Pet_Shop_10218 LED Lighting Kit

Package contents:

- 7x Strip Lights
- 3x White 30cm Dot Lights
- 1x 6-port Expansion Board
- 1x Lamp Post with LED and cable attached
- 1x Battery Pack (3x AA batteries not included)
- 2x Adhesive squares
- 7x Lego Plates 1x6 for mounting Strip Lights

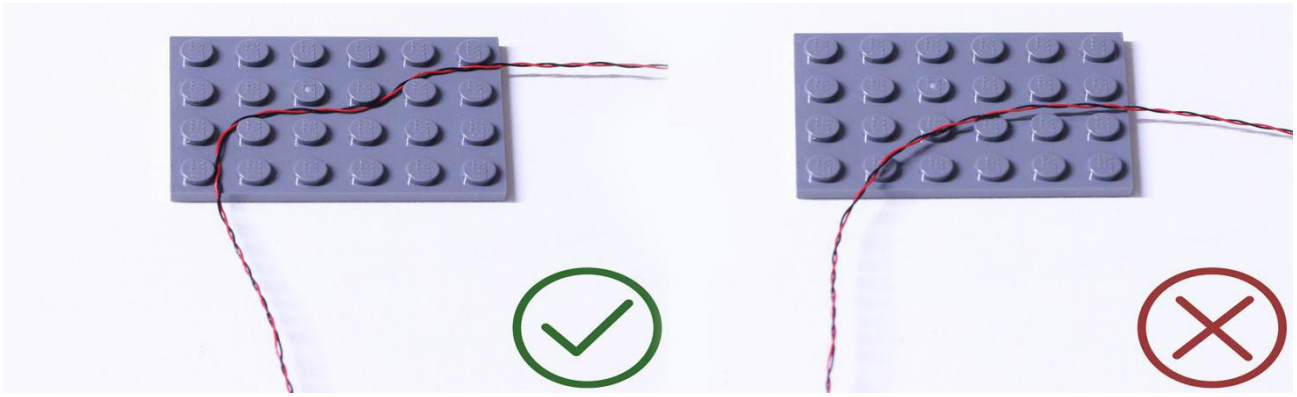
Connecting Cables

- 1x 5cm cable
- 5x 15cm cable
- 1x 30cm cable

Note:

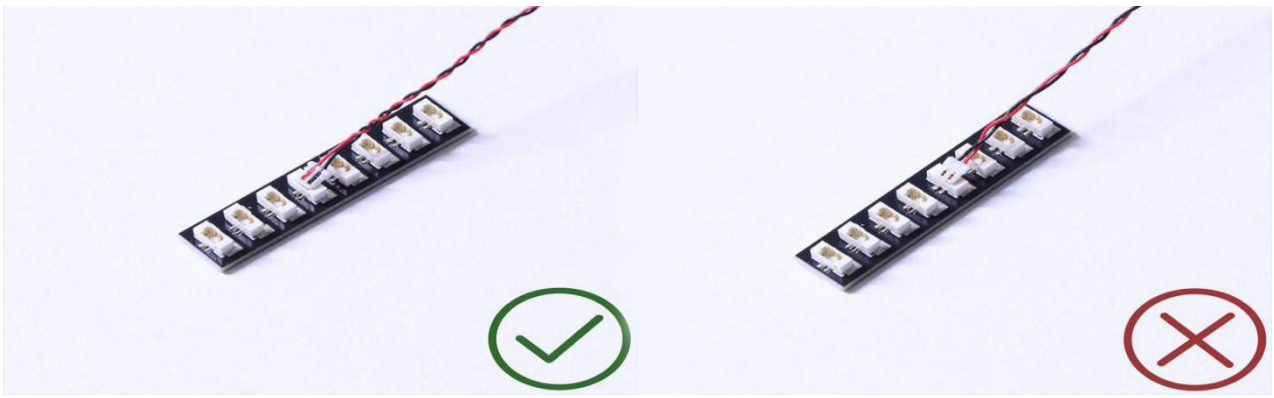
Place wires on the surface or under the LEGO building blocks.

The wire can be place between the building blocks or under the block, but they should be placed between the studs correctly.

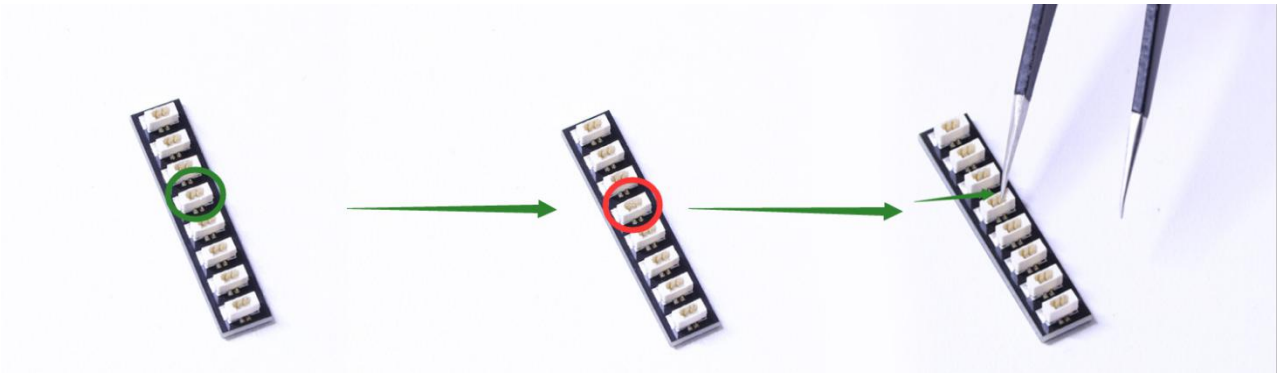


Insert the connectors to the ports.

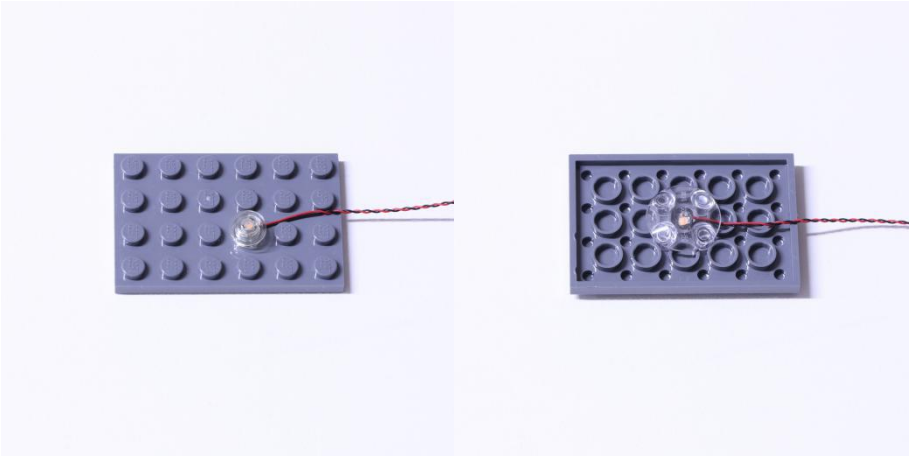
Be careful when you are operating, there's only one correct way to insert, make sure the expansion board is upward, find the soldered "=" sign on the left of the port. When you are inserting, the side which the wires can be seen should be faced to the "=" sign and if you feel hard to insert, please stop, and don't force it, for that may result in bent pins inside the port or overheating of the expansion board.



At this point, use the tweezers to straighten the bentpins.

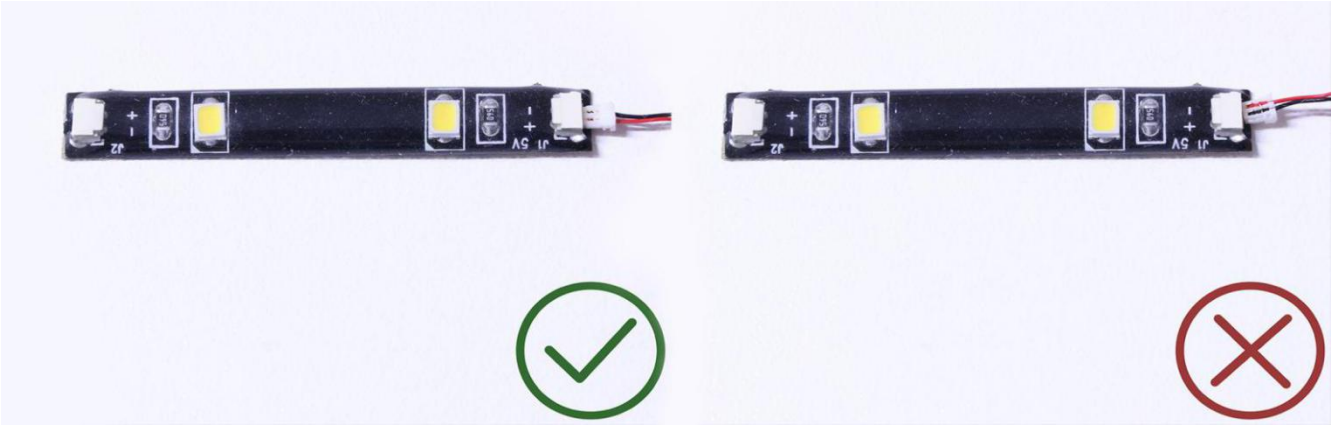


When installing dot lights, make sure they are correctly placed (Yellow LED package is exposed). You can put they either on the top of the studs or between studs.

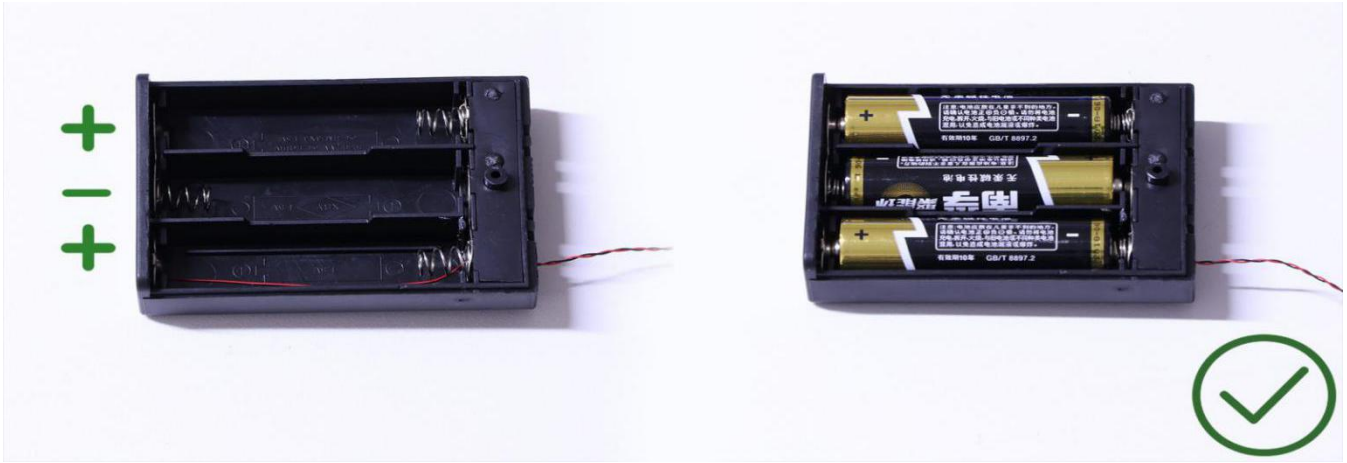


Connecting cable connectors to Strip Lights

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.



