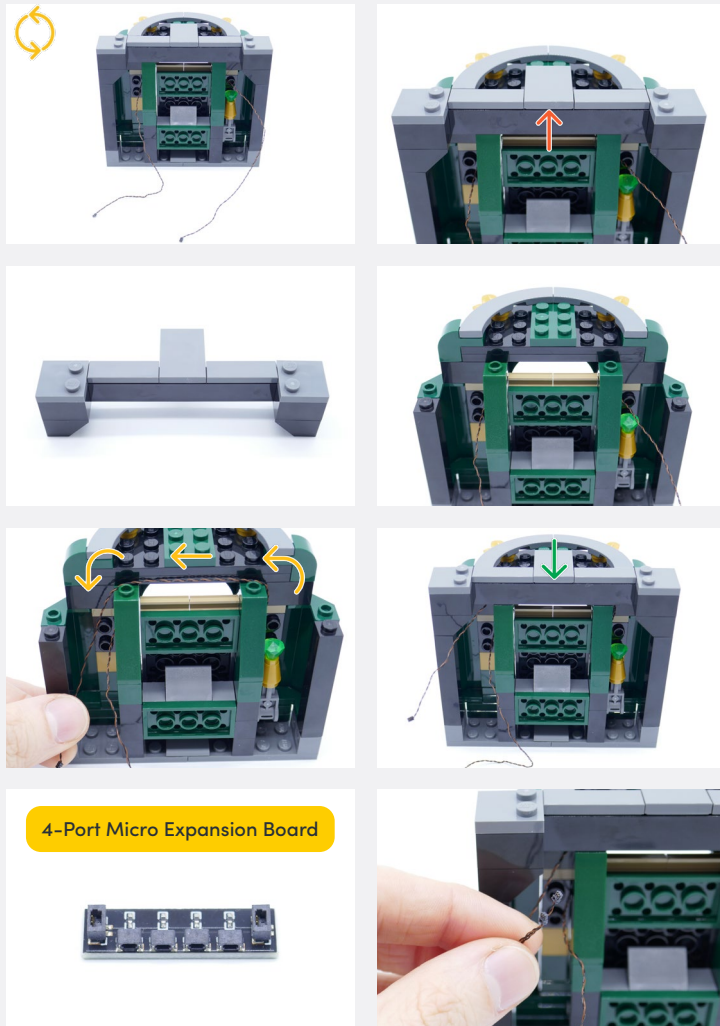


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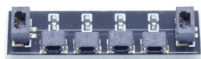


Legend

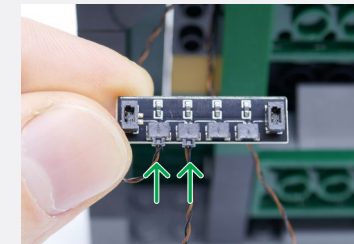
-  DISCONNECT
-  CONNECT / RECONNECT
-  TURN / FLIP
-  DIRECTIONAL
-  TWIST / BRAID
-  POWER ON TEST
-  NOTE ICON



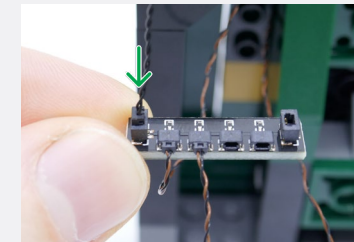
4-Port Micro Expansion Board



5



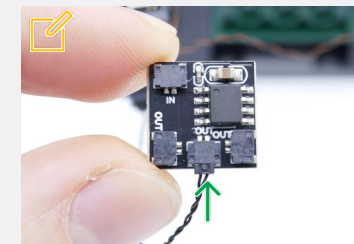
5cm Connecting Cable



Flicker Effects Board



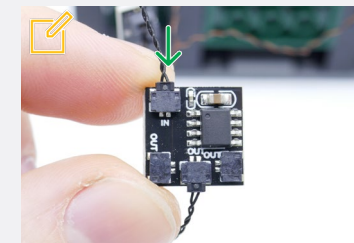
Connect the 5cm Connecting Cable from the 4-Port Micro Expansion Board into the "OUT" port of the Flicker Effects Board



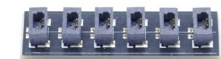
5cm Connecting Cable



Connect the 5cm Connecting Cable into the "IN" port of the Flicker Effects Board



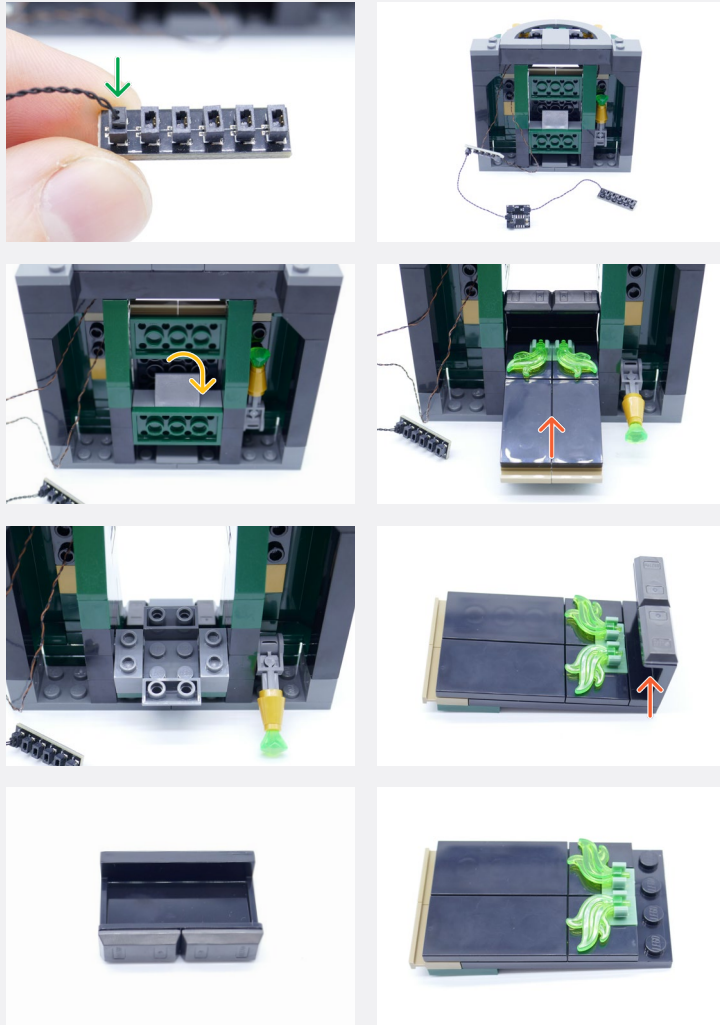
6-Port Expansion Board



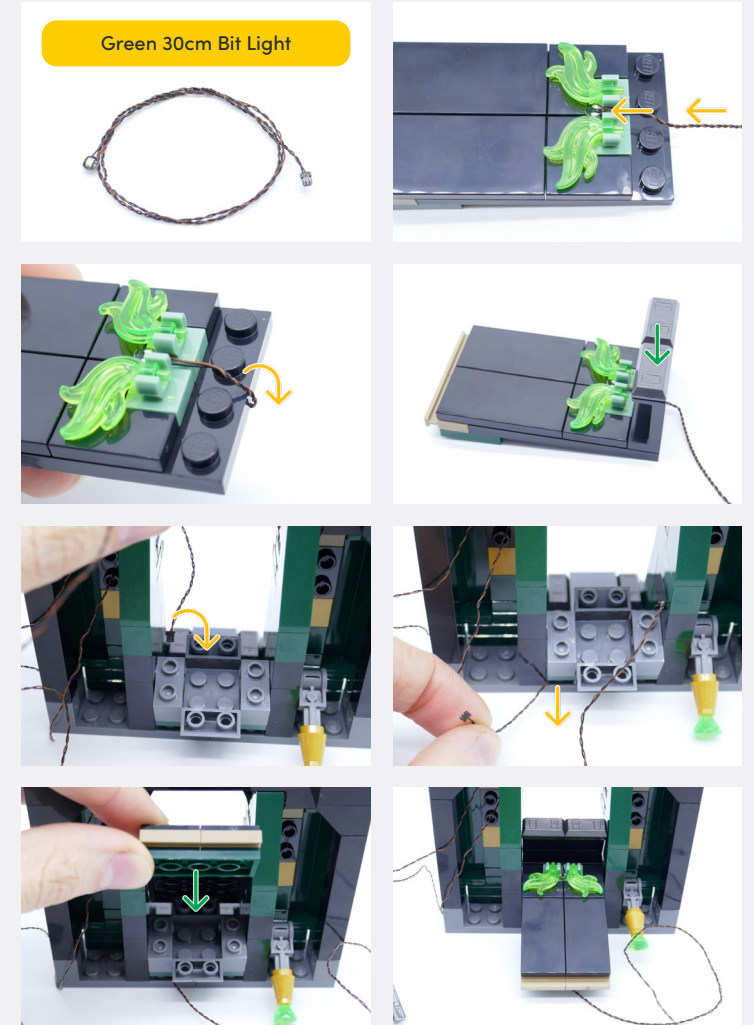
Legend

- DISCONNECT
- CONNECT / RECONNECT
- TURN / FLIP
- DIRECTIONAL
- TWIST / BRAID
- POWER ON TEST
- NOTE ICON

6

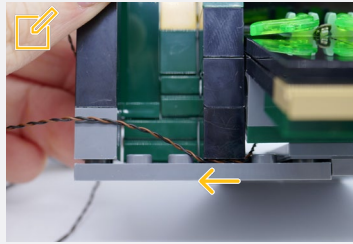
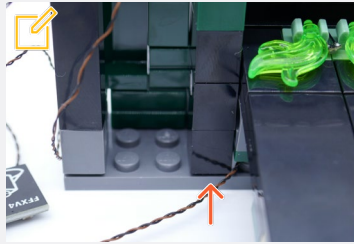


7

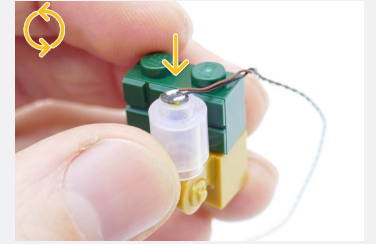
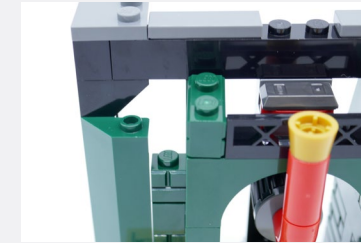
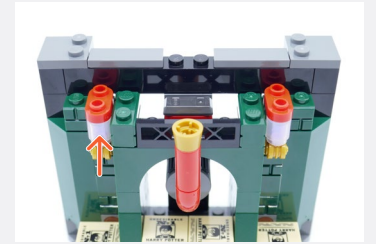
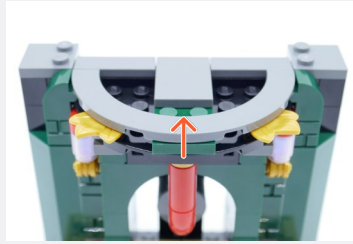
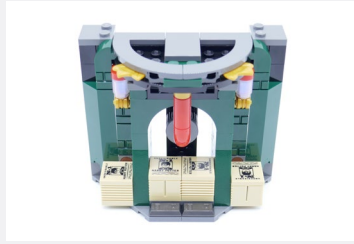
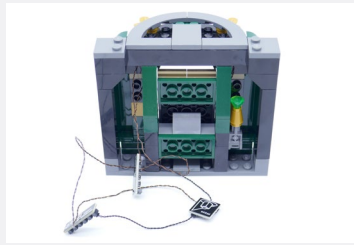
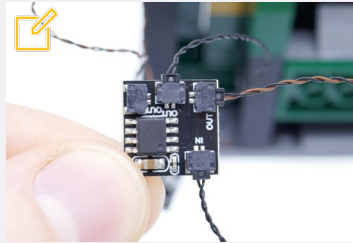
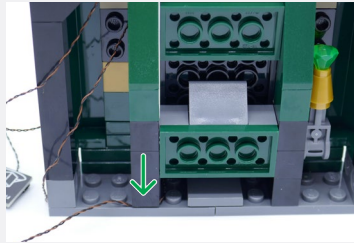


