



**LIGHT^{MY}
BRICKS**



LEGO® HOGWARTS ASTRONOMY TOWER

#75969 LIGHT KIT

INSTALLATION GUIDE

Light My Bricks



LEGO® HOGWARTS ASTRONOMY TOWER #75969 LIGHT KIT INSTALLATION GUIDE

Hi There!

We're here to help you get started on the LEGO®
Hogwarts Astronomy Tower (75969) 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:



- 6 x White 15cm Bit Light
- 3 x White 30cm Bit Light
- 2 x Cool White 15cm Bit Light
- 3 x Warm White 15cm Micro Bit Light
- 1 x Warm White 30cm Micro Bit Light
- 1 x Warm White 15cm Large Bit Light



- 2 x 6-Port Expansion Board
- 1 x 8-Port Expansion Board
- 1 x 2-4 Port Micro Expansion Board



- 1 x Flicker Effects Board



- 2 x 15cm Connecting Cable
- 2 x 5cm Connecting Cable



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

ASSORTED BRICKS:



- 2 x Round Plate 1x1 – Trans Dark Green
- 1 x Technic Ball Joint – White
- 4 x Plate 2x2 W Rounded Bottom – Trans Clear

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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.

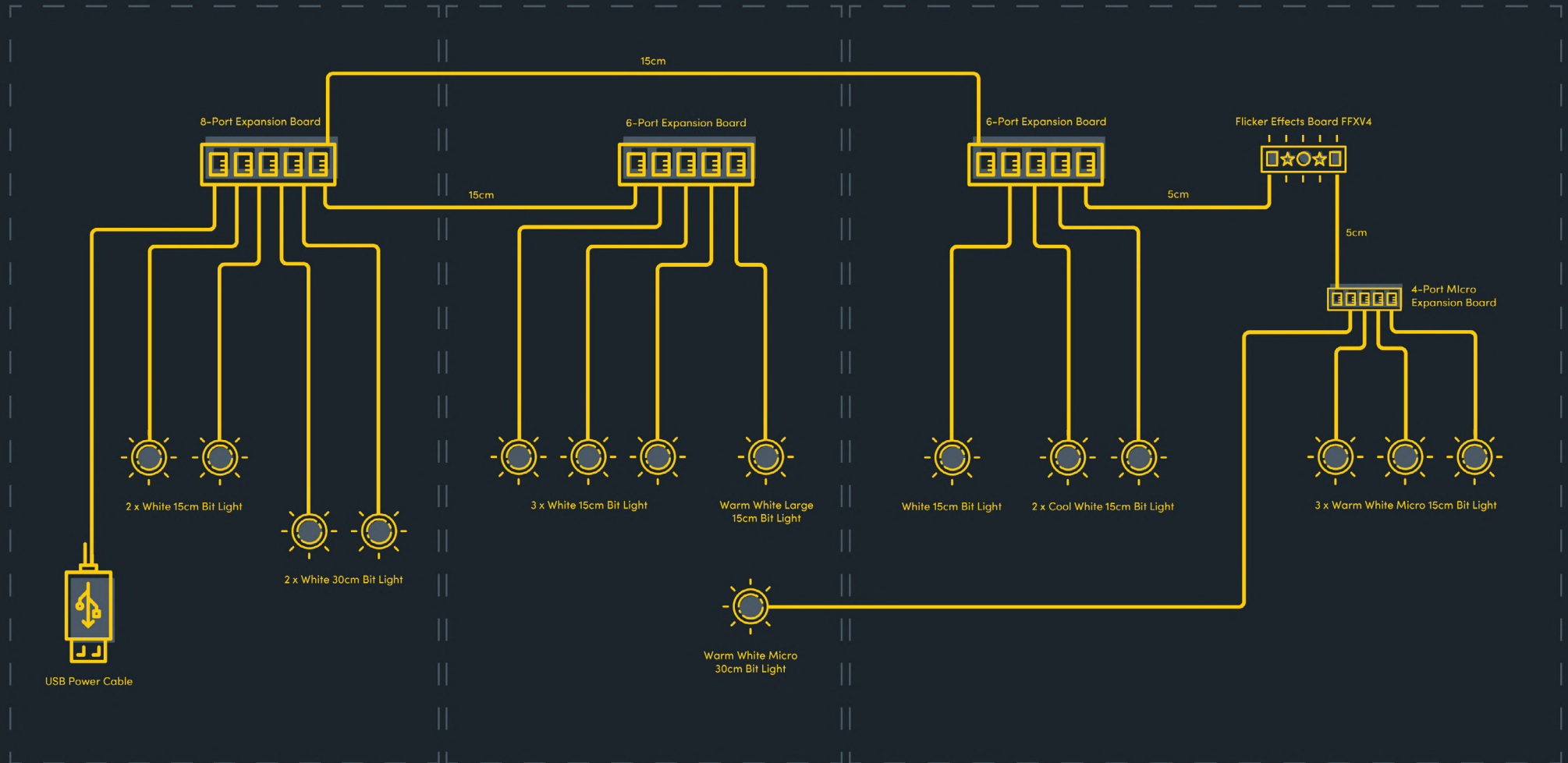


BLUEPRINT

Steps 1-10

Steps 11-19

Steps 20-29





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



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

2



Legend

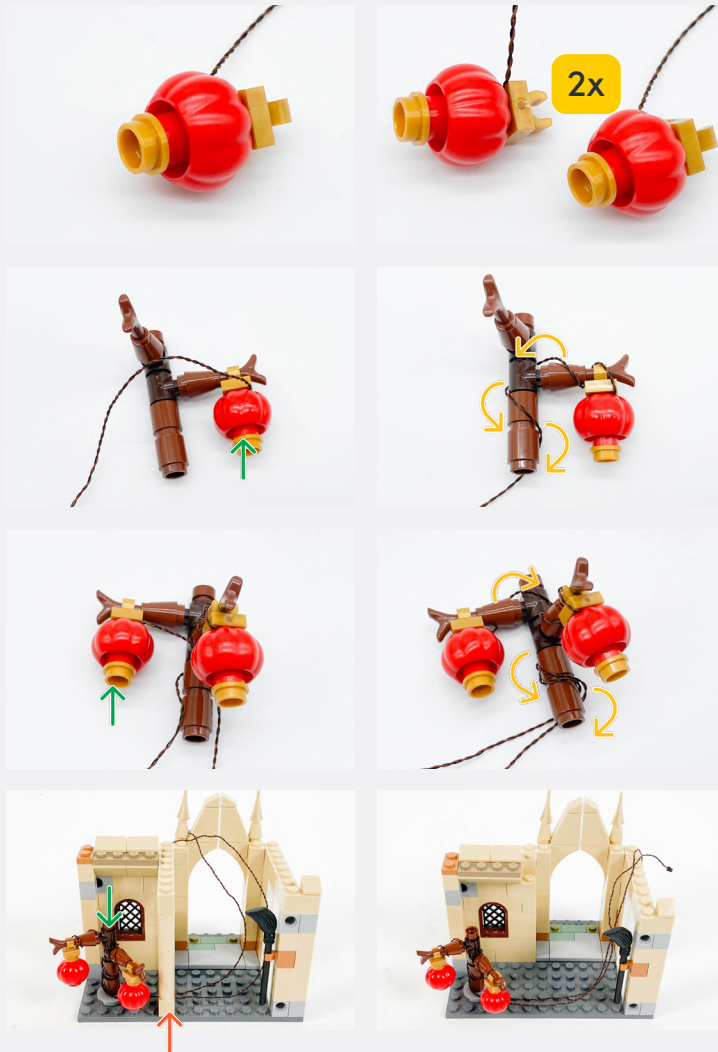
- DISCONNECT
- CONNECT / RECONNECT
- TURN / FLIP
- DIRECTIONAL
- TWIST / BRAID
- POWER ON TEST
- NOTE ICON