Finally, please pay attention to the positive and negative terminals of the battery when installing the battery case.

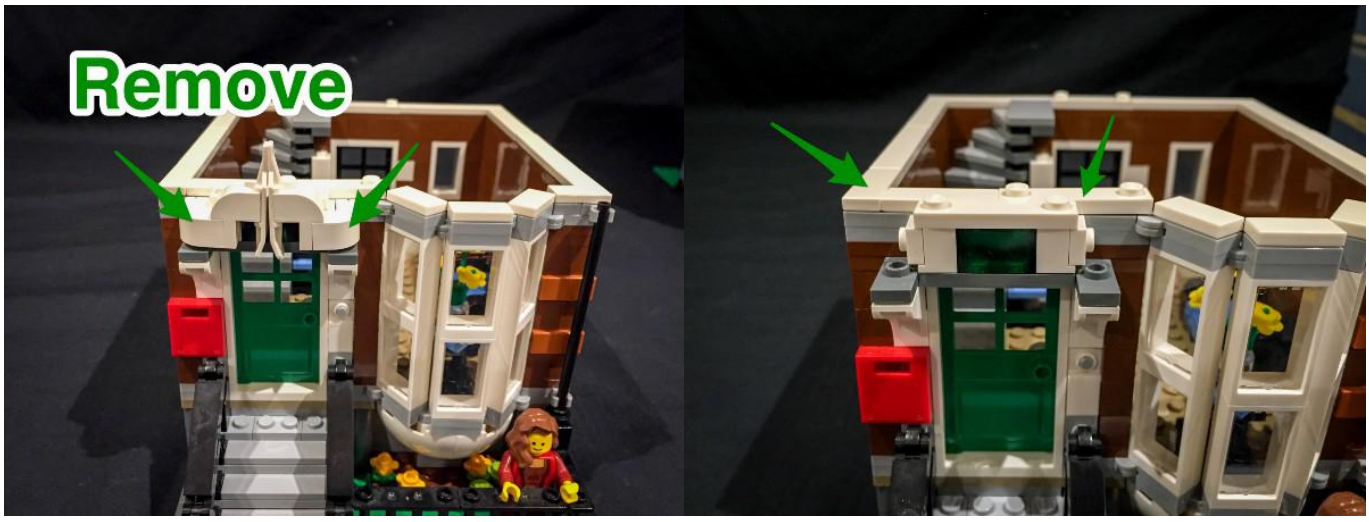


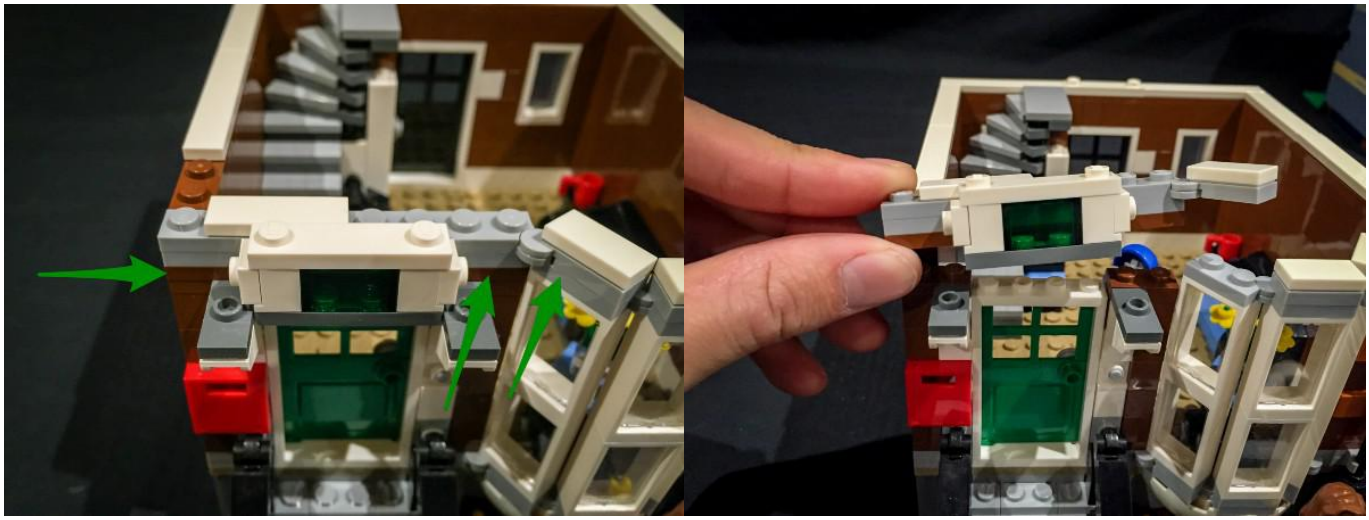
OK, Let's Begin!

Instructions for installing this kit

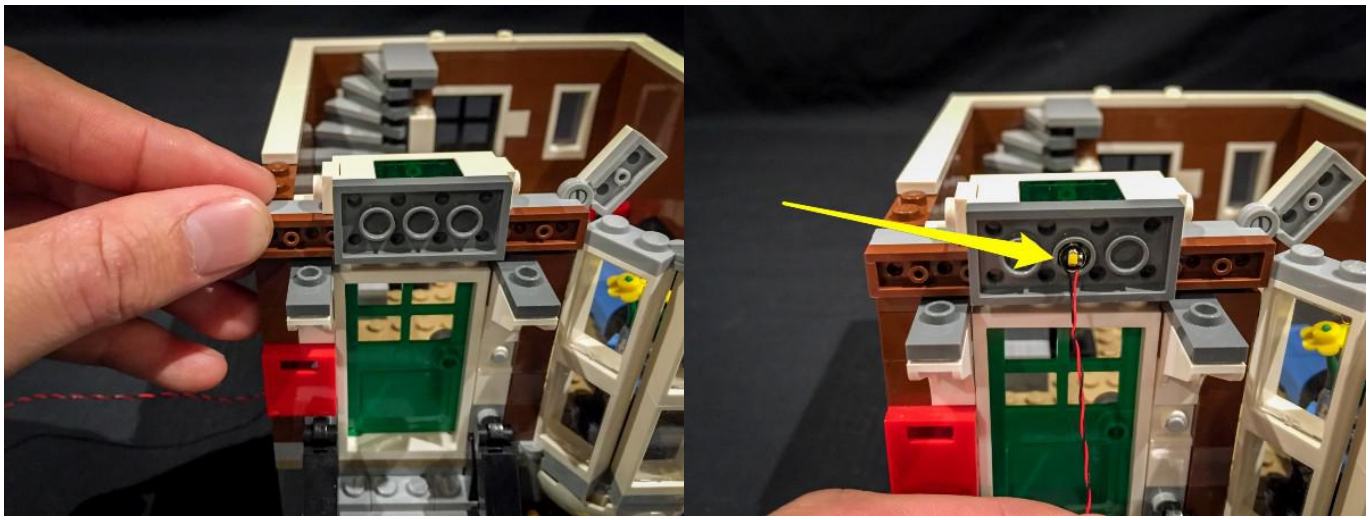
1.) Start by separating the 2 buildings and then remove the 2nd and top levels from the Red building as we will install lights to this section first.

2.) Remove the following pieces which make up the top frame of the front door. Save the last section as we will install a Dot Light to it.





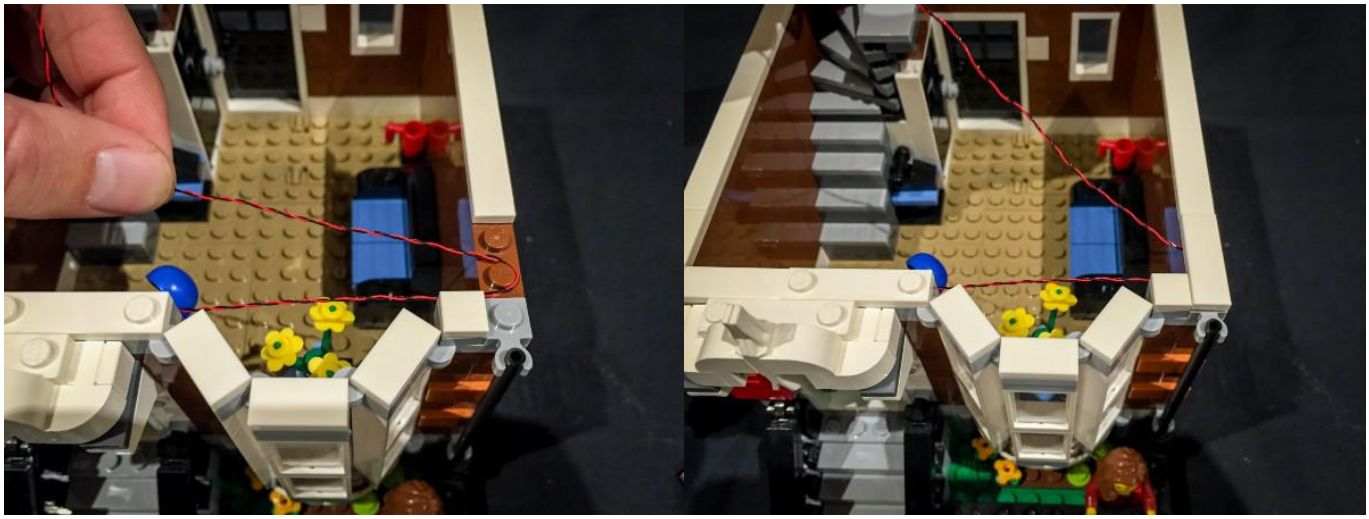
3.) Turn this section over so that we can see the bottom of it. Take 1 Dot Light and place it in the middle of the plate as per below. Ensure that the LED component part is facing the correct way up.

