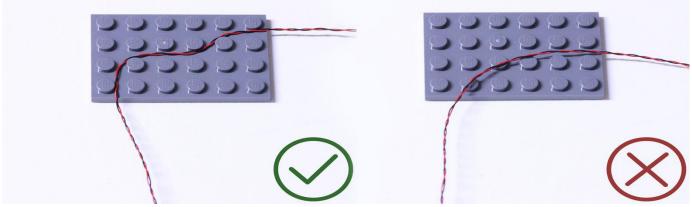
## Package contents:

- 6 x 15cm White Dot Light
- 4 x 15cm Warm White Dot Light
- 4 x 15cm Warm White Light
- 3 x 15cm Connecting Cables
- 1 x Warm White Strip Light
- 3 x 6-port Expansion Boards
- 1 x Round Coin Cell Battery Pack
- 1 x USB Power Cable
- Extra LEGO pieces

## Note:

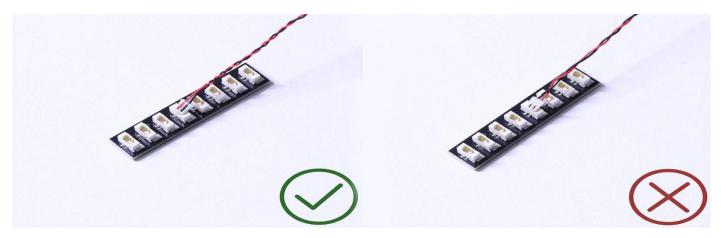
Place wires on the surface or under the LEGO building blocks.

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

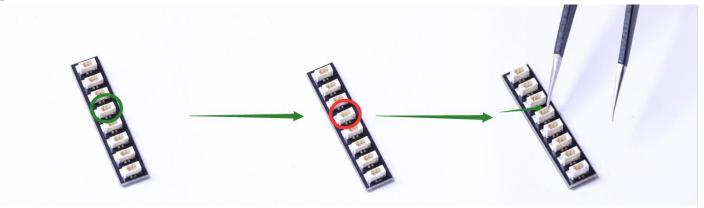


Insert the connectors to the ports.

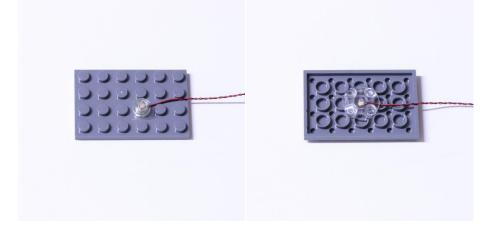
Be careful when you are operating, there's only one correct way to insert, make sure the expansion board is upward, find the soldered "=" sign on the left of the port. When you are inserting, the side which the wires can be seen should be faced to the "=" sign and if you feel hard to insert, please stop, 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 bent pins.



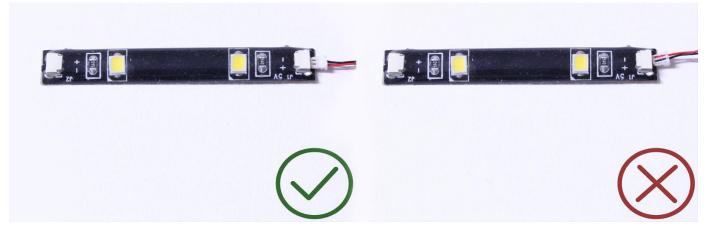
When installing dot lights, make sure they are correctly placed (Yellow LED package is exposed). You can put they either on the top of the studs or between studs.



