## Package contents:

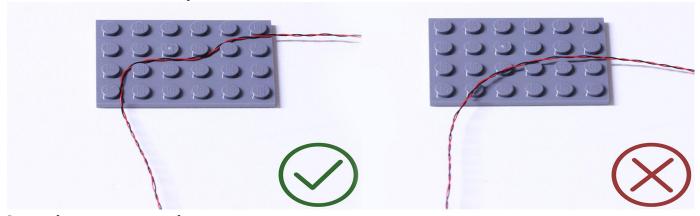
- 2 x 15cm Flashing White Dot Lights
- 1 x 30cm Flashing White Dot Light
- 4 x Warm White Strip Lights
- 2 x 5cm Connecting Cables
- 1 x 15cm Connecting Cable
- 1 x 30cm Connecting Cable
- 1 x 6 -port Expansion Boards
- 1 x USB Power Cable

Extra LEGO pieces

## Note:

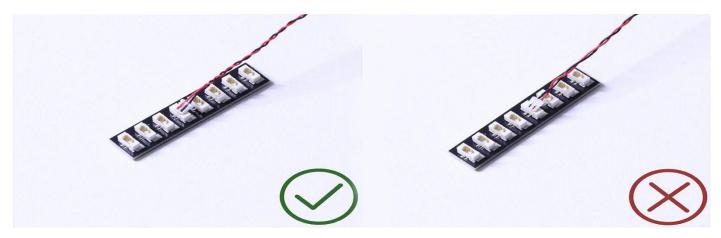
Place wires on the surface or under the LEGO building blocks.

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

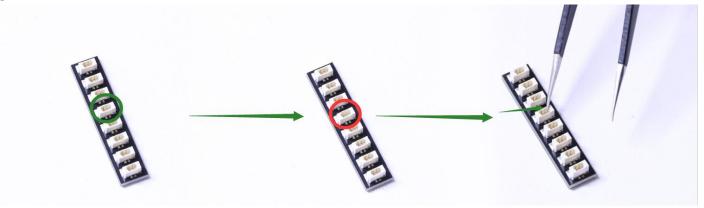


Insert the connectors to the ports.

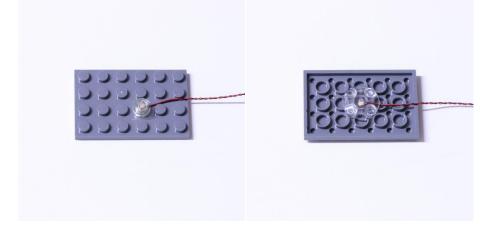
Be careful when you are operating, there's only one correct way to insert, make sure the expansion board is upward, find the soldered "=" sign on the left of the port. When you are inserting, the side which the wires can be seen should be faced to the "=" sign and if you feel hard to insert, please stop,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



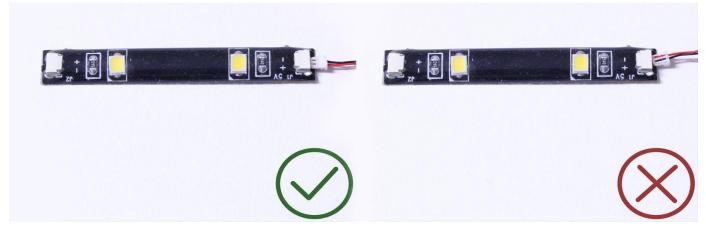
When installing dot lights, make sure they are correctly placed (Yellow LED package is exposed). You can put they either on the top of the studs or between studs.



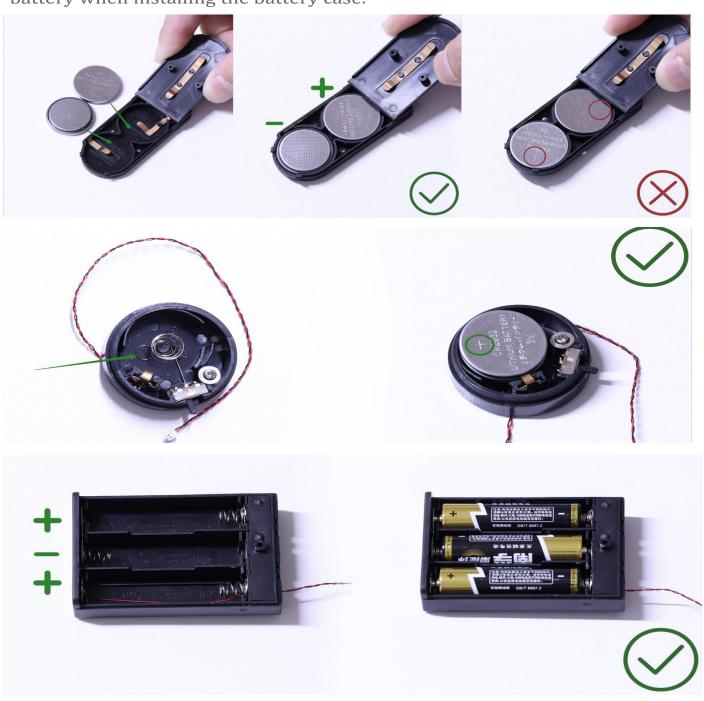
## **Connecting cable connectors to Strip Lights**

