

#21330 LIGHT KIT
INSTALLATION GUIDE



Light My Bricks



LEGO® HOME ALONE #21330 LIGHT KIT INSTALLATION GUIDE

Hi There!

We're here to help you get started on the LEGO®

Home Alone (21330) Light Kit.

This PDF details the instruktiv 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:



- 9 x Warm White Strip Light
- 12 x White 30cm Bit Light
- 4 x Flashing White 30cm Bit Light
- 5 x White 15cm Bit Light
- 2 x Orange 30cm Bit Light
- 2 x Red 30cm Bit Light
- 40 x Warm White 30cm Micro Bit Light



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



4 x Flicker Effects Board



- 12 x 5cm Connecting Cable
- 2 x 15cm Connecting Cable
- 8 x 30cm Connecting Cable
- 2 x 50cm Connecting Cable
- 3 x Wireless Power Connector Sets



- 1 x USB Power Cable
- (Power Source not Included)
- 1 x Flat Battery Pack

EXTRA BRICKS:



- 1 x Round Plate 1x1 Open Stud Light Grey
- 2 x Plate 1x6
- 1 x Plate 2x8 Black
- 2 x Round Plate 1x1 Trans Orange
- 2 x Round Plate 1x1 Trans Red
- 1 x Round Plate 1x1 Trans Clear
- 1 x Plate 2x2 W Rounded Bottom Trans Clear
- 1 x Tile 1x2 Black

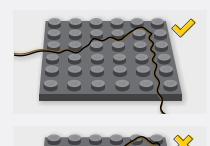


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Before You Begin



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 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

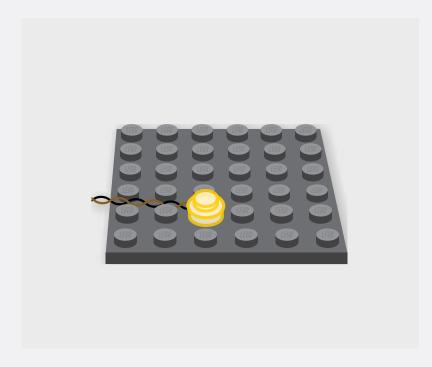
Take extra care when inserting the micro connectors to micro ports of Micro Expansion Boards. Connecting Micro Bit Lights to Micro Expansion Boards is similar to connecting lights and cables to Strip Lights. With the expansion board facing up, ensure the side of the connector with the wires exposed is 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.





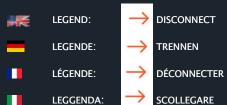






INSTRUCTIONS

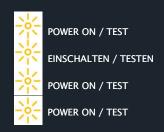
To ensure a smooth installation of your light kit, please read and follow each step carefully. If you run into any issues, please refer to the online troubleshooting guide.



































TURN / FLIP -> DIRECTIONAL 🚜 TWIST / BRAID 🔆 POWER ON TEST 🕜 NOTE ICON





















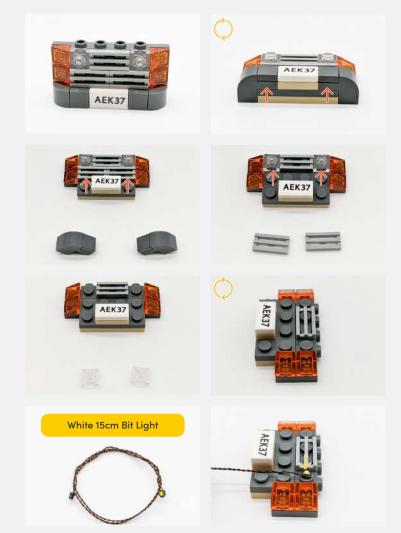
TURN / FLIP -> DIRECTIONAL 🚜 TWIST / BRAID 🔆 POWER ON TEST 🕜 NOTE ICON



















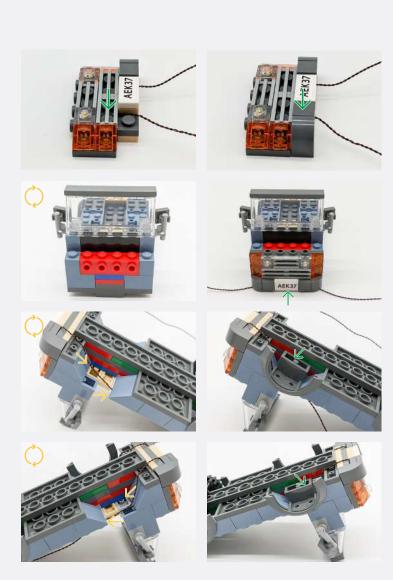














CONNECT / RECONNECT







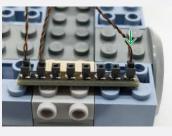






If you experience any issues with the lights not working and suspect an issue with a component, please try a different port on the expansion board to verify where the fault lies (with the light or expansion board). To correct any issues with expansion board ports, please view the section addressing expansion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

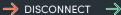














CONNECT / RECONNECT







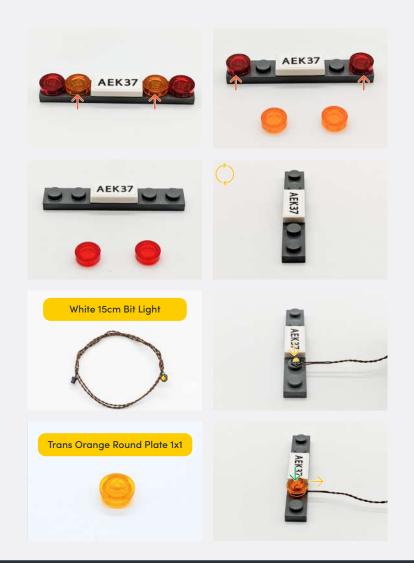


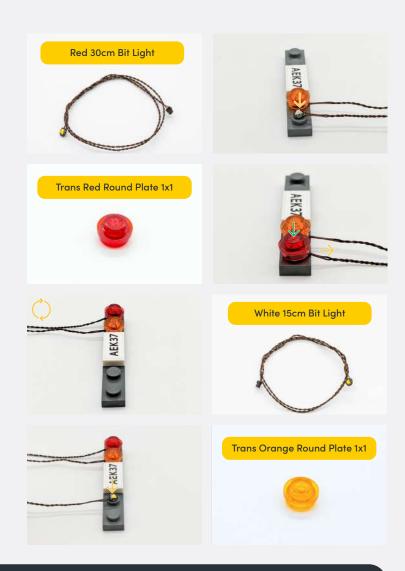
TURN / FLIP -> DIRECTIONAL R TWIST / BRAID R POWER ON TEST NOTE ICON