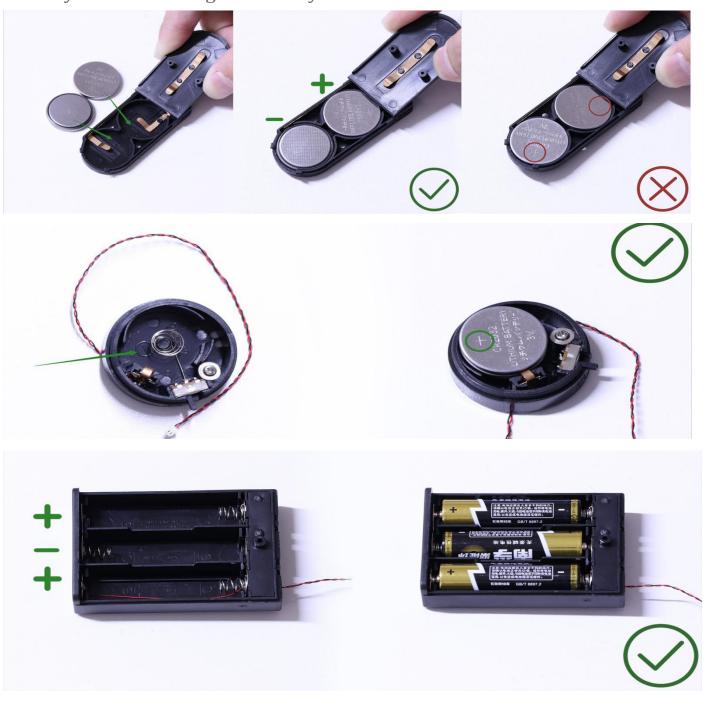
## **Connecting cable connectors to Strip Lights**

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

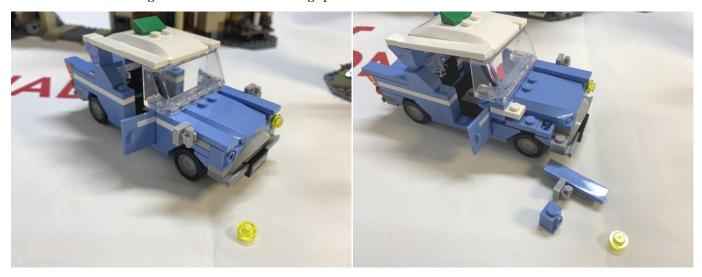
Let's start from installing the lights for the car



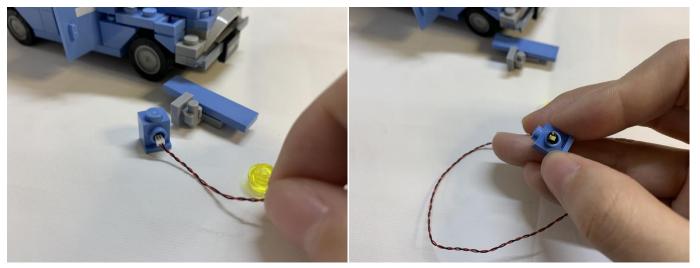
Take 2 white 15cm dot lights

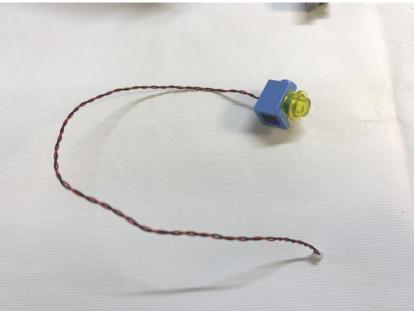


Remove the headlight and the following pieces from the left side of the car

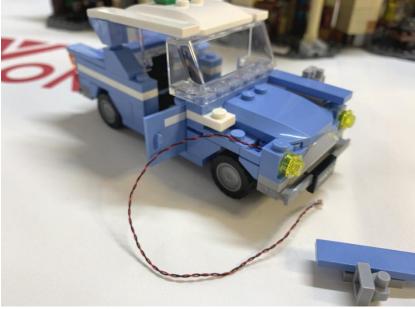


Thread the connector through the hole on the brick, pull the cable till the lighting part is facing up, reconnect the round plate to secure the light





