



**LIGHT^{MY}
BRICKS**



**LEGO® THOR'S HAMMER #76209
LIGHT KIT
INSTALLATION GUIDE**

Light My Bricks



LEGO® THOR'S HAMMER #76209 LIGHT KIT INSTALLATION GUIDE

Hi There!

We're here to help you get started on the LEGO®
Thor's Hammer (76209) 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:



1x White 15cm Bit Light
 1x Warm White Large 15cm Bit Light
 14x Blue 15cm Bit Light
 11x Cool White Large 15cm Bit Light



1x 6-Port Expansion Board
 2x 8-Port Expansion Board
 1x 12-Port Expansion Board



1x NO Push Board
 1x Scary Effects Board
 1x Flicker Effects Board



6x 5cm Connecting Cable



1 x USB Power Cable
 (Power Source not Included)

ASSORTED BRICKS:



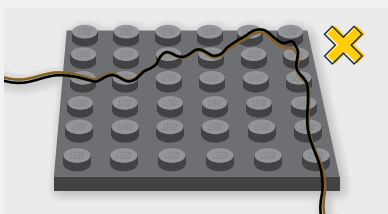
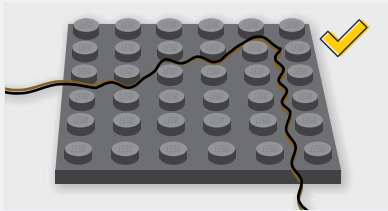
- 4 x Dark Grey Plate 2x2
- 9x Dark Grey Tile 1x2
- 2x Tile 1x1 W Clip Round Edges - Black
- 3x Plate 1x1 Mod Rounded w Handle - Black
- 4x Round Plate 1x1 Open Stud - Black
- 1x Arm Skeleton, Bent with Clips (Horizontal Grip) - Black
- 1x Plate 1x2 MW Bar Handle on Side - Black

* Spares included

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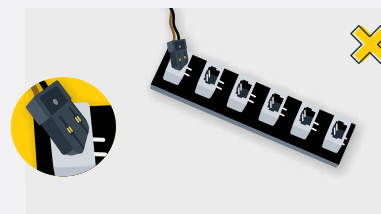
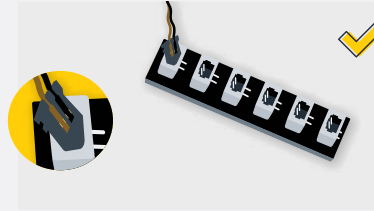
Before You Begin



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.

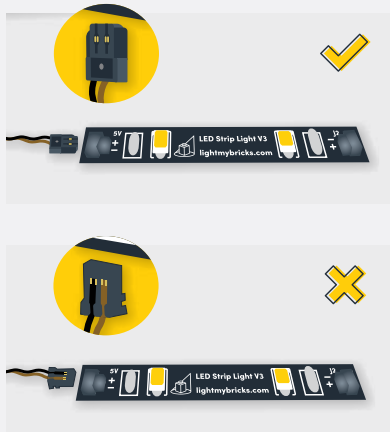


Connecting Cable Connectors To Expansion Boards

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.



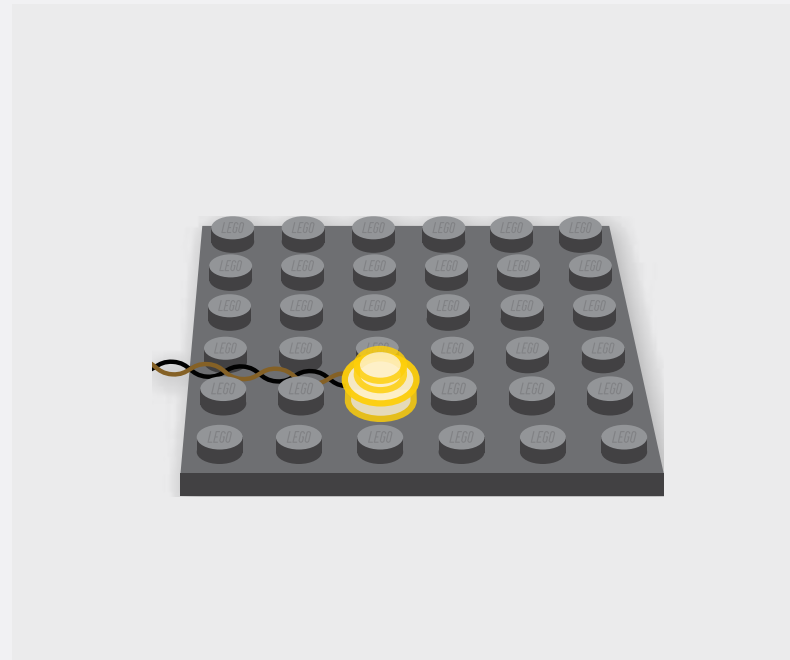
Connecting Micro Cable Connectors To Micro Expansion Board Ports

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.

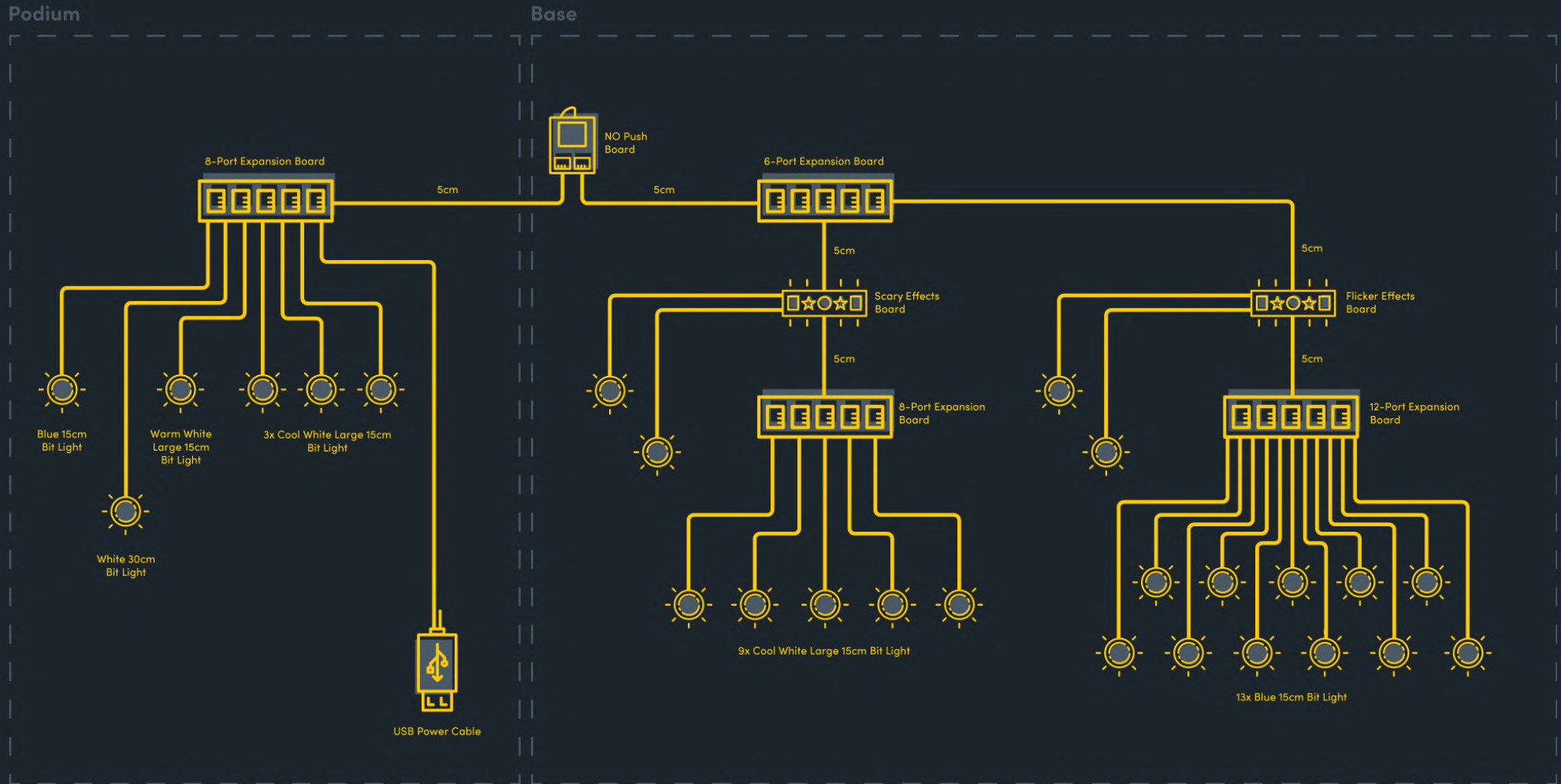
Before You Begin

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





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



2

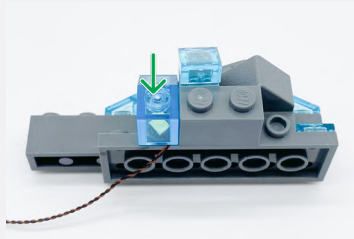


Cool White 15cm Large Bit Lights will always go under Trans Light Blue 2x1 Slopes.