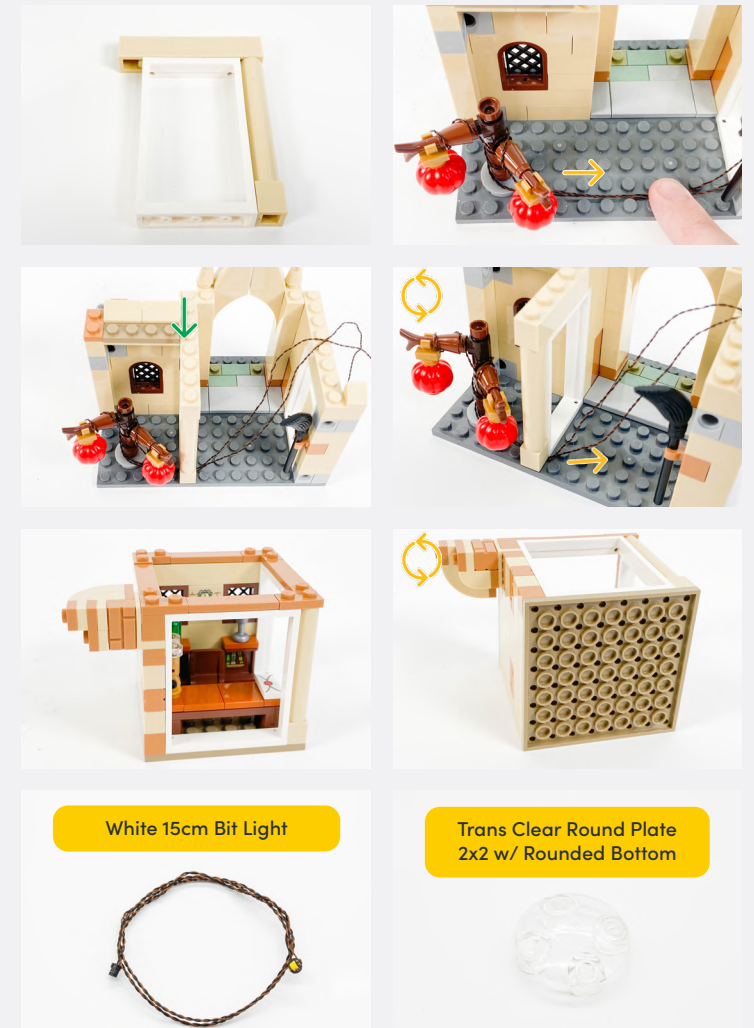
3



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



4



White 15cm Bit Light

Trans Clear Round Plate 2x2 w/ Rounded Bottom

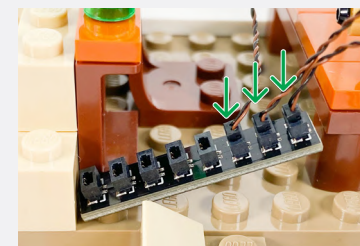
Legend → DISCONNECT → CONNECT / RECONNECT ↻ TURN / FLIP → DIRECTIONAL ↻ TWIST / BRAID * POWER ON TEST 📝 NOTE ICON



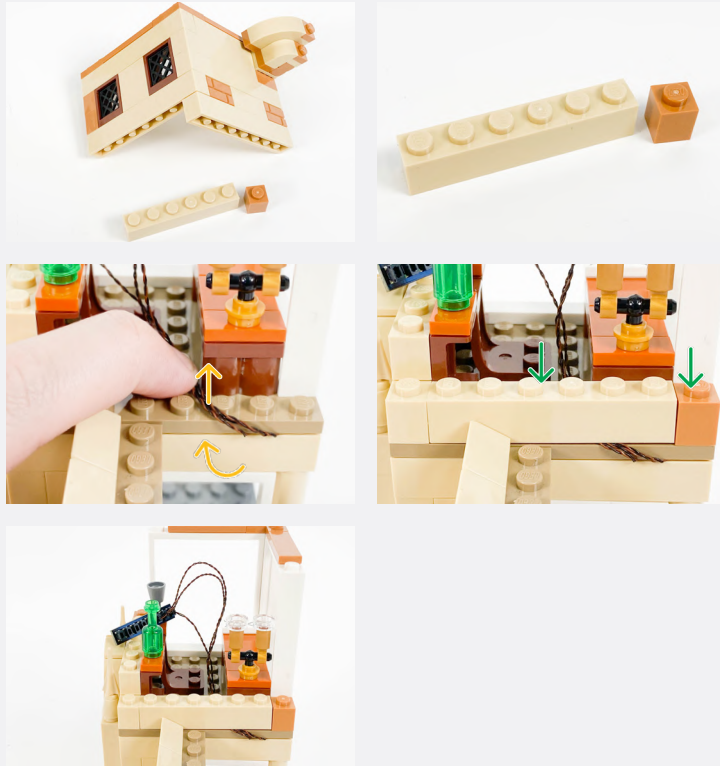
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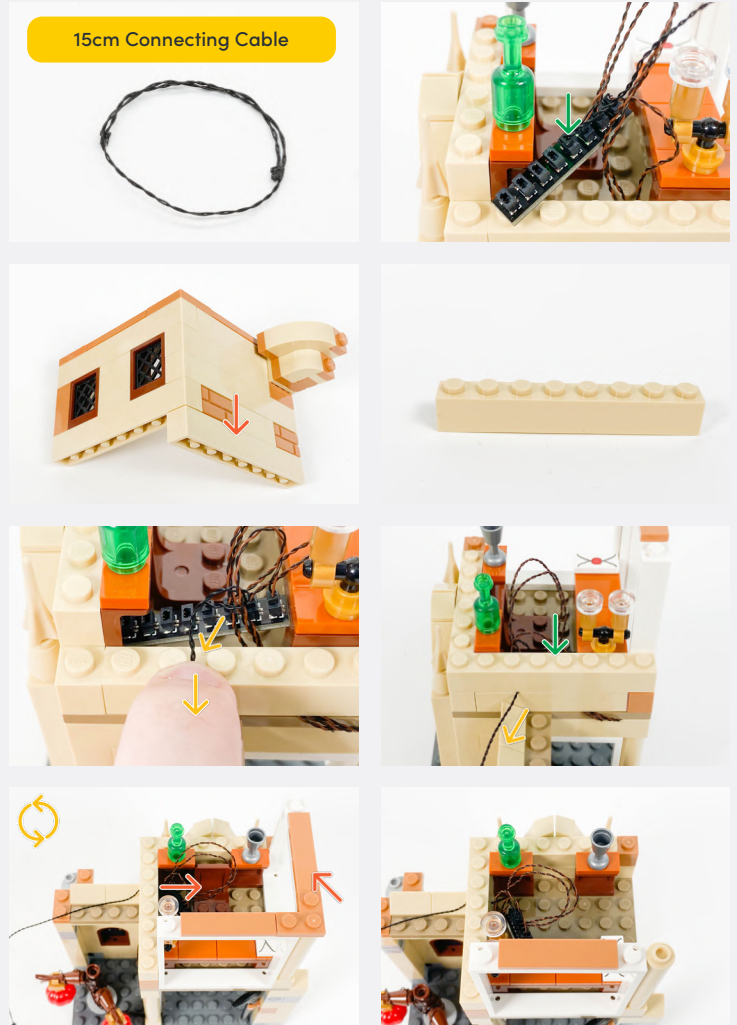
8-Port Expansion Board



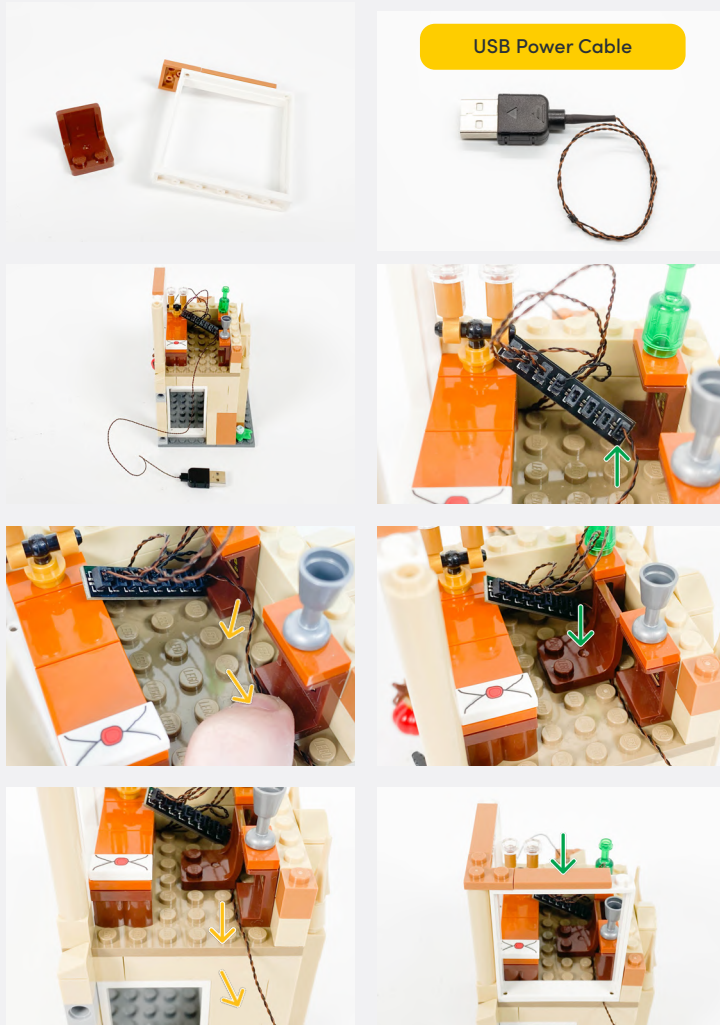
Legend → DISCONNECT → CONNECT / RECONNECT ↻ TURN / FLIP → DIRECTIONAL ↻ TWIST / BRAID * POWER ON TEST 📝 NOTE ICON