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.



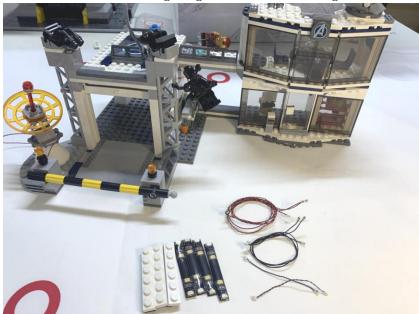
Finally, please pay attention to the positive and negative terminals of the battery when installing the battery case.



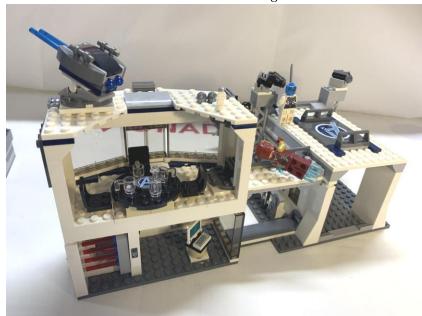
OK, Let's Begin!

## Instructions for installing this kit

Start from installing lights for the Avengers Base



Turn to the inside of the building



Take a warm white strip light, a white 1x6 plate, stick the strip to the back of the plate

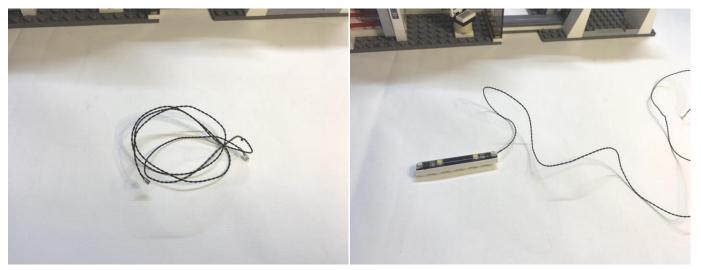


Take another 2 strip lights, 2 white 1x6 plates, stick the strip lights to the plates

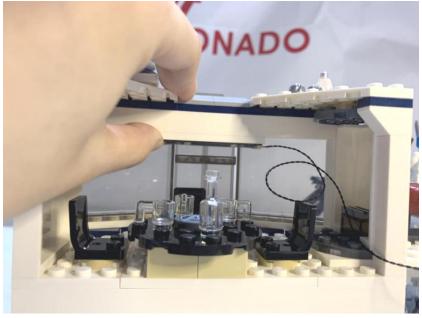
separately



Take a 30cm connecting cable, connect it to one port on a strip light

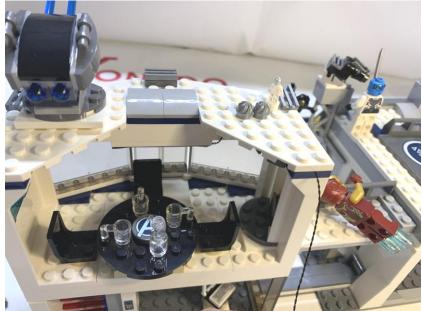


Connect the strip light to the ceiling of the second floor

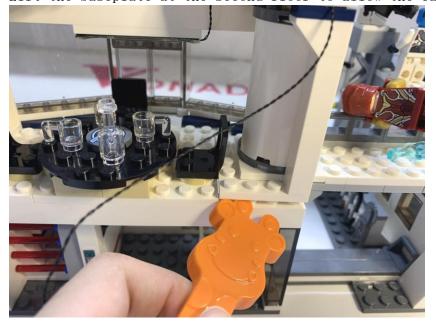


Lift the right plate on the roof to help us to place the cable underneath in between studs, reconnect the plate.