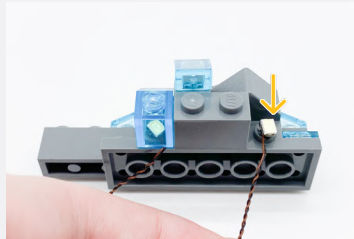
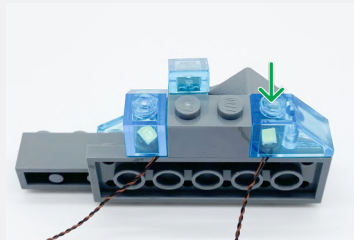
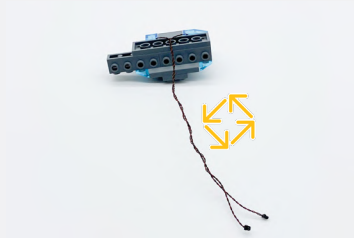
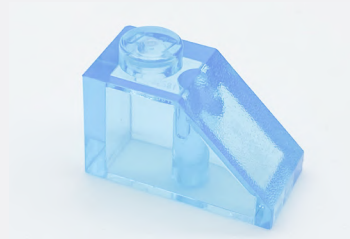
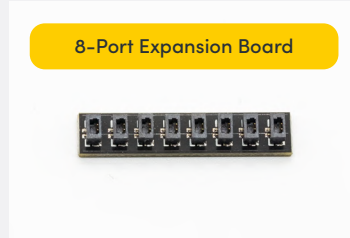
Cool White 15cm Large Bit Light



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





Cool White 15cm Large Bit Light









8-Port Expansion Board

3

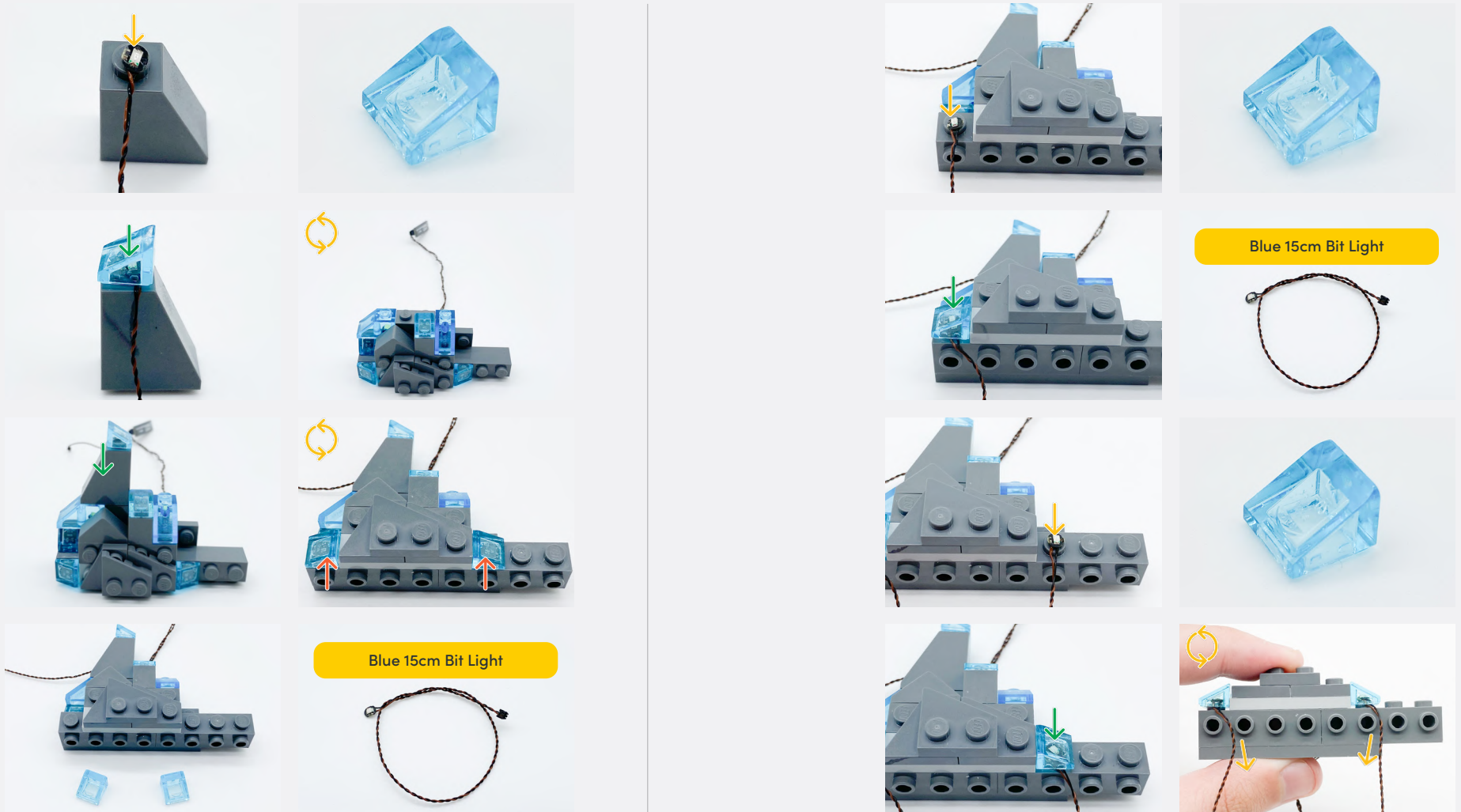




Blue 15cm Bit Light will always go under Trans Light Blue 1/2 Slopes.

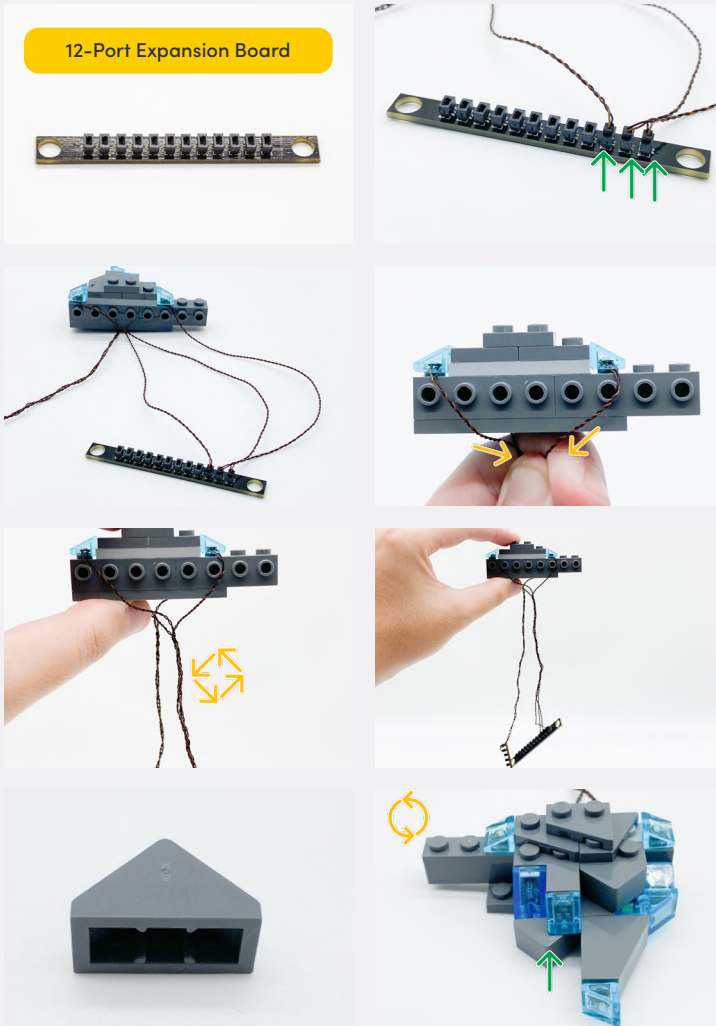



Blue 15cm Bit Light

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



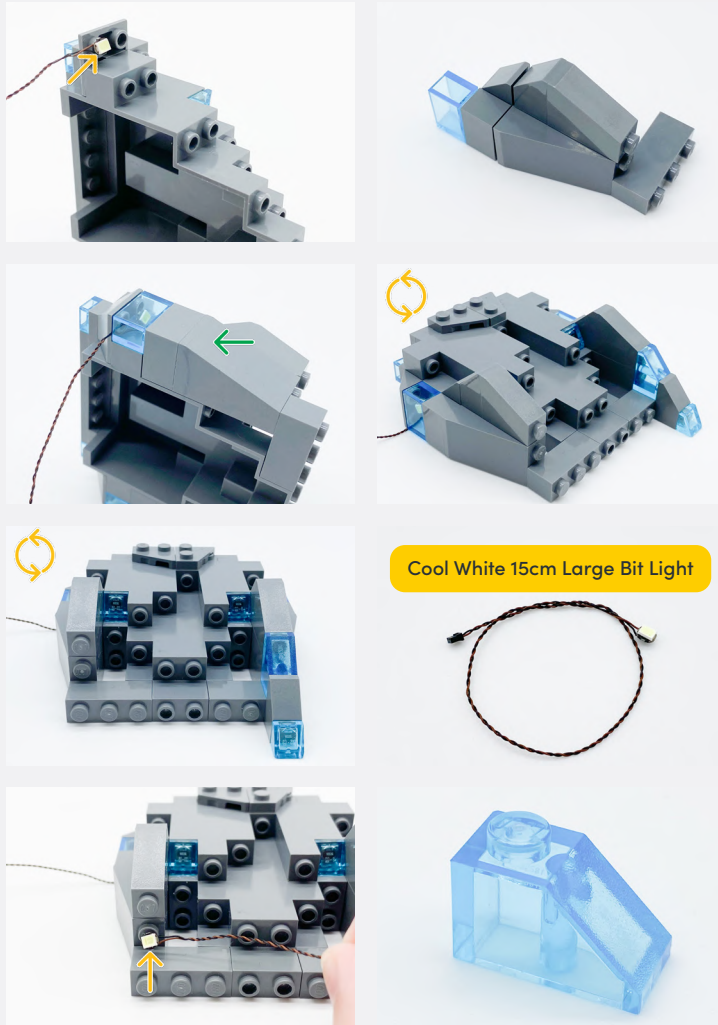
Legend → DISCONNECT → CONNECT / RECONNECT ↻ TURN / FLIP → DIRECTIONAL ↻ TWIST / BRAID ✨ POWER ON TEST 📝 NOTE ICON