Legend → DISCONNECT → CONNECT / RECONNECT ↻ TURN / FLIP → DIRECTIONAL ↻ TWIST / BRAID ✨ POWER ON TEST 📝 NOTE ICON

Slightly disconnect the black bricks, then run the cable in between

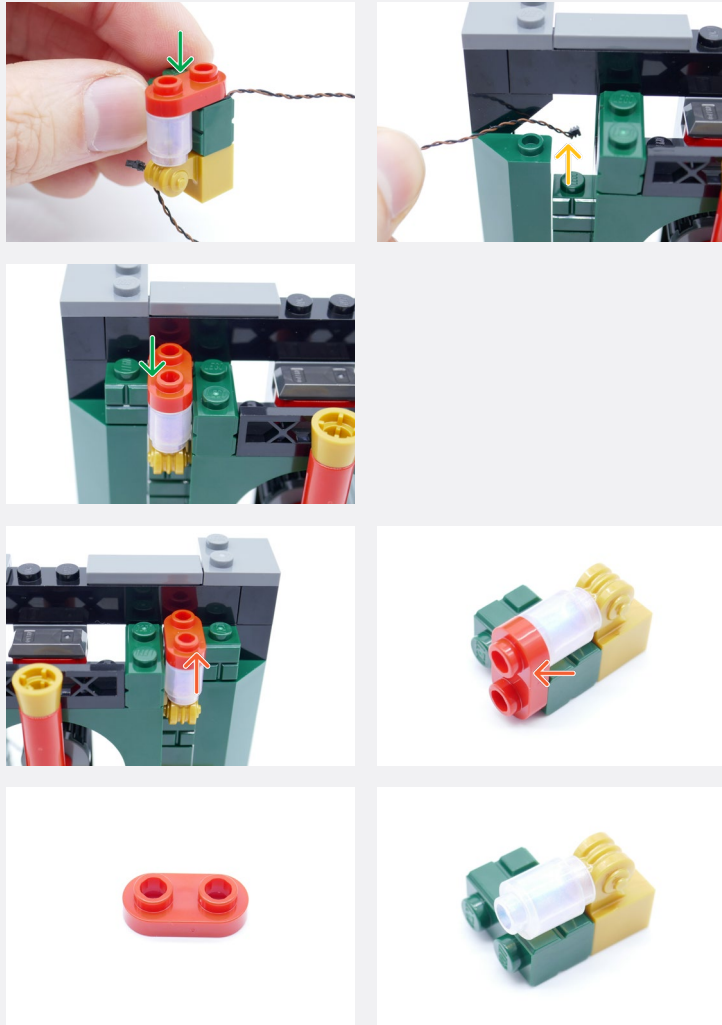


Connect the Green 30cm Bit Light into the "OUT" port of the Flicker Effects Board