5















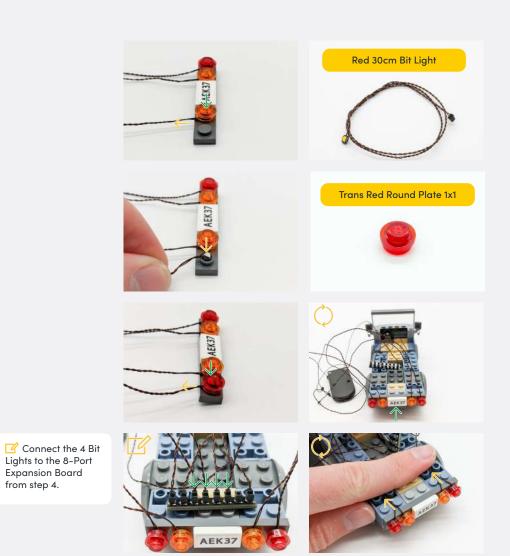
















from step 4.

















🗹 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.

6

















Legend

→ DISCONNECT →

CONNECT / RECONNECT























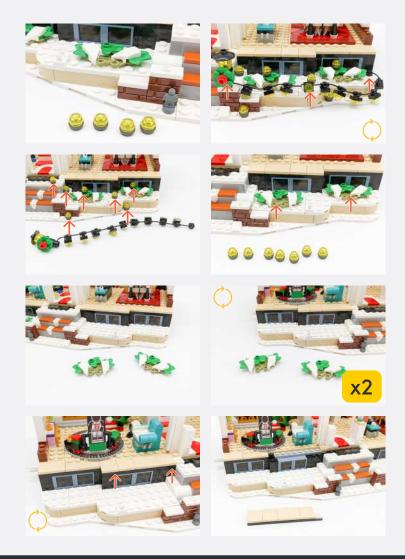












Turn the crank so that the train is towards the back of the house.



 \rightarrow DISCONNECT \rightarrow

CONNECT / RECONNECT



























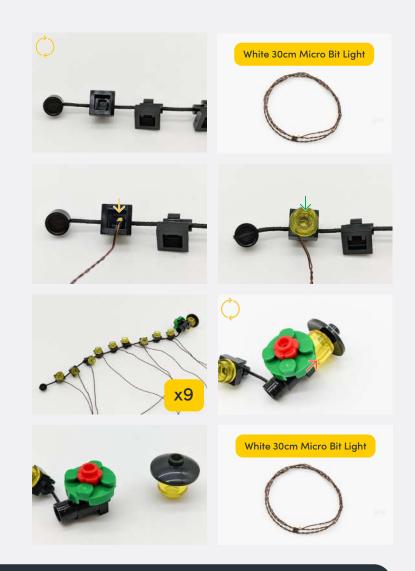


















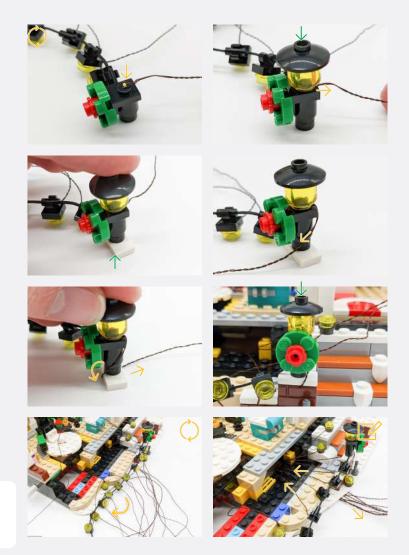














10

Thread the cables from the first 5 Micro Bit Lights under the house.











Thread the

cables from the last 5 Bit Lights under the house.





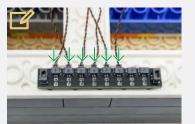
INSTRUCTIONS



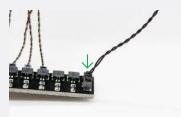


Connect the 6 cables from the leftmost hole into the Micro 8-Port **Expansion Board**







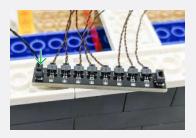


Connect the 8 cables from the hole; second from the left, into the Micro 8 Port **Expansion Board**





Connect the other end of the 5cm Connecting Cable into the Micro 8-Port **Expansion Board**





Legend

 \rightarrow DISCONNECT \rightarrow

CONNECT / RECONNECT









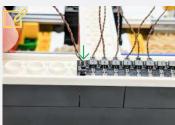




🗹 If you experience any issues with the lights not working and suspect an issue with a component, please try a different port on the expansion board to verify where the fault lies (with the light or expansion board). To correct any issues with expansion board ports, please view the section addressing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



Connect the USB Power Cable into the first (leftmost) port on the Micro 8-Port **Expansion Board**













Legend

















12





Connect the 2
Bit Lights into the last 2 ports on the far left Micro 8-Port Expansion Board











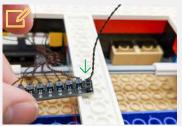


13

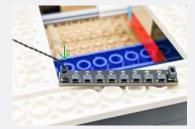
Connect the 5cm Connecting Cable into the MIcro 8-Port Expansion Board on th

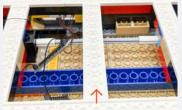










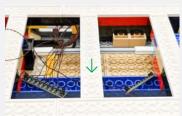










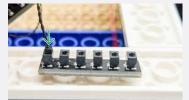


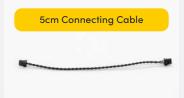
Connect the 5cm Connecting Cable into the third Micro 8-Port Expansion Board.





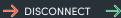






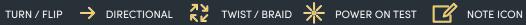


Legend

















🗹 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.



