## 1989 Batwing # Lego Light Kit for 76161 Remote Control Version

Thank you for choosing our lighting products. We are committed to LEGO product study and lighting development, we're always trying our best to provide LEGO fans with the best products and the best installation ideas.

Must be careful observation, imagination can be infinite.

We provide basic parts to support your imagination.

DO IT YOURSELF .that's what LEGO is .

As always, Lego has been adhering to the DIY philosophy from product selection, research and development to sales. Consumers buy the parts, you will assemble them by yourself, and you can experience every step from picking up the first piece to installing the last one. Besides, LEGO has different answers for the installation form and method of each part. Vonado lighting also does not want to kill your unlimited creativity, we will try our best to make products with high variability, high playability and unlimited play. If you have any dissatisfaction or your own ideas on the parts such as the color of the lights, the length of the cables, the installation position of the product, and the final effects of each module, you can make your own arrangement, and we will cooperate with you to replace or repurchase.

LETS MOVE!

### Package contents:

- 4 x 15cm Blue Strip Lights
- 2 x 15cm Blue Strip Lights (with 7 lights)
- 2 x 15cm Warm White Strip Lights
- 1 x 15cm Red Strip Lights (with 7 lights)
- 2 x 30cm Red Dot Lights
- 1 x Blue Strip Light
- 2 x 30cm Flashing Warm White Dot Lights
- 4 x 30cm Flashing Red Dot Lights
- 2 x 30cmBlue Dot Lights
- 1 x 30cm Head Light
- 1 x USBCable
- 1 x 15cm Connecting Cable
- 4 x 30cm Connecting Cables
- 2 x 5cm Connecting Cables
- 1 x Remote Control Switch Board
- 4 x 4-port Expansion Board
- 1 x 6-port Expansion Boards
- 1 x 12-port Expansion Board

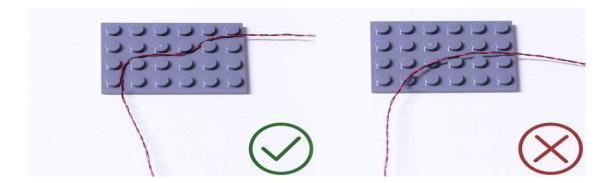
Extra pieces



### Note:

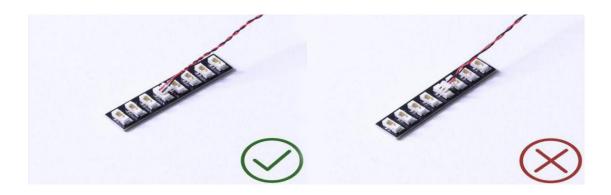
Place wires on the surface or under the building blocks.

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

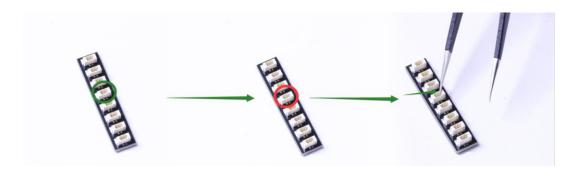


Insert the connectors to the ports.

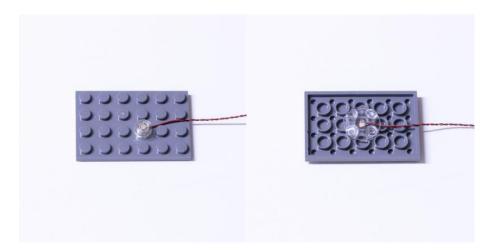
Be careful when you are operating, there's only one correct way to insert, make sure the expansion board is upward, find the soldered "=" sign on the left of the port. When you are inserting, the side which the wires can be seen should be faced to the "=" sign and if you feel hard to insert, please stop,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

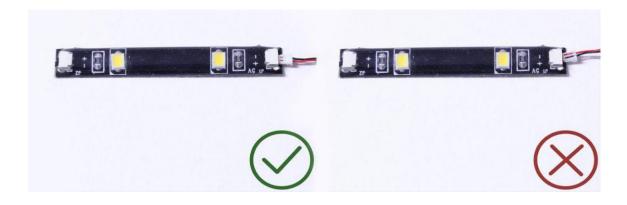


When installing dot lights, make sure they are correctly placed (Yellow LED package is exposed). You can put they either on the top of the studs or between studs.