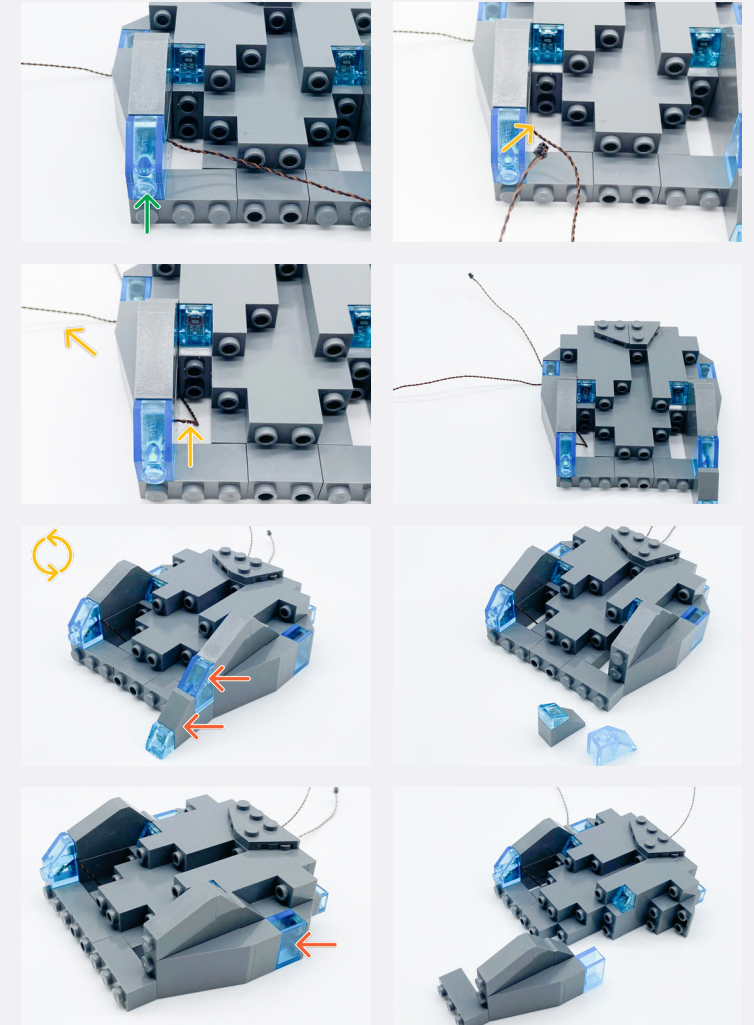
4



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



5

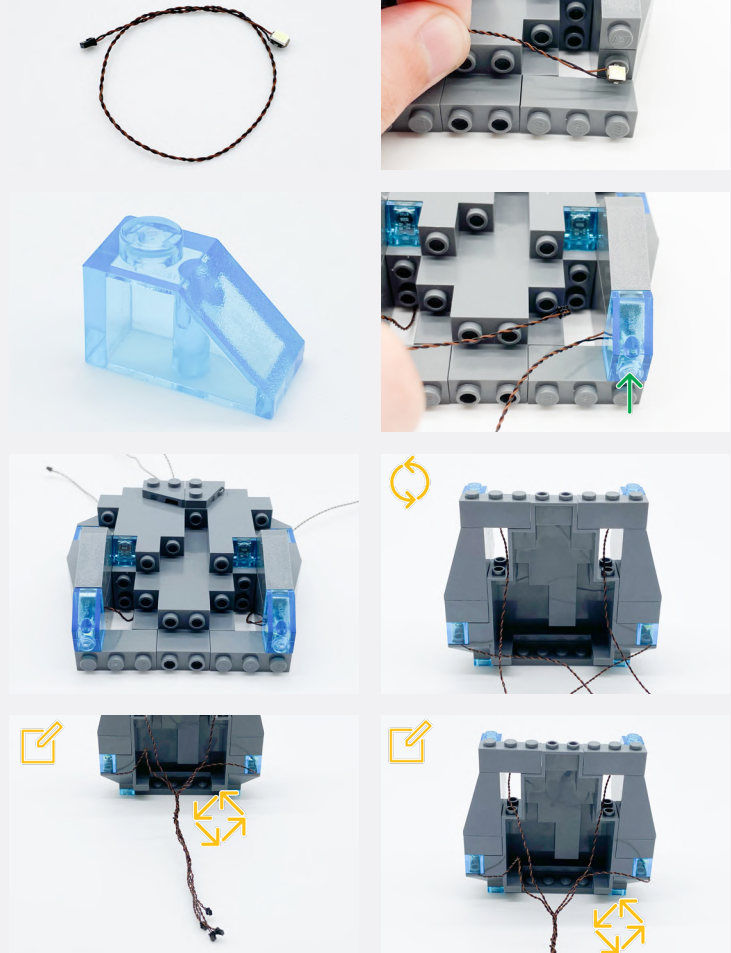


Legend → DISCONNECT → CONNECT / RECONNECT ↻ TURN / FLIP → DIRECTIONAL ↻ TWIST / BRAID ✨ POWER ON TEST 📝 NOTE ICON



Cool White 15cm Large Bit Light

Cool White 15cm Large Bit Light



Begin twisting of the cables a third of the way down.


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

6

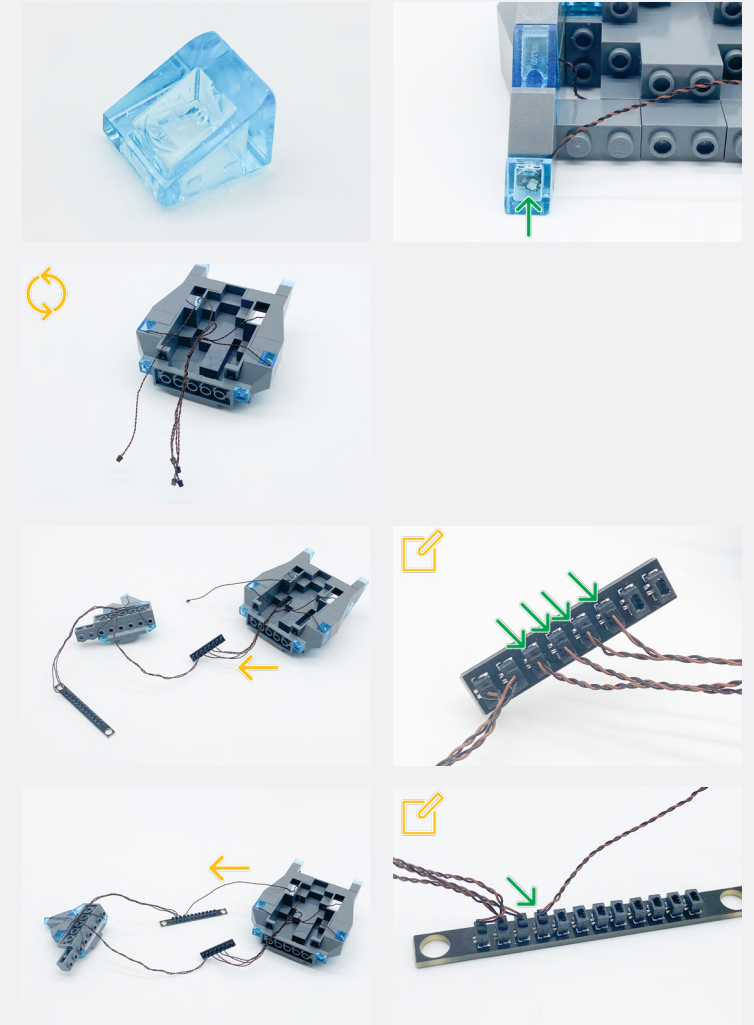


Blue 15cm Bit Light

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 Connect the four Cool White 15cm Large Bit Lights to the 8-Port Expansion Board

Connect the Blue 30cm Bit Light to the 12-Port Expansion Board



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

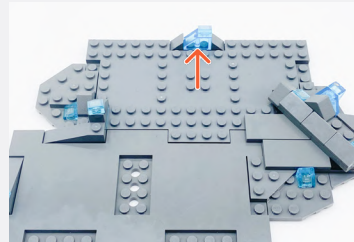
If you experience any issues with the lights not working and suspect an issue with a component, please try a different port on the expansion board to verify where the fault lies (with the light or expansion board). To correct any issues with expansion board ports, please view the section addressing expansion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



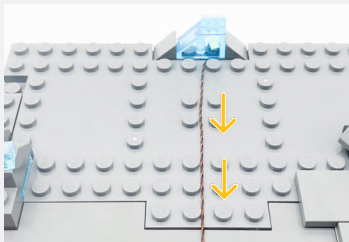
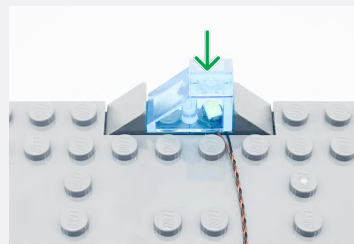
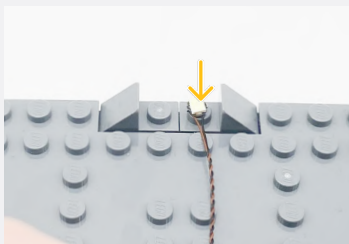
Connect the other end to a USB Power Bank, USB Wall Adaptor, or USB to AA Battery Pack (sold separately).