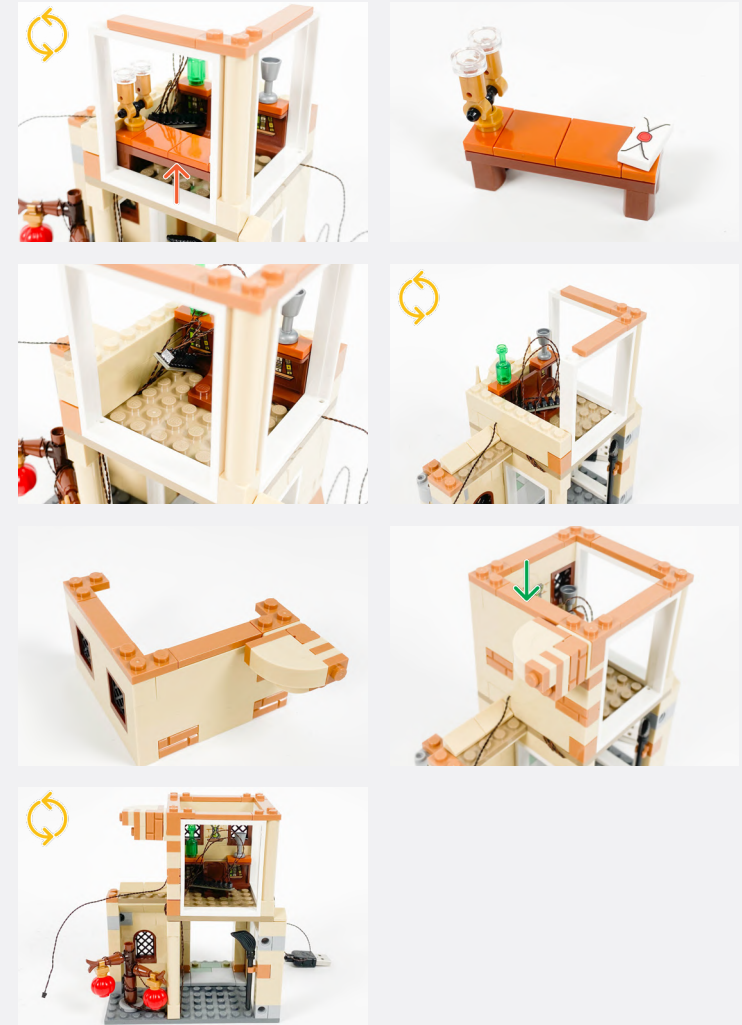
6



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



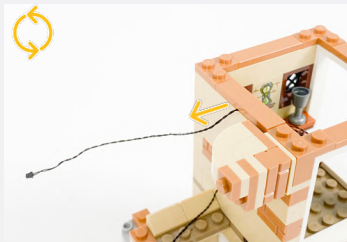
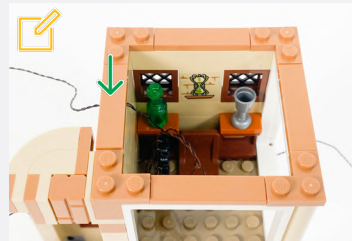
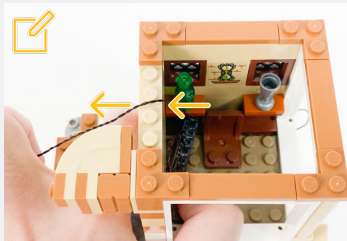
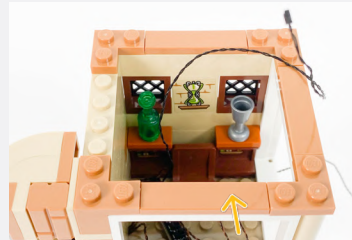
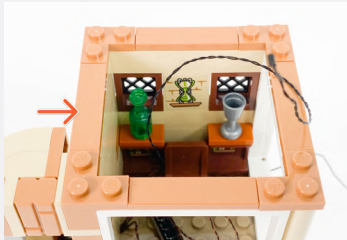
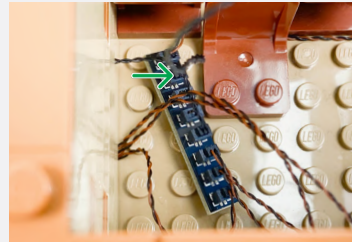
7



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

8

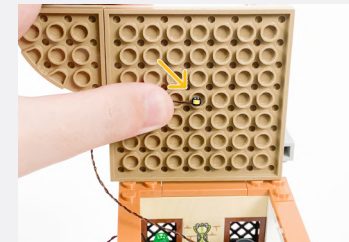
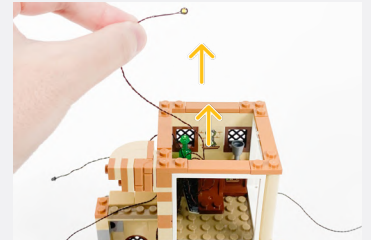
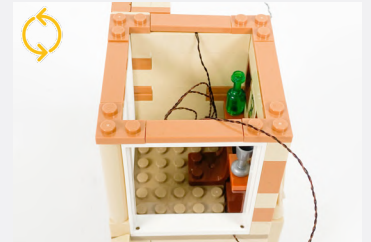
15cm Connecting Cable



✍ Ensure the Expansion Board is still maneuverable by allowing excess cable before securing with the Tile

9

White 15cm Bit Light



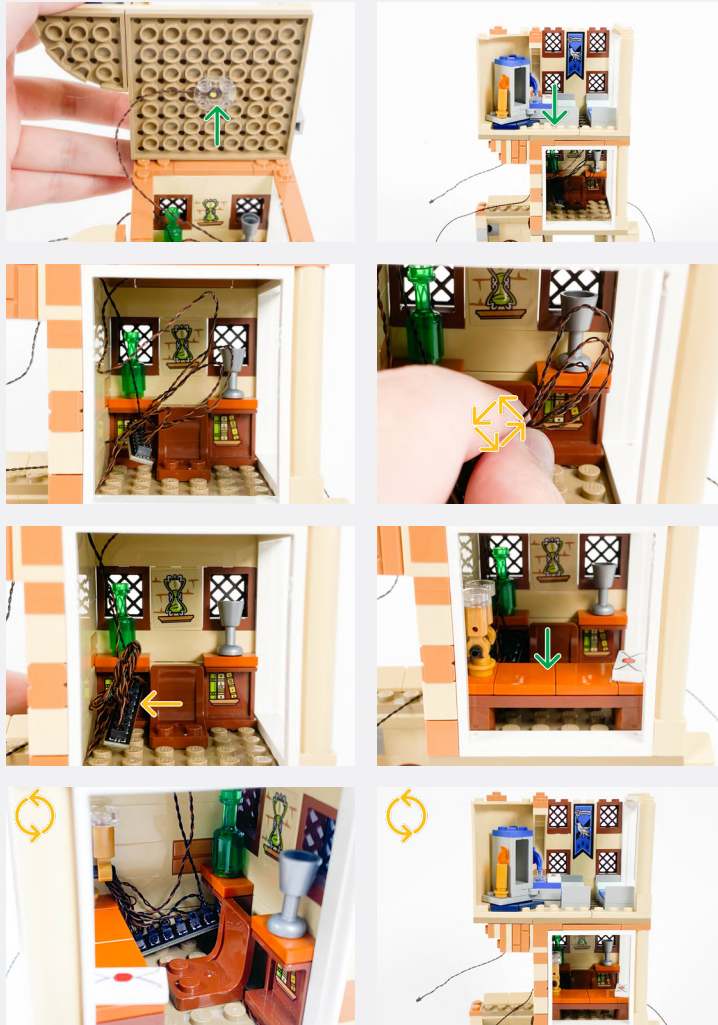
Trans Clear Round Plate 2x2 w/ Rounded Bottom