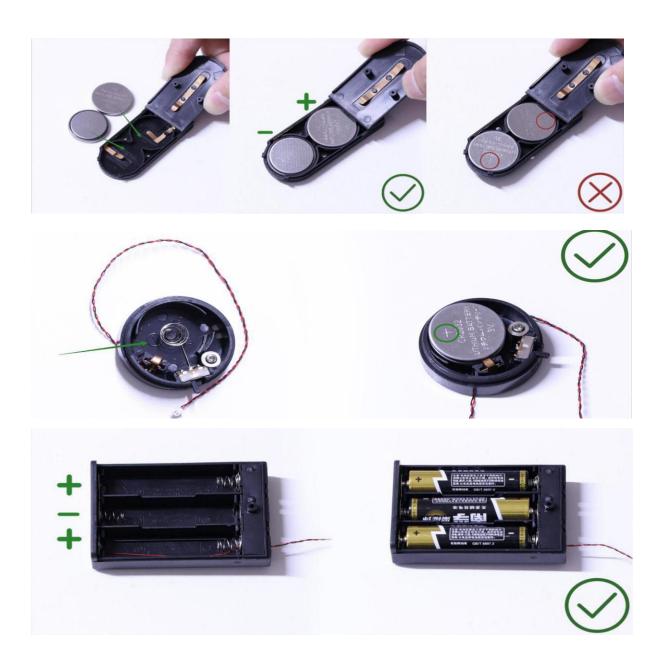


#### Connecting cable connectors to Strip Lights

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.



# Remote control function description



ON: All branches are opened OFF: all branches are closed

A: open/close A road B: open/close B road C: open/close C road D: open/close D road

FS: Turn on blinking for the last open channel BLN:Start breathing for the last opened path

↑: Increase blinking/breathing rate↓: Increase blinking/breathing rate

Brightness+: VIncrease brightness Brightness -: Reduce brightness

## Instructions for installing this kit:

Batwing Remote Control Version, Lighting Kit, 17 bags in total, 16 bags with labels, 1 bag without label, as per below:

Power supply: USB cable (self-contained power bank or mobile phone charger).

Firstly, take the power source (power bank or mobile phone charger), connect it to the USB cable, connect the other end of the USB cable to the expansion board to verify all the lights one by one.



After the verification, disconnect the lights and put them back to the bags.

(note: put the lights back to the bags when verification of the lights from the same bag is done, then, continue to verify the lights in another bag.)

OK, Let's Begin! (you can use the tweezer if necessary.)

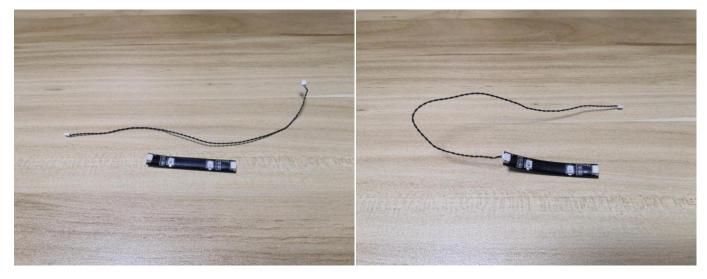
(Tips: the tweezer is sharp, you should be careful when using it, do not hurt yourself or scratch the pieces; be gentle and do not wear the cables.)

# Instructions for installing this kit:

Take the Batwing at first.



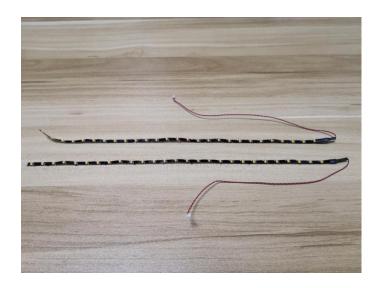
Take a 15cm connecting cable, a blue strip light.



Stick the strip light to the following place.



Take 2 warm white 15cm strip lights.



Stick the strip lights to the following places inside the wings.



Remove the following gray pieces from both sides.