Reconnect the headlight

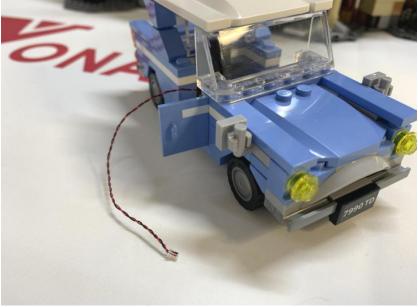


Lift the front window to allow the cable thread through the gap, pull the cable out from the inside of the driver's room

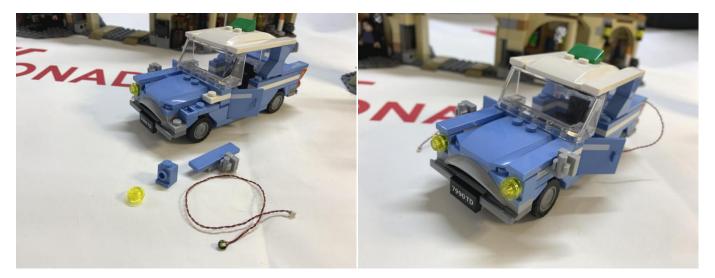




Reconnect the pieces we removed before

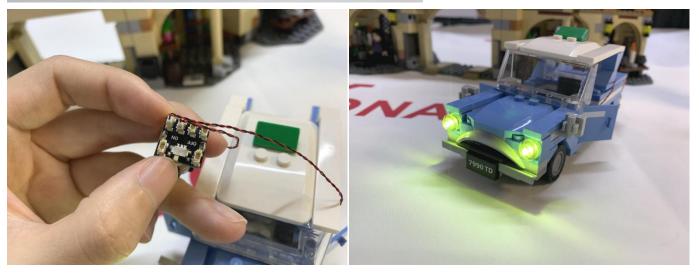


Turn the car to the other side. Repeat the previous steps to install the headlights at the right side



Take the Round Coin Cell Battery Pack, connect the cables to it to test if the lights are working OK

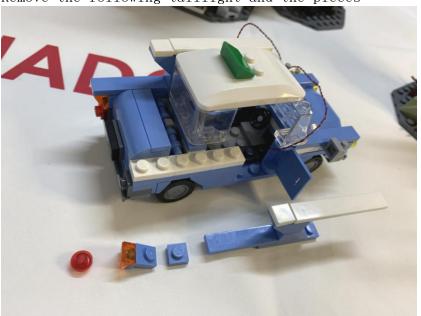




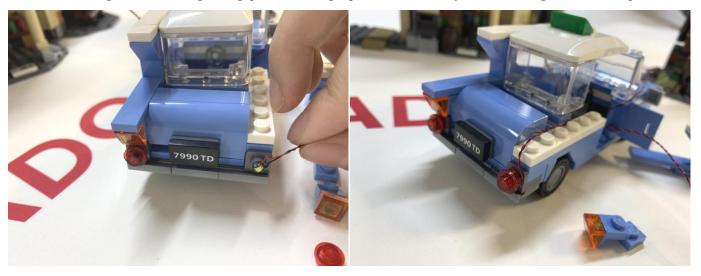
Take 4 white 15cm dot lights, turn the car to its back, we'll install the taillights



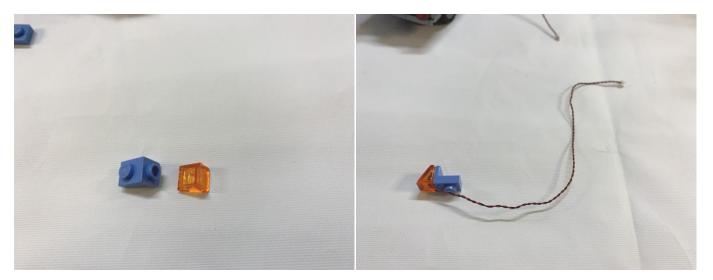
Remove the following taillight and the pieces