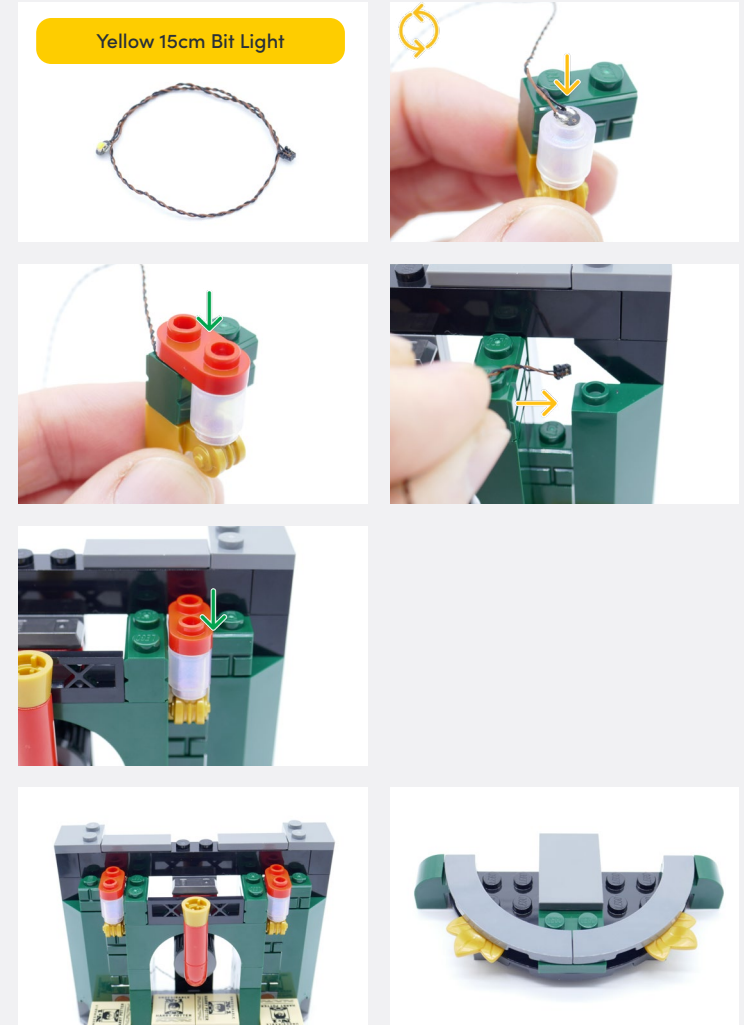


8

Legend DISCONNECT CONNECT / RECONNECT TURN / FLIP DIRECTIONAL TWIST / BRAID POWER ON TEST NOTE ICON



9



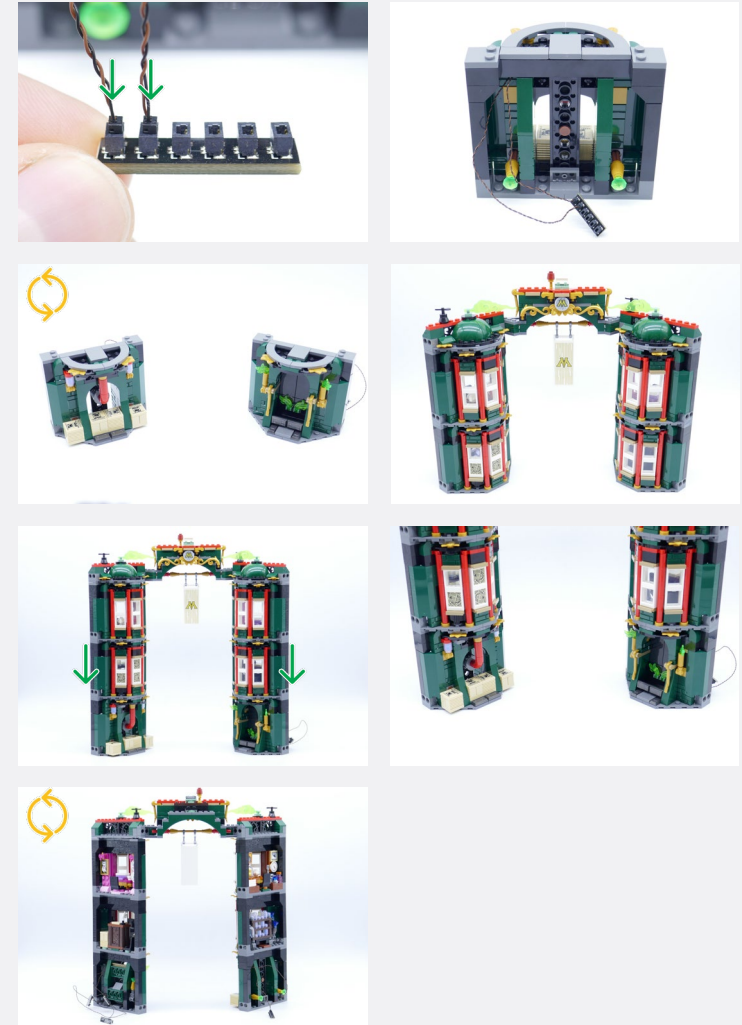
Yellow 15cm Bit Light

10

Legend → DISCONNECT → CONNECT / RECONNECT ↻ TURN / FLIP → DIRECTIONAL ↻ TWIST / BRAID ✨ POWER ON TEST 📝 NOTE ICON

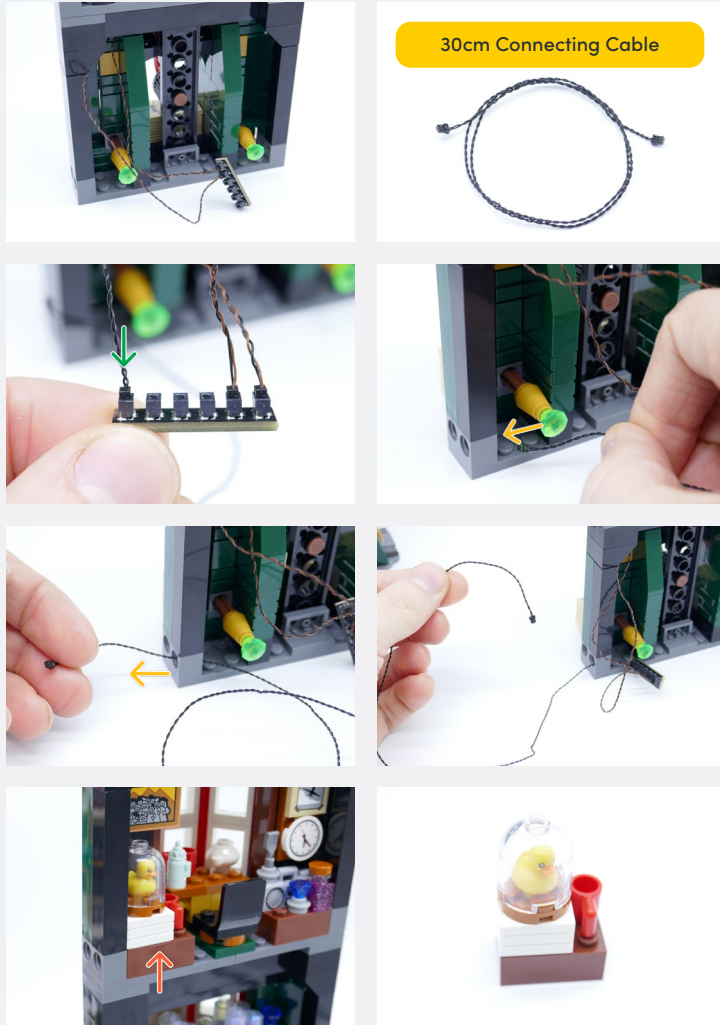


11

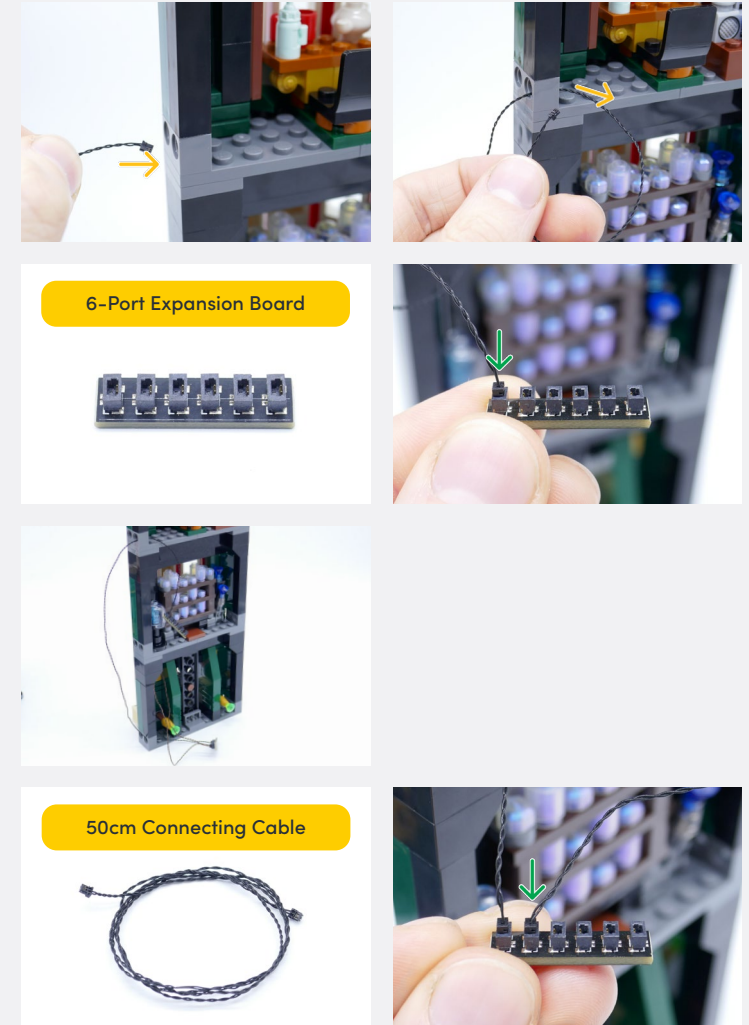


Legend → DISCONNECT → CONNECT / RECONNECT ↻ TURN / FLIP → DIRECTIONAL ↗↘ TWIST / BRAID ✨ POWER ON TEST 📝 NOTE ICON

12

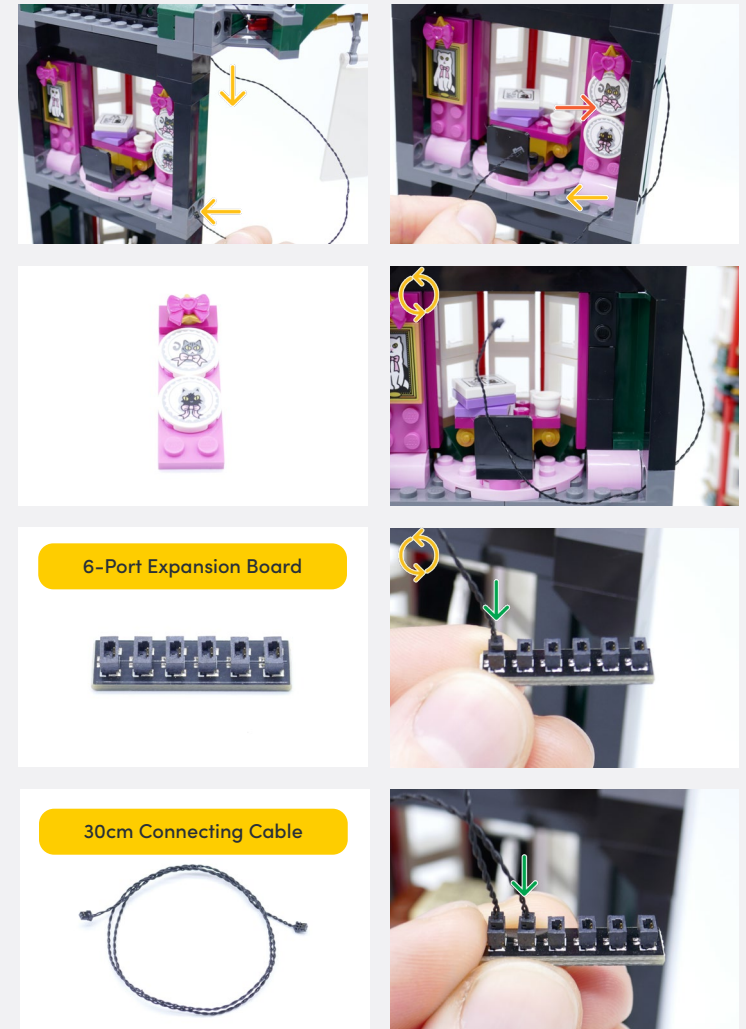
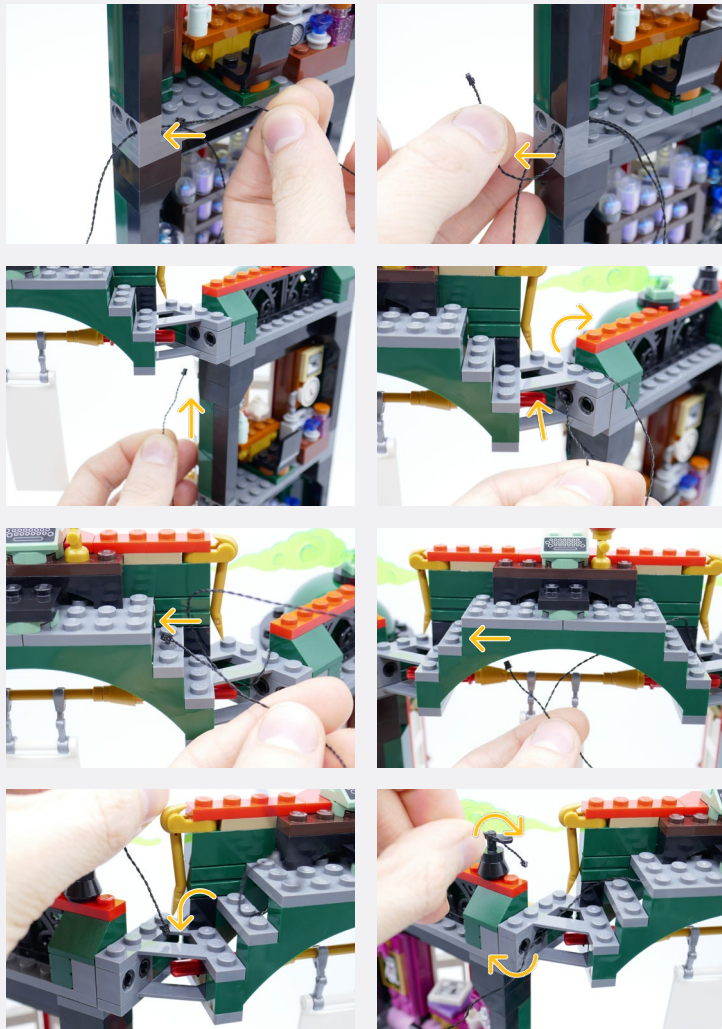


13



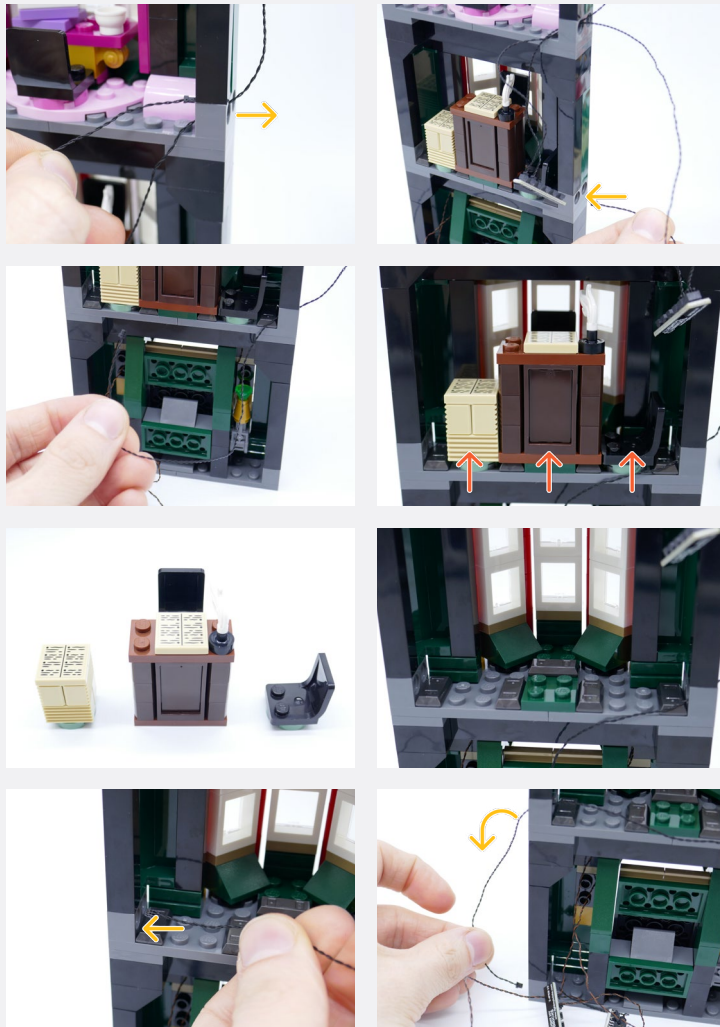
Legend

- DISCONNECT
- CONNECT / RECONNECT
- ↻ TURN / FLIP
- DIRECTIONAL
- ↻ TWIST / BRAID
- ✳ POWER ON TEST
- 📝 NOTE ICON

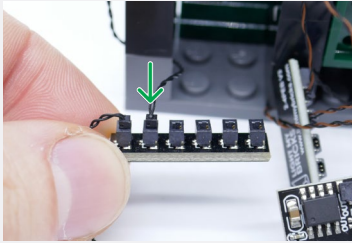


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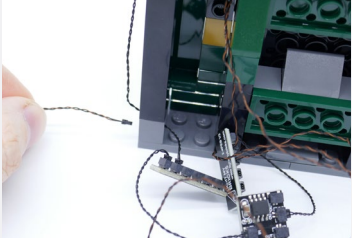
Legend → DISCONNECT → CONNECT / RECONNECT ↻ TURN / FLIP → DIRECTIONAL ↺ TWIST / BRAID ✨ POWER ON TEST 📝 NOTE ICON



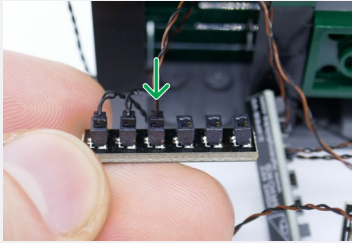
15



USB Power Cable



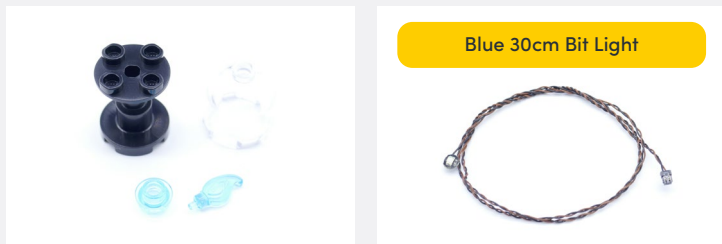
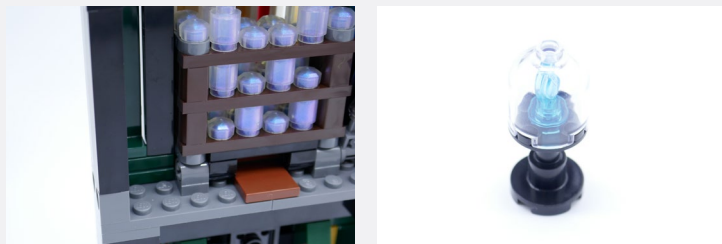
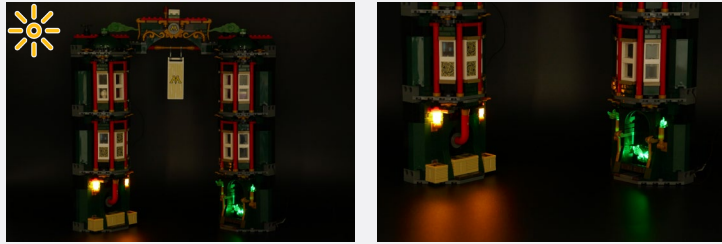
Connect the other end to a 5V USB Power Bank, 5V USB Wall Adaptor, or USB to AA Battery Pack (sold separately)



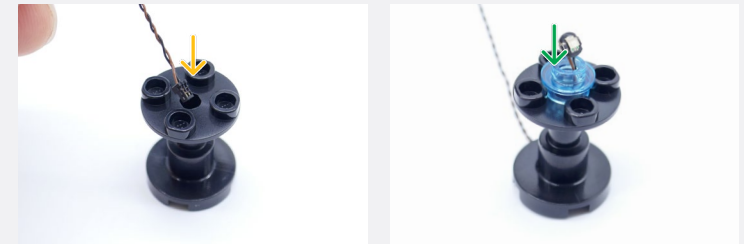
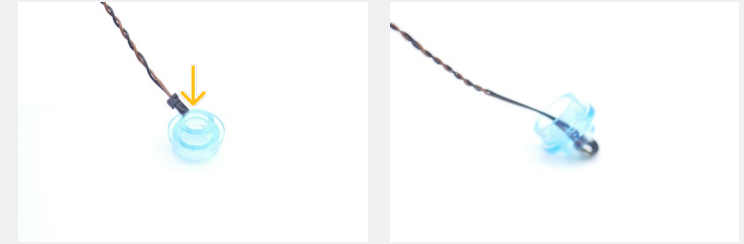
Legend DISCONNECT CONNECT / RECONNECT TURN / FLIP DIRECTIONAL TWIST / BRAID POWER ON TEST NOTE ICON

If you experience any issues with the lights not working and suspect an issue with a component, please try a different port on the expansion board to verify where the fault lies (with the light or expansion board). To correct any issues with expansion board ports, please view the section addressing expansion board issues in our troubleshooting section.