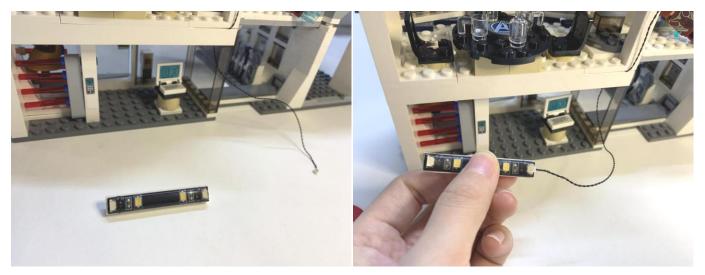


Lift the baseplate at the second floor to allow the cable thread down to the lower floor

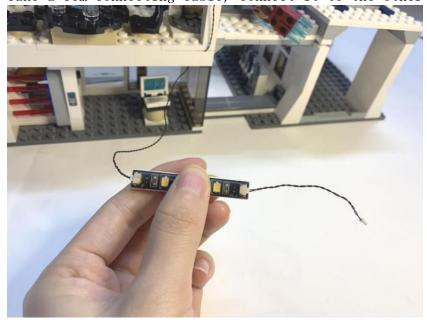




Take another strip light, connect the cable thread down from the strip light at the second floor to it



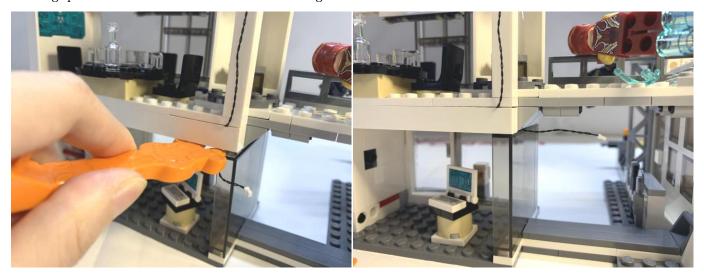
Take a 5cm connecting cable, connect it to the other port on this strip light



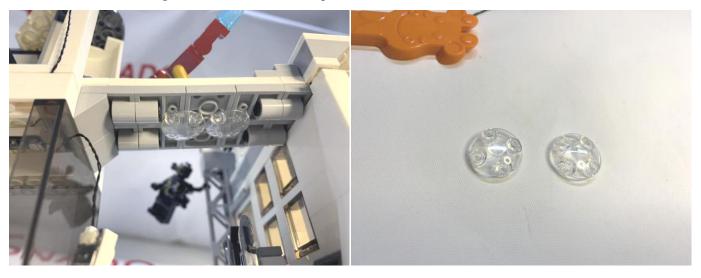
Connect the strip light to the ceiling of the first floor, pull the  $5 \, \mathrm{cm}$  cable rightward



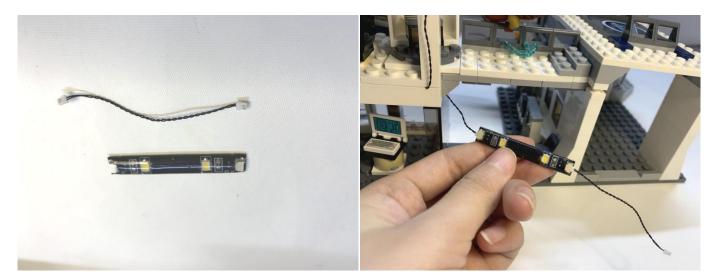
Slightly lift the roof of the first floor to help the 5cm connecting cable tread through the gap and to the corridor at the right



Remove the following 2 trans 2x2 round plates



Take a warm white strip light, a 5cm connecting cable, Connect the 5cm connecting cable to one port on the strip light, connect the 5cm connecting cable from the corridor to the other port



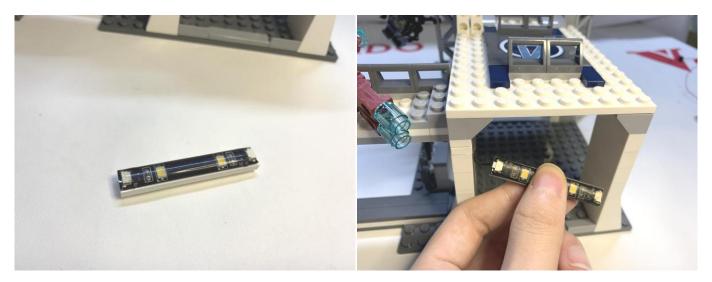
Stick the strip light to the following position