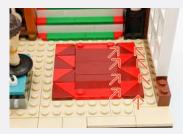






























Legend

→ DISCONNECT →

RECONNECT















ightarrow disconnect ightarrow

CONNECT / RECONNECT

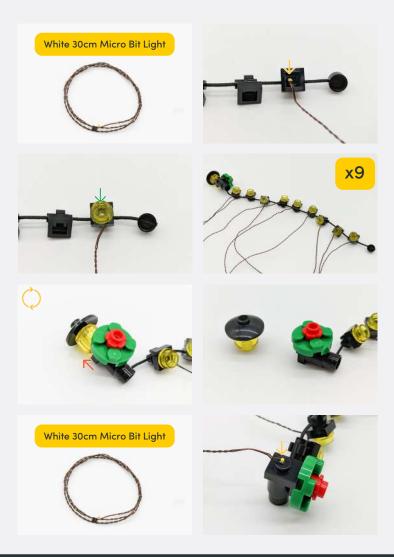














→ DISCONNECT →

CONNECT / RECONNECT







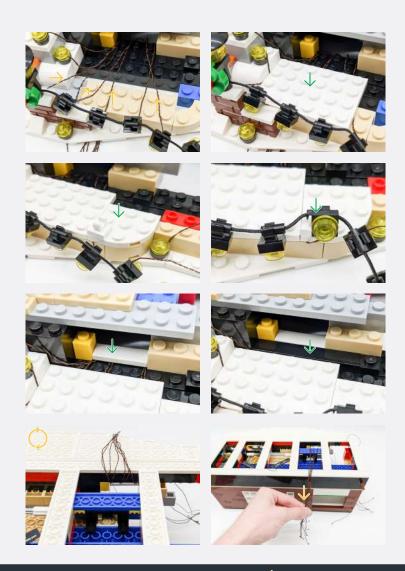
Thread the 5

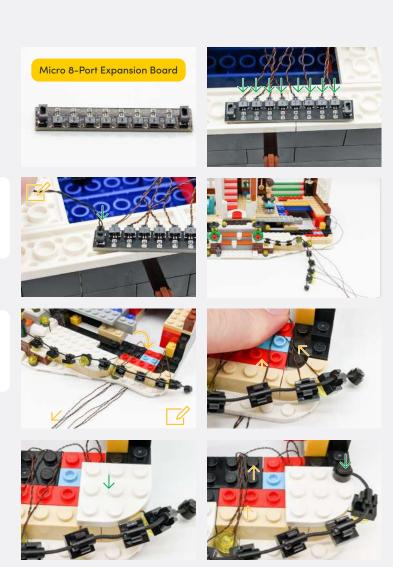
under the house











 \rightarrow DISCONNECT \rightarrow

CONNECT / RECONNECT

TURN / FLIP -> DIRECTIONAL R TWIST / BRAID R POWER ON TEST NOTE ICON



Connect the 5cm Connecting Cable from step 13 into the Micro 8-Port Expansion Board.

Thread the last 4 Bit Light cables under the house through the right

hole.



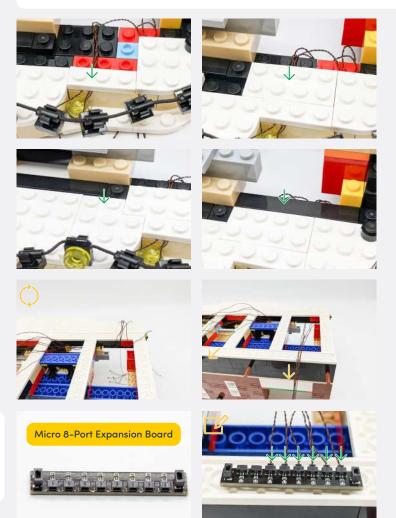


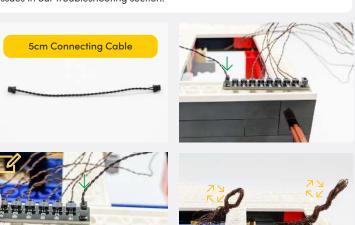


🗹 If you experience any issues with the lights not working and suspect an issue with a component, please try a different port on the expansion board to verify where the fault lies (with the light or expansion board). To correct any issues with expansion board ports, please view the section addressing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

> Connect the 5cm Connecting Cable into the Micro 8-Port **Expansion Board** from earlier in this

step.









Legend

Connect the 6

Bit Light cables from the rightmost hole into the Micro 8-Port **Expansion Board**

→ DISCONNECT →

CONNECT / RECONNECT















Connect the 2 Bit Lights into the last 2 ports in the rightmost Micro 8-Port Expansion Board 5cm Connecting Cable