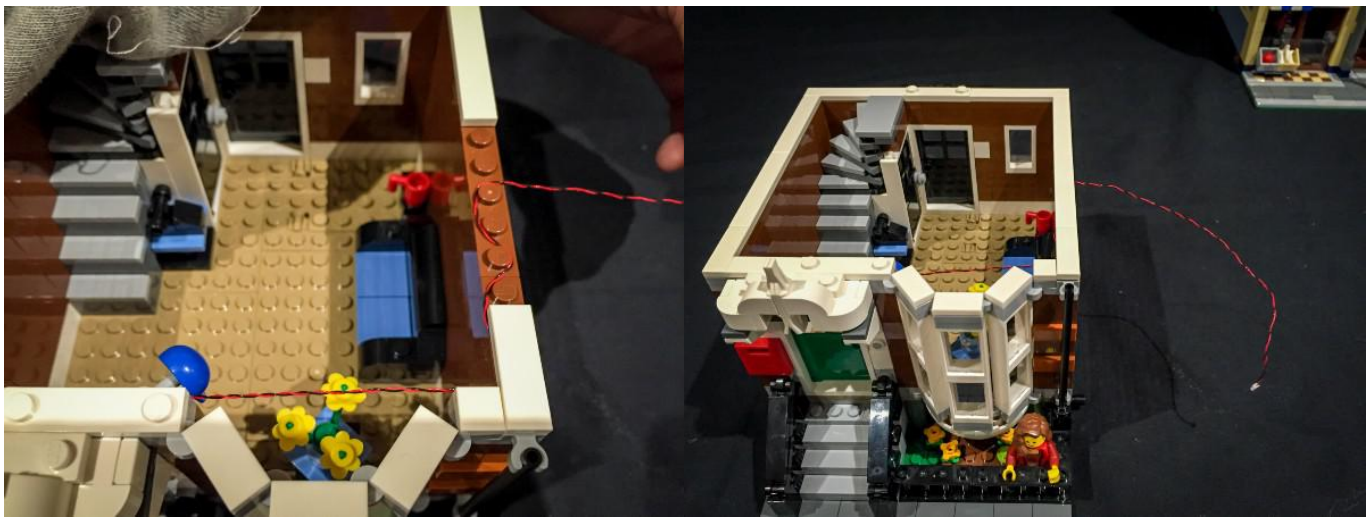


Reconnect this section back to original position but first place your thumb over the Dot Light so that it does not fall out of place when we turn the Lego section over. Ensure the cable for the Dot Light is on the inside of the building and laid in between Lego studs. When you look from underneath, you should be able to just see the LED component peeping through.

Reconnect the Lego pieces we removed in previous steps.

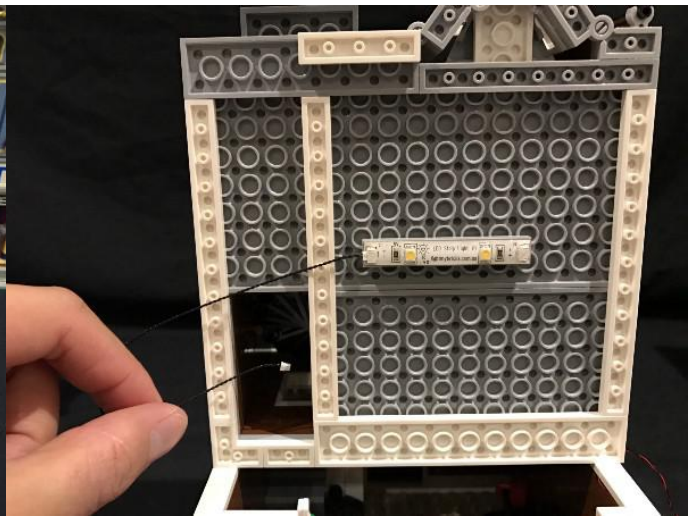
4.) Pull the excess cable toward the right and then lay it in between the brown studs underneath the white Lego plate as per below. This helps hide excess cable and secures it in place. The cable should be now secured and there should be roughly 12 – 15cm in length between the wall and connector. Leave this end of the cable for now as We will connect this to the other side of the Pet Shop later on.



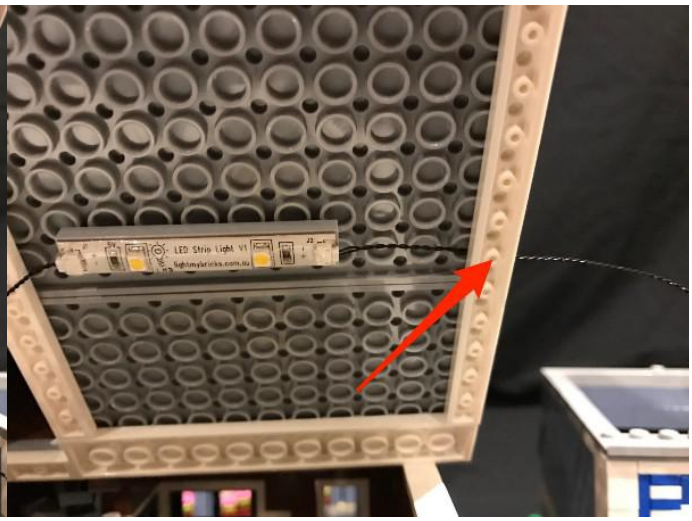


5.) Take the entire 2nd floor and then turn if over on its back so that we can see the bottom of it. Take 1 strip light and connect or stick it (depending on which option you choose) in the following position. We will refer to this as **striplight#1.** Take a **30cm connecting cable** and plug it into the left port of

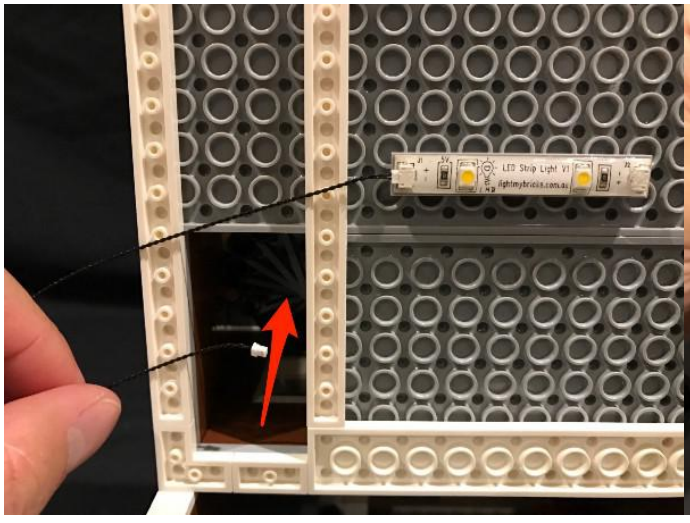
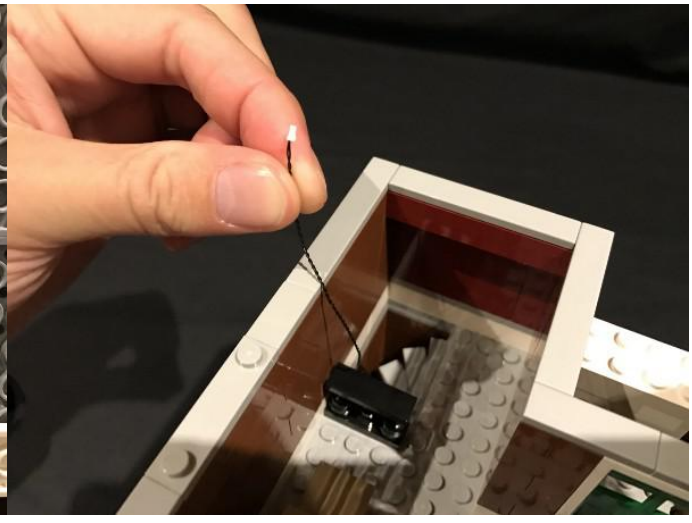
the strip light.



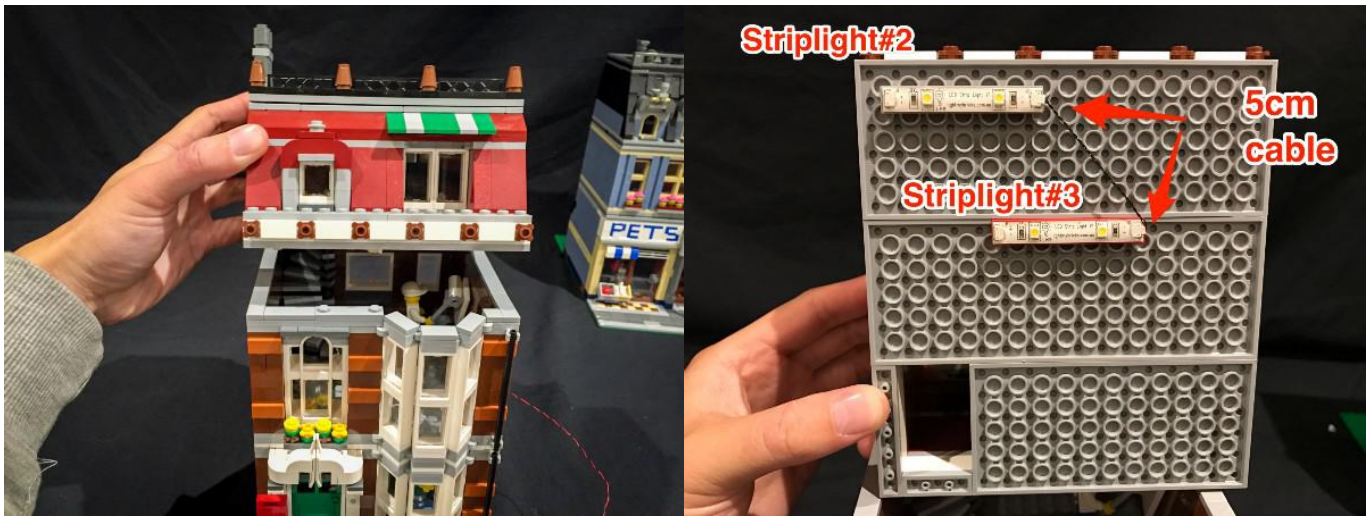
6.) Take another 15cm cable and connect it to the right port of the strip light. Secure this cable by reconnecting the white lego plate over it.