Legend

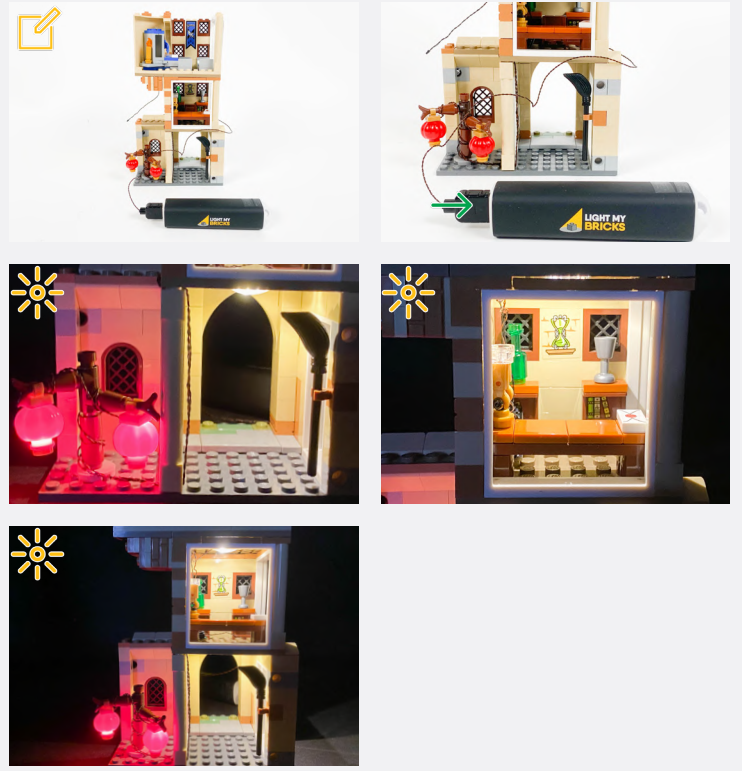
- DISCONNECT
- CONNECT / RECONNECT
- TURN / FLIP
- DIRECTIONAL
- TWIST / BRAID
- POWER ON TEST
- NOTE ICON

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.



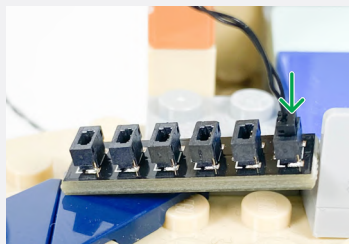
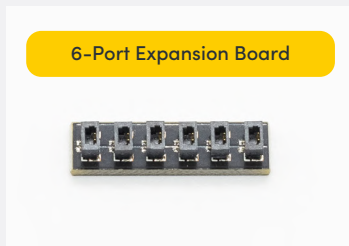
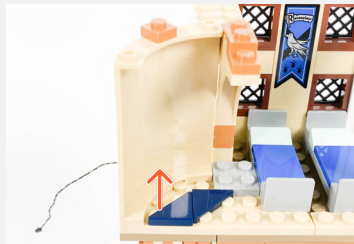
10

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

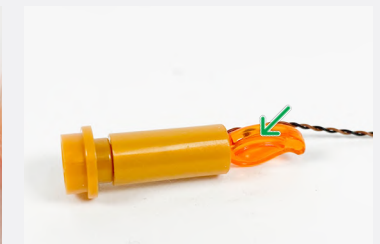
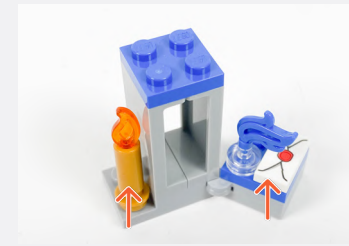