Legend

 \rightarrow DISCONNECT \rightarrow

CONNECT/ RECONNECT





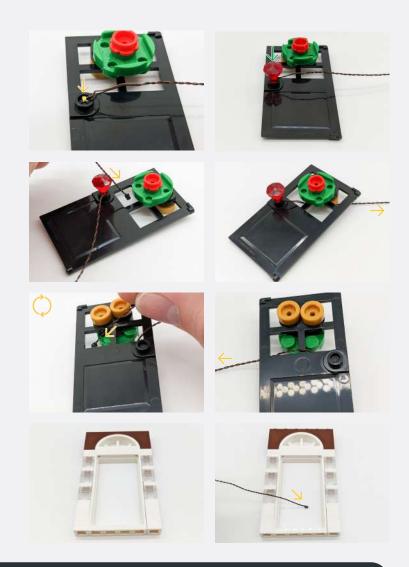




















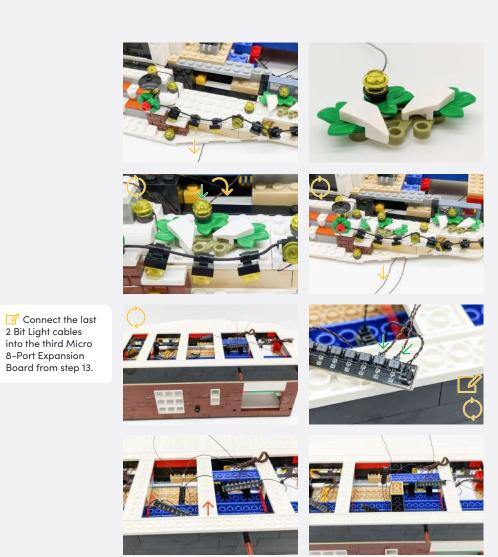


TURN / FLIP -> DIRECTIONAL 🚜 TWIST / BRAID 🔆 POWER ON TEST 🕜 NOTE ICON









→ DISCONNECT →

CONNECT / RECONNECT



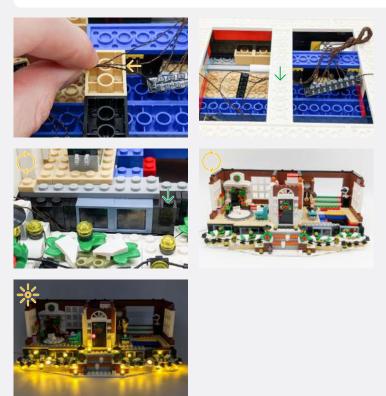








🗹 If you experience any issues with the lights not working and suspect an issue with a component, please try a different port on the expansion board to verify where the fault lies (with the light or expansion board). To correct any issues with expansion board ports, please view the section addressing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















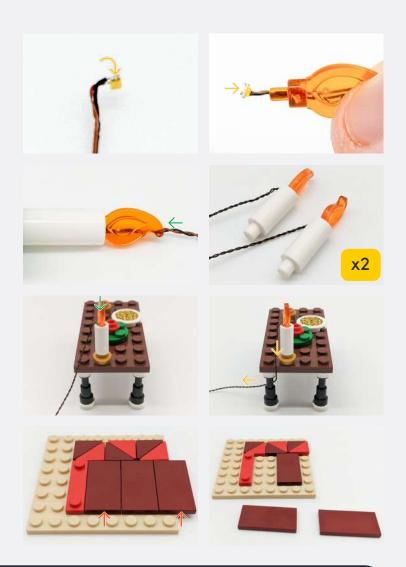
























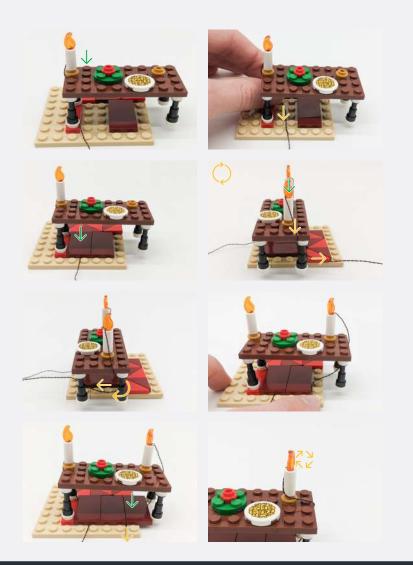


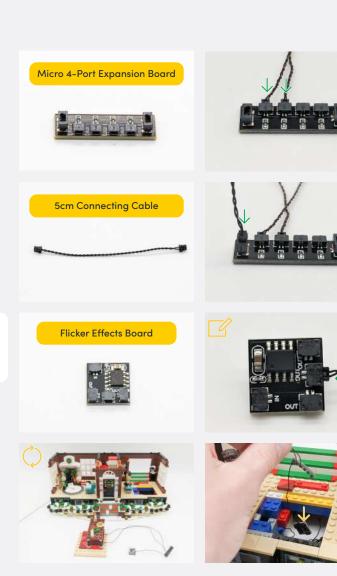
























Connect the 5cm

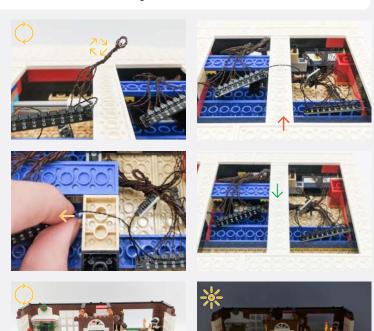
Connecting Cable to the OUT port of the Flicker Effects Cable.











Connect the 5cm Connecting Cable from step 17 to the IN port of the Flicker Effects Board.



Legend

→ DISCONNECT →

CONNECT / RECONNECT







































CONNECT / RECONNECT





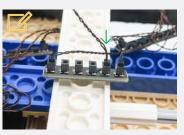








Connect the 15cm Connecting Cable to the 6-Port Expansion Board from 13.









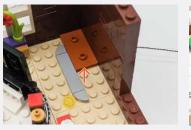








22









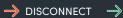








Legend









TURN / FLIP -> DIRECTIONAL 🚜 TWIST / BRAID 🔆 POWER ON TEST 🕜 NOTE ICON









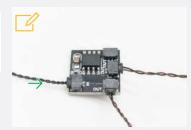


Connect the White 30cm Bit Lights to the OUT ports on the Flicker Effects Board.





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





Connect the 5cm Connecting Cable into the 8-Port **Expansion Board** from step 21.









Legend

→ DISCONNECT →

CONNECT / RECONNECT





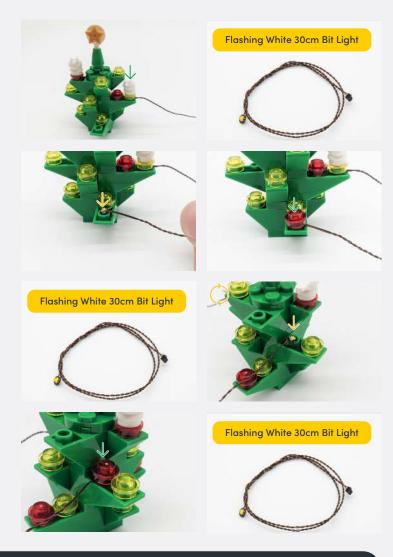










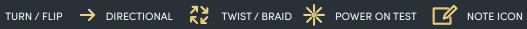










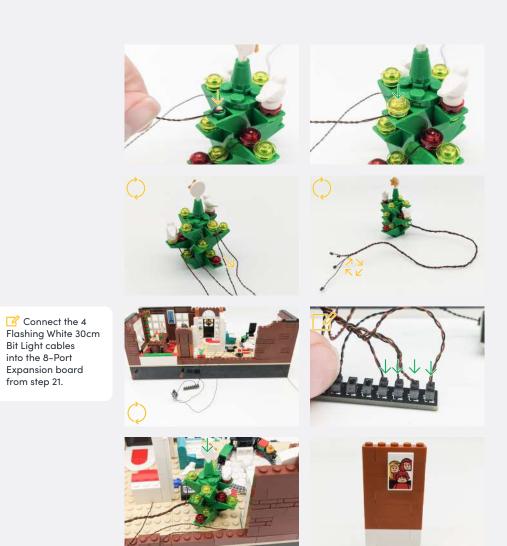














Legend

Expansion board from step 21.



