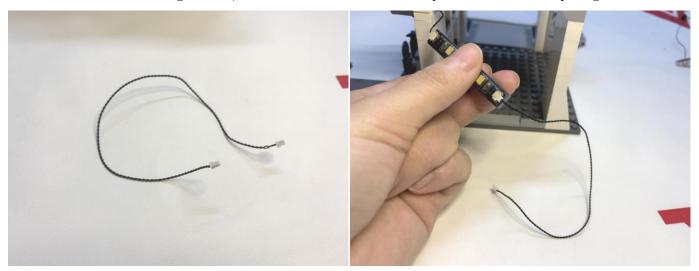
Slightly lift the following wall to allow the 5 cm conencting cable thread through



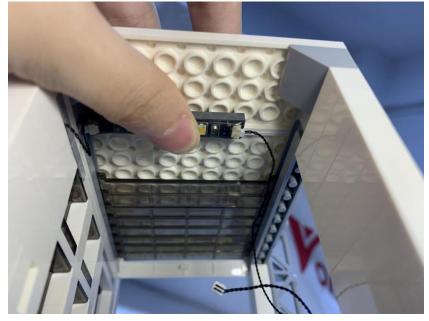
Connect the last strip light to the 5cm connecting cable



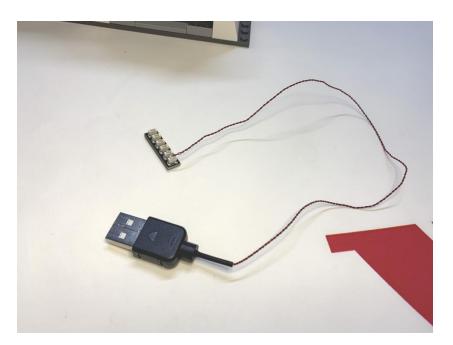
Take a 15cm connecting cable, connect it to the left port on the strip light.



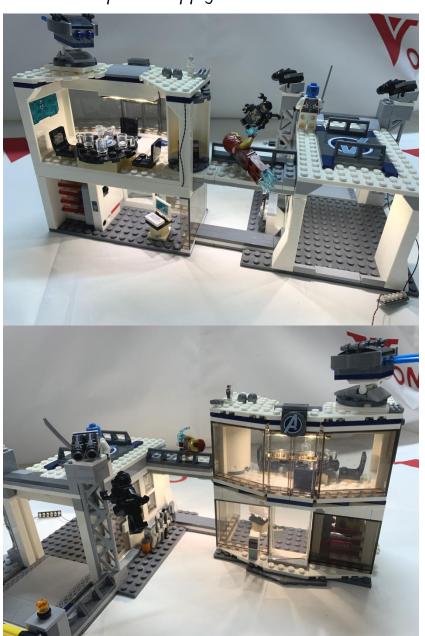
Stick the strip light to the roof as per below



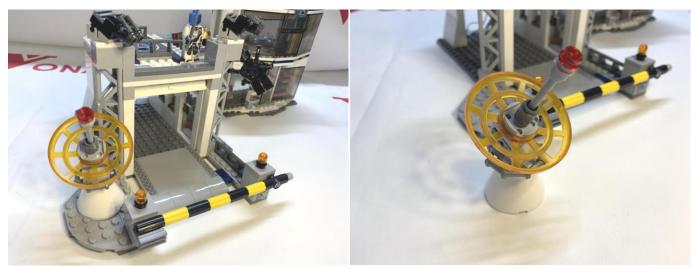
Take the 6 -port Expansion Boards and USB Power Cable



Connect the power supply and test it!



Turn the building to the gate, remove the signal tower



Disassemble it as per below

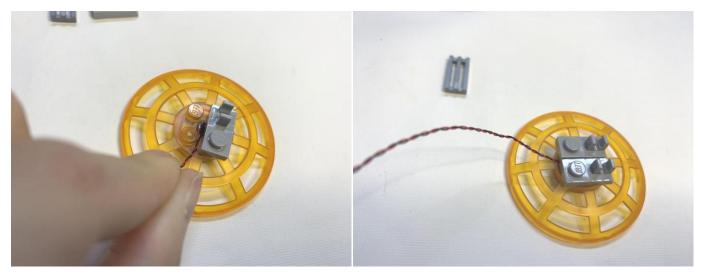


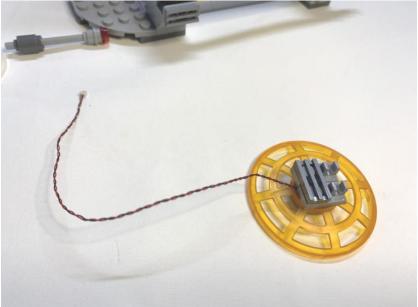
Take a flashing white 15cm dot light



With lighting part facing down, connect the light to the hole at the center of the disc. Note: do not thread it through.