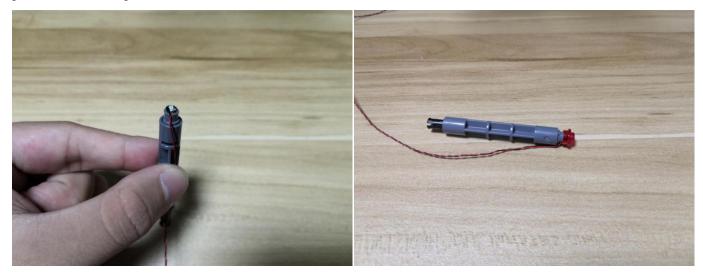




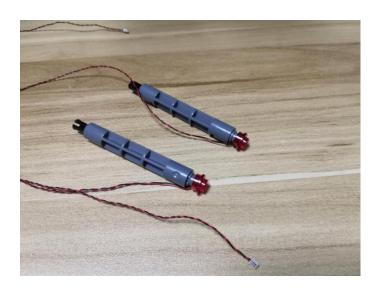
Take 2 red 30cm dot lights, 2 trans red 1x1 round plates.



With lighting part facing up, stuck the cable at the following gap, connect the red 1x1 round plate over as per below.



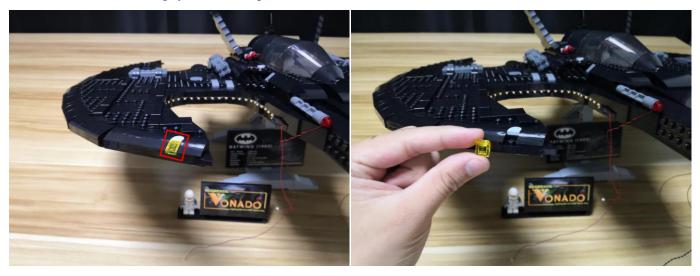
Install the other light in the same way.



Reconnect the gray pieces.



Remove the following yellow slope bricks from both sides.

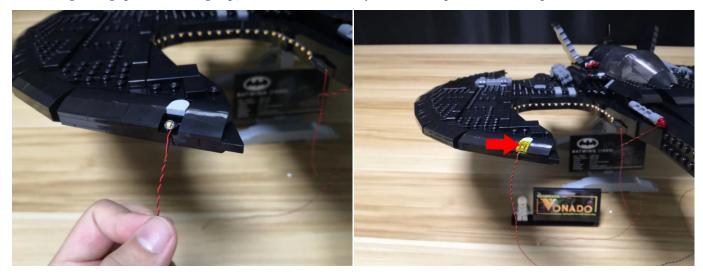




Take 2 flashing warm white 30cm dot lights.



With lighting part facing up, reconnect the yellow slope brick as per below.



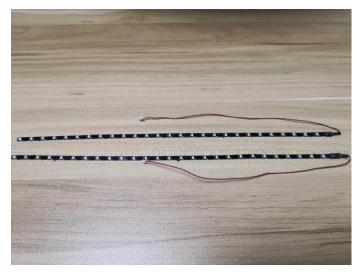
Install the other light in the same way.



Turn to the left side as per below.



Take 2 blue 15cm strip lights.



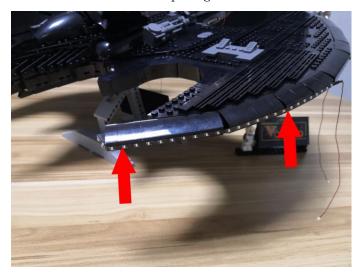
Stick the strip light to the following place.



Hide the cable at the following space.



Stick the other strip light to the back of the left side as per below.



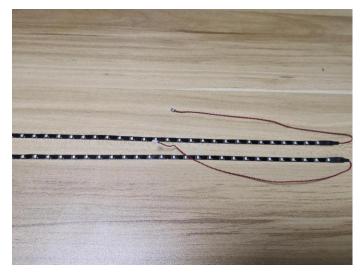
Hide the cable at the following space.



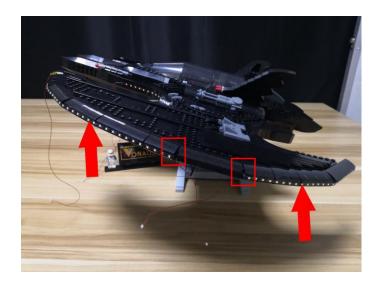
Turn to the right side.



Take 2 blue 15cm strip lights.



Install the strip light for the right side in the same way.



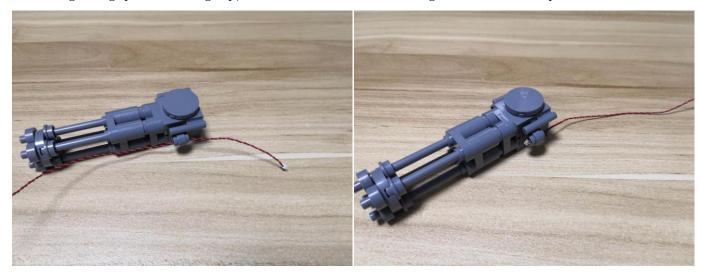
Remove the following gray pieces from both sides.