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

8



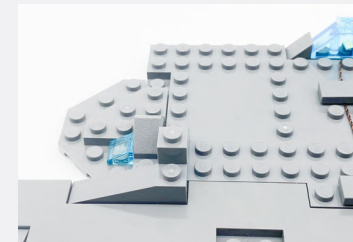
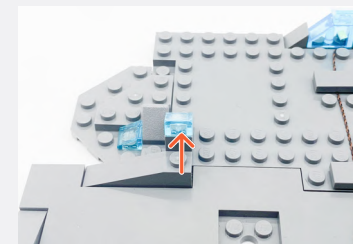
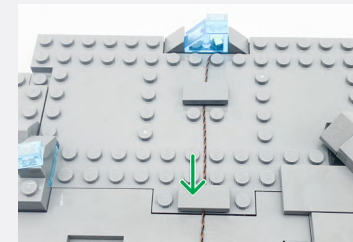
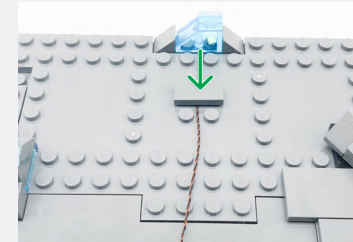
Cool White 15cm Large Bit Light



Dark Grey Tile 1x2



9



Dark Grey Tile 1x2

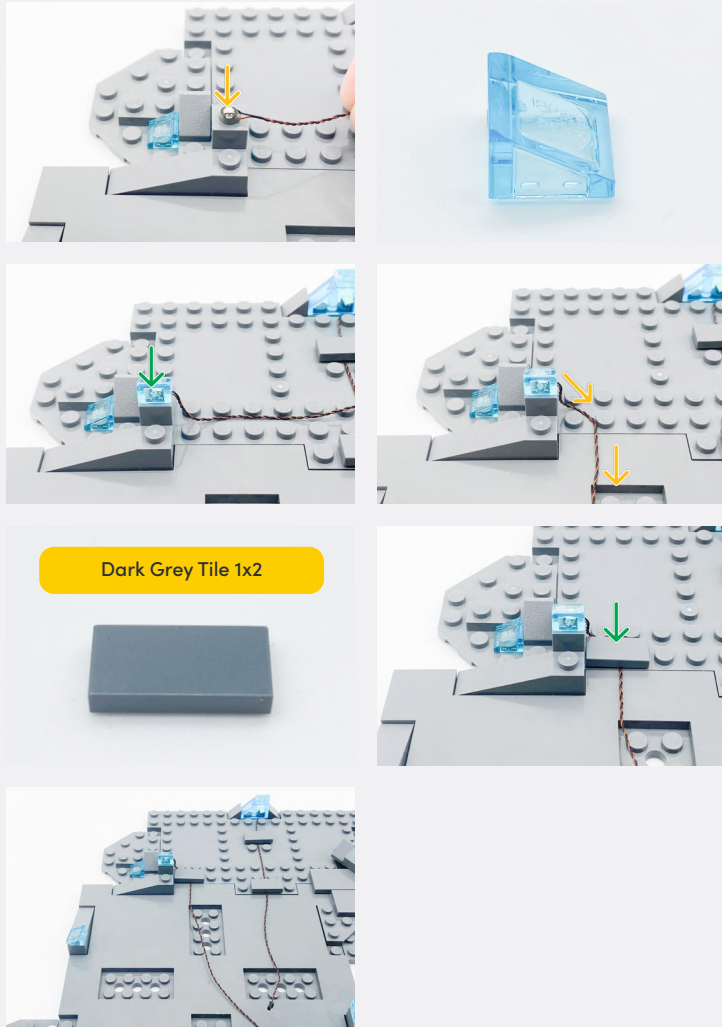


Blue 15cm Bit Light

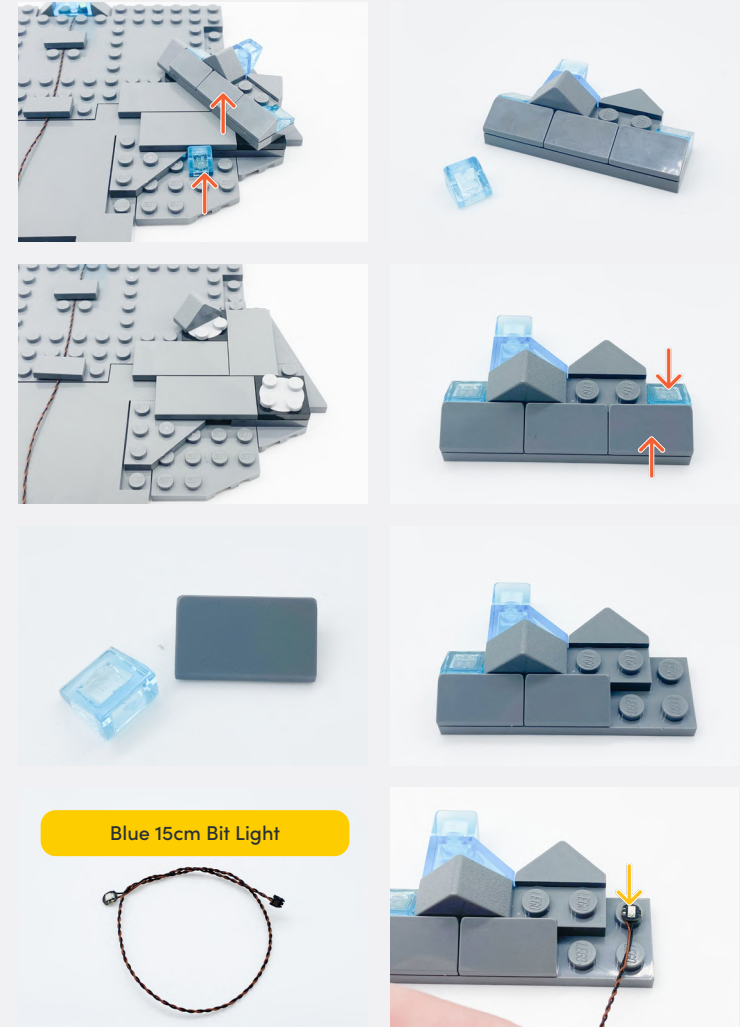


Legend

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

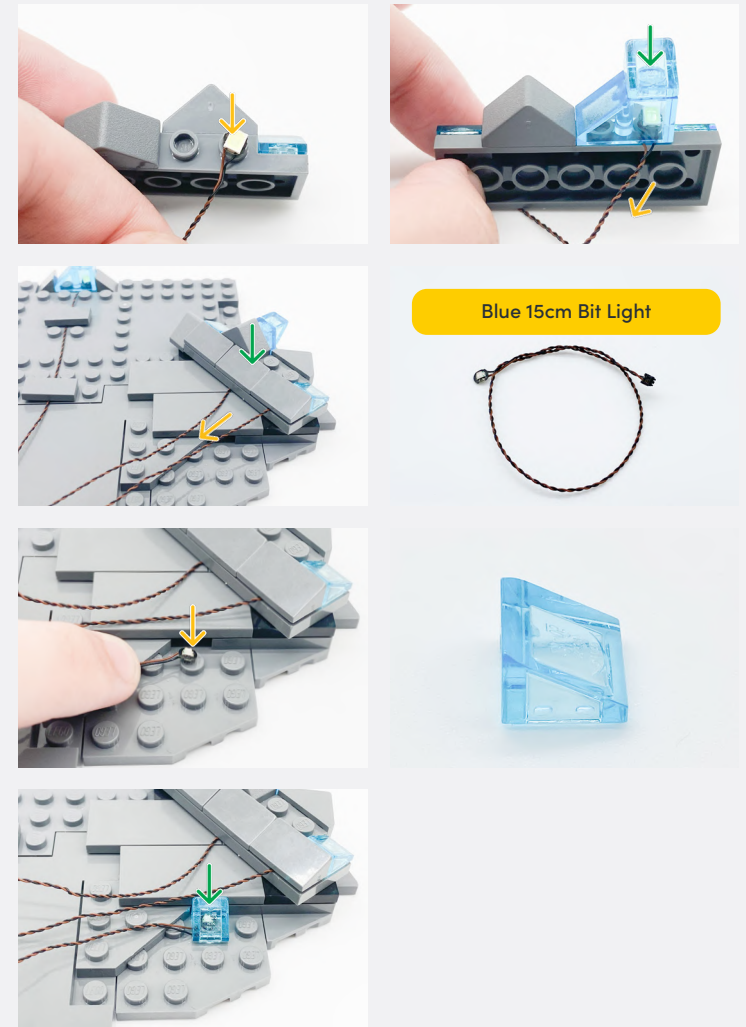
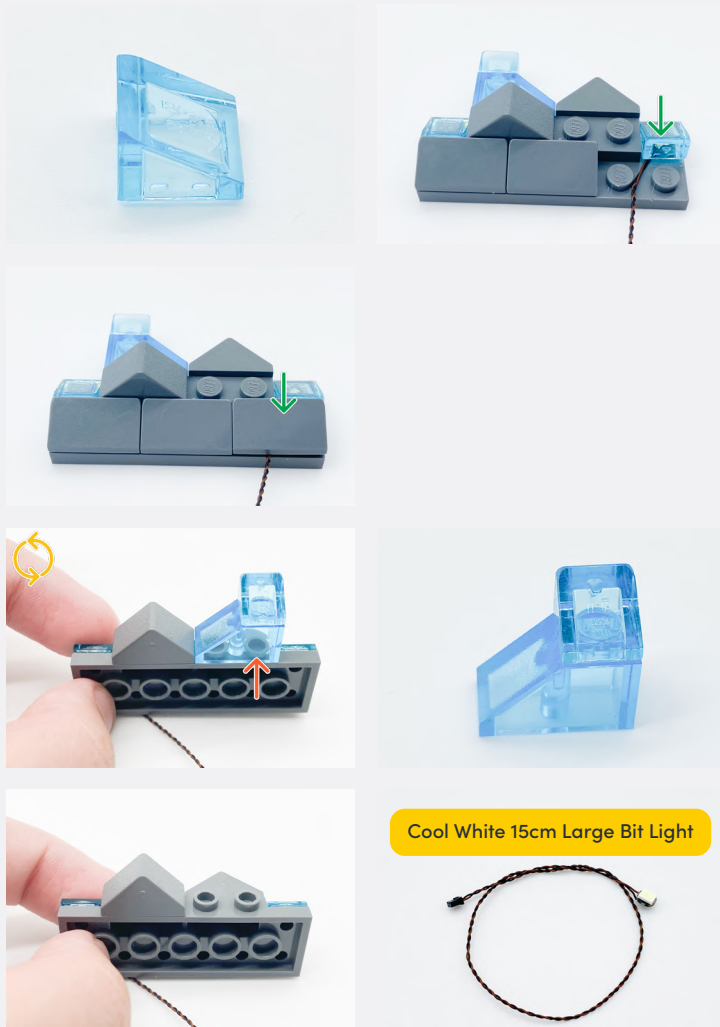