INSTRUCTIONS





























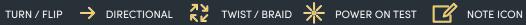


Legend







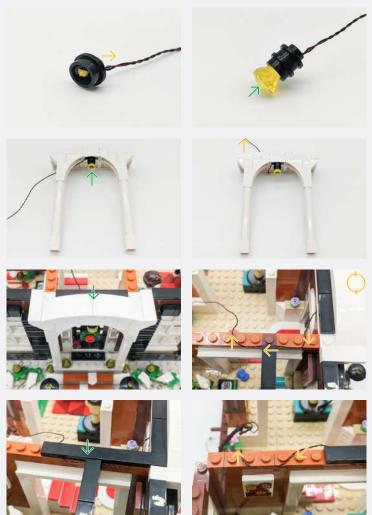




























Connect the Wireless Power Connector and Bit Light cables into the 8-Port Expansion Board from step 21.









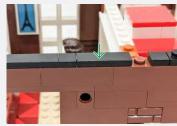




























Legend

 \rightarrow DISCONNECT \rightarrow

CONNECT / RECONNECT





















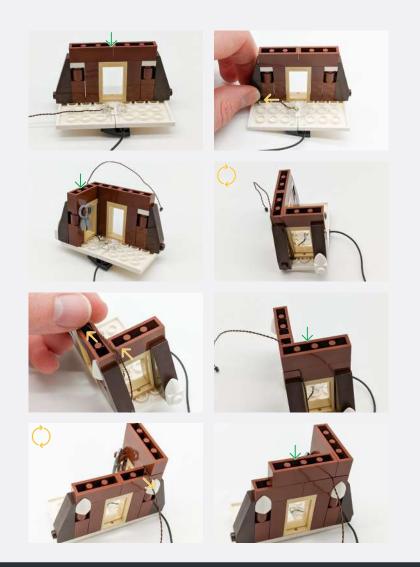


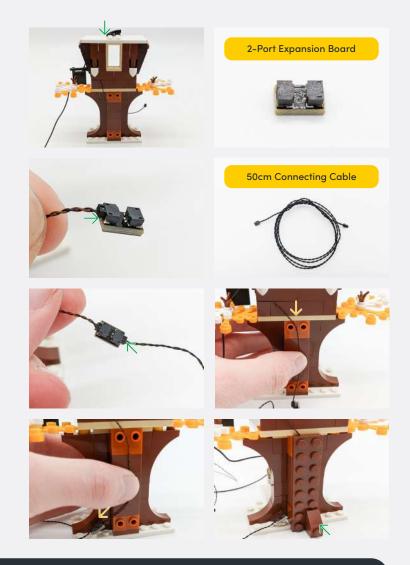


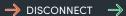














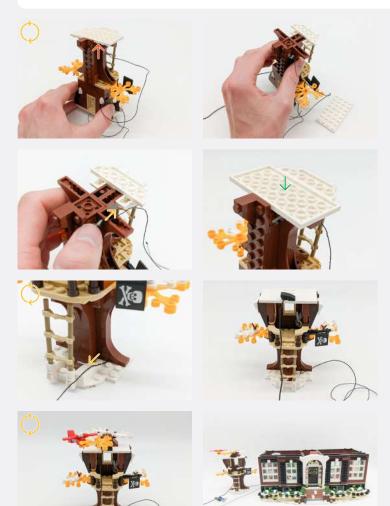






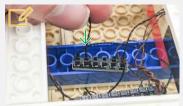






Connect the 50cm Connecting Cable into the 6-Port Expansion Board from step 13.