Take 2 flashing red 30cm dot lights, 2 trans red 1x1 round plates.



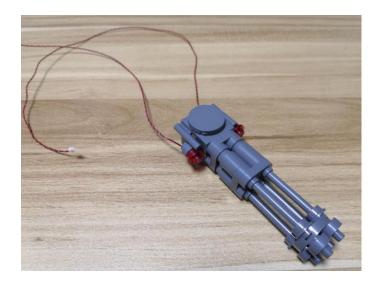
With lighting part facing up, thread the cable through the hole as per below.



Connect the trans red round plate over.



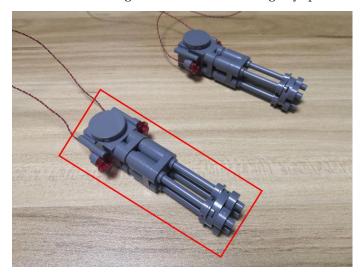
Install the light at the other side in the same way.



Take 2 flashing red 30cm dot lights, 2 trans red 1x1 round plates.



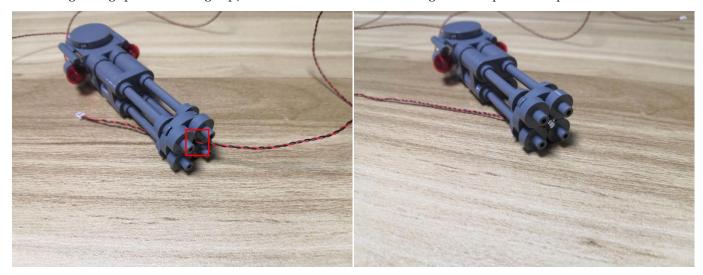
Install the light for the other gray piece in the same way.



Take 2 blue  $30 \, \mathrm{cm}$  dot lights, 2 trans white round plates.



With lighting part facing up, thread the cable through the space as per below.



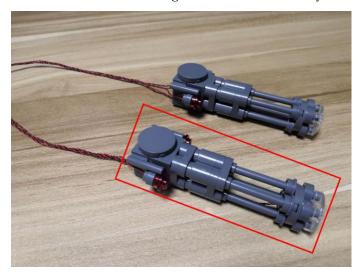
Connect the trans white round plate over.



Group the 3 cables together.



Install the other light in the same way.



Reconnect the following gray pieces.



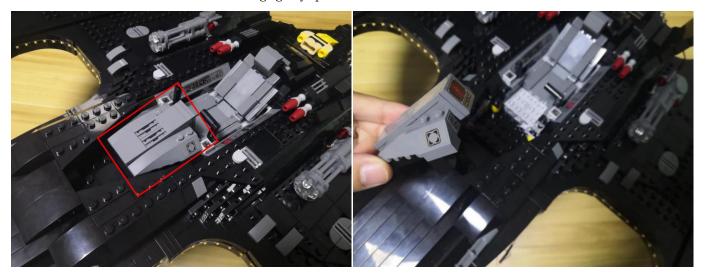
Remove the roof.



Remove the following black piece.



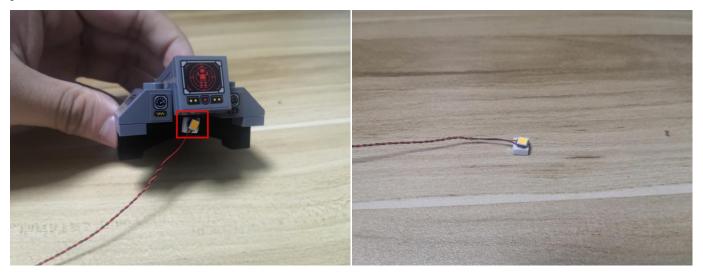
Continue to remove the following gray piece.



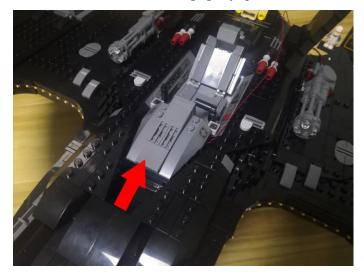
Take a 30cm head light, an adhesive square.