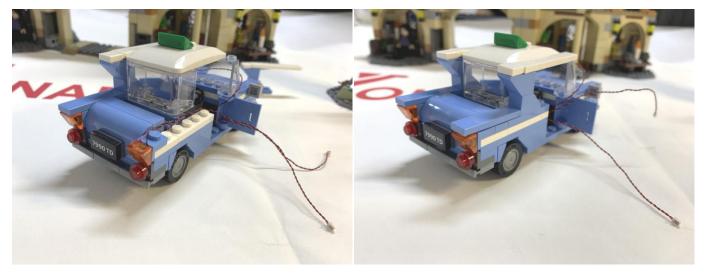
Take a dot light, with lighting part facing up, secure it by connecting the round plate over



Similarly, continue to install the second dot light



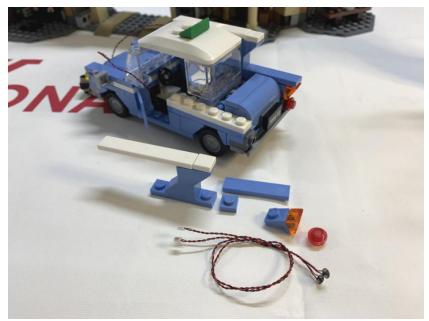
Reconnect the taillights, place the cables of the lights underneath in between studs, then, pull the lights to the inside of the driver's room



Connect the cables to the Round Coin Cell Battery Pack to verify the current



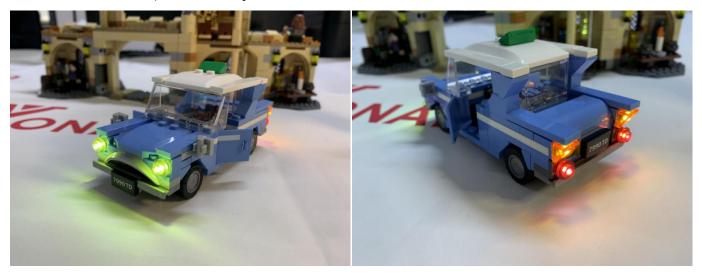
Repeat the steps above to install the taillights at the other side



Remove the roof, connect the cables inside the driver's room to the Round Coin Cell Battery Pack, tuck excess cables around the battery pack. With switch facing up, place the battery pack inside the driver's room



Reconnect the roof, turn the power on to test the current



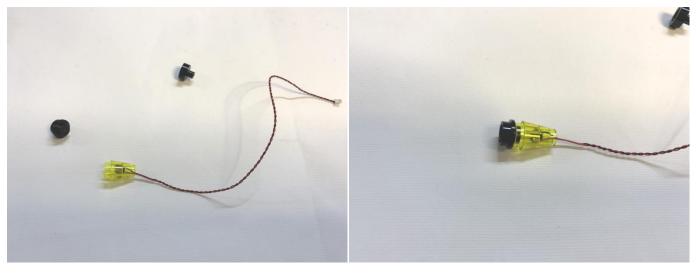
Let's move onto installing lights for the building, start from the left side of the building, remove the following 2 lights from the wall



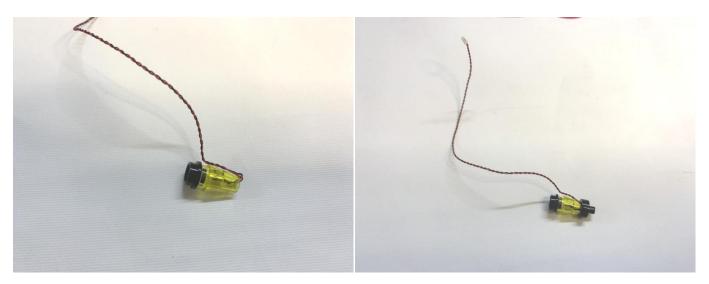
Take 2 warm white 15cm dot lights



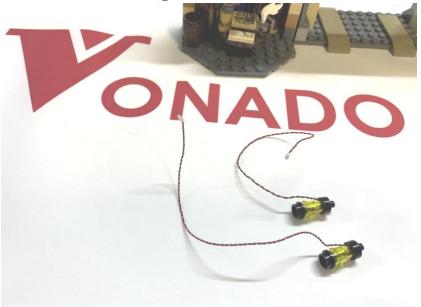
Disassemble the lights as per below, take a dot light, thread its light through the trans yellow piece, reconnect the black round plate