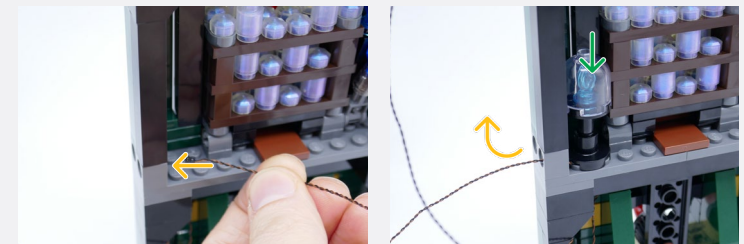
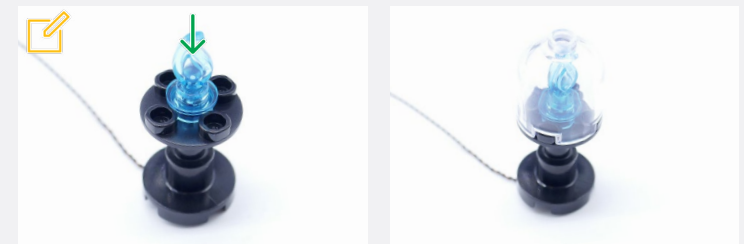
16



Blue 30cm Bit Light



Ensure the Blue Bit Light is placed behind the blue flame piece so it shines out through it



Legend DISCONNECT CONNECT / RECONNECT TURN / FLIP DIRECTIONAL TWIST / BRAID POWER ON TEST NOTE ICON

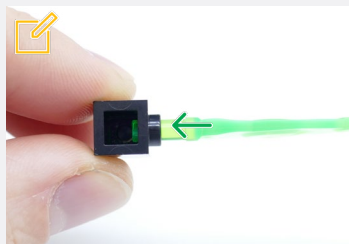
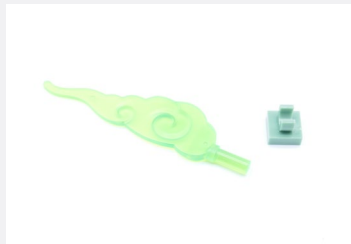
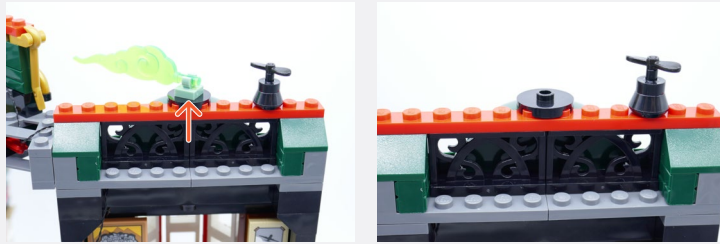
17

	<p>Round Plate 1x1 Open Stud - Black</p>
<p>White 15cm Bit Light</p>	

Legend

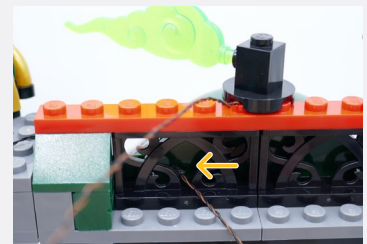
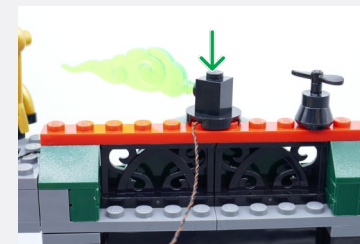
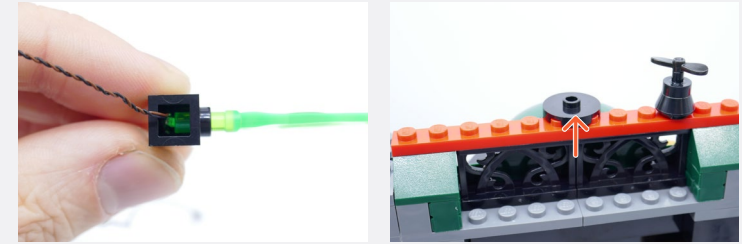
- DISCONNECT
- CONNECT / RECONNECT
- TURN / FLIP
- DIRECTIONAL
- TWIST / BRAID
- POWER ON TEST
- NOTE ICON

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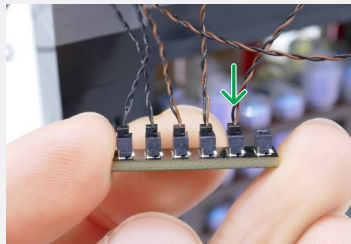
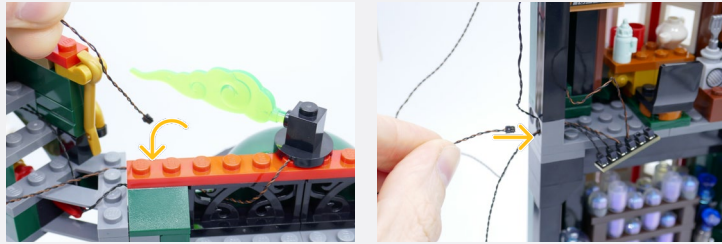


Partially connect the green cloud piece to the Brick

Place the Bit Light inside and fully connect the green cloud piece



Legend → DISCONNECT → CONNECT / RECONNECT ↻ TURN / FLIP → DIRECTIONAL ↻ TWIST / BRAID ✨ POWER ON TEST 📝 NOTE ICON

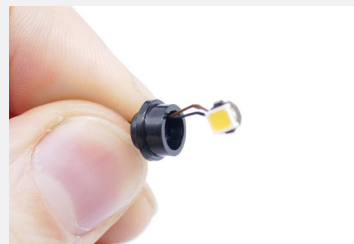


19

Round Plate 1x1 Open Stud - Black



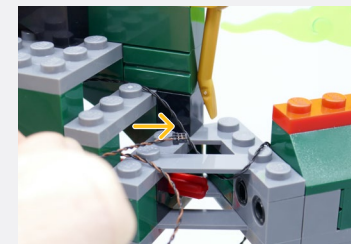
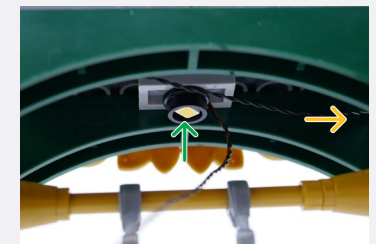
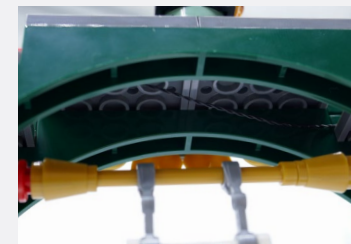
Warm White 30cm Large Bit Light



20

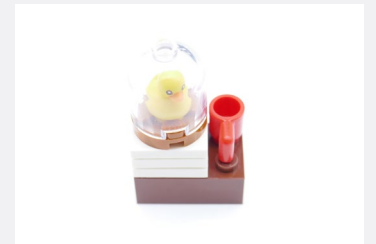
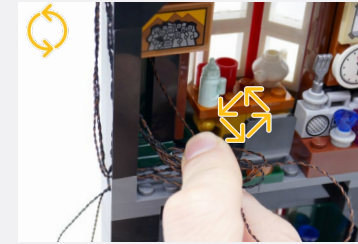
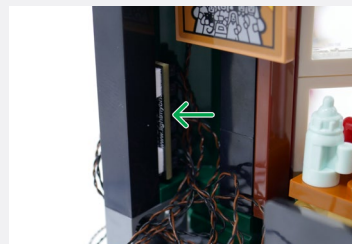
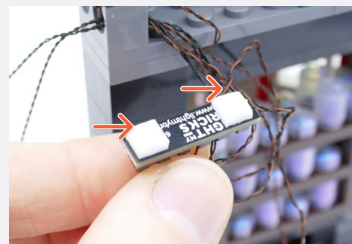
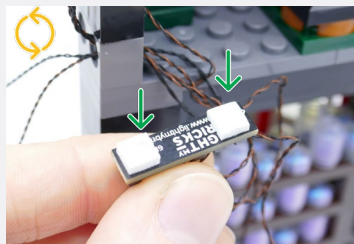
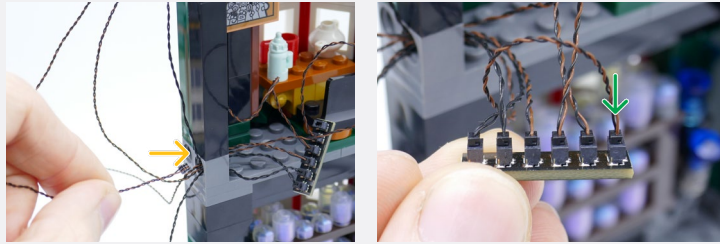