Legend

→ DISCONNECT →

RECONNECT





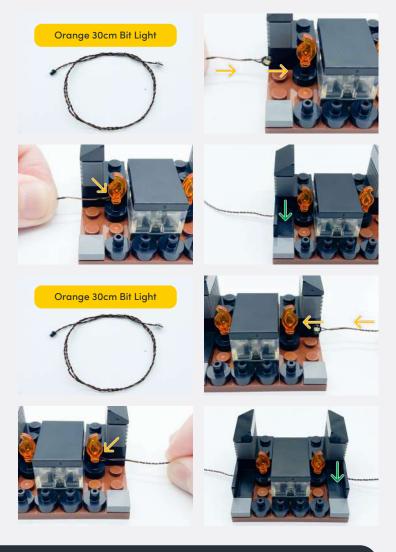


































































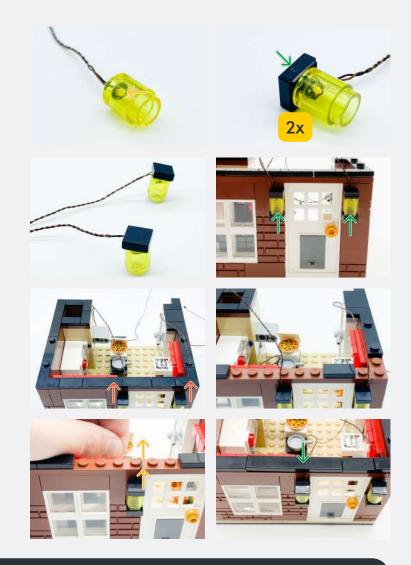






















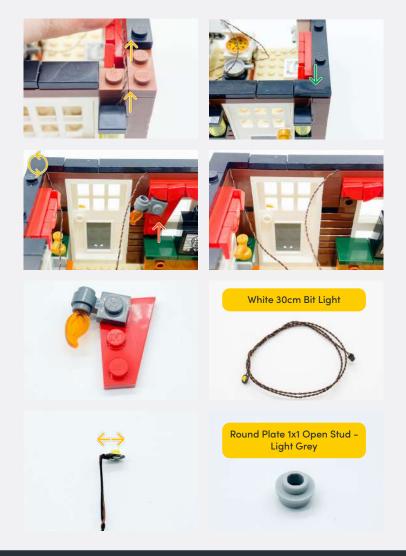


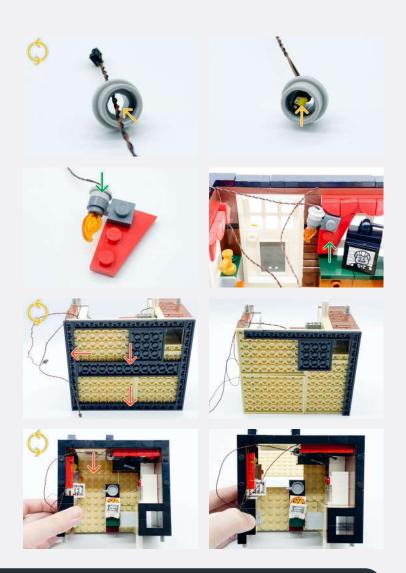






30















CONNECT / RECONNECT





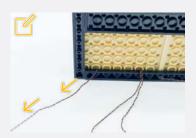


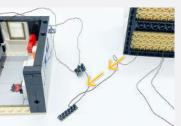






Connect the Left Bit Light cable (From the external door lamp) to the 6-Port Expansion Board

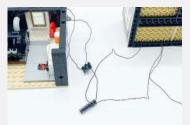




Identify the longer cable from the two Bit Lights (the second door lamp) and connect it to the Expansion Board

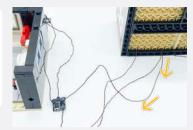




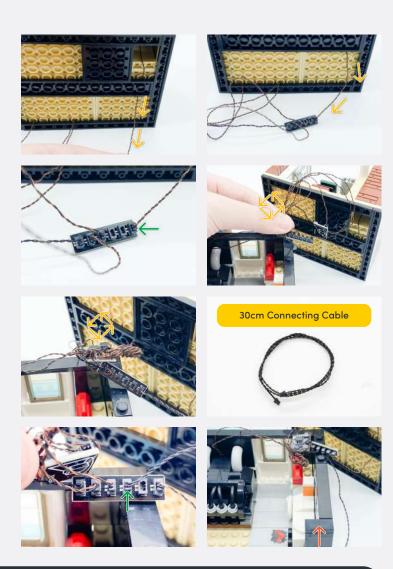












Legend























CONNECT / RECONNECT









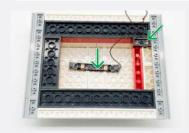




When reconnnecting the roof, ensure the Wireless Power Connectors are alligned

If you are having trouble, please refer to page 81

🗹 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.





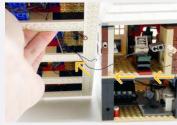


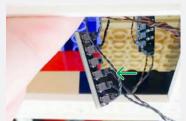




















Legend

→ DISCONNECT →

RECONNECT













Wireless Power Connector (Plate Side)



Legend



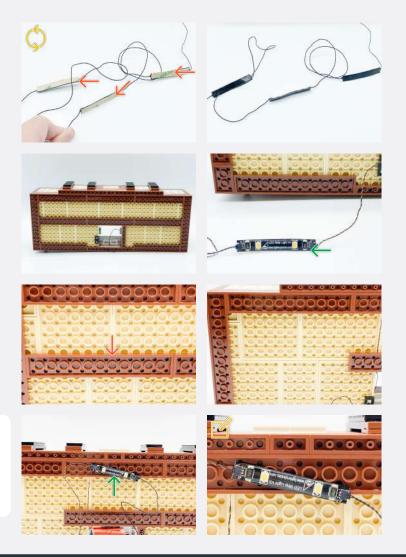












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Legend

Ensure the Strip Light is positioned the exact way as shown, to enable this floor to be reconnected to the section below