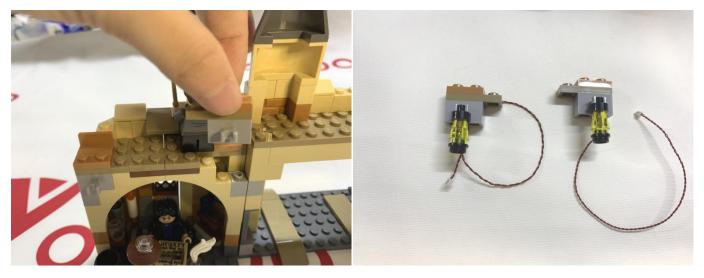
Bend the light before reconnecting the black round plate. Note: do not pull the cable too tight



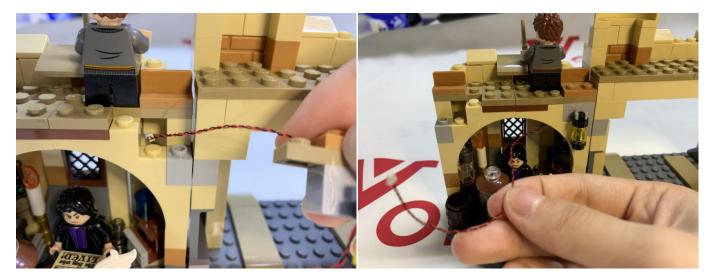
Install the other light as we did before



Remove the bricks which are connected to the lights from the wall, connect the lights to them



Thread the cable of the light through the gap, pull it from inside of the building



Similarly, reconnect the other light



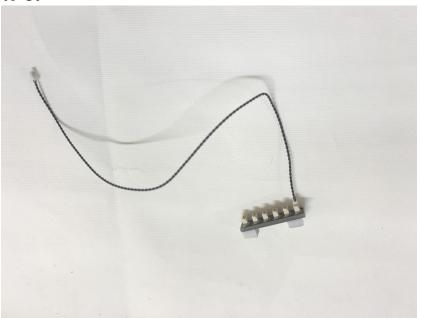
Take a 15cm warm white light, a 2x2 round plate



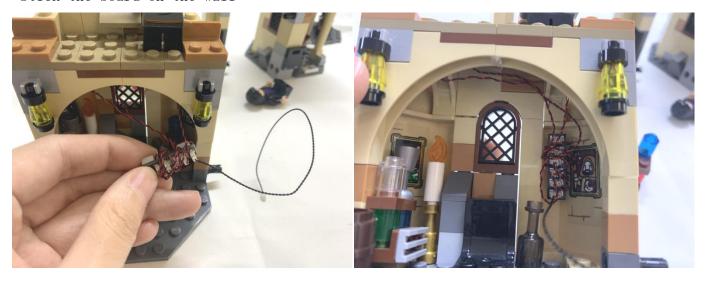
With lighting part facing down, secure the light underneath the roof with the round plate



Take a 6-port expansion board, stick tapes at both sides, connect a  $15 \, \mathrm{cm}$  connecting cable to it



Connect all cables of the lights to the expansion board, tuck excess cables around the board. Stick the board on the wall



Disconnect the following round plate to secure the hanging cables



Thread the 15cm connecting cable from the expansion board through the gap on the wall