Plate 1x2 - Any Colour



Legend

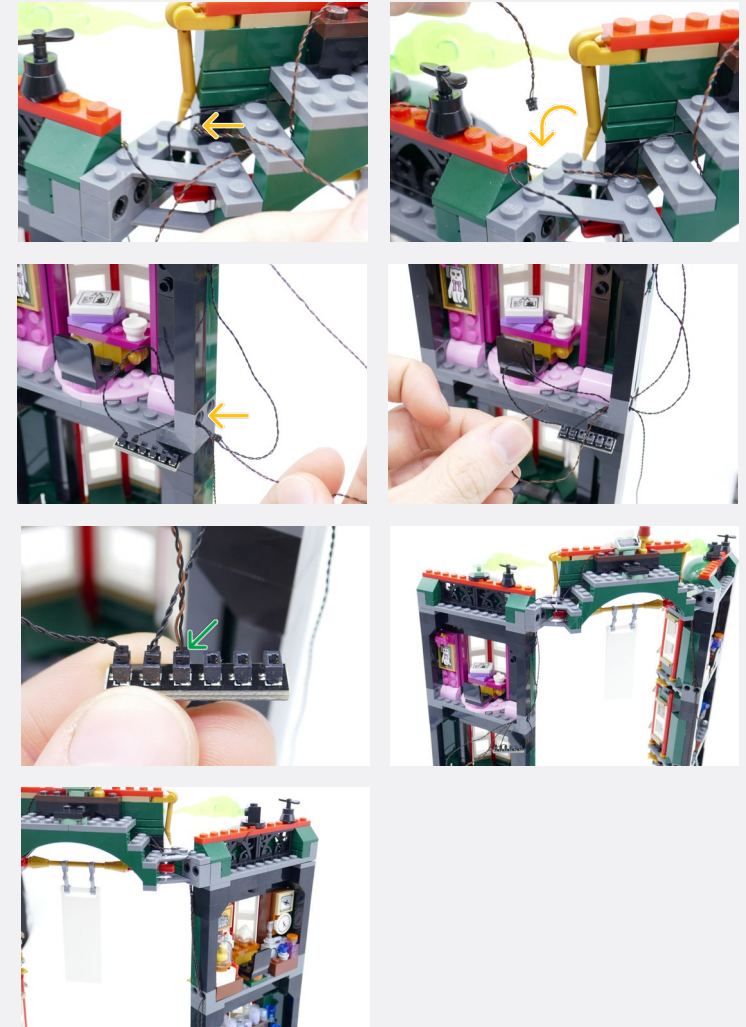
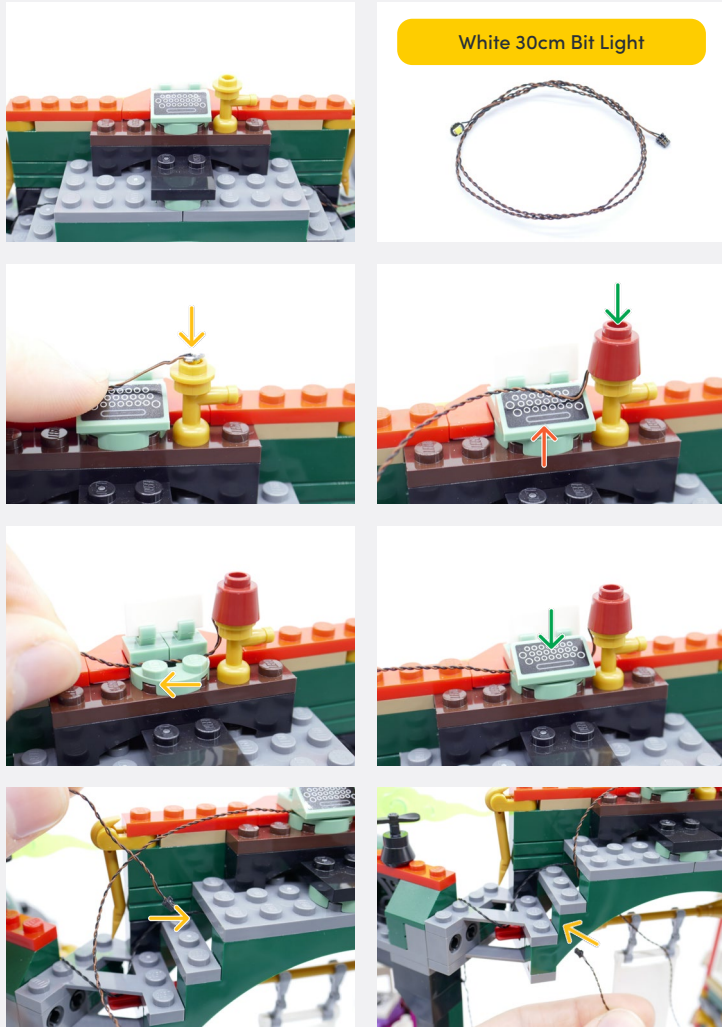
- DISCONNECT
- CONNECT / RECONNECT
- TURN / FLIP
- DIRECTIONAL
- TWIST / BRAID
- POWER ON TEST
- NOTE ICON



Ensure the cables are routed in the corner and down the tower

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Legend → DISCONNECT → CONNECT / RECONNECT ↻ TURN / FLIP → DIRECTIONAL ↔ TWIST / BRAID ✨ POWER ON TEST 📝 NOTE ICON



Legend

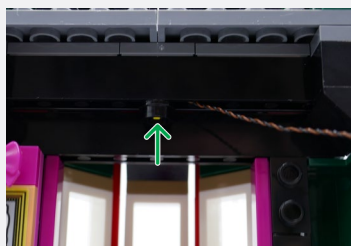
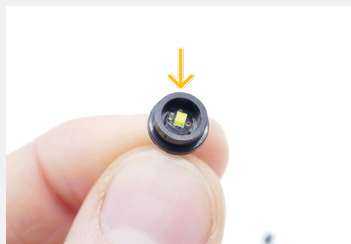
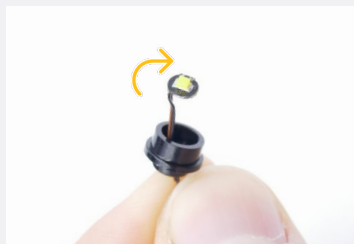
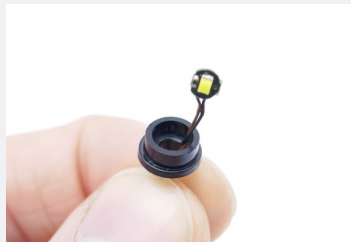
- DISCONNECT
- CONNECT / RECONNECT
- TURN / FLIP
- DIRECTIONAL
- TWIST / BRAID
- POWER ON TEST
- NOTE ICON

22

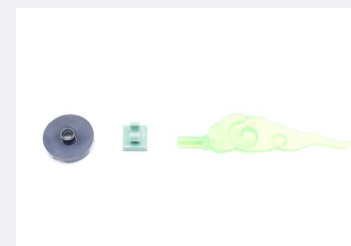
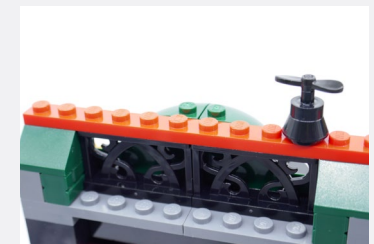
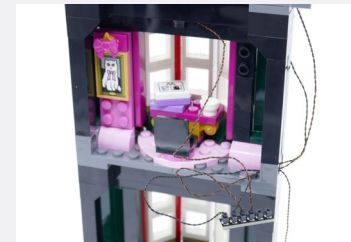
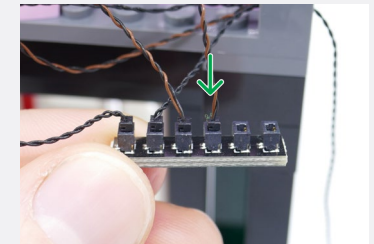
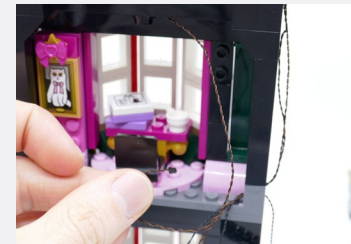
Round Plate 1x1 Open Stud - Black



White 15cm Bit Light



23

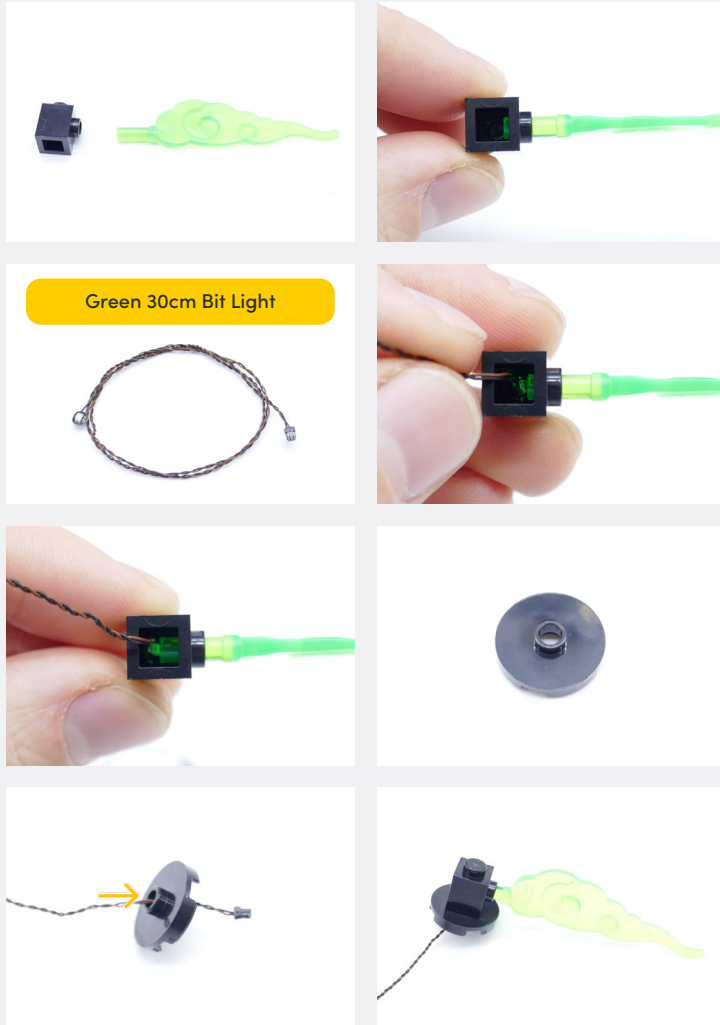


Brick 1x1 Modified with Stud on one side - Black

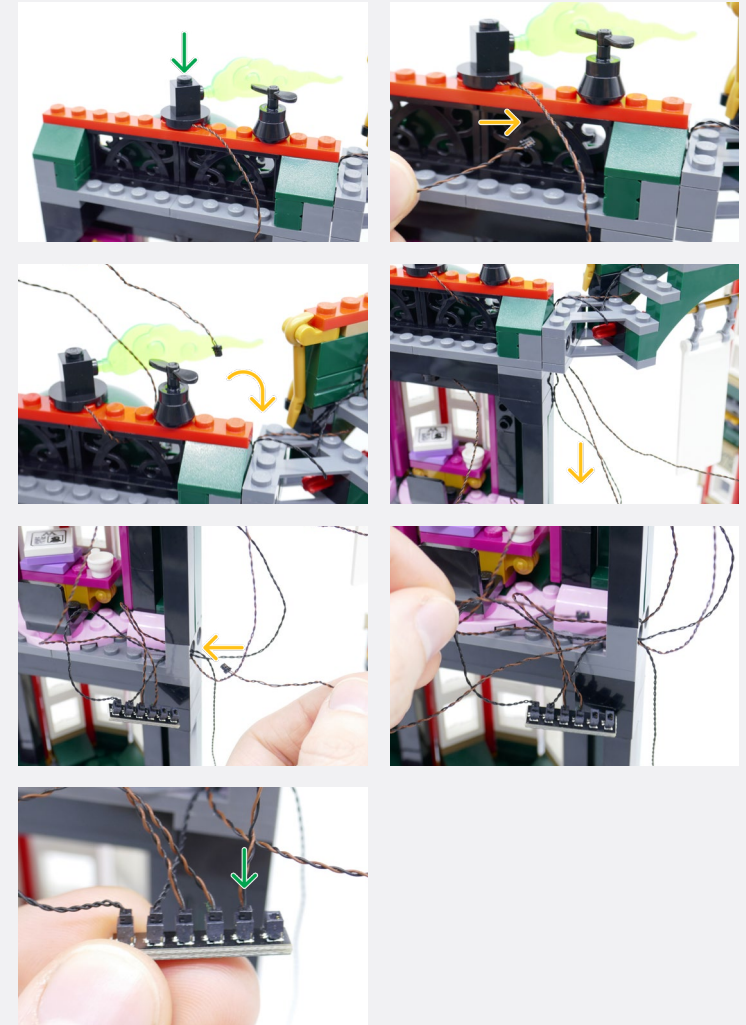


Legend





24



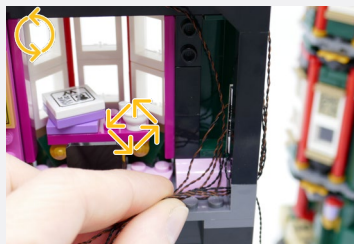
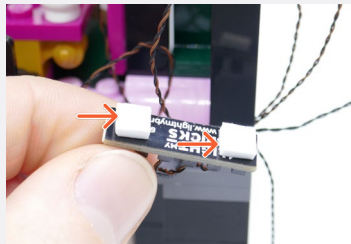
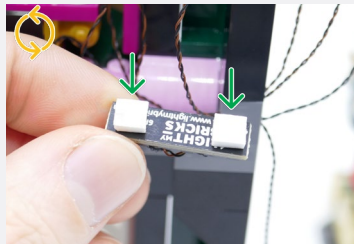
Legend → DISCONNECT → CONNECT / RECONNECT ↻ TURN / FLIP → DIRECTIONAL ↻ TWIST / BRAID * POWER ON TEST 📝 NOTE ICON