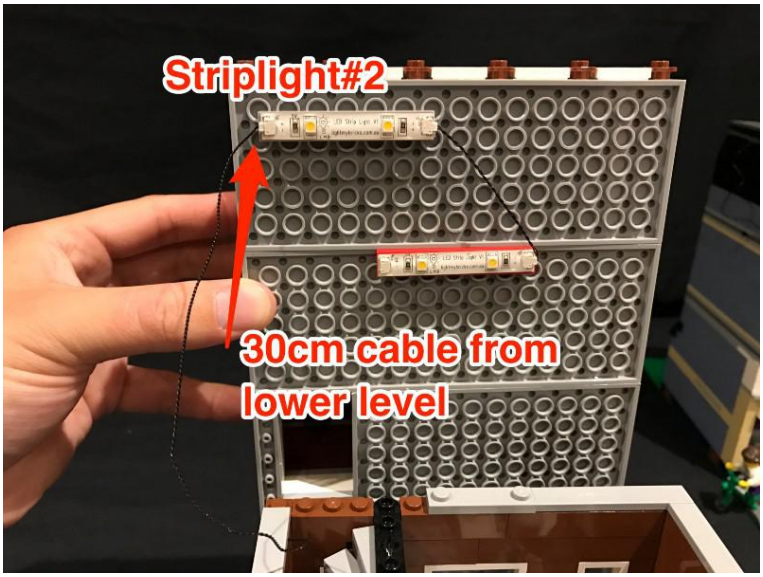
7.) Thread the other side of the cable we connected into the left port up the space which leads to the level above. Flip the 2nd floor over and then reconnect it in place. Locate the cable we threaded up earlier and pull it up. Secure it in place by pulling it in between the 4th & 5th step from the top. This should lock the cable in place as it is a tight gap between the step and wall.

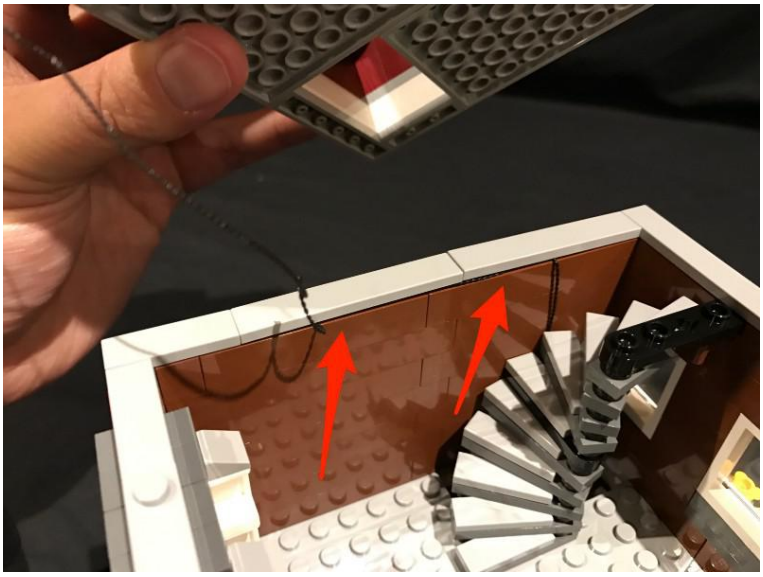
8.) Take the 3rd level and then turn it on its back so that we can see underneath. Take another 2 strip lights and connect them together using a **5cm connecting cable**, then connect/stick them in the following positions. These will be identified as **striplight#2** and **striplight#3**.



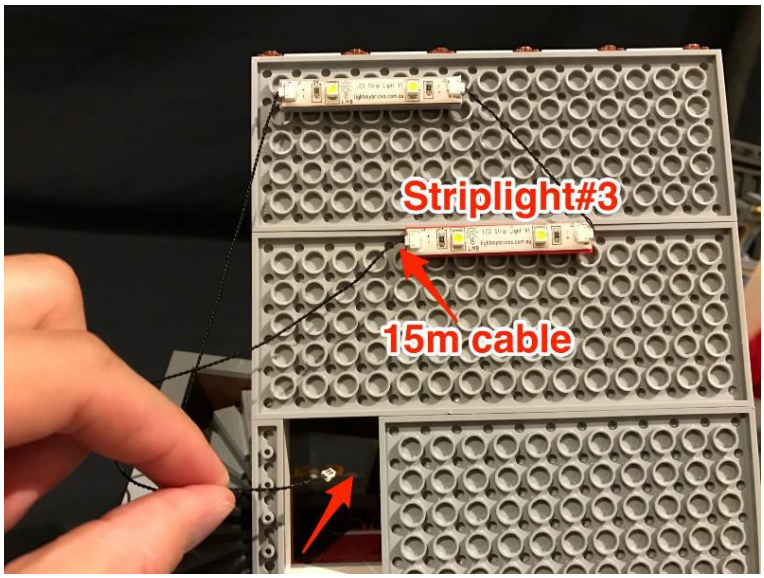
9.) Take the 30cm cable that we pulled up from underneath and connect this into the left port of striplight#2.



Lay access cable toward the front of the building underneath the grey Lego tiles as per below.

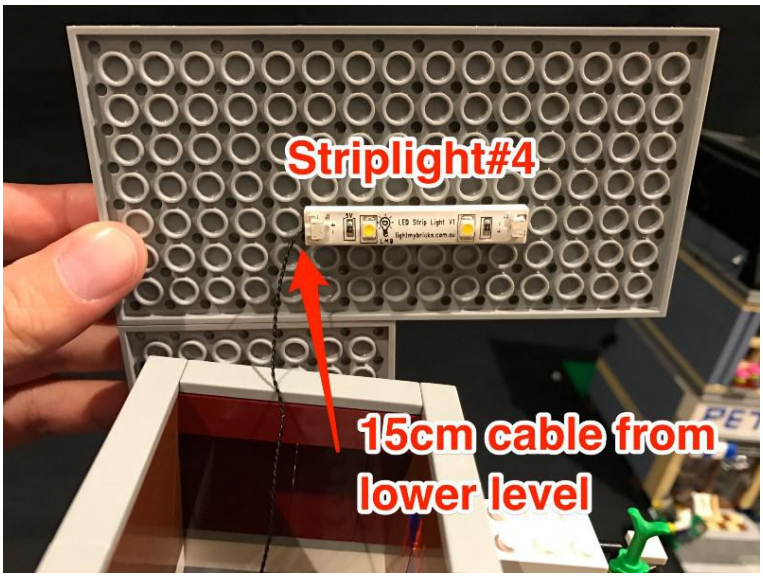


10.) Take a 15cm cable and connect it into the left port of striplight#3 then thread this up to the level above.

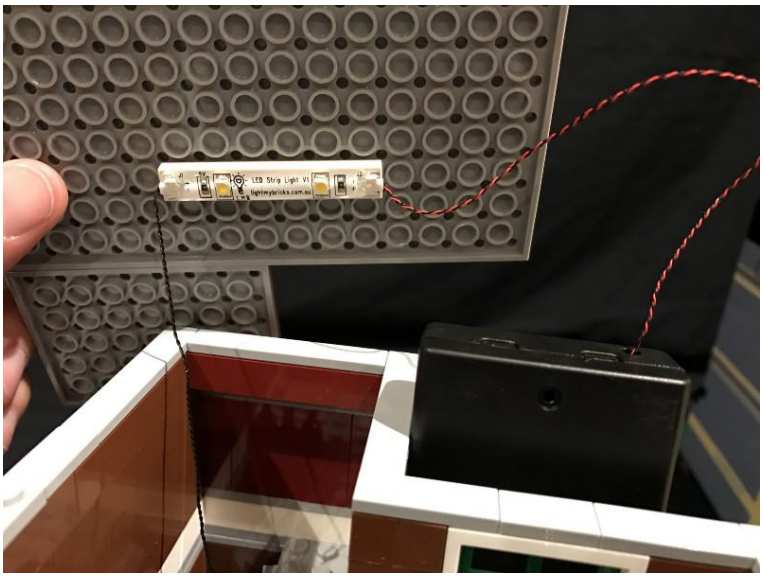


Place the entire 3rd level back into the correct position ensuring that striplight#3 is clearly visible from the front of the building just above the window of the 2nd floor.

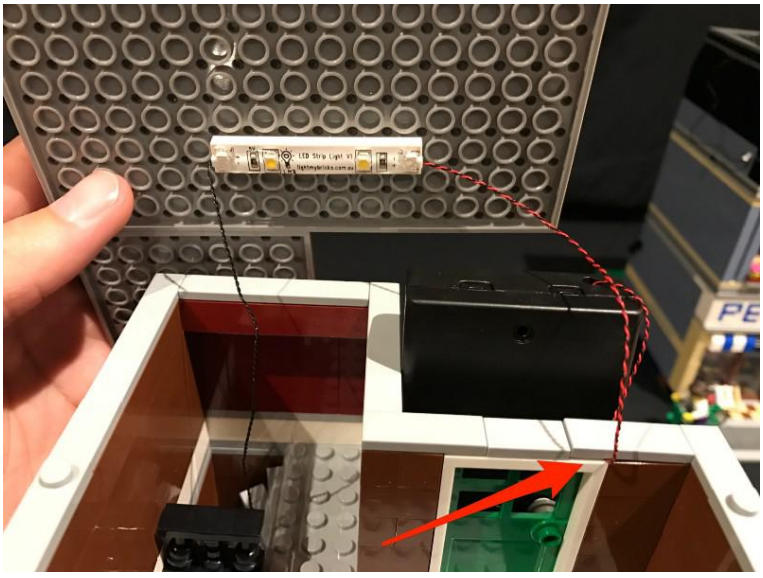
11.) Take the roof of the red building and then connect/stick another strip light (**striplight#4**) in the following position underneath. Connect the 15cm cable which we pulled up from the lower level into the left port of the strip light.



12.) Take the **AA Battery pack** and insert 3 AA batteries into it. Place the battery pack on the balcony and then insert the attached cable into the right port of striplight#4.

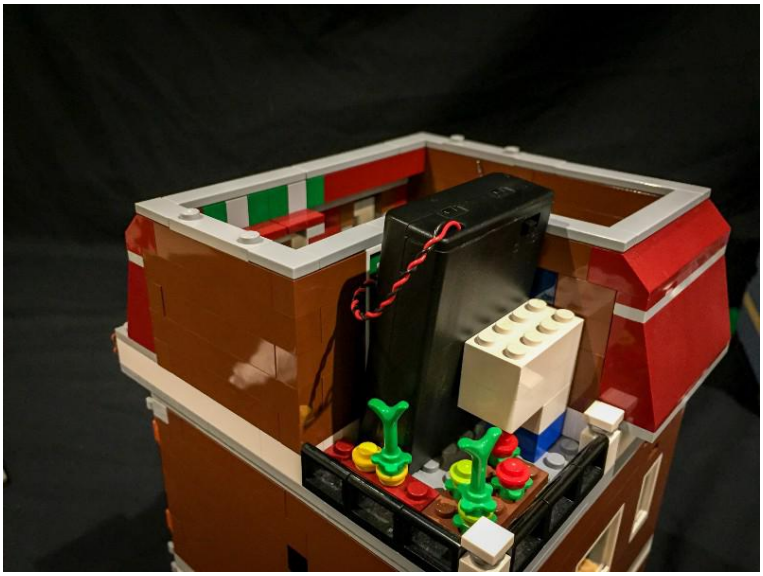


Secure the battery pack and cable in place by connecting them underneath the grey Lego tiles.