Turn the power on and enjoy the light



Thread the 15cm connecting cable through the gap on the near building



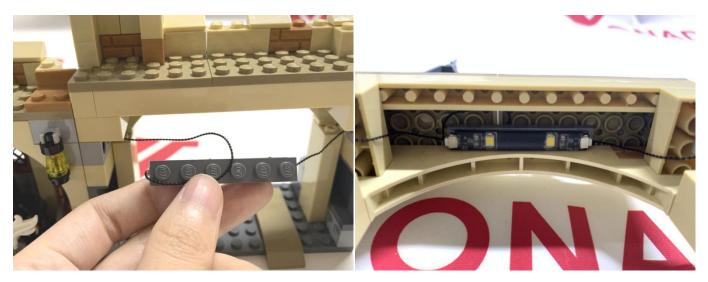
Take a warm white strip light, a 15cm connecting cable, a 1x6 plate. Stick the strip light to the back of the plate, connect the 15cm connecting cable to its port



Connect the other port to the 15cm connecting cable we threaded through the wall before



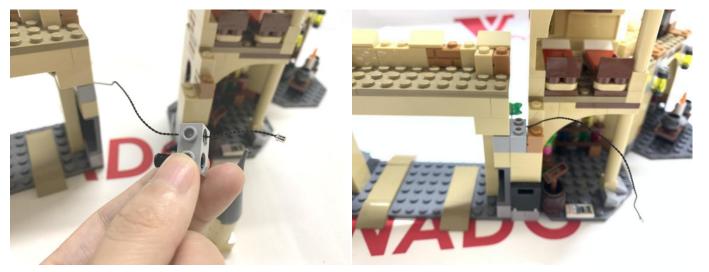
Place the excess cable in between studs of the plate, connect the strip light to the roof



Remove the following pieces from the tower



Thread the 15cm connecting cable from the strip light through the gray technic piece before reconnecting the technic piece



Place the connecting cable in between studs, pull it out from the right side, reconnect the tower



Remove the second floor of the tower



Take a  $15 \, \mathrm{cm}$  warm white light, a  $2 \, \mathrm{x} 2$  round plate. Install the light to the roof as we did before





Remove the following plates



Connect the plate underneath the second floor of the tower. Thread the connector of the light through the following gap to the first floor inside the building. Reconnect the second floor of the tower

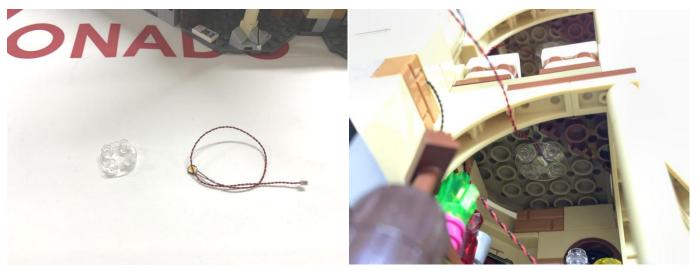




Disconnect the right building. Put the left building down



Take a warm white 15cm light, a 2x2 round plate. Repeat the previous steps to install the light to the top of the tower

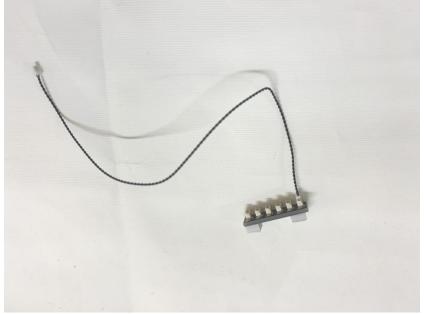


Now, we'll install the last part. Take 2 warm white  $15 \, \text{cm}$  dot lights, a warm white  $15 \, \text{cm}$  light, a  $2 \, \text{x2}$  round plate. Repeat the steps above to install the lights