25

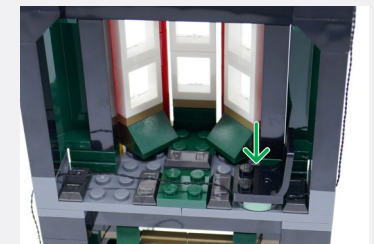
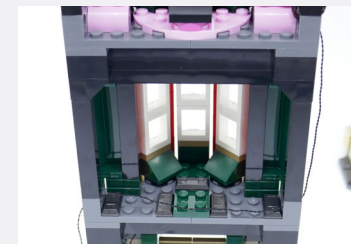
Ensure the cables are routed in the corner and down the tower



2x Adhesive Square



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Legend



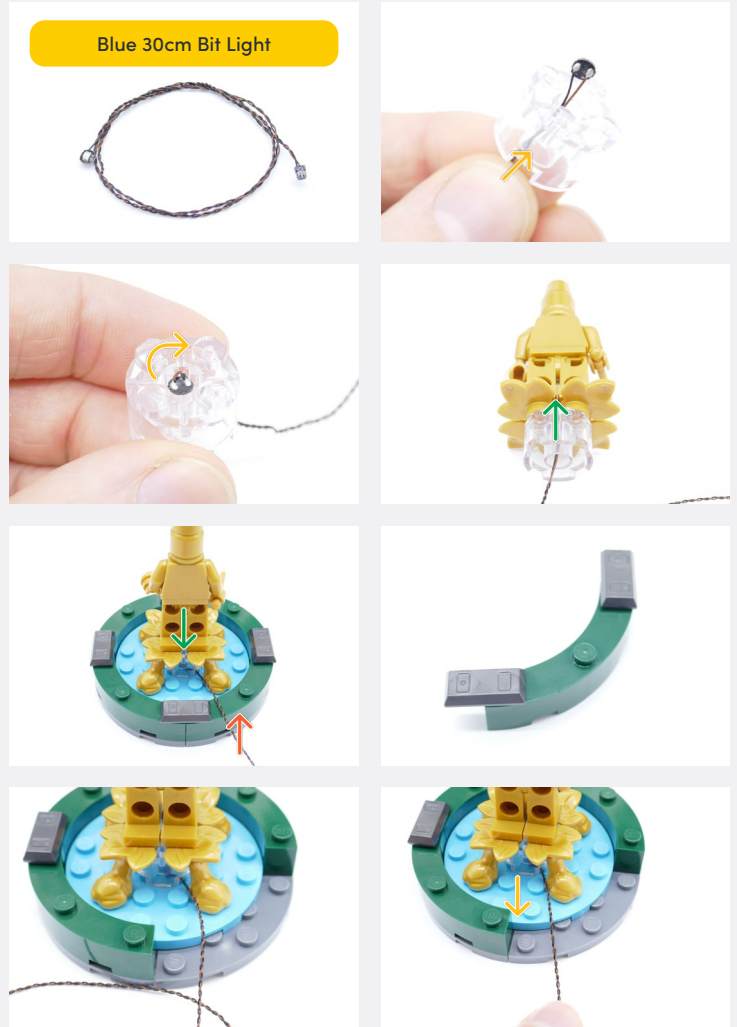
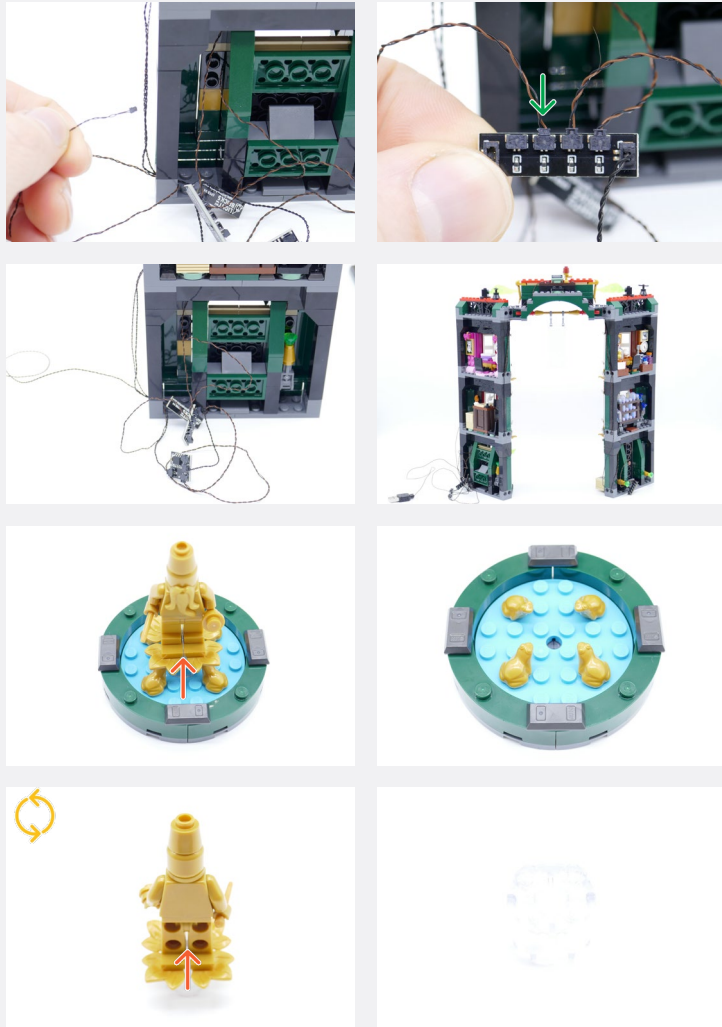
	<p>White 30cm Micro Bit Light</p>
	<p>Round Plate 1x1 Open Stud - White</p>
<p> Ensure the Micro Bit Light is to the left side of the hole, so the flame piece can be connected</p>	<p>Candle Flame</p>

27

Legend

- DISCONNECT
- CONNECT / RECONNECT
- TURN / FLIP
- DIRECTIONAL
- TWIST / BRAID
- POWER ON TEST
- NOTE ICON

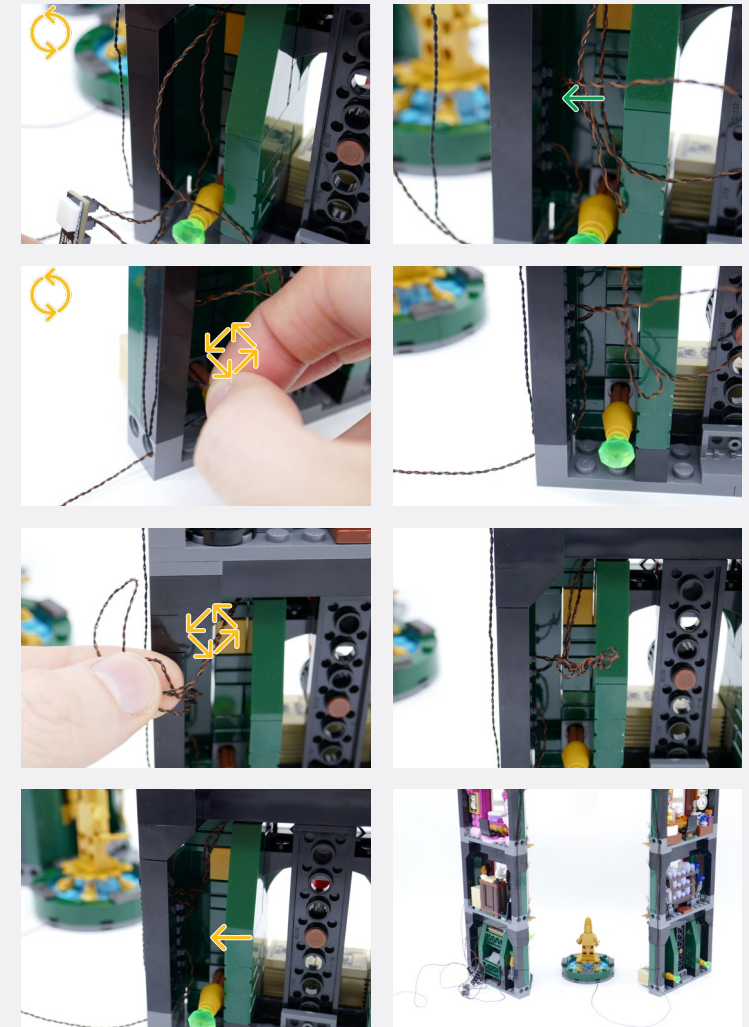
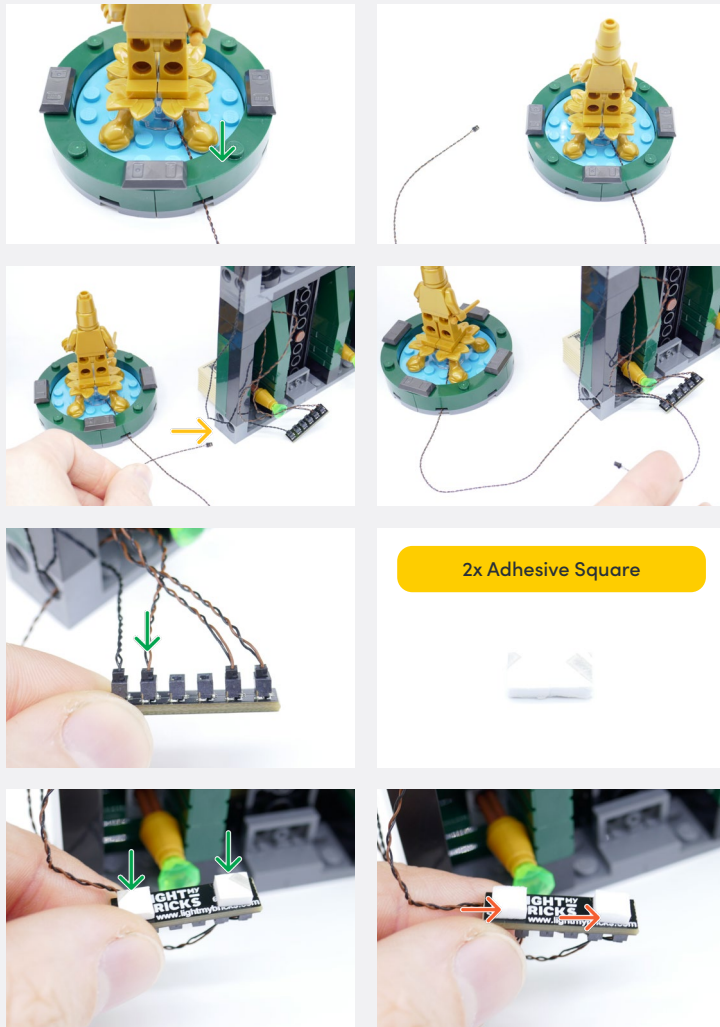
28