You can secure the battery pack in place and prevent it from moving around by using a few spare Lego

bricks which is what I have done as per below.

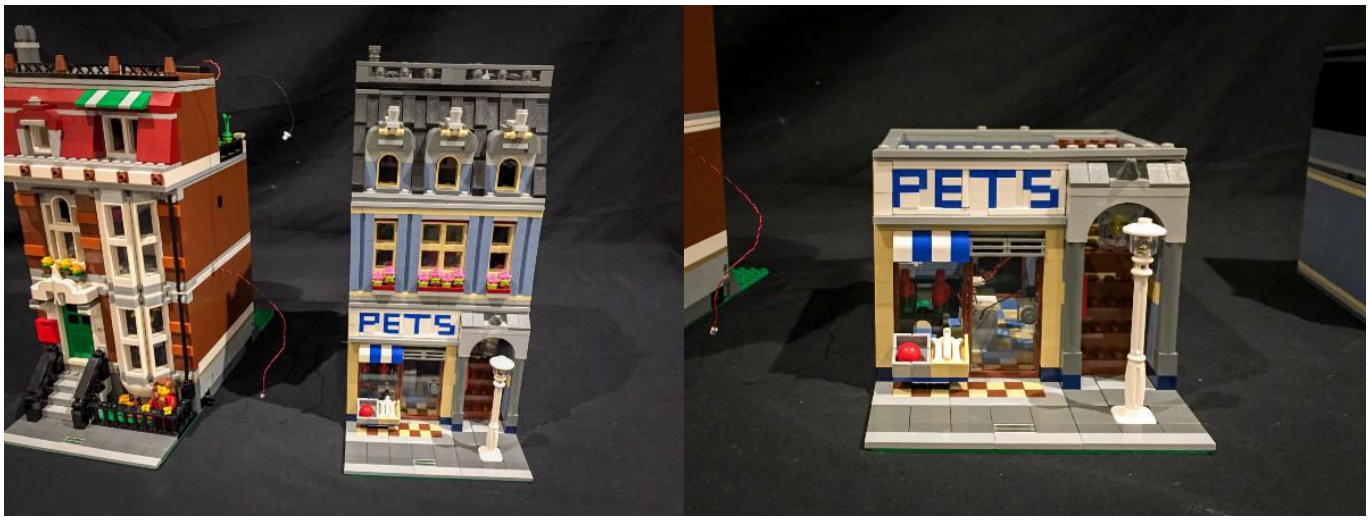


13.) Reconnect the roof on and turn the battery pack on to test our current light circuit to ensure all is working. You should have 2 cables sticking out through the right of the building (connecting cable and Dot Light cable)

Note: that the front door light will not be working as we have yet to connect this to any expansion board.

14.) We will now move on to the "pet shop" side of the building. First remove the 2nd and 3rd

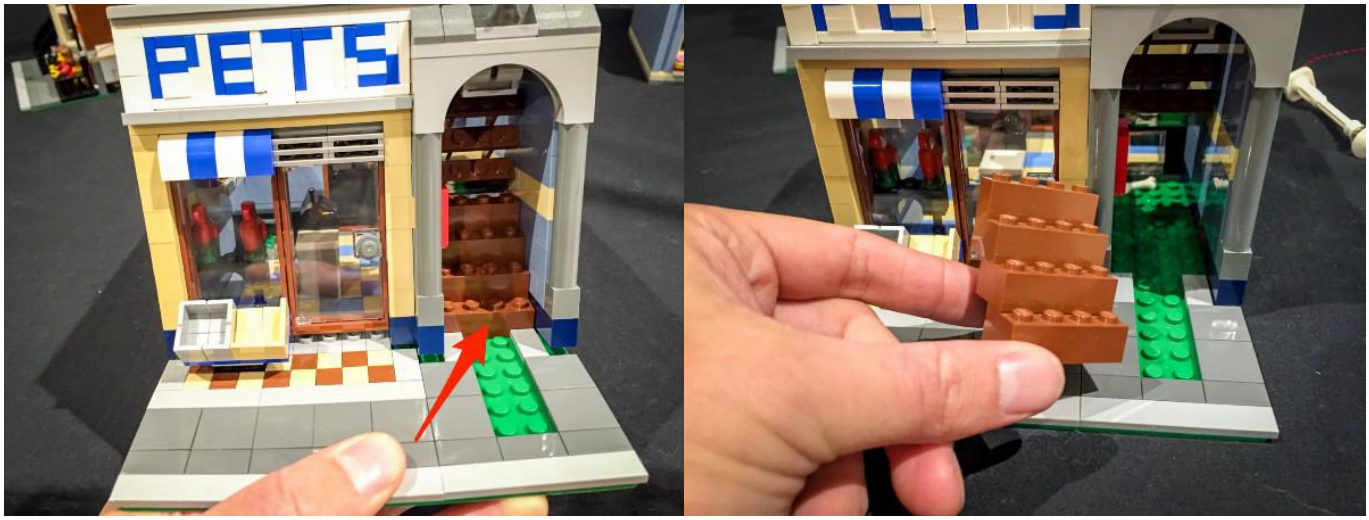
levels.



Remove the lamp post as well as the following Lego tiles.

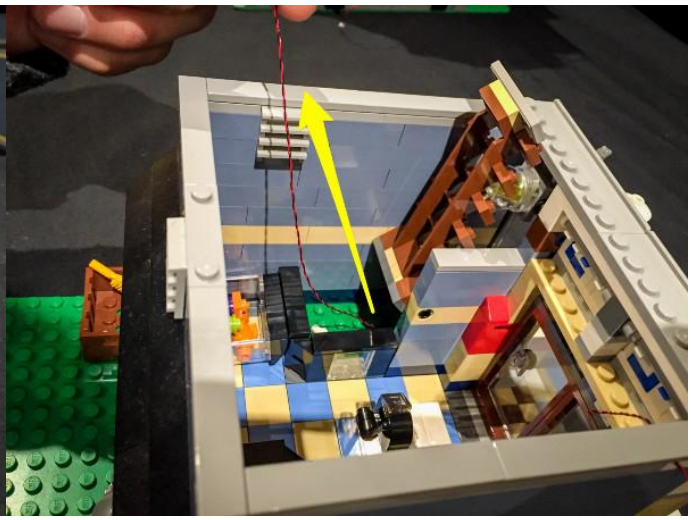
Remove the set of brown steps.

Note: You can tilt the base plate down a little to help easily disconnect the steps.

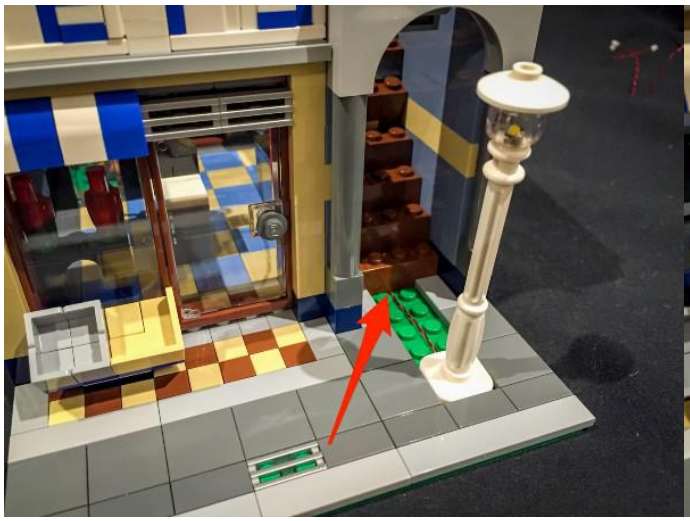


Take the Vonado lamp post with LED and cable attached and connect this to the base plate ensuring the cable is facing toward the shop. Thread the cable through the doorway and pull the other end of

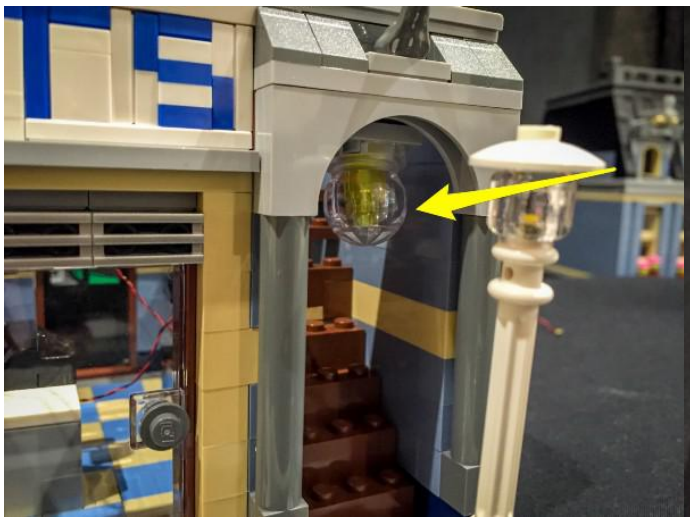
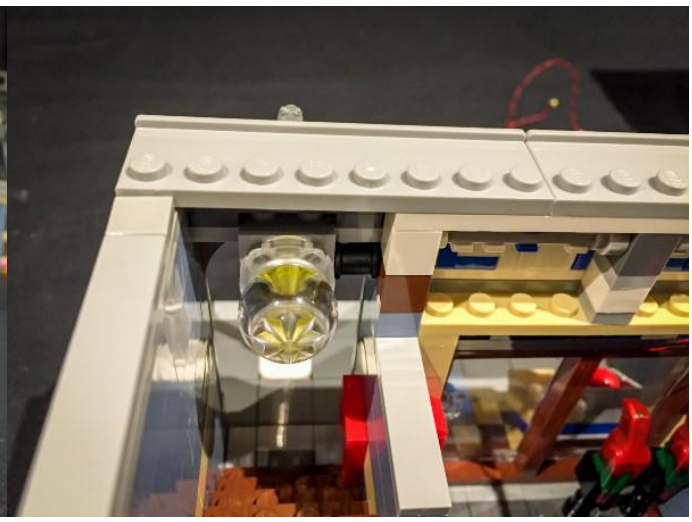
this cable up from the inside of the shop.