10



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

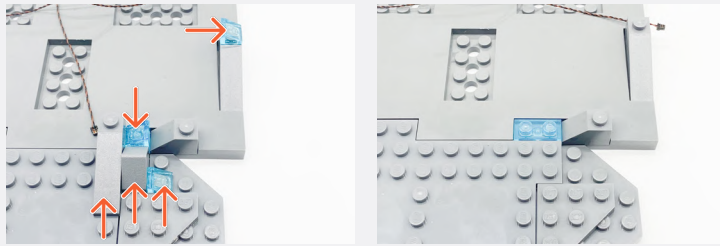
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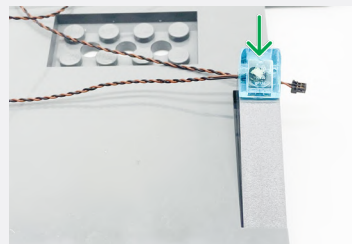
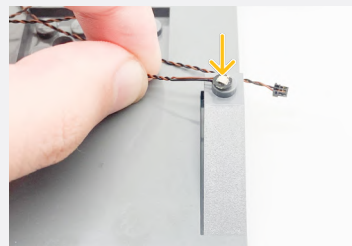
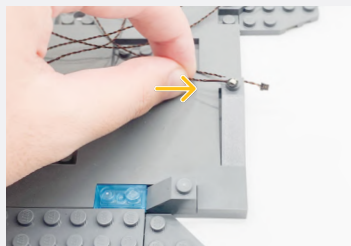
Legend

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

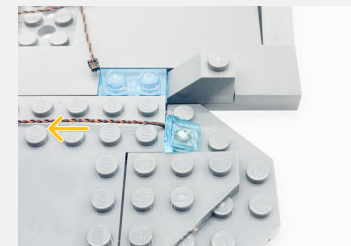
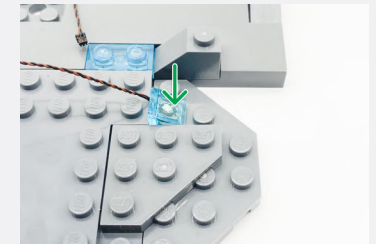
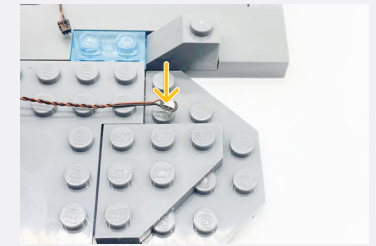
12



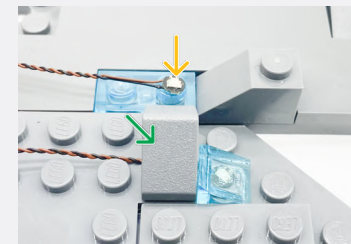
Blue 15cm Bit Light



Blue 15cm Bit Light



Blue 15cm Bit Light



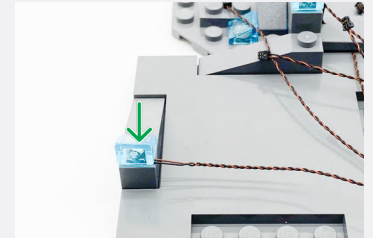
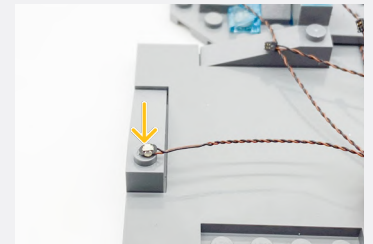
Legend

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

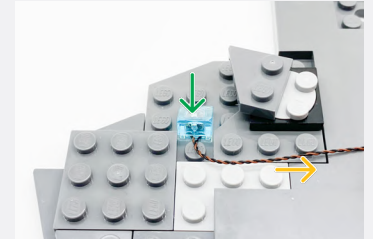
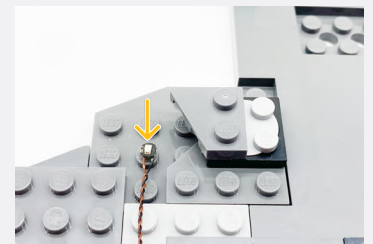
13



Blue 15cm Bit Light



Blue 15cm Bit Light



Legend

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



Blue 15cm Bit Light

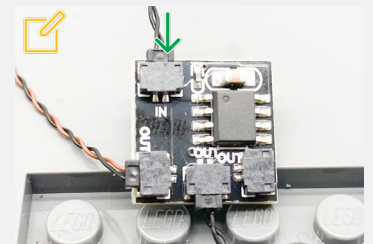
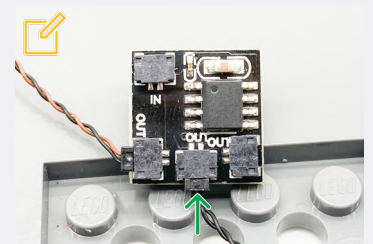
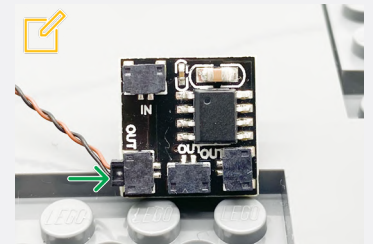
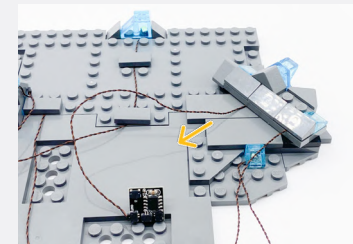
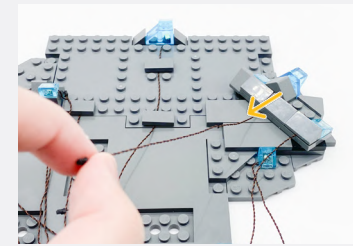


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✂ Connect the Cool White 15cm Large Bit Light to the 'OUT' port of the Scary Flicker Effects Board.

✂ Connect the 5cm Connecting Cable to the 'OUT' port of the Scary Flicker Effects Board.

✂ Connect the 5cm Connecting Cable to the 'IN' port of the Scary Flicker Effects Board.

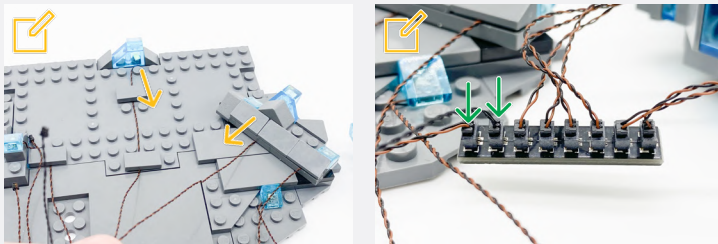


Legend

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

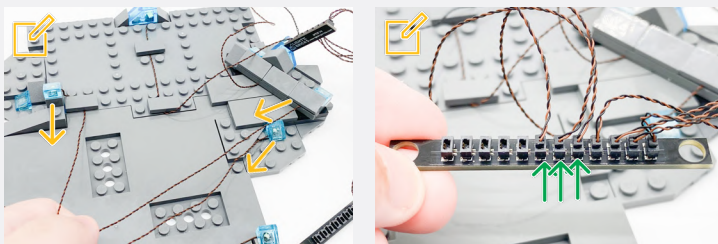


Connect the remaining Cool White 30cm Large Bit Light and the 5cm Connecting Cable from the 'OUT' port to the 8-Port Expansion Board

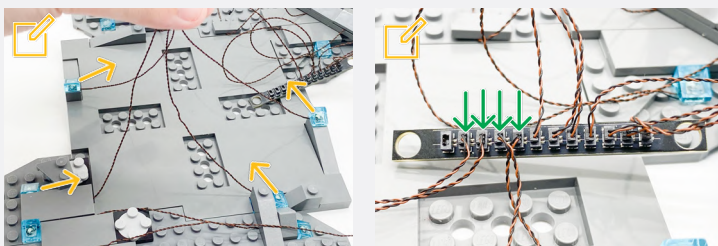


15

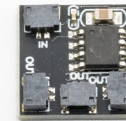
Connect the Blue Bit Lights from the following three Trans Light Blue 1/2 Slopes to the 12-Port Expansion Board.



Connect the Blue Bit Lights from the following four Trans Light Blue 1/2 Slopes to the 12-Port Expansion Board.



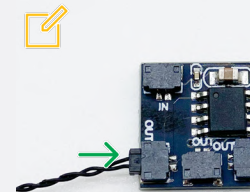
Flicker Effects Board



5cm Connecting Cable



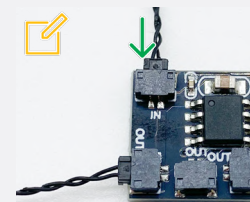
Connect the 5cm Connecting Cable to the 'OUT' port of the Flicker Effects Board.



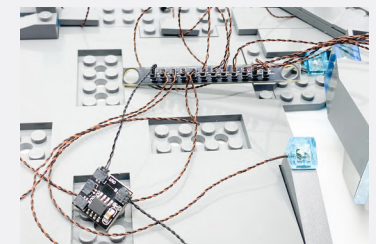
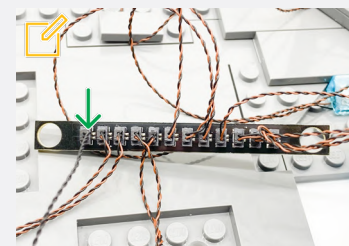
5cm Connecting Cable



Connect the 5cm Connecting Cable to the 'IN' port of the Flicker Effects Board.