Reconnect the gray plate, secure the light in place

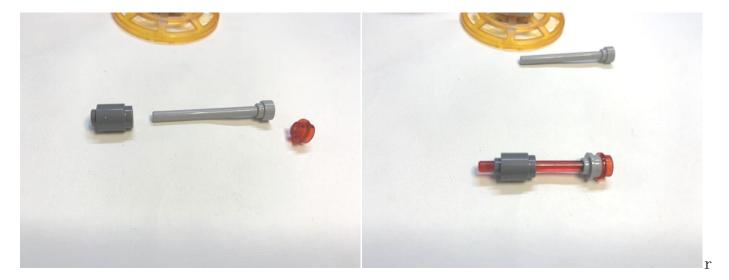




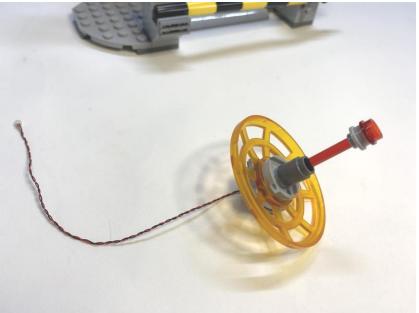
Take a red bar, a gray round piece with a hole



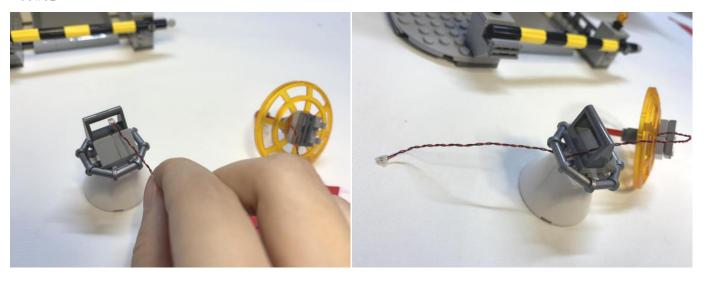
Replace the original gray bar with the red one

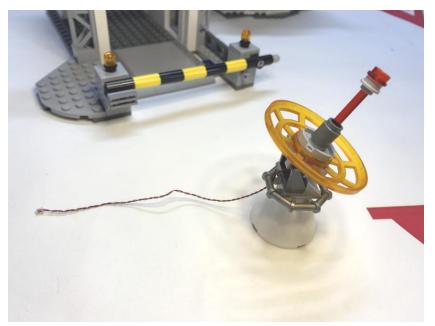


eassemble the signal tower

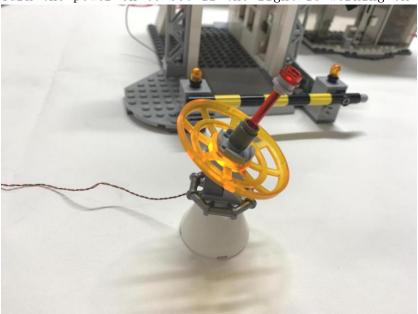


Thread the connector of the light through the following gap before reconnecting the signal tower





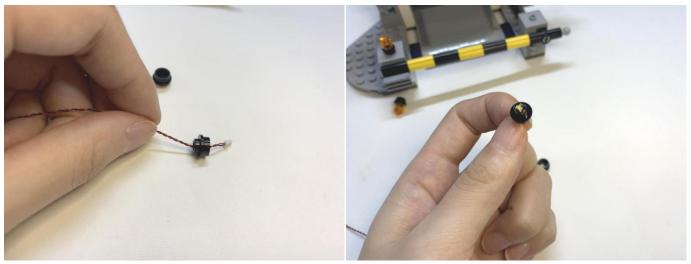
Turn the power on to see if the light is working OK