Blue 30cm Bit Light

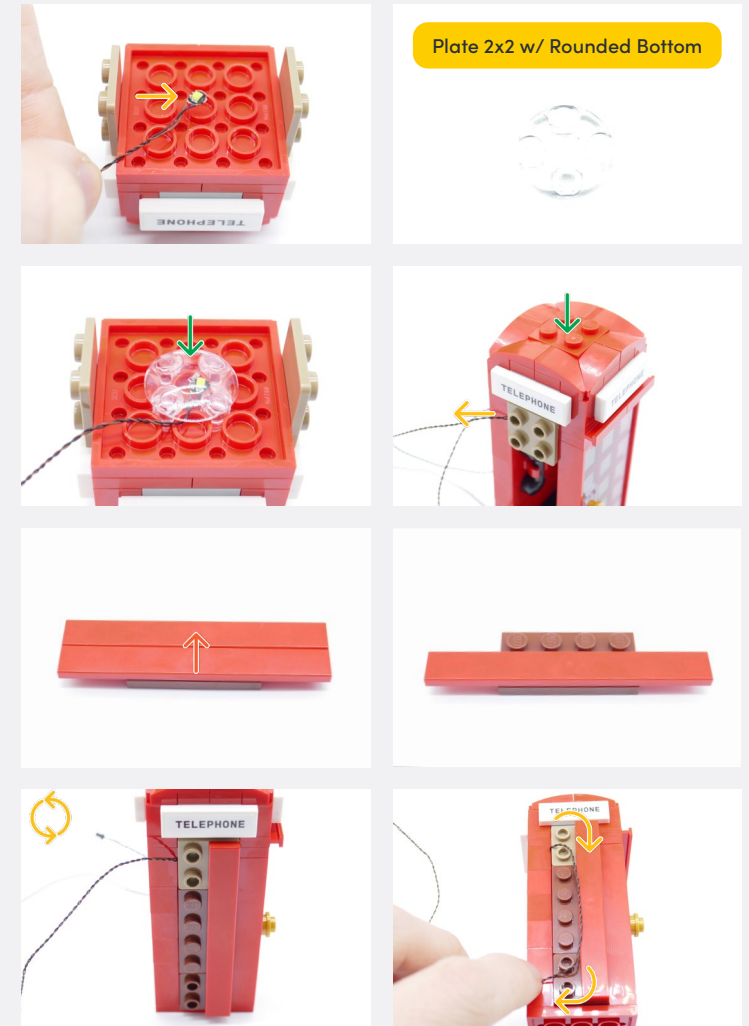
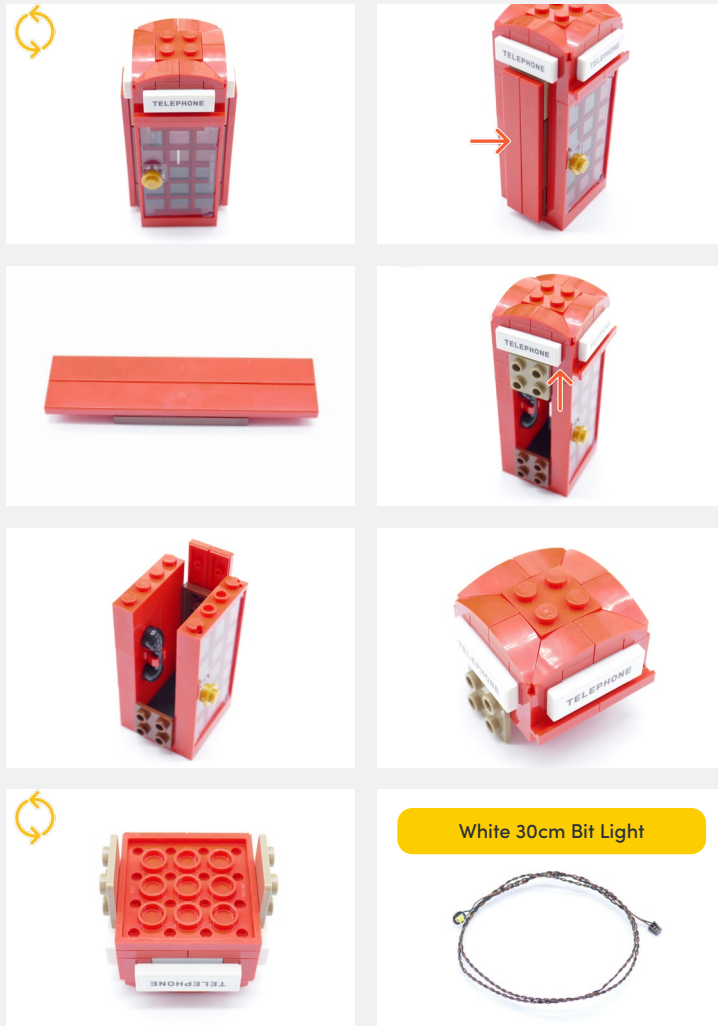
Legend → DISCONNECT → CONNECT / RECONNECT ↻ TURN / FLIP → DIRECTIONAL ↻ TWIST / BRAID ✨ POWER ON TEST 📝 NOTE ICON

29



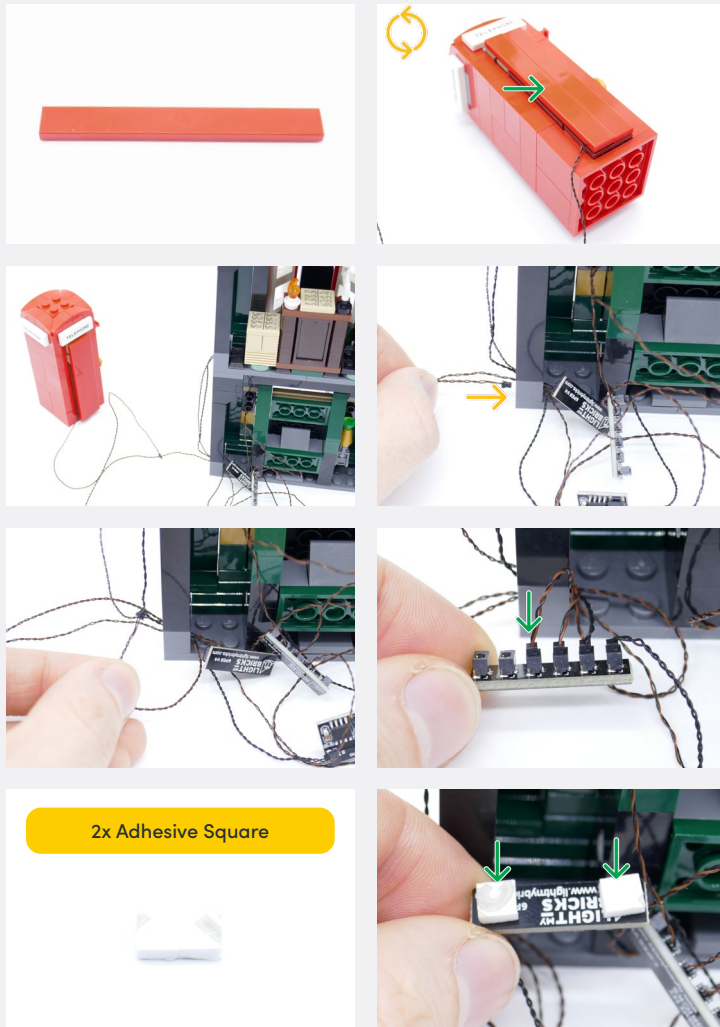
Legend → DISCONNECT → CONNECT / RECONNECT ↻ TURN / FLIP → DIRECTIONAL ↔ TWIST / BRAID ✨ POWER ON TEST 📝 NOTE ICON