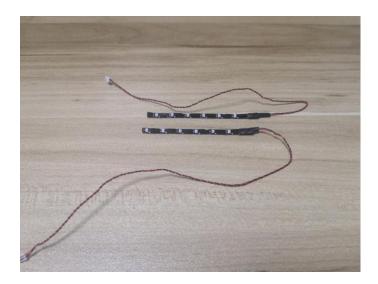
Stick the adhesive square to the back of the light, and stick the light to the following place.



Reconnect the following gray piece.



Take 2 blue 15cm strip lights (with 7 lights).

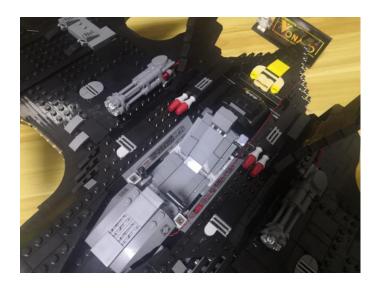


Stick the strip lights to the spoilers as per below.





Place the cable inside the cabin as per below.



Reconnect the roof.



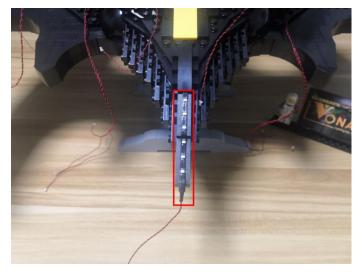
Turn to the tail.



Take a red 15cm strip light (with 7 lights).



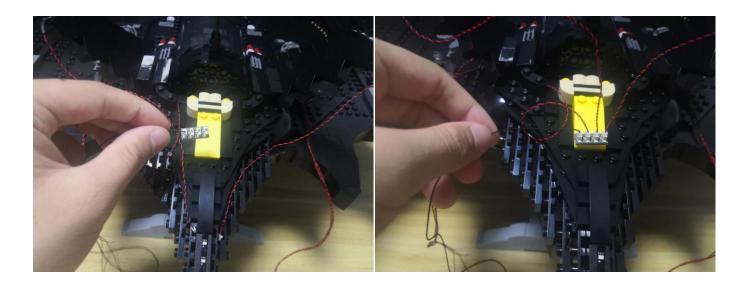
Stick the strip light to the following place.



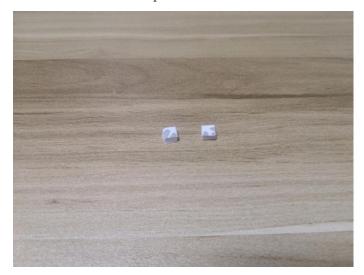
Take a 30cm connecting cable, a 4-port expansion board, assemble them as per below.



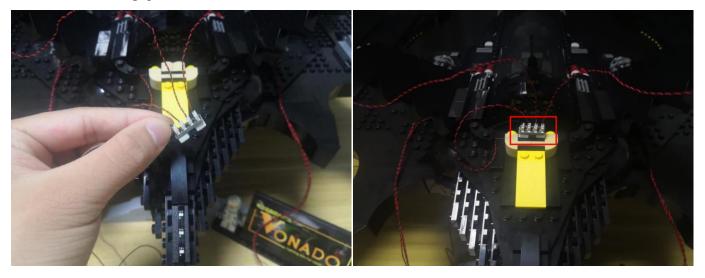
Connect the following 3 cables to the expansion board.



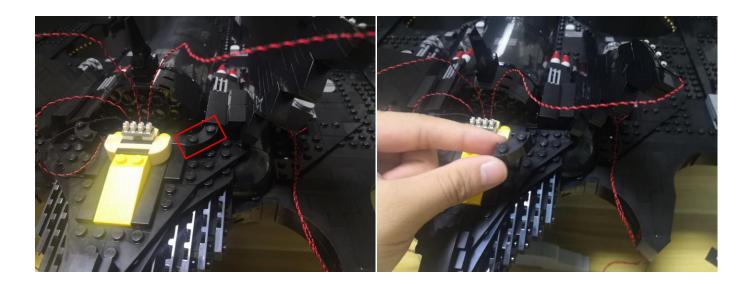
Take 2 adhesive squares.