Legend DISCONNECT CONNECT / RECONNECT TURN / FLIP DIRECTIONAL TWIST / BRAID POWER ON TEST NOTE ICON

11



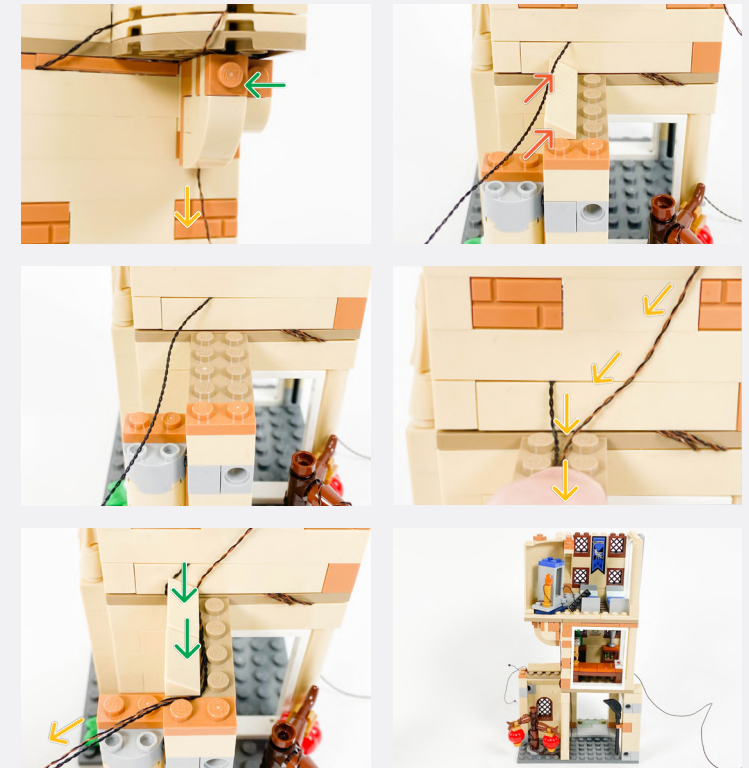
12



Legend

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

13



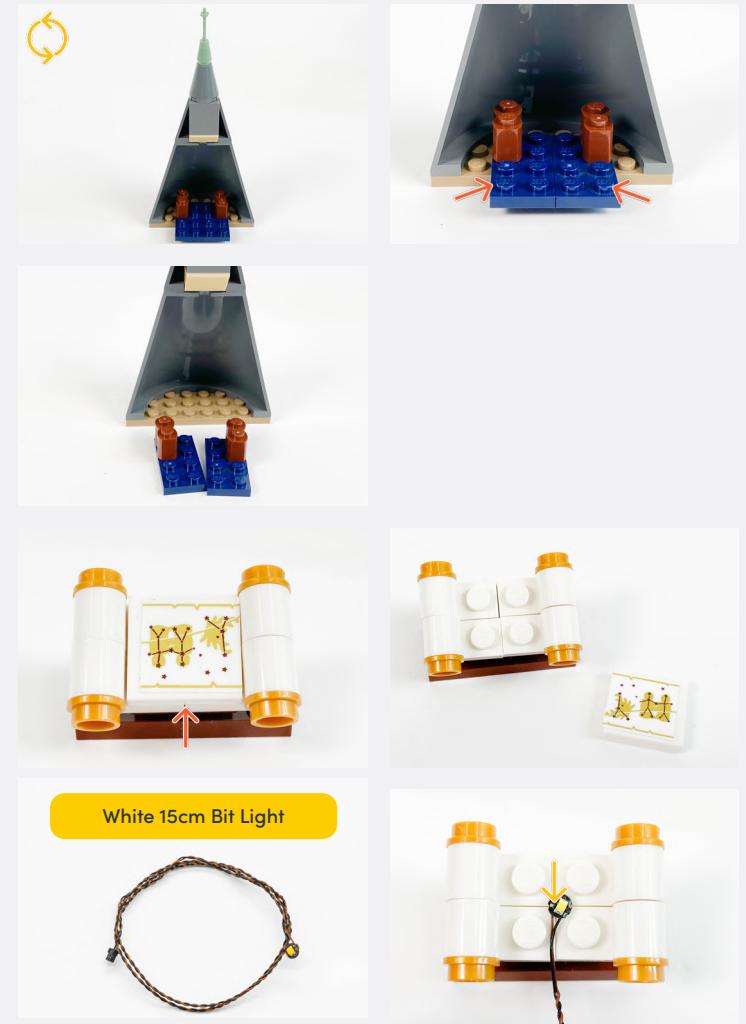
Legend

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

14

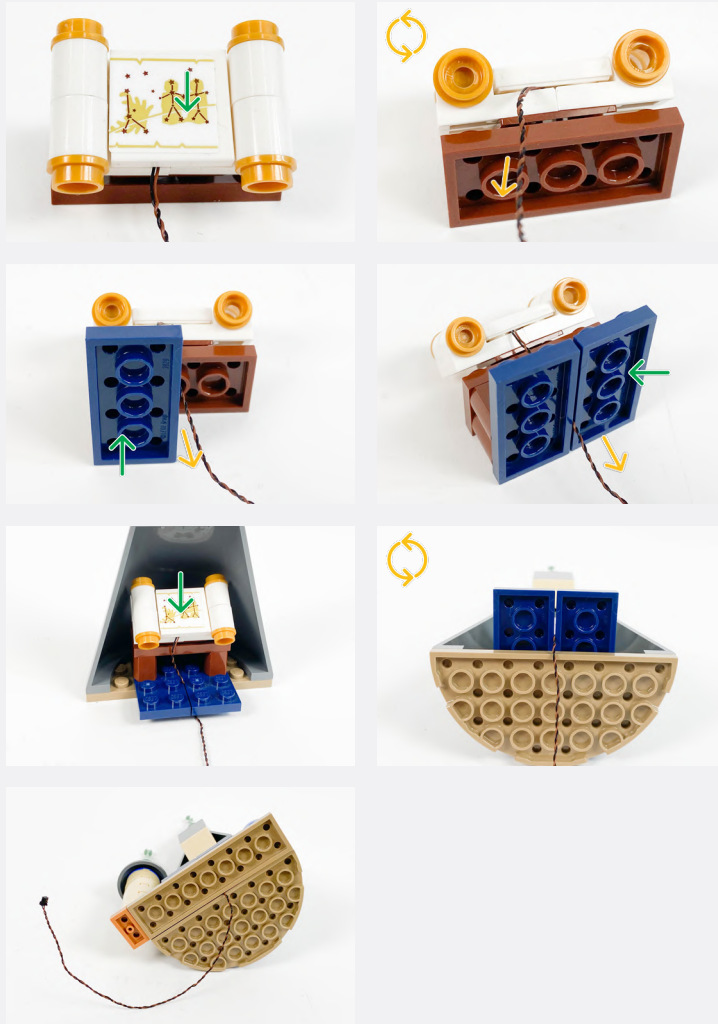


15



White 15cm Bit Light

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



16



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

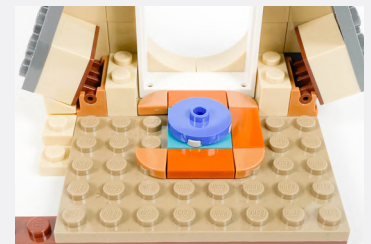
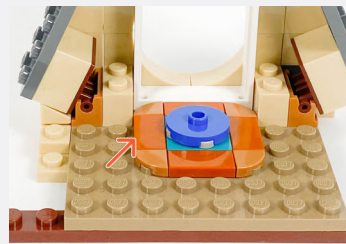
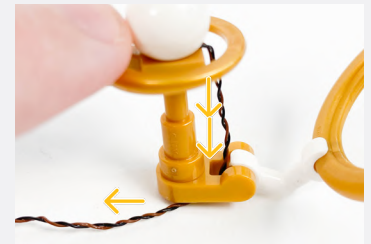
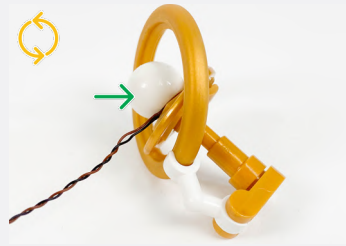
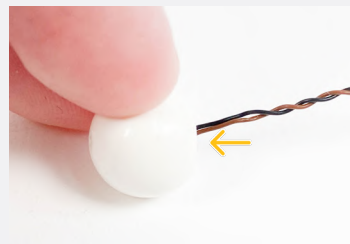
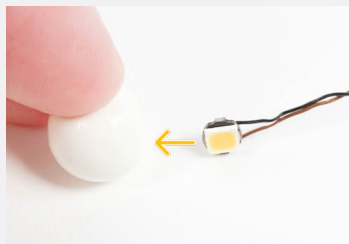
17



Warm White 15cm Large Bit Light



Technic Ball Joint - White



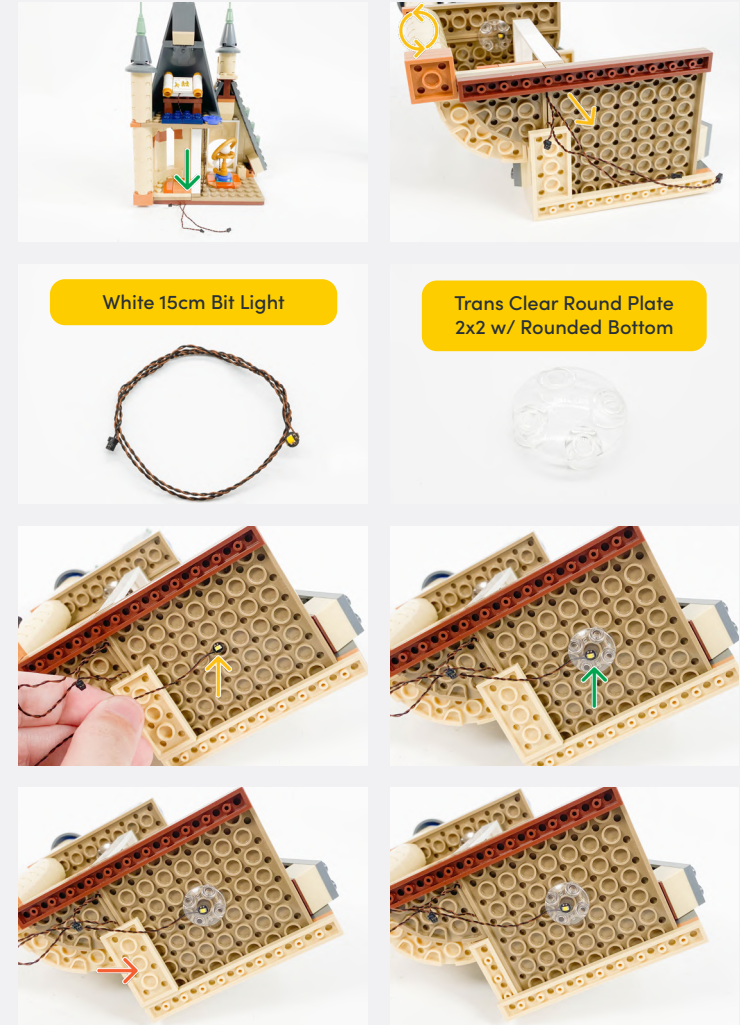
Legend

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



☑ Ensure the three cables are threaded below the floor before connecting the top level back together

18

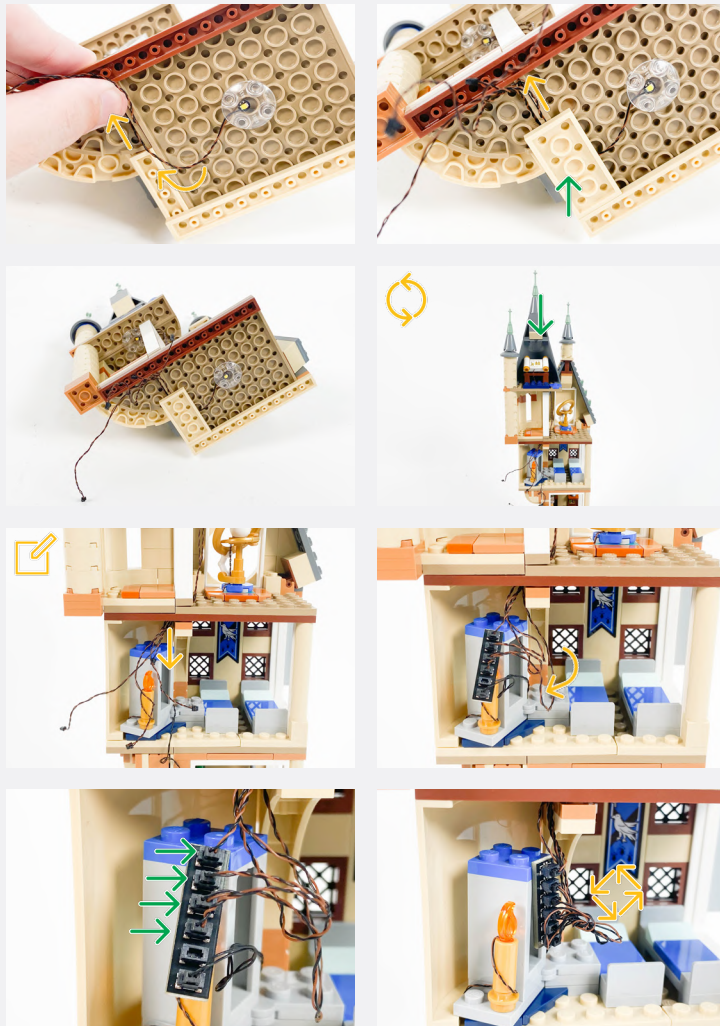


White 15cm Bit Light

Trans Clear Round Plate 2x2 w/ Rounded Bottom

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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Pull all the cables from the top floor downwards to connect to the 6-Port Expansion Board



Legend

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

20



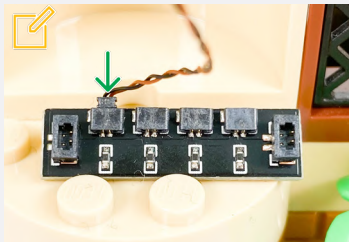
Legend

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

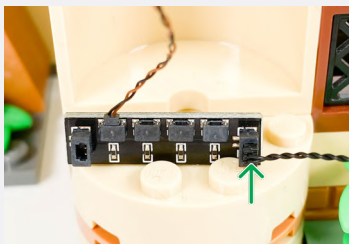
21

Connect the White 30cm Micro Bit Light from step 12 to the micro port of the Micro Expansion Board.