Connect the 5cm Connecting Cable from the 'OUT' of the Flicker Effects Board port to the 12-Port Expansion Board.

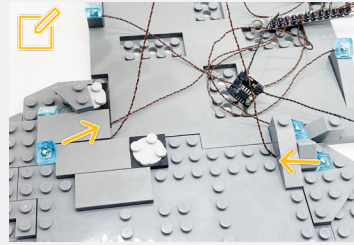
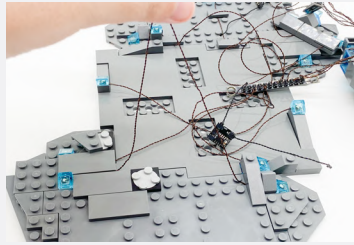


Legend

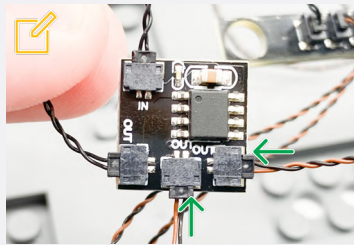
- DISCONNECT
- CONNECT / RECONNECT
- TURN / FLIP
- DIRECTIONAL
- TWIST / BRAID
- POWER ON TEST
- NOTE ICON

📌 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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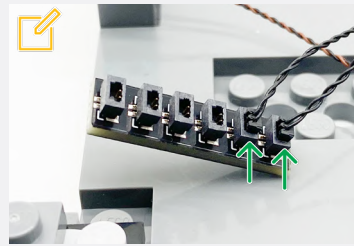
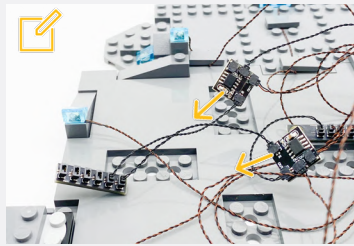
📌 Connect the two Blue 15cm Bit Lights to the 'OUT' port of the Flicker Effects Board.



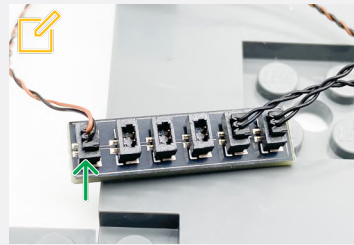
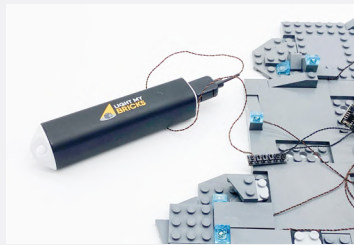
6-Port Expansion Board



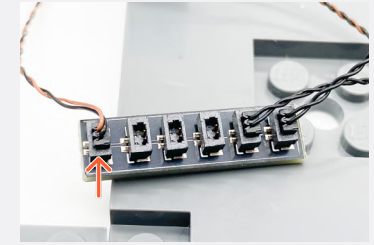
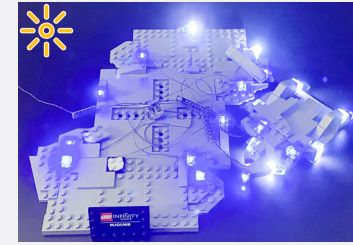
📌 Connect both 5cm Connecting Cables from the 'IN' port of the Scary and Flicker Effects Board to the 6-Port Expansion Board.



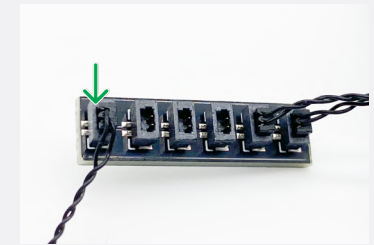
📌 Reconnect the USB Power Cable.



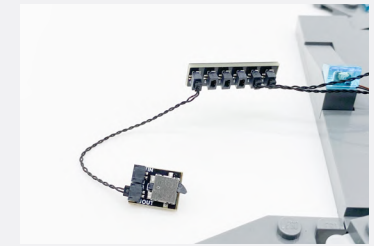
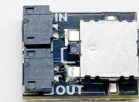
17



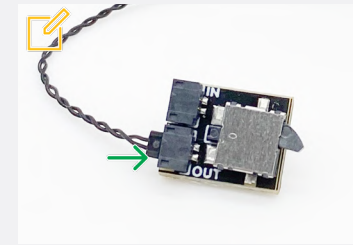
5cm Connecting Cable



NO Push Board



📌 Connect the other end of the 5cm Connecting Cable to the 'OUT' port of the NO Push Board.



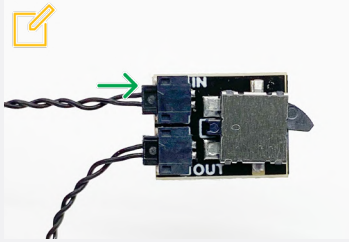
5cm Connecting Cable



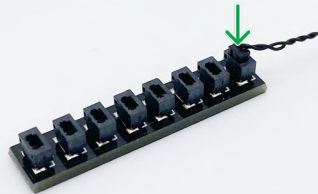
Legend

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

✍️ Connect the the 5cm Connecting Cable to the 'IN' port of the NO Push Board.



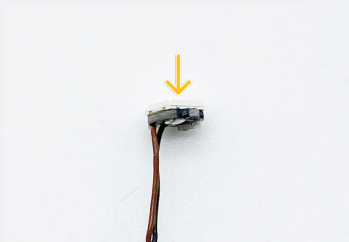
8-Port Expansion Board



Black Round Plate 1x1 w/ Open Stud



Cool White 15cm Large Bit Light



Black 1x1 Plate Modified Plate Rounded w/ Handle



Black 1x1 Tile w/ Clip Rounded Edges

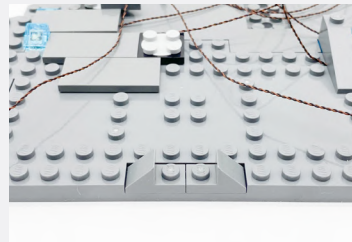
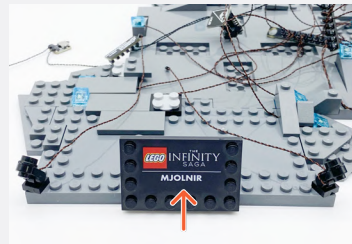


18

Legend

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

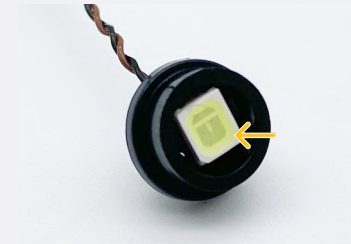
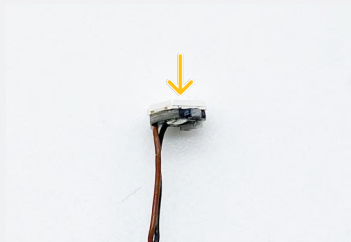
19



Black Round Plate 1x1 w/ Open Stud



Cool White 15cm Large Bit Light



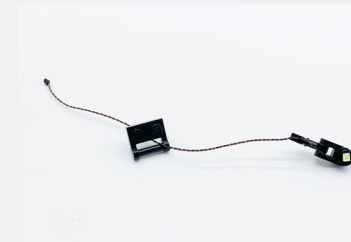
Black 1x1 Plate Modified Plate Rounded w/ Handle



Black Arm Skeleton, Bent w Clips (Horizontal Grips)

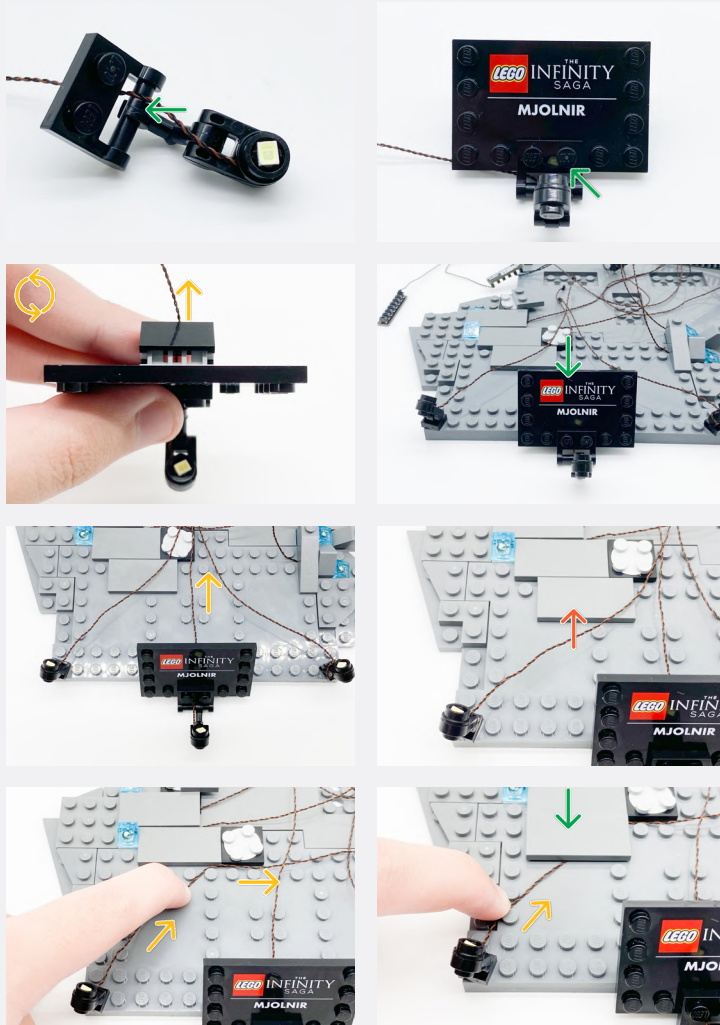


Plate 1x2 MW Bar Handle on Side - Black

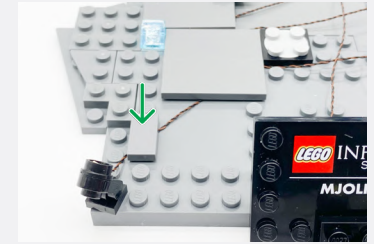


Legend → DISCONNECT → CONNECT / RECONNECT ↻ TURN / FLIP → DIRECTIONAL ↻ TWIST / BRAID ✨ POWER ON TEST 📝 NOTE ICON

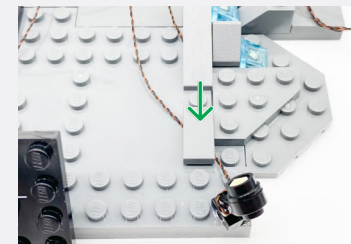
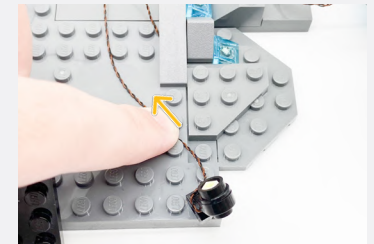
20