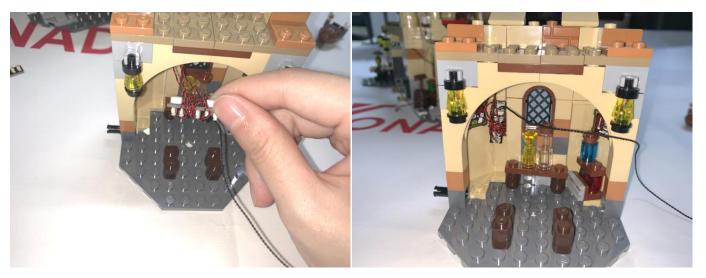




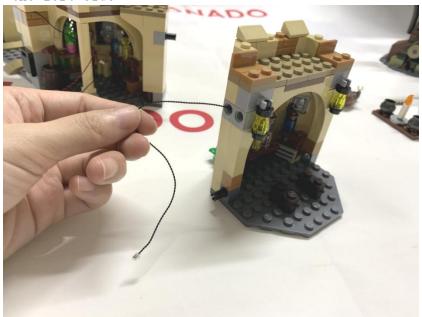
Take a 6-port expansion board, stick taps to both sides, connect a 15cm connecting cable to it



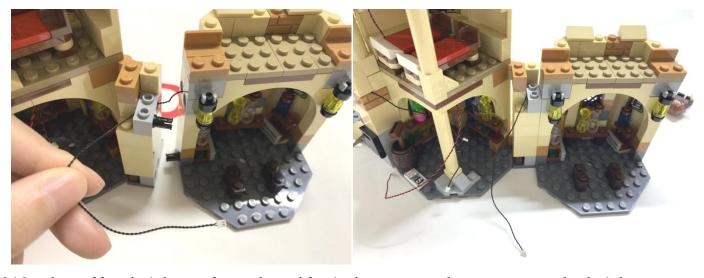
Connect all cables of the lights we just installed to the expansion board, tuck excess cable to it. Secure the expansion board n the wall by using the adhesive tapes



Thread the 15cm connecting cable though the following gap, pull it toward the building at the left side



Remove the following pieces from the building at the left, thread the cable through the gray technic piece, pull it to the first floor inside the left building

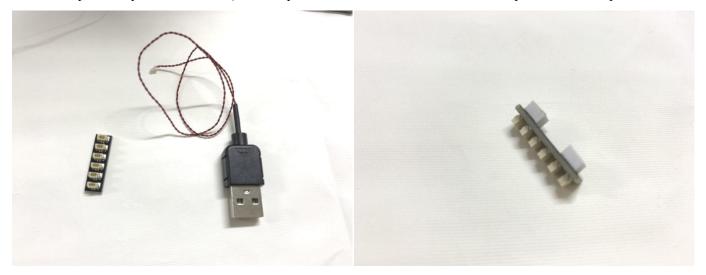


Lift the yellow brick to place the cable in between studs, reconnect the brick

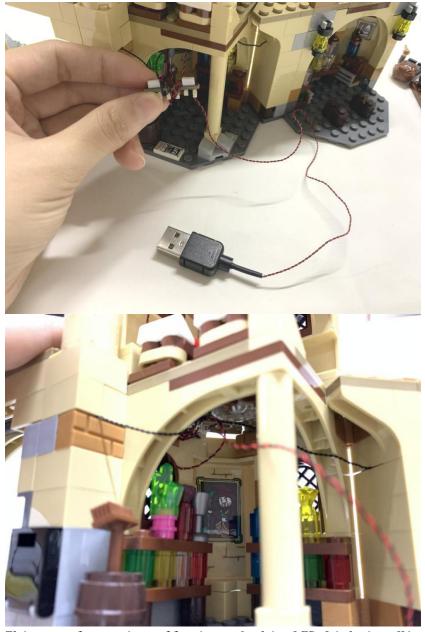




Take a 6-port expansion board, a USB power cable. Stick adhesive tapes to the expansion board



Connect the cable from the first floor to the 6-port expansion board, tuck excess cable around the expansion board. Connect the USB cable to it, stick the expansion board on the wall



This completes installation of this LED Lighting Kit. ENJOY!