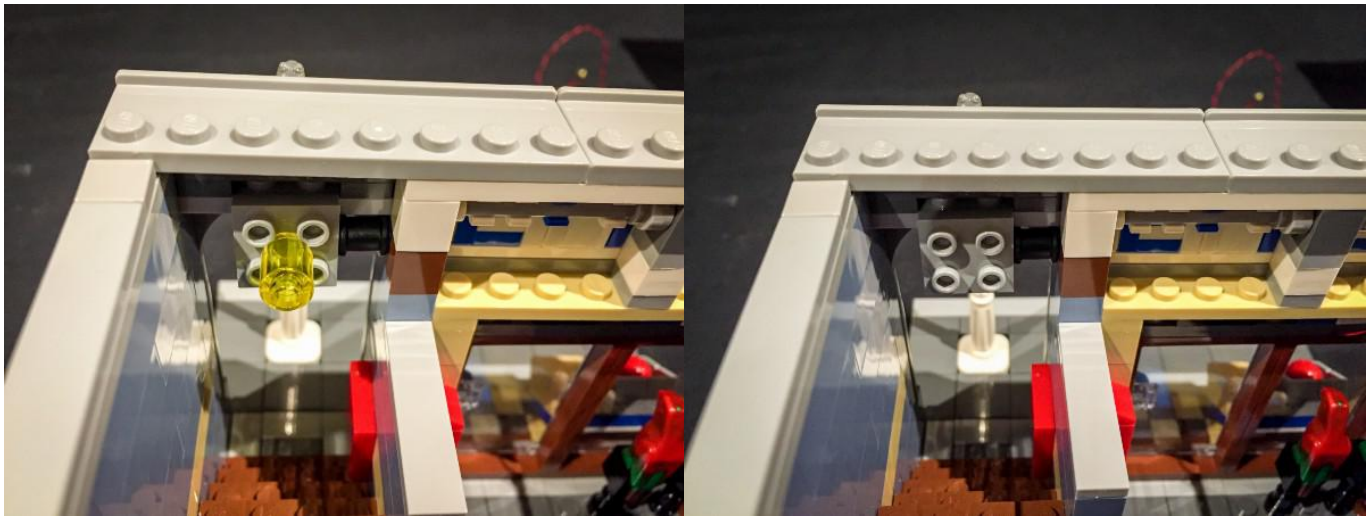



Lay the cable in between the green studs as pictured below before reconnecting the set of brown steps as well as the grey tiles we removed earlier.




15.) Push the porch light back and then disassemble the following pieces as per below.

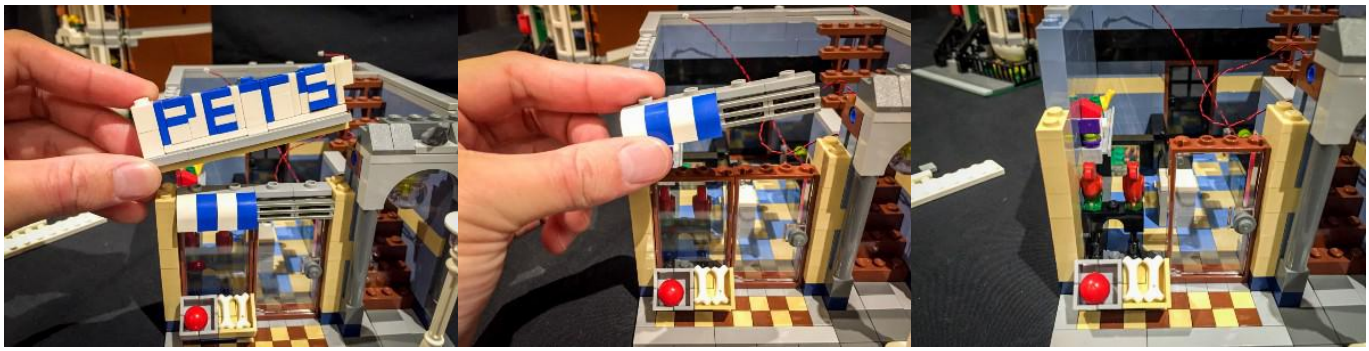





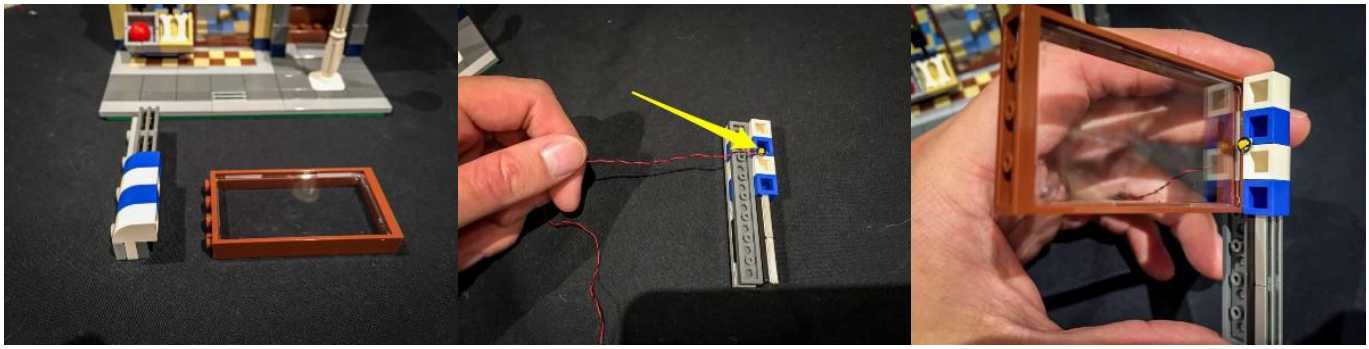
16.) Take a Dot Light and place it in the middle of the 4 grey studs ensuring the LED component part is facing the correct way up. Secure this Dot Light in place by reconnecting the transparent yellow Lego light piece directly over the top. Ensure that the cable is facing the same way as per below. The Dot Light should sit comfortably in the middle of the light piece. Once this is done, reconnect the transparent globe piece over the top.

Turn the porch light back toward the original position.

17.) Remove the following Lego pieces which surround the front windows of the Pet shop.

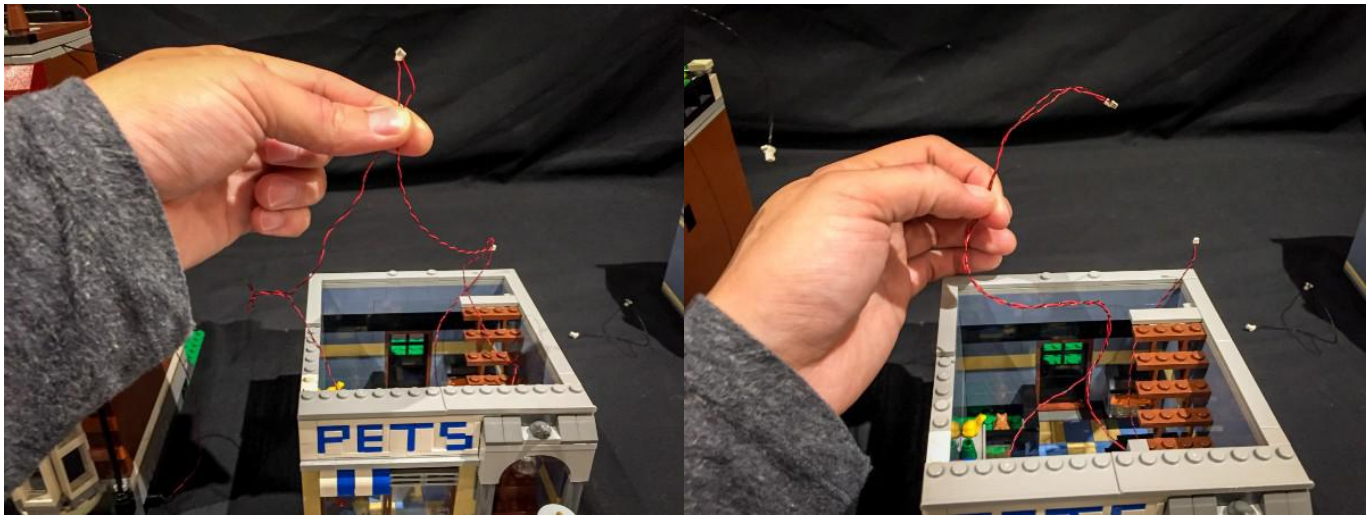


Take the below pieces and then install another Dot Light to the bottom of the blue and white roof. Secure the Dot Light in place by reconnecting the brown window underneath ensuring that the Dot Light cable is facing the inside of the building and laying in between the brown studs. The LED component should be visible if you look from underneath.

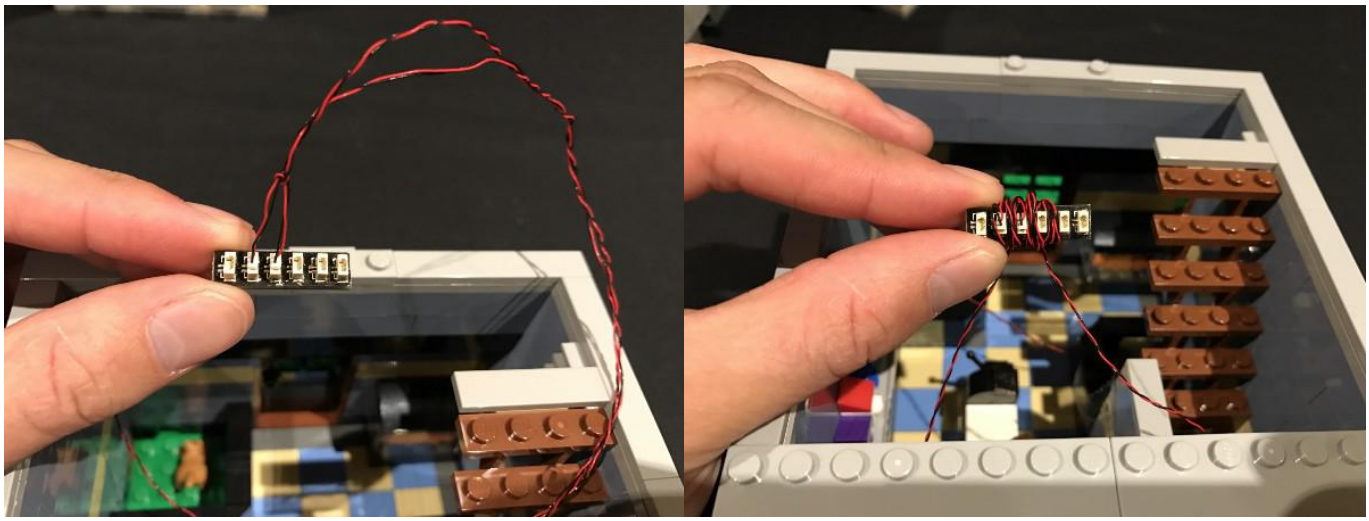


Reconnect the windows and surrounding pieces to original positions.