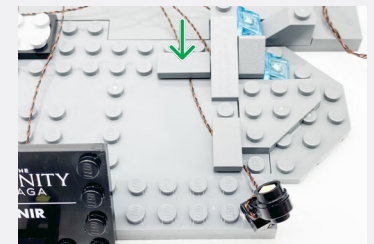
Dark Grey Tile 1x2



Dark Grey Tile 1x2



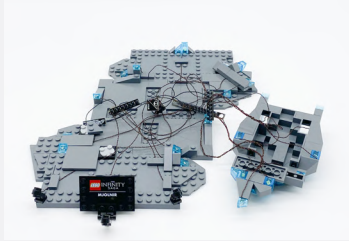
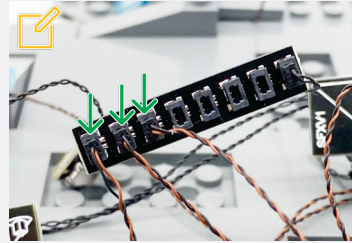
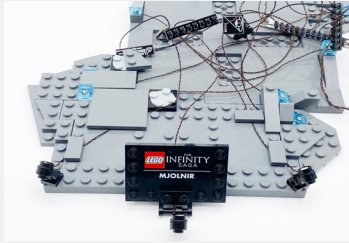
Dark Grey Tile 1x2



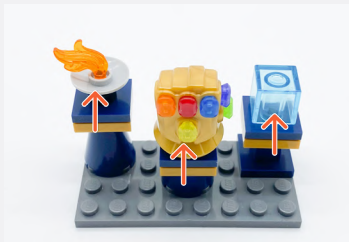
Legend

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

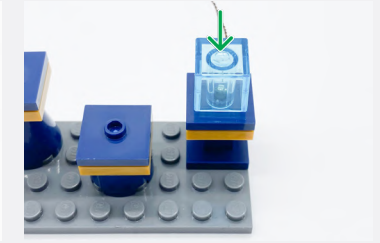
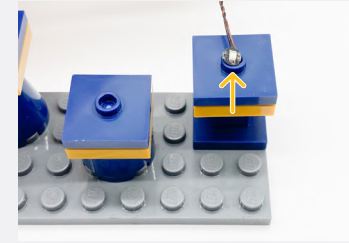
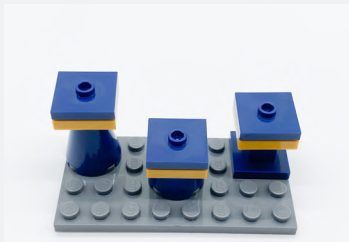
✍️ Connect all three spotlights to the 8-Port Expansion Board from step 17.



21



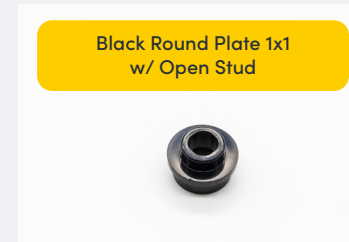
Blue 15cm Bit Light



Black Round Plate 1x1 w/ Open Stud



Warm White 30cm Large Bit Light



Legend

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

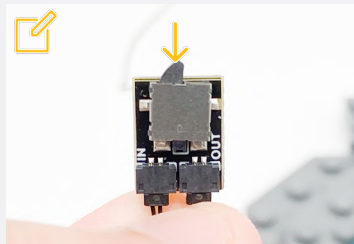
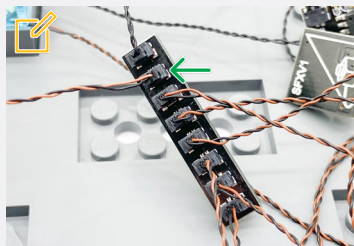
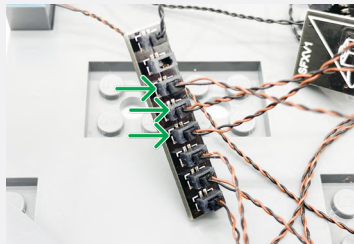
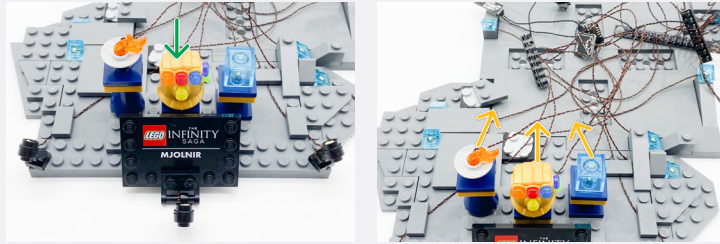


22

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.



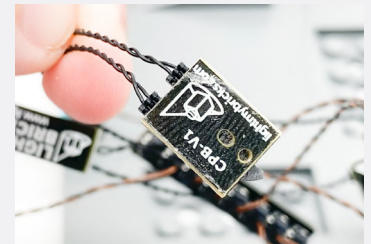
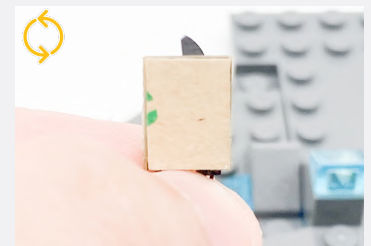
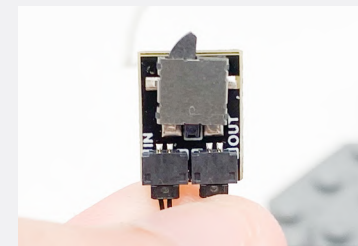
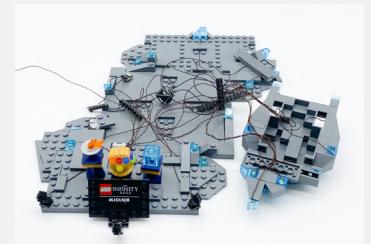
📌 Reconnect the USB Power Cable.

📌 Push the trigger on the NO Push Board to see if the other lights are working

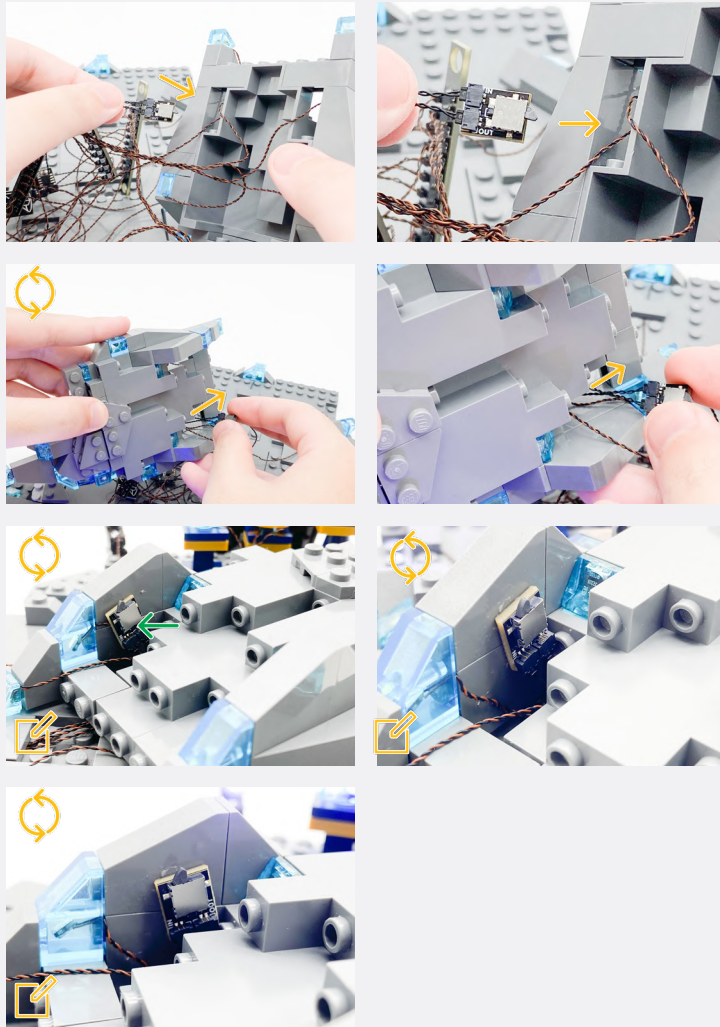
23



Dark Grey Tile 1x2

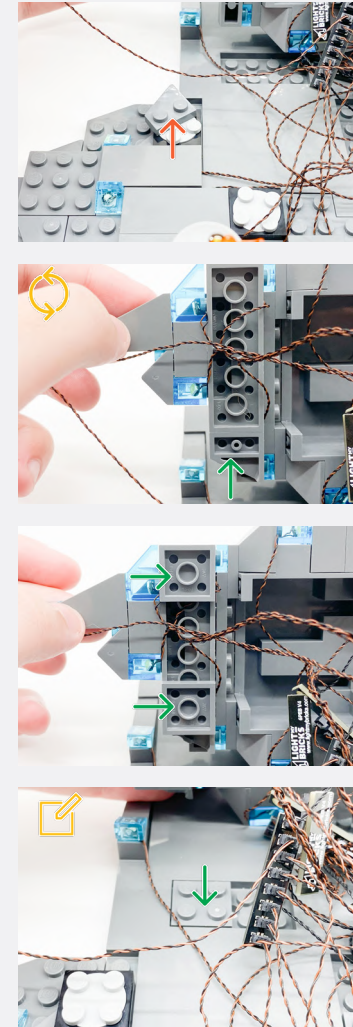


Legend → DISCONNECT → CONNECT / RECONNECT ↻ TURN / FLIP → DIRECTIONAL ↺ TWIST / BRAID ✨ POWER ON TEST 📌 NOTE ICON



☑ Ensure to place the NO Push Board exactly as shown. Place it so it is pushing against the stud. This is to prevent Thor's Hammer from pushing the board out of position.