→ DISCONNECT →

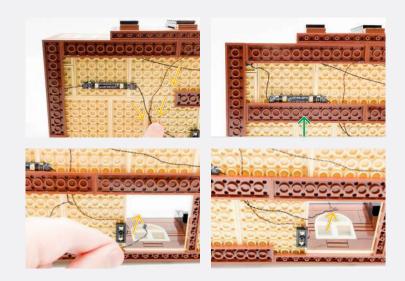
CONNECT/ RECONNECT

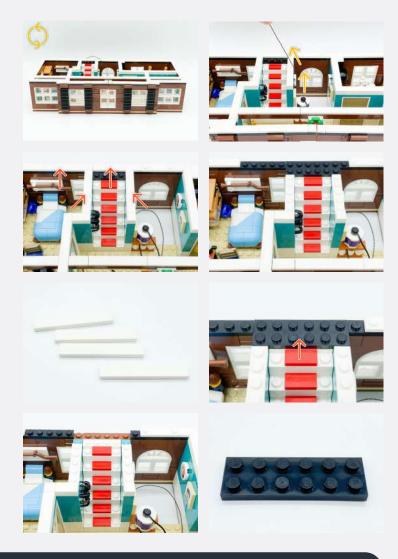


















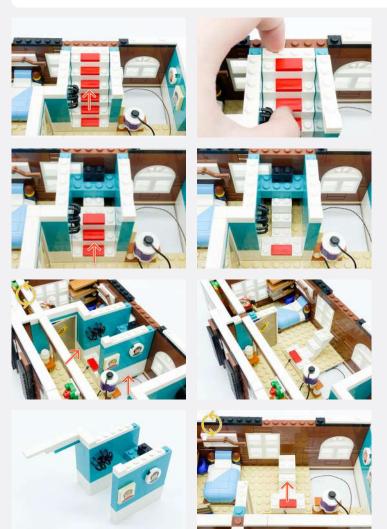


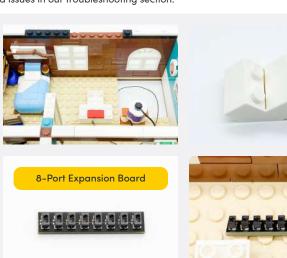
















Legend

→ DISCONNECT →

RECONNECT

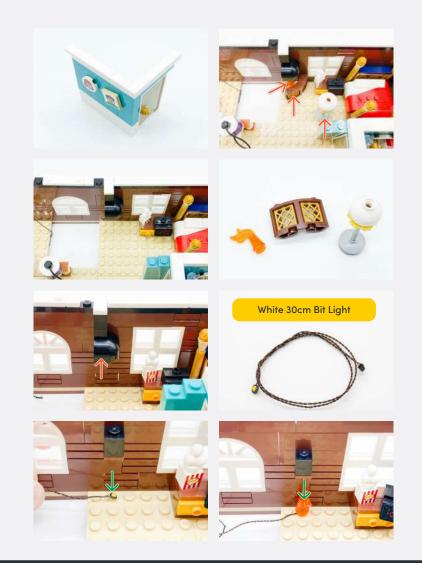










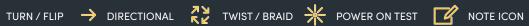




































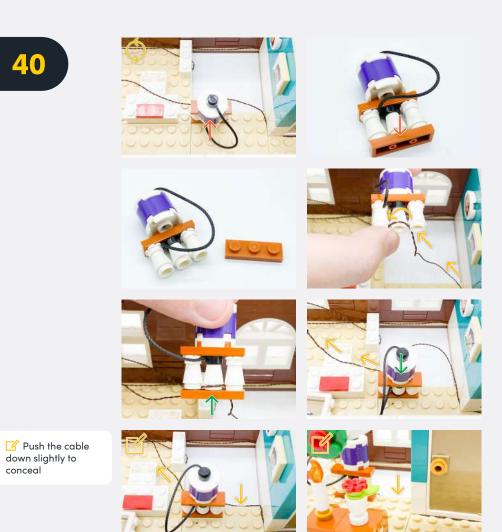








40





Legend











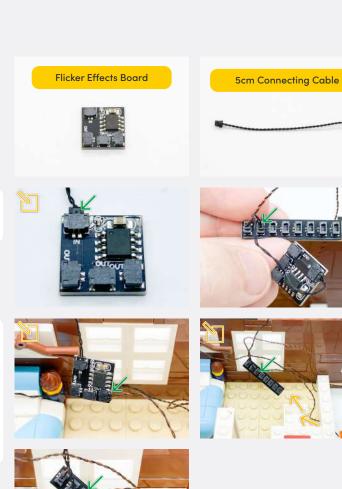




Connect the 5cm Connecting Cable to the 'IN' port

Connect the White 30cm Bit Light from the fireplace to the 'OUT' port of the Flicker Effects Board

Connect the White 30cm Bit Light from the Lamp to the 8-Port Expansion





Legend

→ DISCONNECT →

CONNECT / RECONNECT



TURN / FLIP -> DIRECTIONAL R TWIST / BRAID R POWER ON TEST NOTE ICON

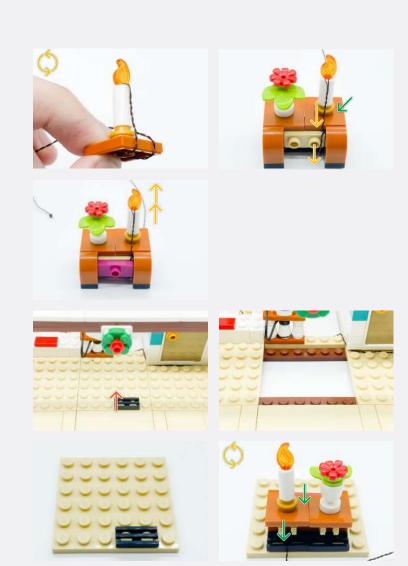












Legend

→ DISCONNECT →

CONNECT / RECONNECT



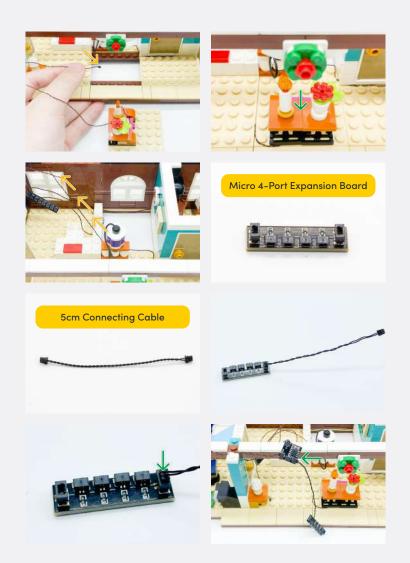












Connect the other end of the 5cm **Connecting Cable** to one of the OUT' ports on the Flicker Effects Board

Connect the White 30cm Micro Bit Light to one of the small ports on the Micro Expansion Board