Micro 4-Port Expansion Board



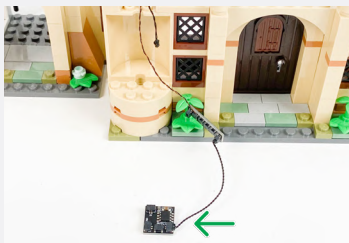
5cm Connecting Cable



Flicker Effects Board

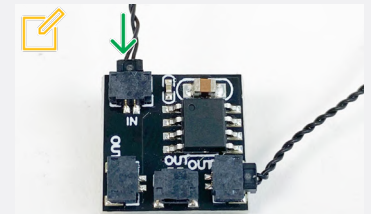
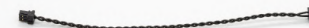


Connect the other end of the 5cm Connecting Cable to the 'OUT' Port on the Flicker Effects Board

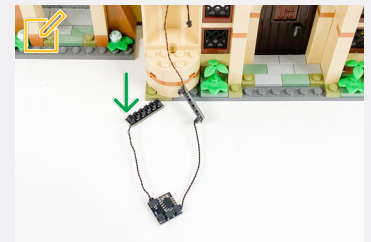


Connect the 5cm Connecting Cable to the 'IN' Port on the Flicker Effects Board.

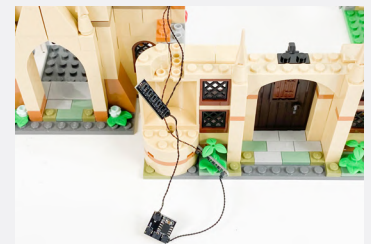
5cm Connecting Cable



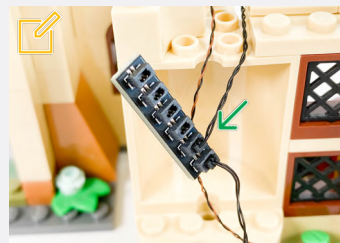
6-Port Expansion Board



Connect the other end of the 5cm Connecting Cable to the 6-Port Expansion Board.



Connect the 15cm Connecting Cable from step 8 to the 6-Port Expansion Board.



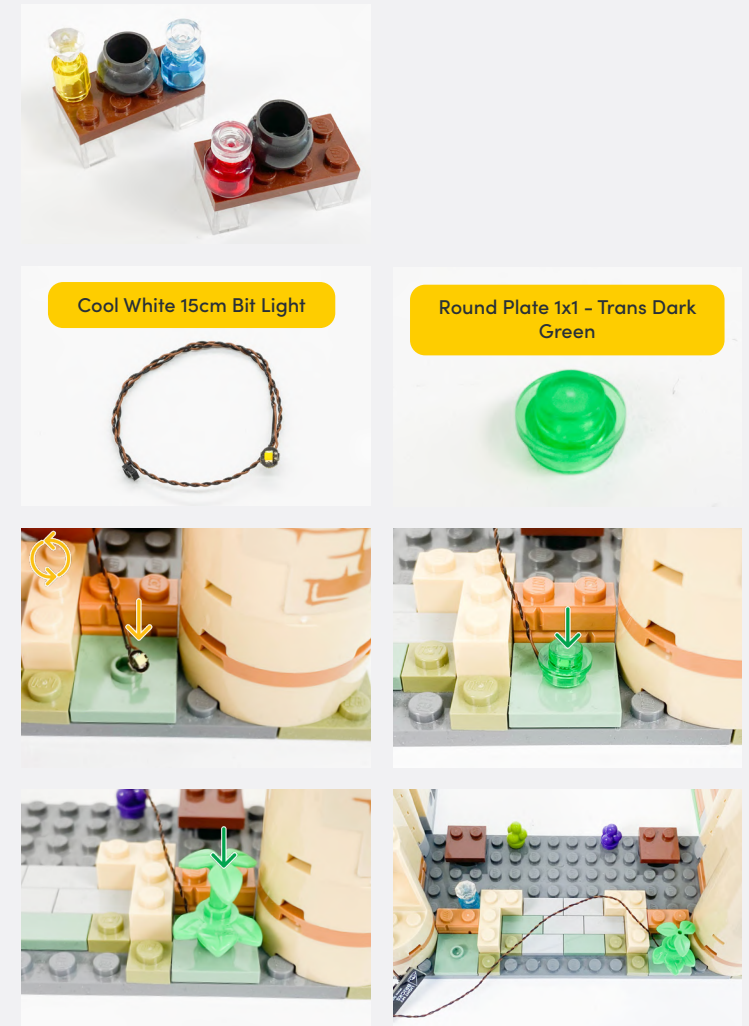
Legend

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

22



23

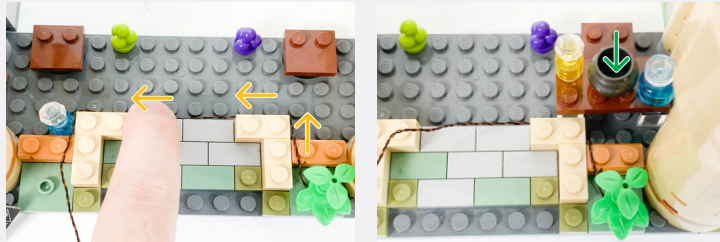


Cool White 15cm Bit Light

Round Plate 1x1 - Trans Dark Green

Legend

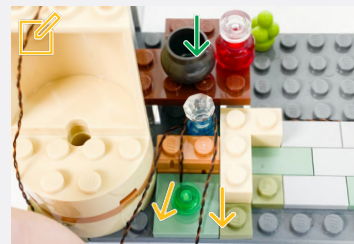
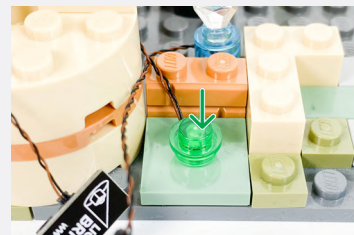
- DISCONNECT
- CONNECT / RECONNECT
- TURN / FLIP
- DIRECTIONAL
- TWIST / BRAID
- POWER ON TEST
- NOTE ICON




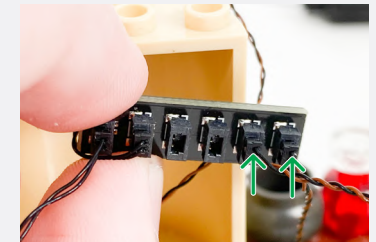
Cool White 15cm Bit Light



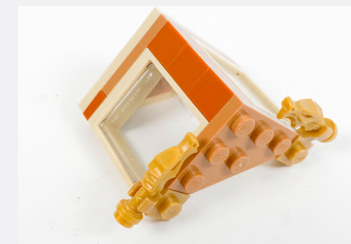
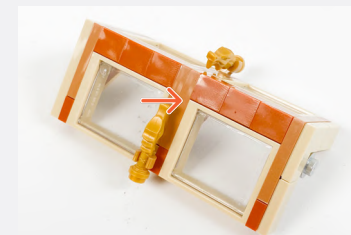
Round Plate 1x1 - Trans Dark Green