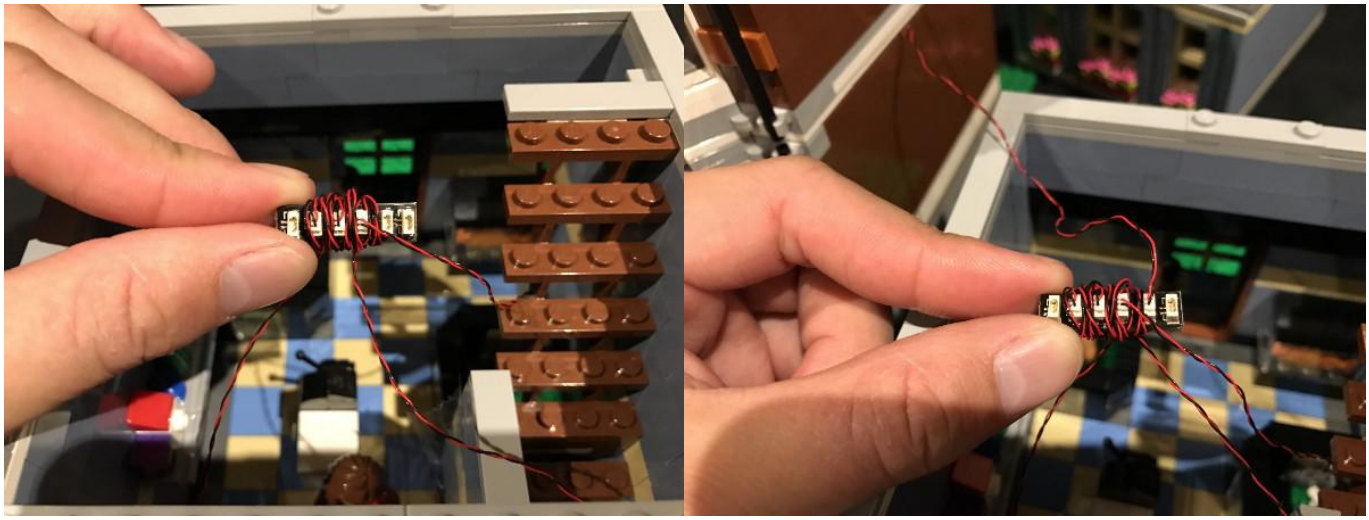
18.) Take the cable from the Dot Light we just installed as well as porch Dot Light and twist/wind them together.



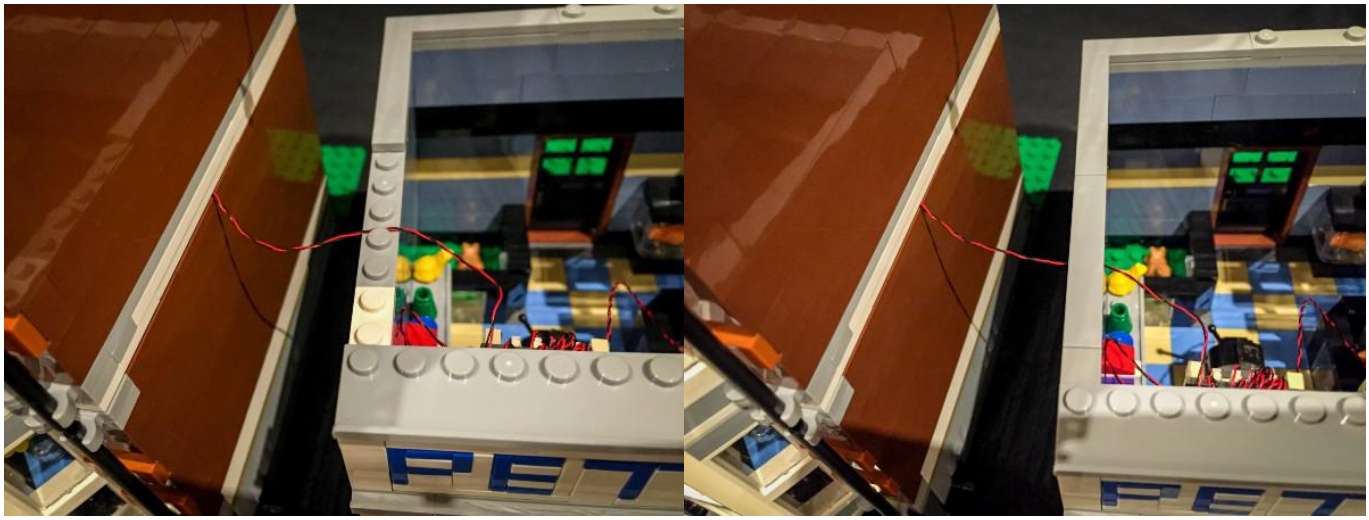
Take the **6-port expansion board** from this kit and connect the 2 cables we twisted together into the the spare ports of the expansion board. Wind the 2 cables around the expansion board to free up the excess cable as per below.



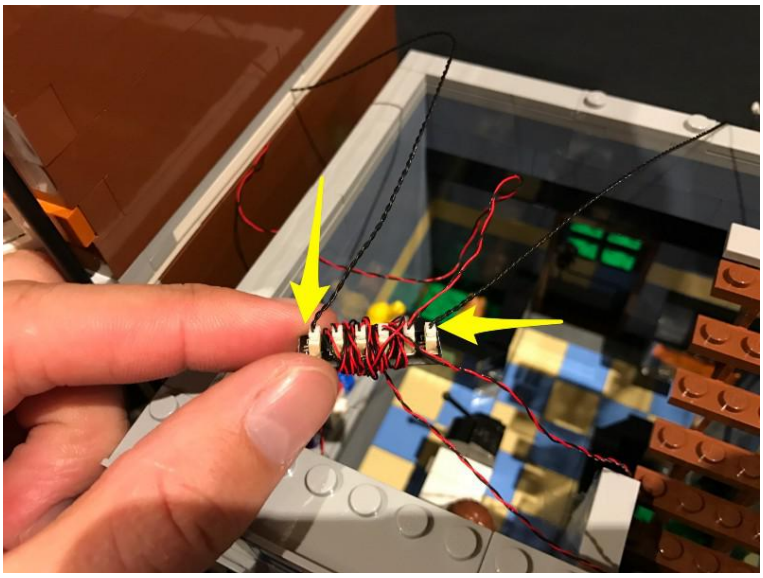
19.) Take the cables from the lamp post as well as the front door Dot Light from the red building and plug them into the next available ports on the expansion



Before you connect the cable from the front door of the red building, lay this cable underneath one of the grey tiles as per below.

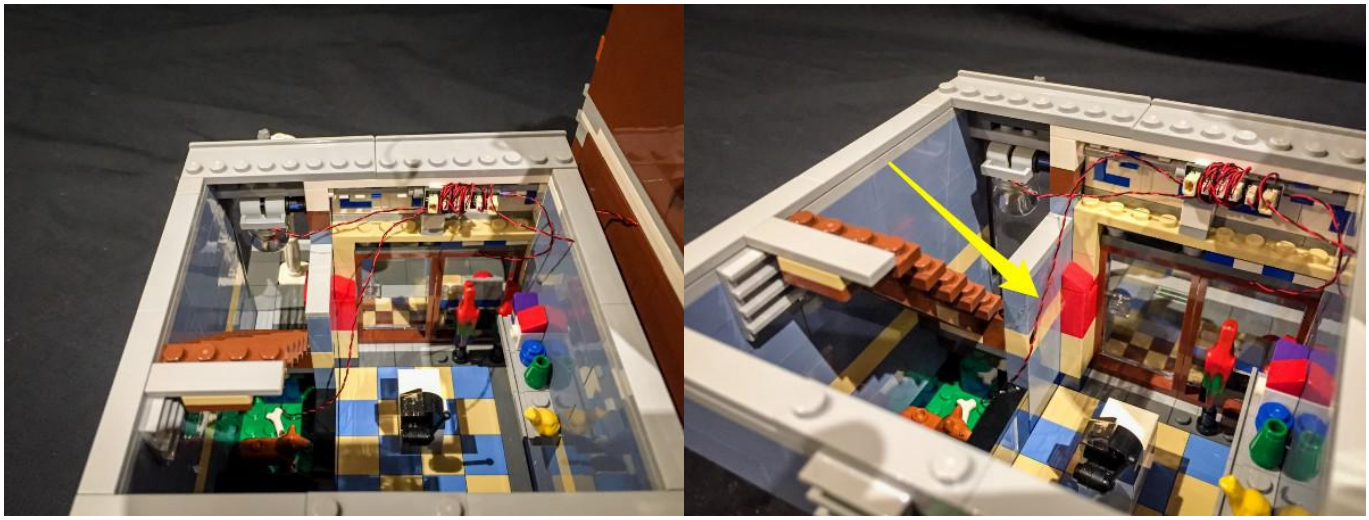


20.) Connect the 15cm cable we connected to striplight#1 from the red building into a spare port of the expansion board then take another 15cm cable and connect it into the final port on the expansion board.

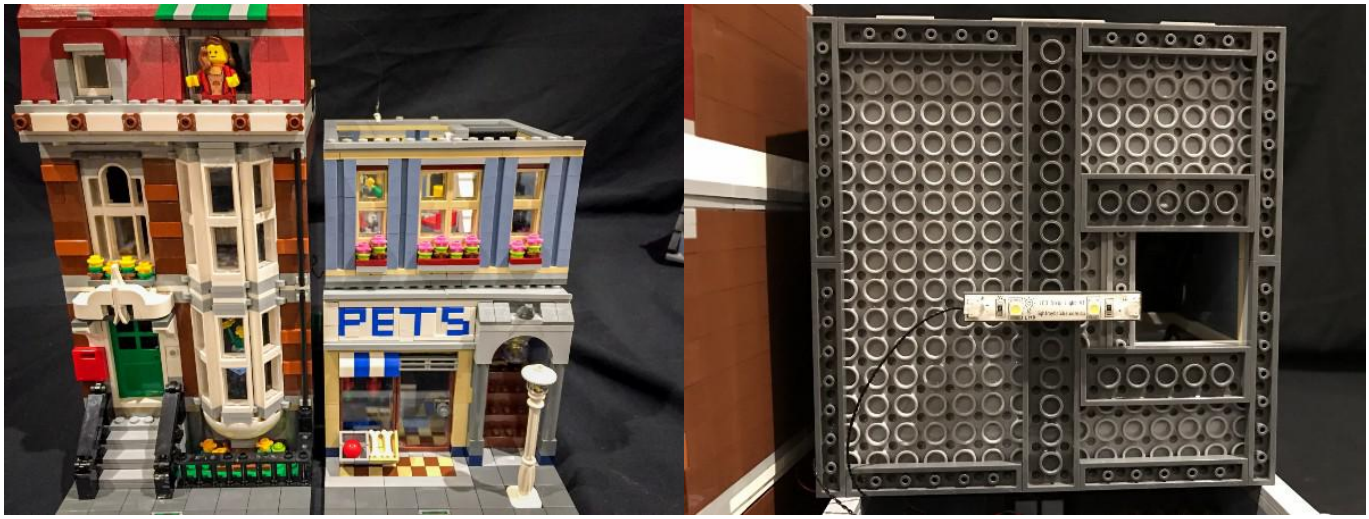


Secure the expansion board to the top of the building using a self adhesive square like I have done below. We need to keep the cables from being obviously seen from the outside front of the building so do your best to hide these cables.