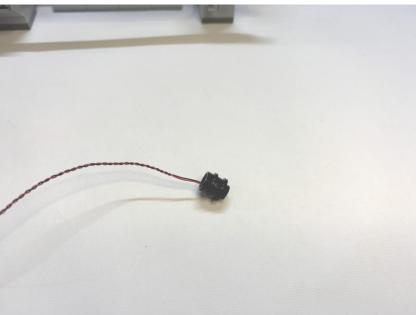


Take a flashing white 30 cm dot light, 2 black round plates with hole

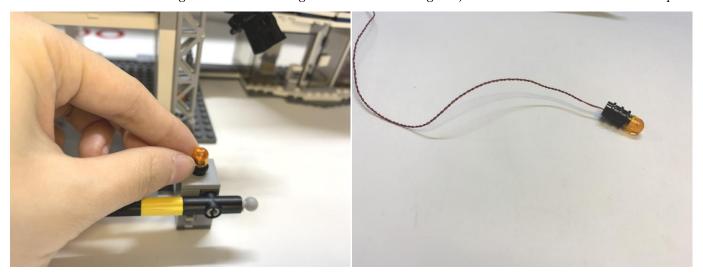


Thread the connector of the light through the hole, pull till the light is facing up, connect the other round plate over

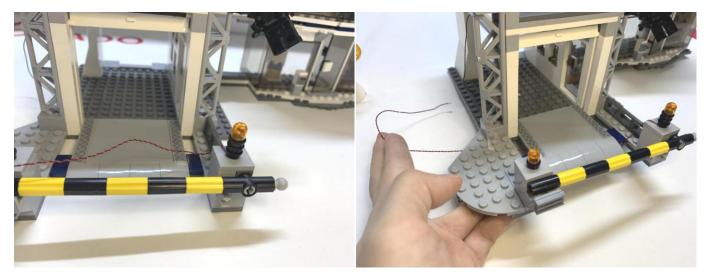




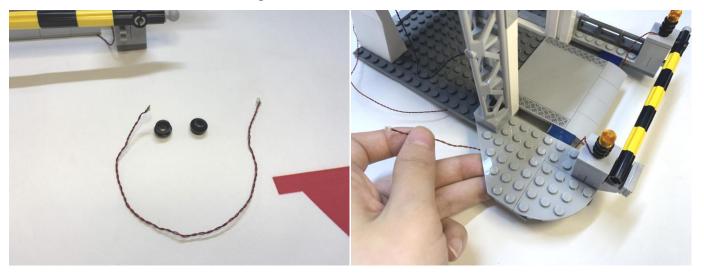
Remove the caution light from the right side of the gate, connect it to the round plate



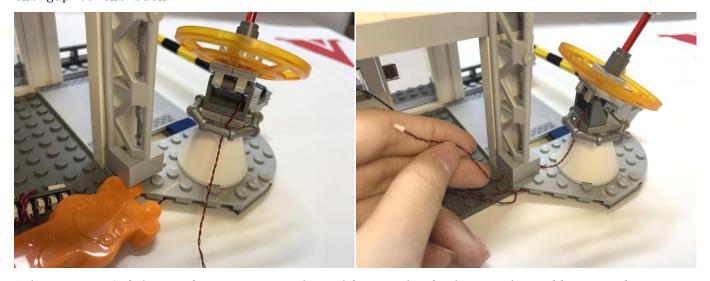
Reconnect the caution light, slightly lift the building to allow the cable thread through the baseplate, pull it out from the left



Take a flashing white 15 cm dot light, 2 black round plates with hole. Repeat the steps above to install the other caution light



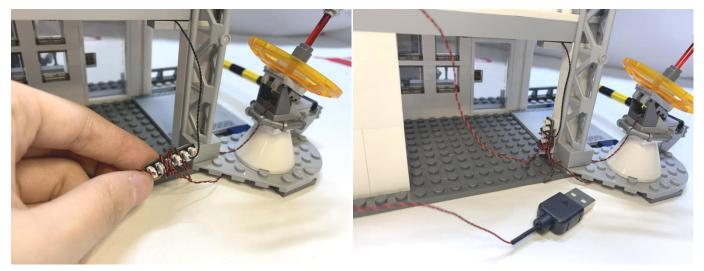
Slightly lift the piece at the back of the signal tower, thread the cable of the light through the gap to the back



Take a gray 1x2 base plate, secure the cable of the light to the following place



Connect the cables of the lights to the 6 -port Expansion Boards, secure the board in place with adhesive squares



This completes installation of this LED Lighting Kit. ENJOY!