 Pull both Bit Lights under the Trans Clear Green Round Plates as shown



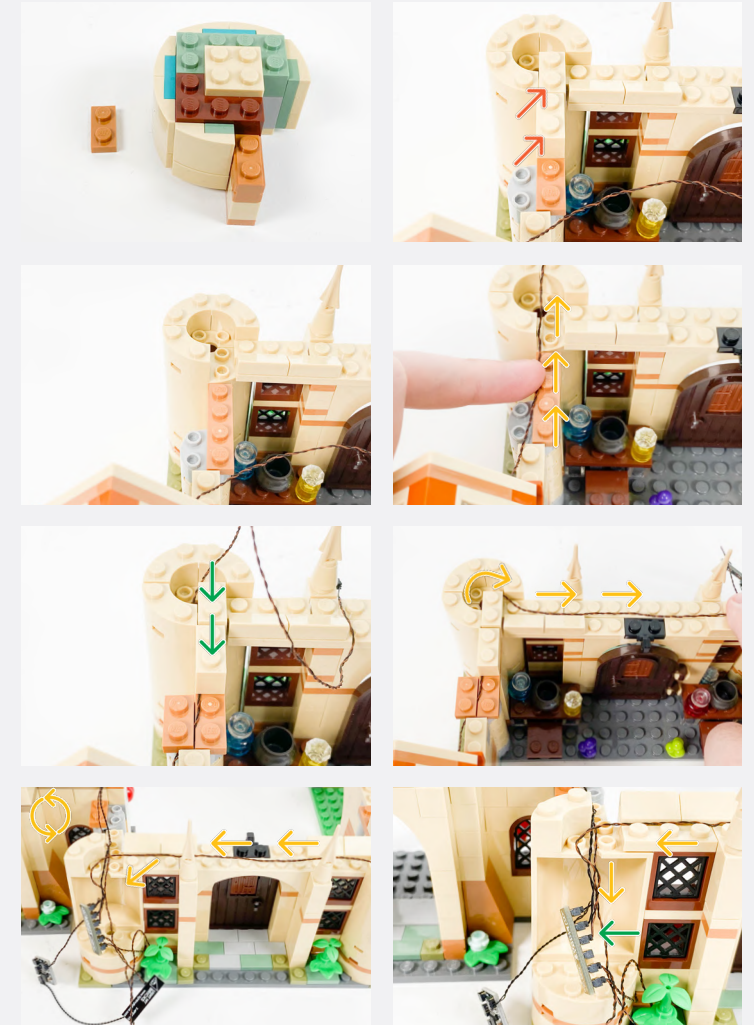
24



White 30cm Bit Light



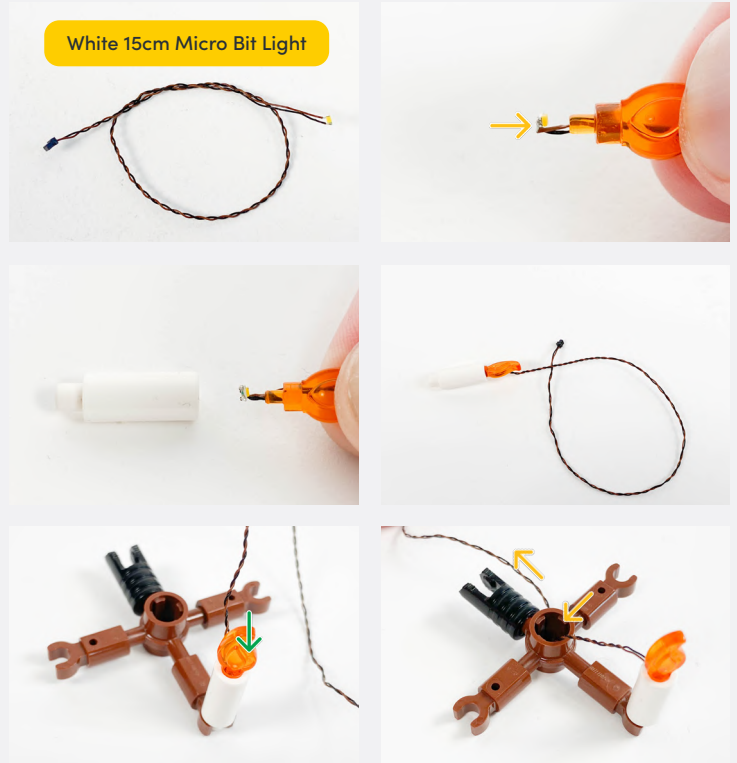
Legend  DISCONNECT  CONNECT / RECONNECT  TURN / FLIP  DIRECTIONAL  TWIST / BRAID  POWER ON TEST  NOTE ICON



Legend

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

25



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

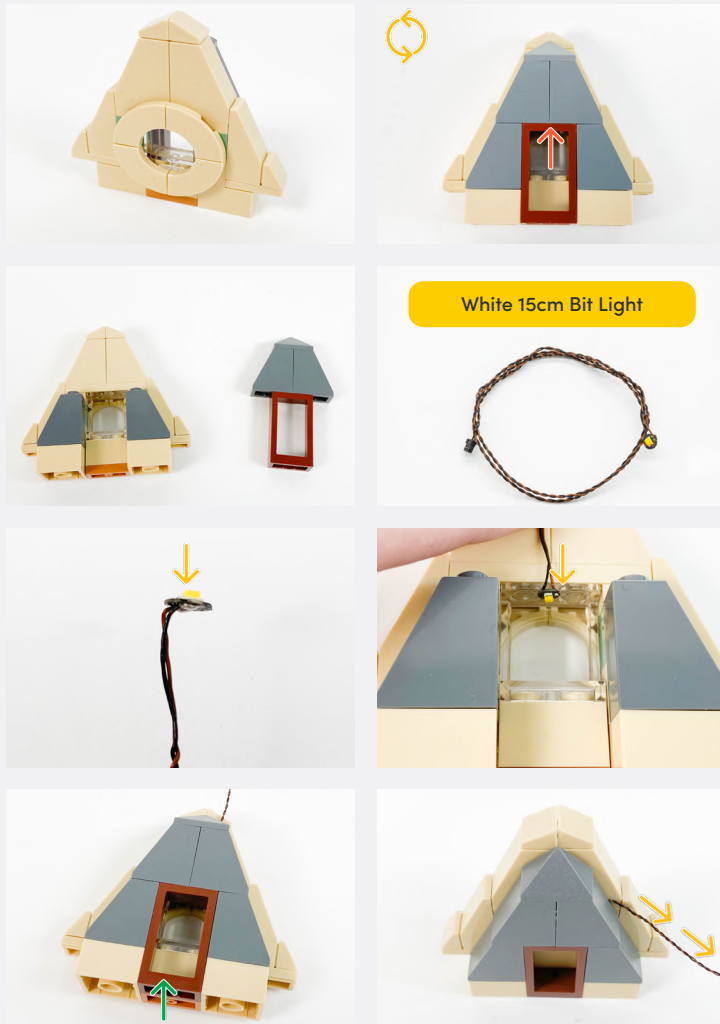
26

Use the LEGO Brick Separator Tool that came packaged with your LEGO kit

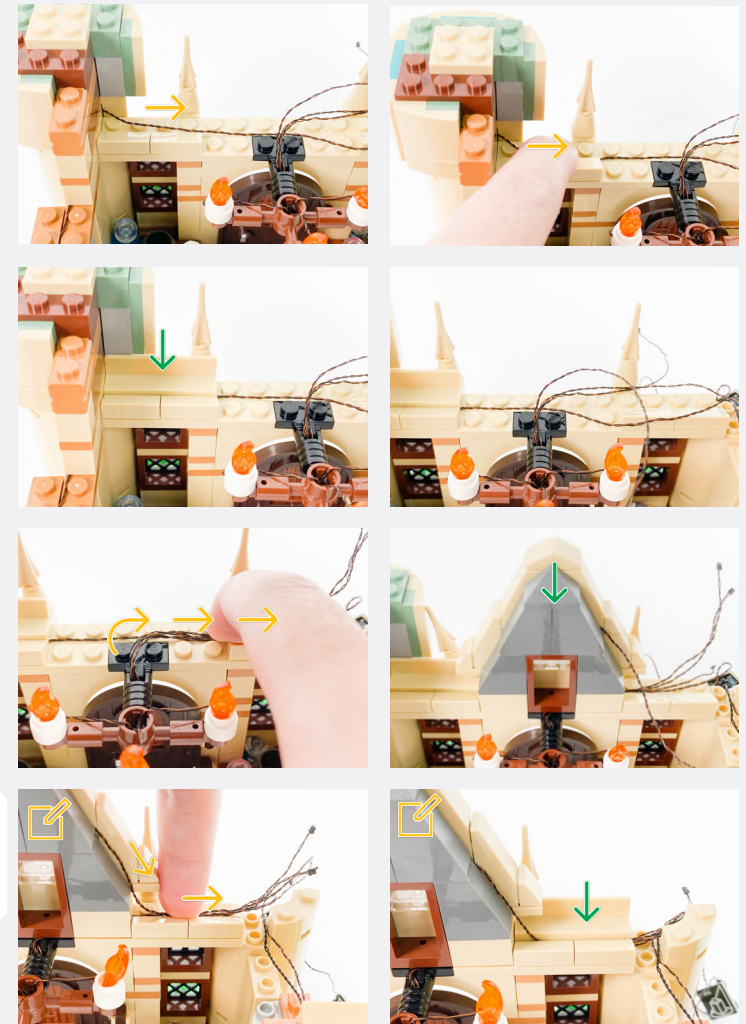


Legend → DISCONNECT → CONNECT / RECONNECT ↻ TURN / FLIP → DIRECTIONAL ↻ TWIST / BRAID * POWER ON TEST 📝 NOTE ICON

27



White 15cm Bit Light

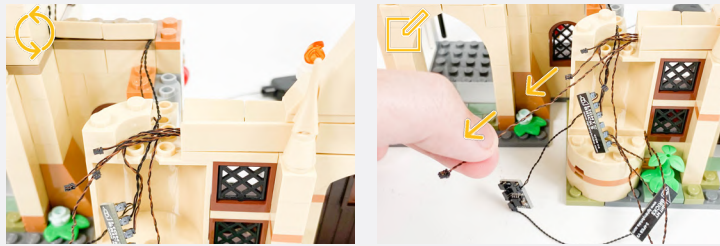


☑ Ensure there is cable slack (not too tight) so the tile can reconnect.