You will notice that the cable from the lamp post is dangling down. You can hide this by simply using a little bit of sticky tape to stick the cable to the wall as shown below.

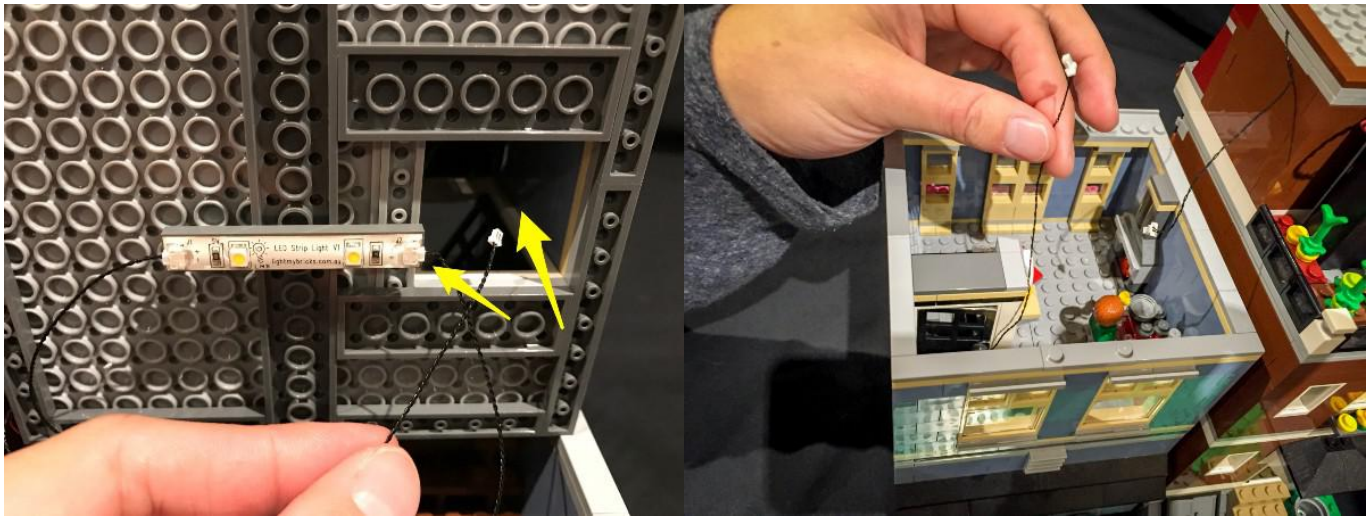


21.) Take the 2nd level and place it on top of the ground floor. Tip it on its back and connect/stick a strip light (**Striplight#5**) to the bottom of it in the following position. Connect the other end of the 15cm cable we connected earlier to the expansion board into the left port of the strip light.

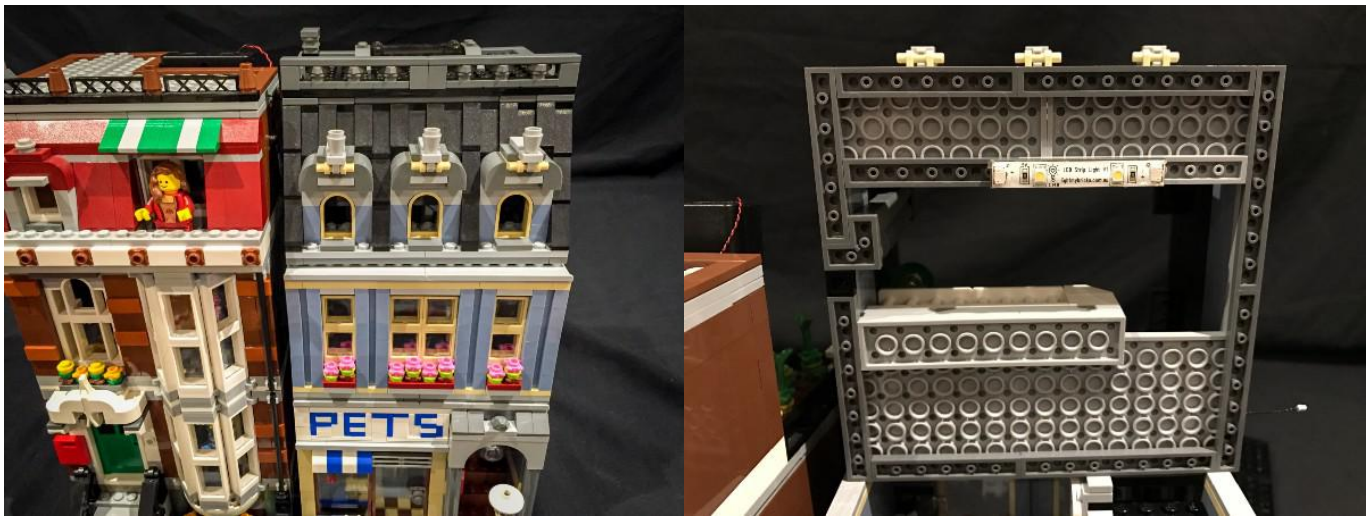


22.) Take another 15cm cable and connect it to the right port of striplight#5. Thread the other end of the cable up the spacing which leads to the 2nd level. Reconnect the entire 2nd level back to original position and then pull the 15cm cable up from underneath.

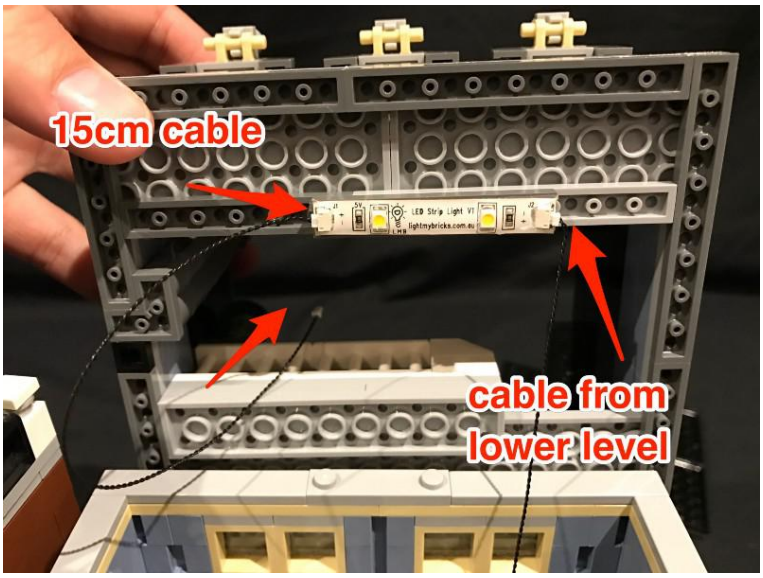
Note: You will need to open the door on the 2nd level to do this and when you close the door after the cable has been threaded through, it will secure it it place. Leave this cable aside for now and ensure it does to drop back down below.



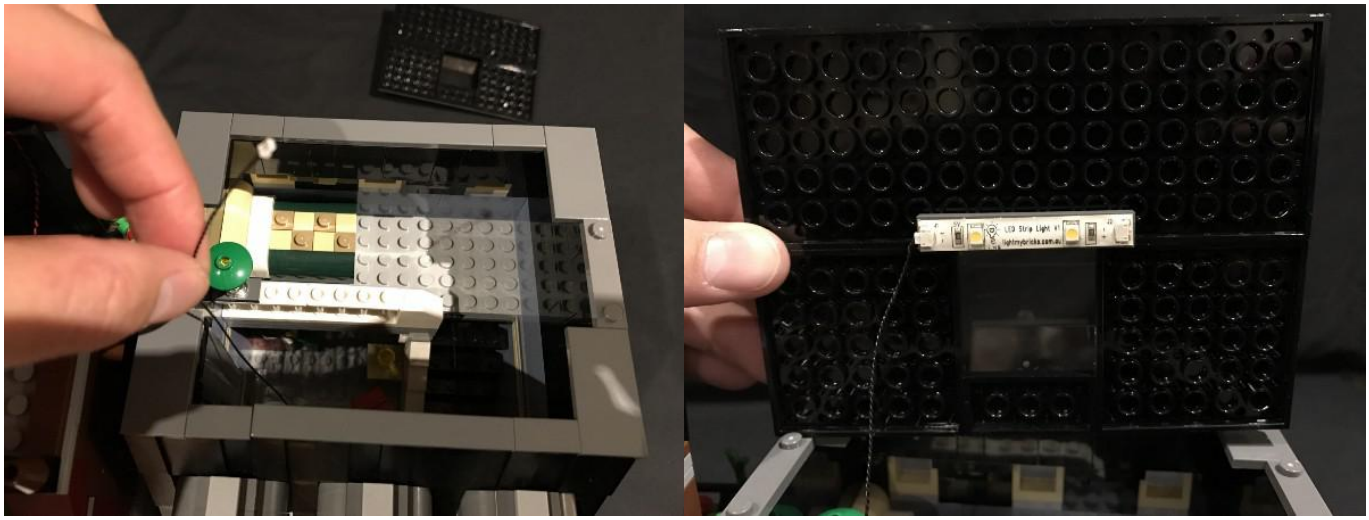
23.) Place the 3rd level (first remove roof) on top and then turn it over to connect/stick another strip light(**Striplight#6**) in the following position.



Take another 15cm cable and connect this to the left port of striplight#6. Thread this up and pull it up from the top of the floor and set aside ensuring it does not drop back down below. Locate the 15cm cable we pulled up from the door on the level below and connect this to the right port of striplight#6. Reconnect the entire 3rd floor back in place.



24.) Pull the 15cm cable up from the below 2nd floor and connect it to the final strip light (striplight#7). Take the roof of the building and connect/stick the strip light in the below position.



Reconnect the roof to the original position and and then connect the 2 buildings back together.

This now completes installation of the Pet Shop lighting kit.

Turn the battery pack to “on” and enjoy!