24



☑ Connect the two plates to the front and left indented area.



2 x Plate 2x2 - Dark Grey



2 x Plate 2x2 - Dark Grey



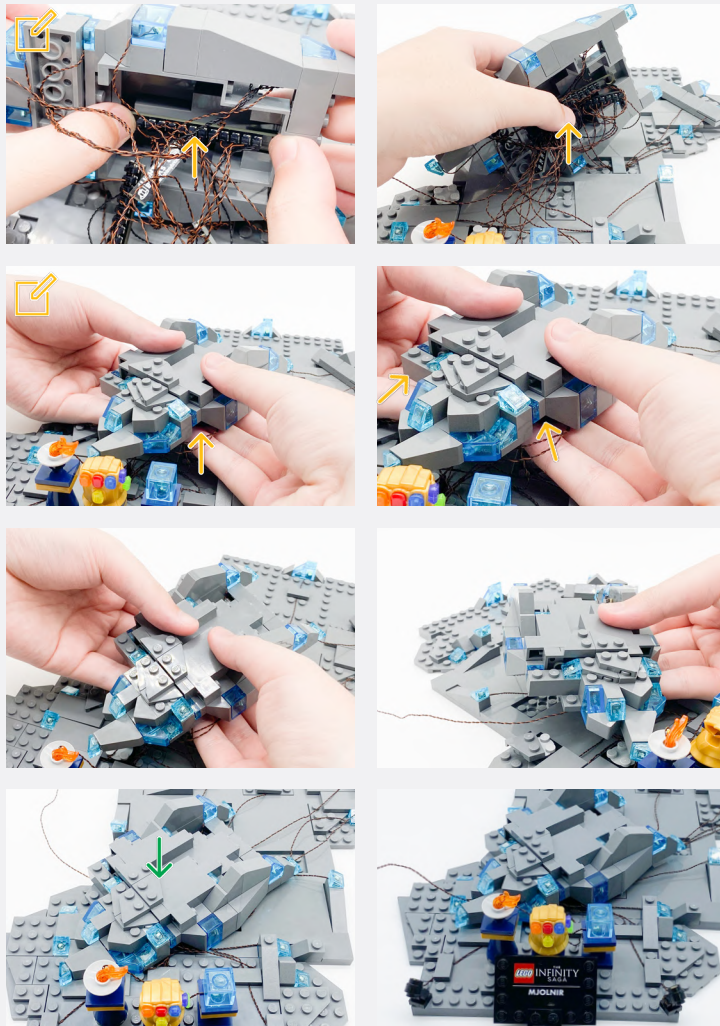
Legend

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

25

Place the 12-Port Expansion as shown so it is flat inside and not sticking out

Stuff all the cables and Expansion Boards underneath EXCEPT for the USB Power Cable, ensuring the bottom is flat so it is easily reconnectable.



Use the LEGO tool to help push the cables beneath the mound.

26

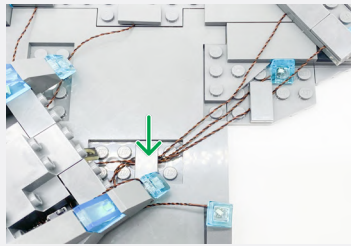


Dark Grey Tile 1x2

Dark Grey Tile 1x2

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.



Removed Parts

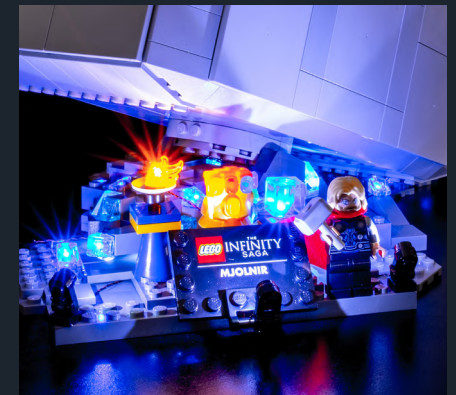


Legend

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

FINAL PRODUCT

This finally completes installation of the Light My Bricks Thor's Hammer 76209 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.

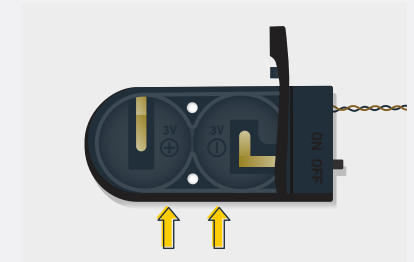
If the batteries have no power, replace the batteries.

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.

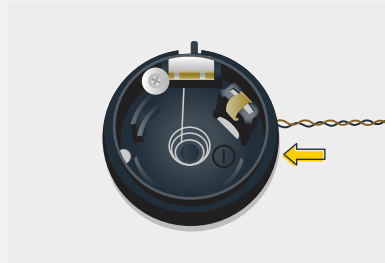
On the opposite side, the "-" side of the battery pack should have the battery flipped upside down, that is the "+" symbol facing upwards.



Troubleshooting

Check For Cr2032 Batteries Using The Round Battery Pack

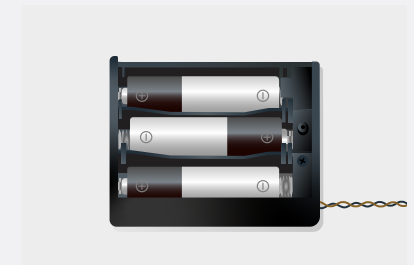
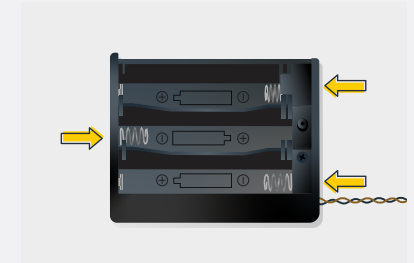
Inside the battery pack is a symbol indicating which side the (round) CR2032 battery should be inserted. In this case, for the stacked battery pack, ensure that BOTH batteries have the "+" symbol facing upwards.



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

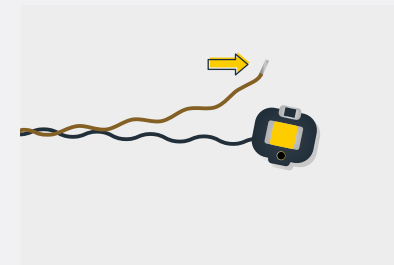
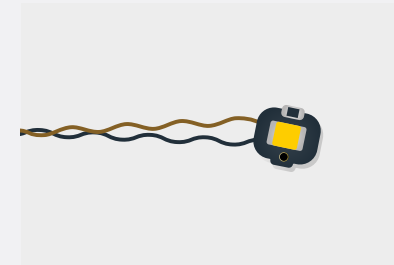
Check Your Wires

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.



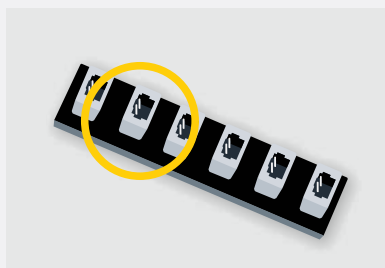
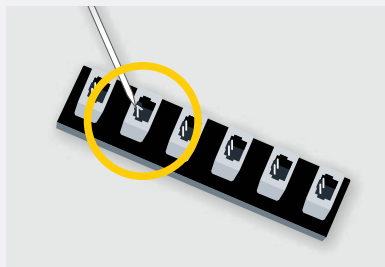
Troubleshooting

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.

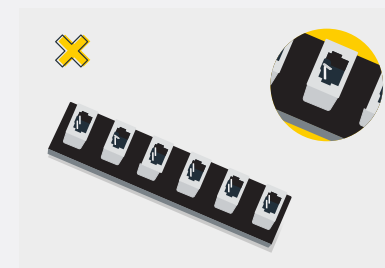
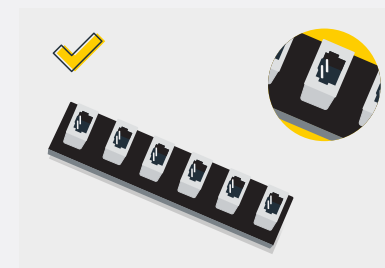
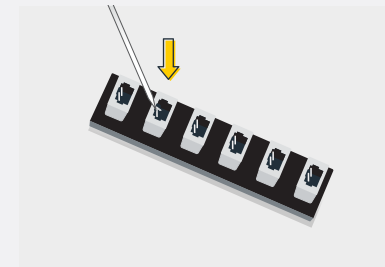
Not only will a light connected to the damaged port not work, but if the pins inside the port are bent to a point they are touching each other, this can result in all other lights in the system to stop working. This is a short circuit.



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!



lightmybricks.com