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

28

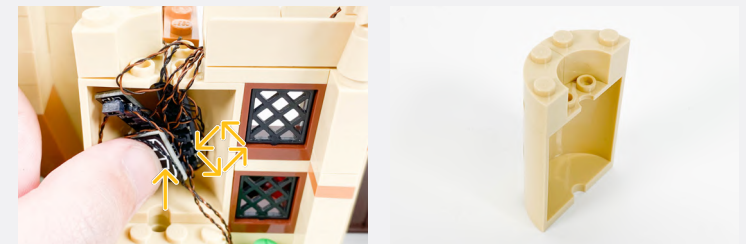
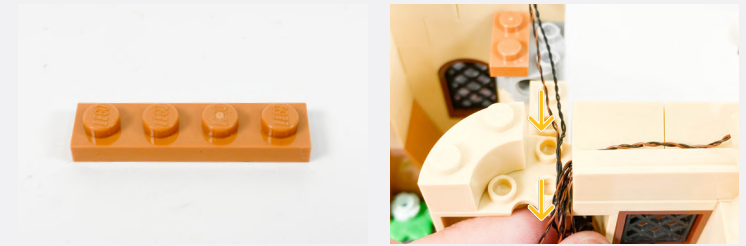
Take hold of the longest cable out of the four (which should be the White 15cm Bit Light) and connect it to the 6-Port Expansion Board



Connect the remaining three White 15cm Micro Bit Lights to the Micro Expansion Board



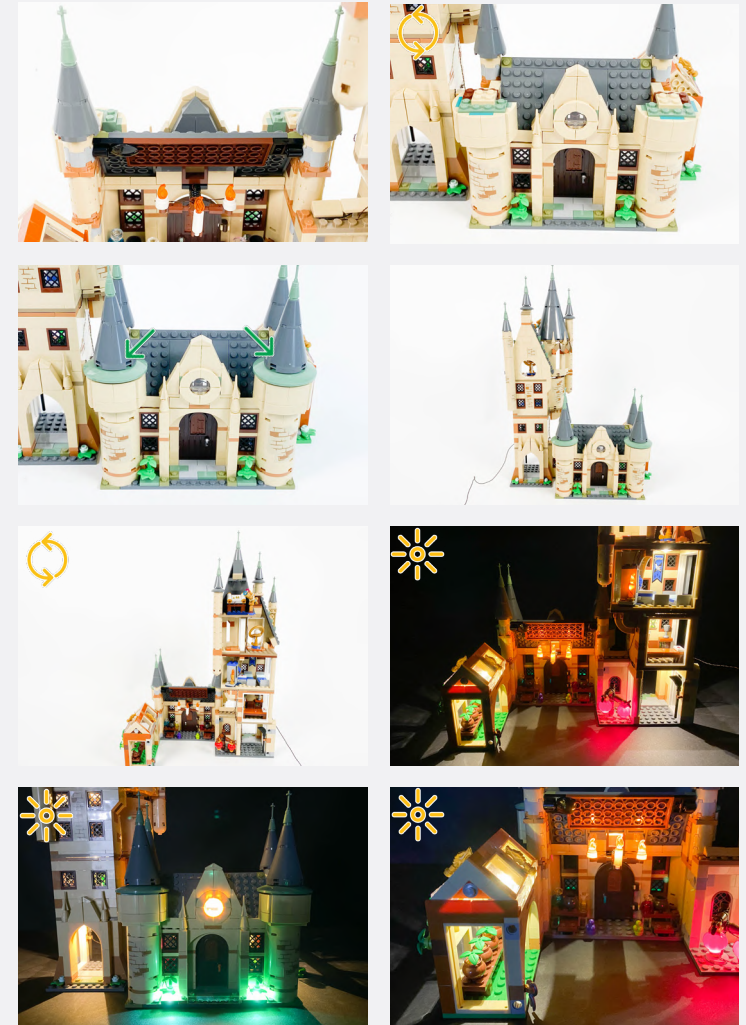
29



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.


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 Hogwarts Astronomy Tower 75969 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.

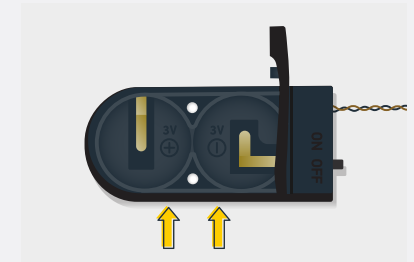
If the batteries have no power, replace the batteries.

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

Check For CR2032 Batteries Using The Flat Battery Pack

Inside the battery pack is a symbol indicating which side the (round) CR2032 battery should be inserted. Check that the “+” side of the battery pack has the battery with the “+” symbol facing downwards.

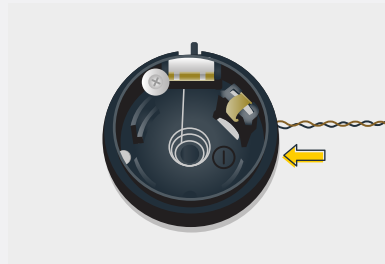
On the opposite side, the “-” side of the battery pack should have the battery flipped upside down, that is the “+” symbol facing upwards.



Troubleshooting

Check For Cr2032 Batteries Using The Round Battery Pack

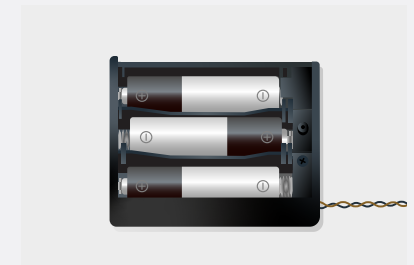
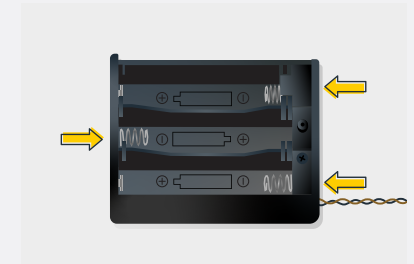
Inside the battery pack is a symbol indicating which side the (round) CR2032 battery should be inserted. In this case, for the stacked battery pack, ensure that BOTH batteries have the “+” symbol facing upwards.



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

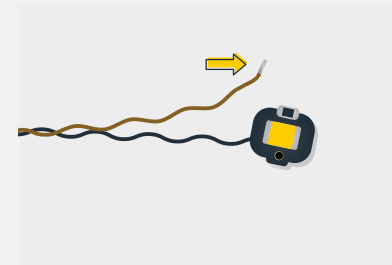
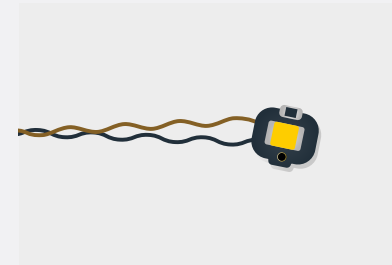
Check Your Wires

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.



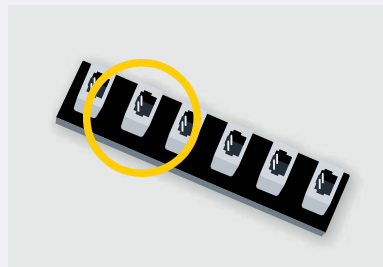
Troubleshooting

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.

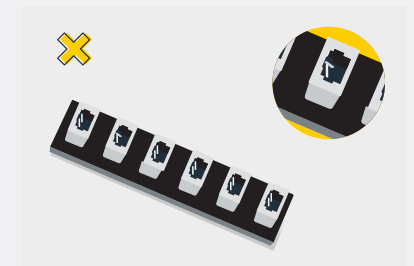
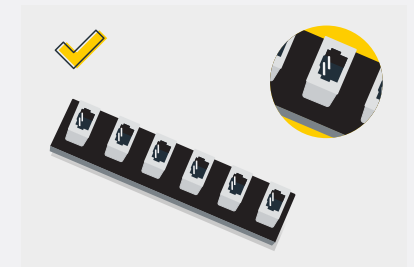
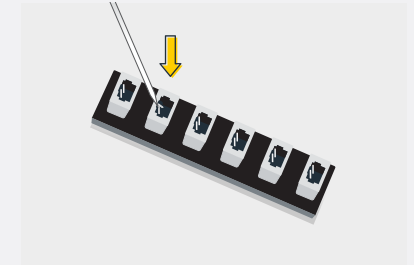
Not only will a light connected to the damaged port not work, but if the pins inside the port are bent to a point they are touching each other, this can result in all other lights in the system to stop working. This is a short circuit.



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!



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