30

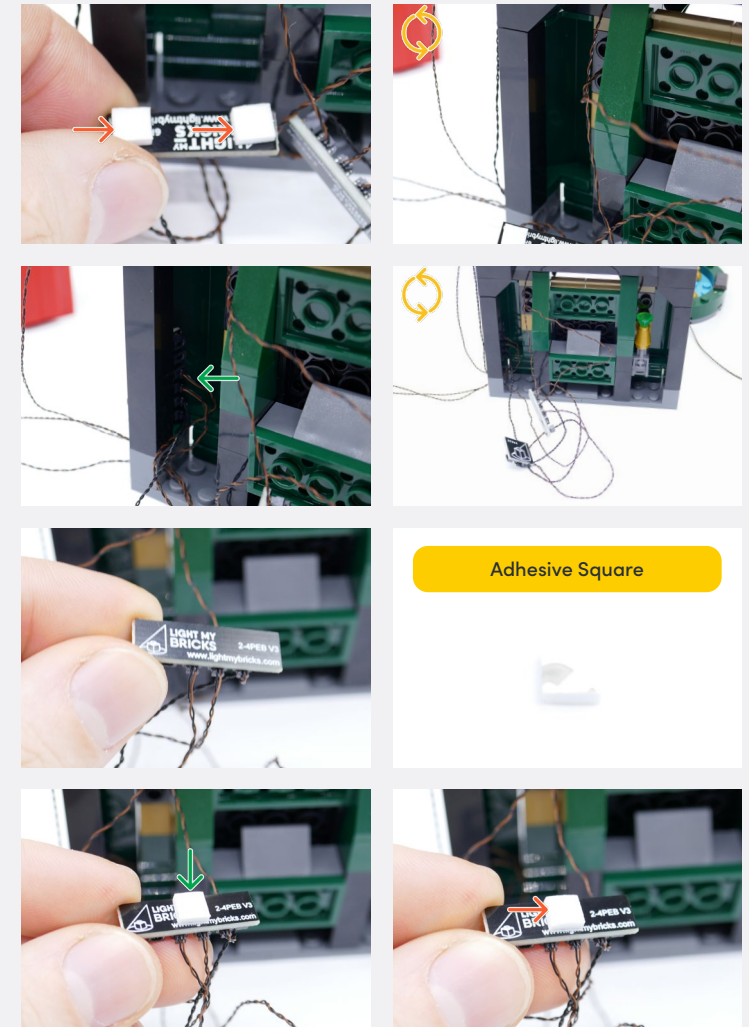


Legend → DISCONNECT → CONNECT / RECONNECT ↻ TURN / FLIP → DIRECTIONAL ↻ TWIST / BRAID * POWER ON TEST 📝 NOTE ICON

31

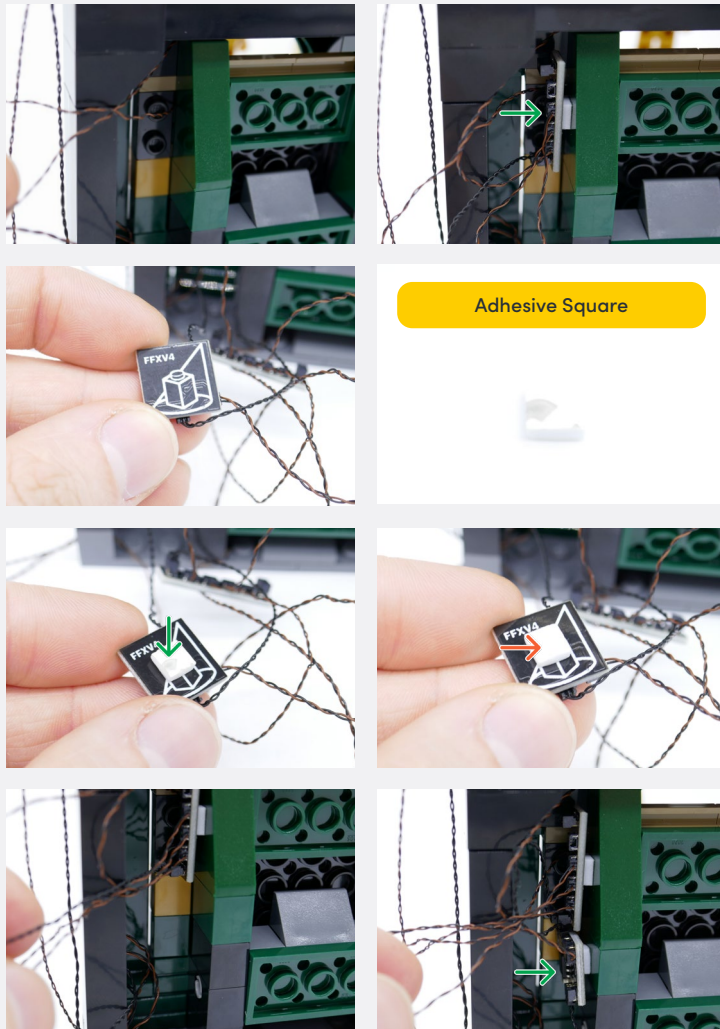


32



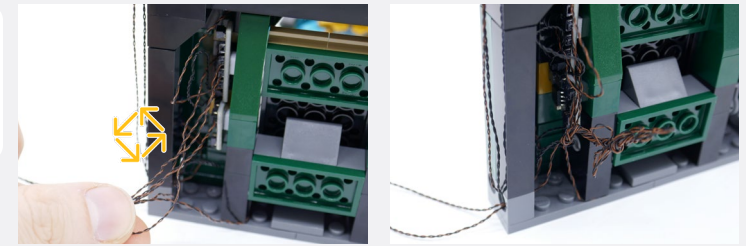
Legend

- DISCONNECT
- CONNECT / RECONNECT
- TURN / FLIP
- DIRECTIONAL
- TWIST / BRAID
- POWER ON TEST
- NOTE ICON



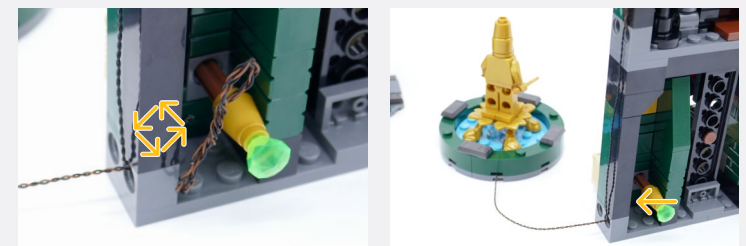
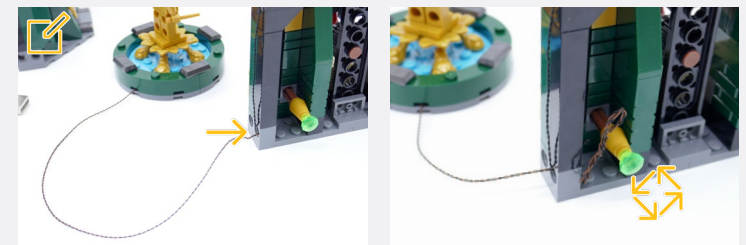
Adhesive Square

✂ Exclude the USB Power Cable and Bit Light from the Phone Booth from the twisting of cables



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✂ Follow this step if you wish to shorten the cables to the Fountain and the Phonebox



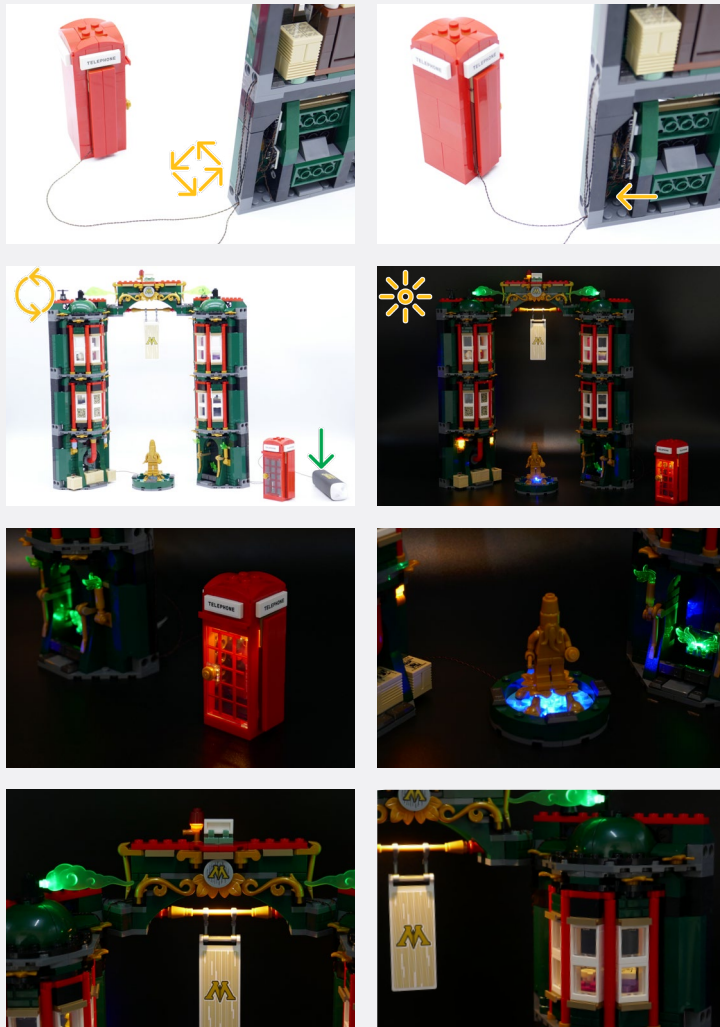
Legend

- DISCONNECT
- CONNECT / RECONNECT
- TURN / FLIP
- DIRECTIONAL
- TWIST / BRAID
- POWER ON TEST
- NOTE ICON

If you experience any issues with the lights not working and suspect an issue with a component, please try a different port on the expansion board to verify where the fault lies (with the light or expansion board). To correct any issues with expansion board ports, please view the section addressing expansion board issues in our troubleshooting section.

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Connect the other end to a 5V USB Power Bank, 5V USB Wall Adaptor, or USB to AA Battery Pack (sold separately)



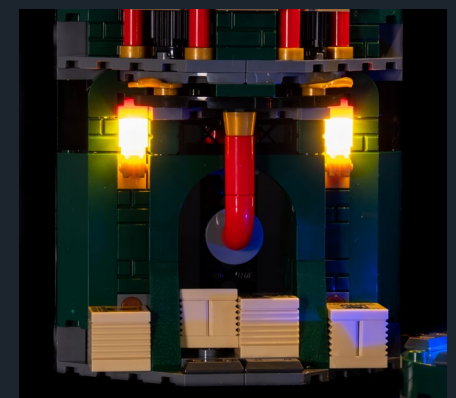
You should have these parts left over that were removed from the LEGO set



Legend DISCONNECT CONNECT / RECONNECT TURN / FLIP DIRECTIONAL TWIST / BRAID POWER ON TEST NOTE ICON

FINAL PRODUCT

This finally completes installation of the Light My Bricks
LEGO® Harry Potter The Ministry of Magic #76403 Light Kit.





TROUBLESHOOTING

Light My Bricks lighting kits contain individual components that are very small and can be easily damaged if not handled correctly.

To prevent unnecessary damage to components, we highly recommend that the User Guide section, **“Important things to note”** is read carefully. Follow the handling procedures in the User Guide to help prevent faults and damages to your Light My Bricks components.

If you are experiencing issues with your Light My Bricks set, watch our troubleshooting video or read on for a list of common causes to help you troubleshoot.

Troubleshooting

Firstly, ensure that the batteries have power using a battery charge gauge.

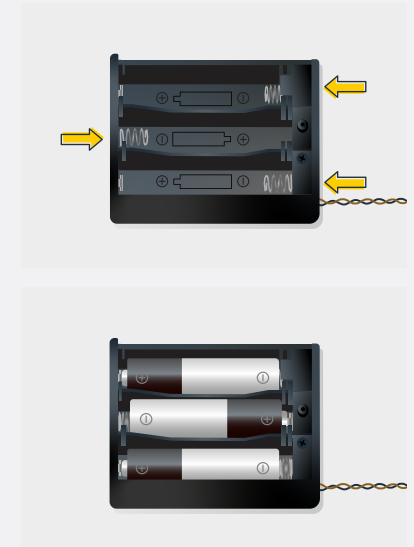
If the batteries have no power, replace the batteries.

If the batteries still have power, check to see if the batteries have been inserted correctly into the battery pack.

Check for AA batteries using the AA battery pack

Inside the battery pack are symbols indicating which direction the AA battery should be inserted. The flat side of the battery should be paired with the spring side of the battery pack.

If the batteries have been installed correctly and your kit still isn't operating correctly, the next step is to check the wiring.



Troubleshooting

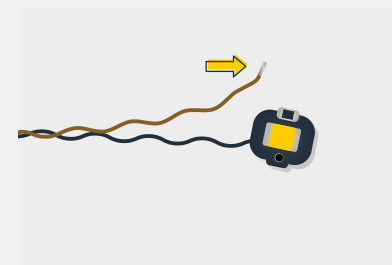
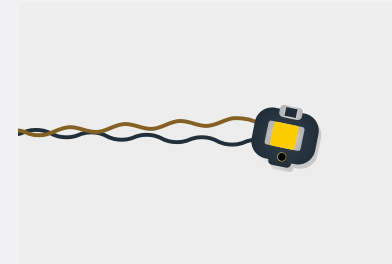
Check Your Wires

In order for Light My Bricks components to fit in between and underneath LEGO® bricks, the components need to be very small. Due to this nature, Light My Bricks components can be easily damaged when not handled correctly.

Be careful when removing unpacked components out of the packaging and ensure not to forcibly pull at the wires as this can damage the soldering that attach the wires to the LEDs.

If the wiring is detached from the LED itself, the light will not operate.

When connecting lights to your LEGO set, check that there are no pinched wires underneath or in between bricks and plates. When the wires are pinched and the exposed wires are touching each other, this can cause a crosswire and the lights to not function correctly.



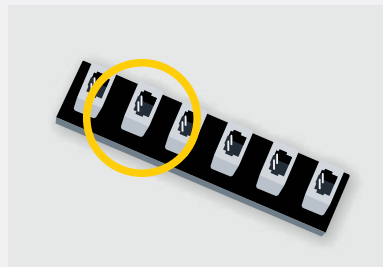
Troubleshooting

Check Your Expansion Board Ports/ Strip Light Ports / Effects Board Ports

It is important to note that connectors can only be inserted to the expansion board, strip light, or effects board ports in one direction.

Forcibly inserting connectors in the incorrect direction will result in damaging the pins inside each of the ports on your component board.

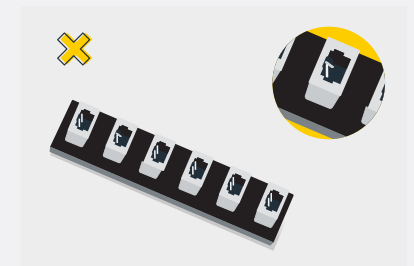
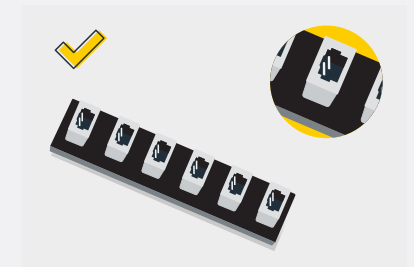
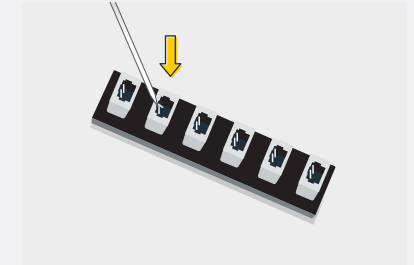
Not only will a light connected to the damaged port not work, but if the pins inside the port are bent to a point they are touching each other, this can result in all other lights in the system to stop working. This is a short circuit.



A short circuit can also 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 component due to a bent pin, try the following steps:

If you look carefully inside each of the ports, each port contains 2 small pins that should be straight. You will be able to identify a faulty port if it has any bent pins.





CONTACT US

If you have an enquiry regarding the online shop, our products or a general enquiry please refer to our Frequently Asked Questions webpage.

Alternatively, you can contact our Customer Services team by visiting our online support portal.

support.lightmybricks.com

We thank you for purchasing this product and hope you enjoy!



lightmybricks.com