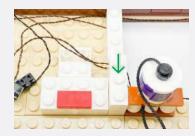


















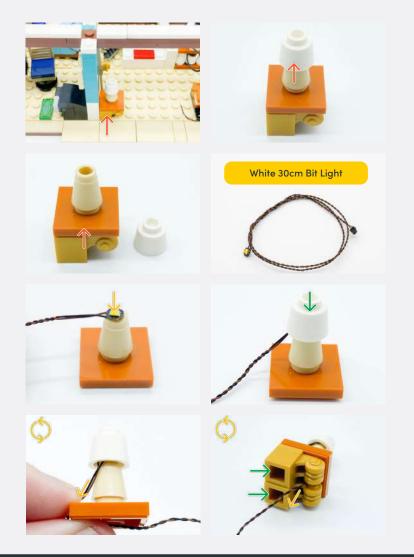




TURN / FLIP -> DIRECTIONAL 🚜 TWIST / BRAID 🔆 POWER ON TEST 🕜 NOTE ICON

















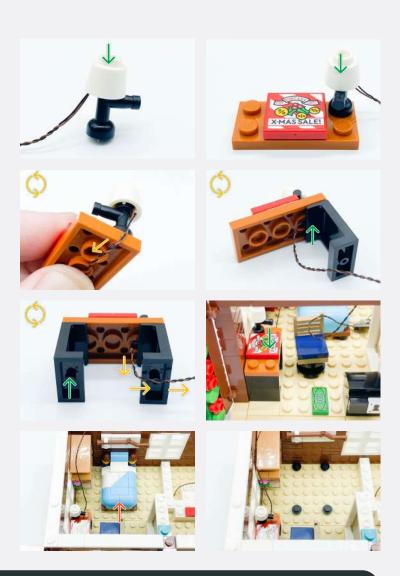


























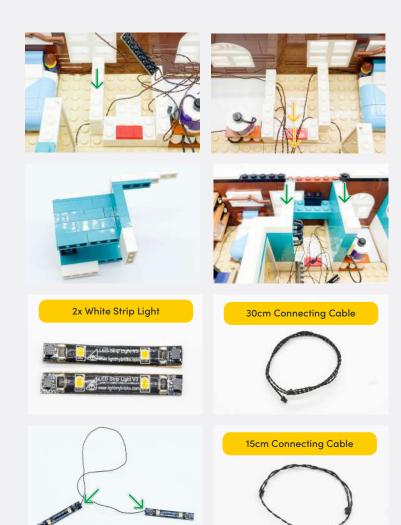






































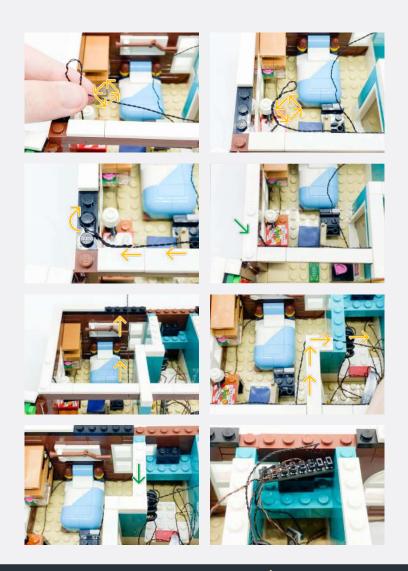














Legend

→ DISCONNECT →

CONNECT/ RECONNECT





Ensure cable from wireless connector is facing the inside of the stair

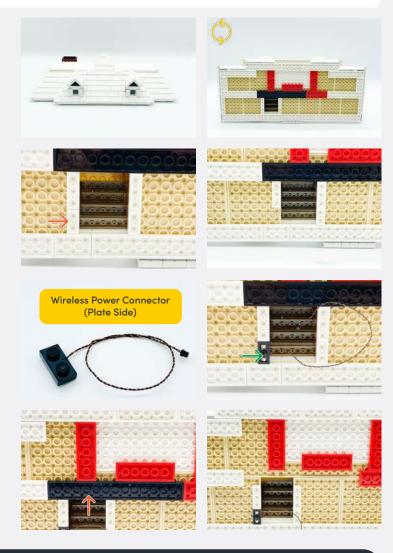






🗹 If you experience any issues with the lights not working and suspect an issue with a component, please try a different port on the expansion board to verify where the fault lies (with the light or expansion board). To correct any issues with expansion board ports, please view the section addressing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





Legend

→ DISCONNECT →

CONNECT / RECONNECT





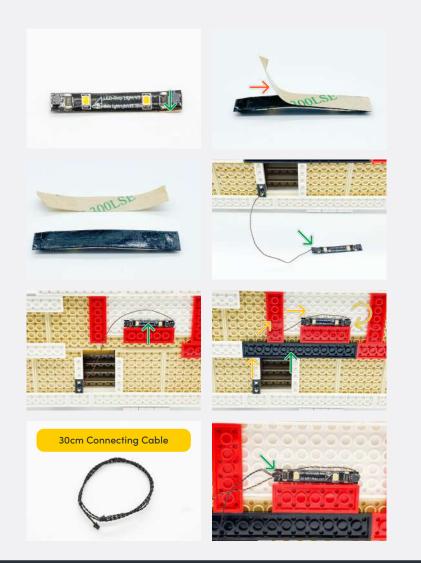




When reconnnecting the floor, ensure the Wireless Power Connectors are alligned

If you are having trouble, please refer to page 81





















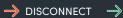


49



















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Flip the Strip
Light anti-clockwise, then connect the Strip Light up onto the roof in the following position with the second Strip Light along the top side









Legend

→ DISCONNECT →

CONNECT/ RECONNECT













Use the 30cm Bit Light at the end of the circuit (connected via the Strip Light)





















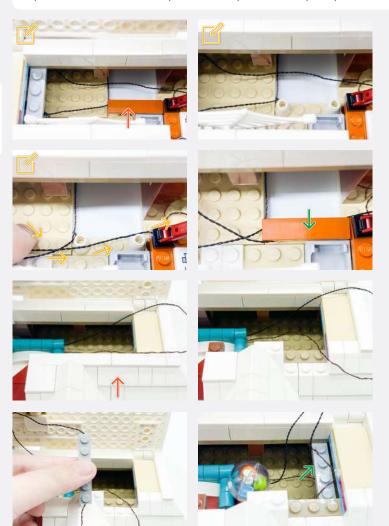






🗹 If you experience any issues with the lights not working and suspect an issue with a component, please try a different port on the expansion board to verify where the fault lies (with the light or expansion board). To correct any issues with expansion board ports, please view the section addressing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

If there are any loose cables on the left side of the attic, thread it in between the railing





If you are having trouble, please refer to page 81

















Legend

→ DISCONNECT →

CONNECT / RECONNECT













🗹 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.

Decide where you want the tree house before twisting the Connecting Cable



















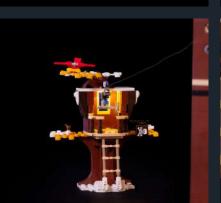


FINAL PRODUCT

This finally completes installation of the Light My Bricks Home ALone 21330 Light Kit.













Wireless Power Connectors Install Tip

If you're having connectivity / contact issues with the Wireless Power Connectors, try the following tip to help resolve the issue.



Pull the terminal contacts further out.

Use a pair of tweezers to gently pull out both terminal contacts from the plate.

This will ensure that both plate and tile connectors are can easily make contact.











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.



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

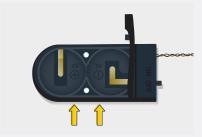
If the batteries have no power, replace the batteries.

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







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.







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.







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