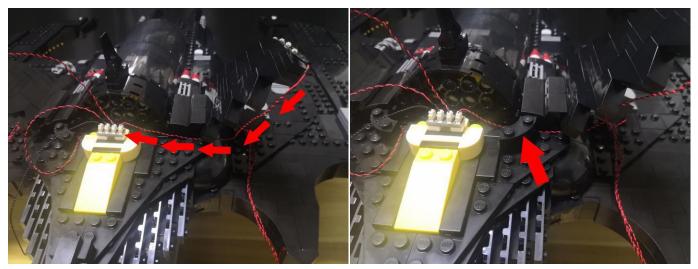
Stick the adhesive squares to the back of the expansion board, and stick the expansion board to the following place.



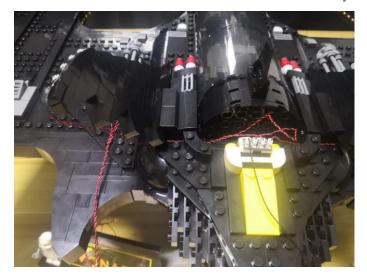
Remove the following black pieces from the right side.



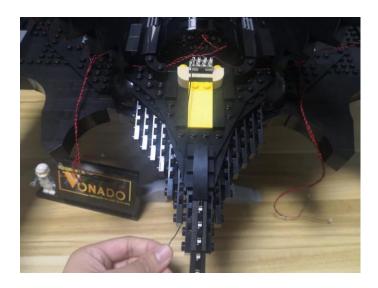
Place the cable as per below, reconnect the black piece.



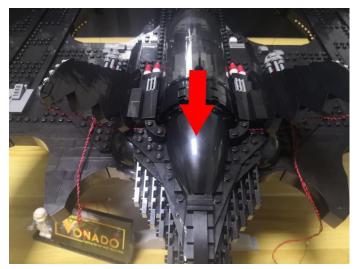
Place the cable at the left side similarly.



Place the cable as per below.



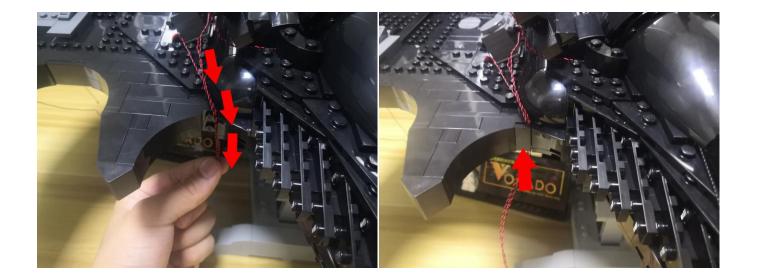
Reconnect the following black piece.



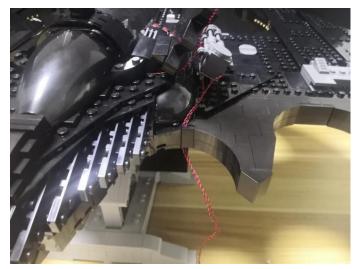
Remove the following black plate from the left side.



Place the cable as per below, reconnect the black plate.



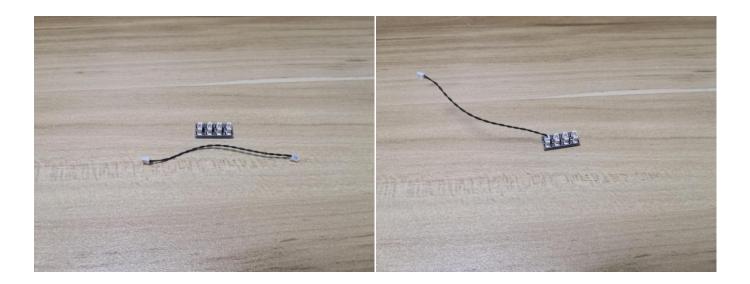
Place the cables at the right side similarly.



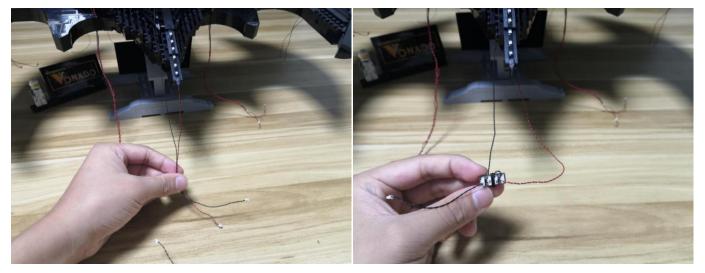
Turn to the following place.



Take a 5cm connecting cable, a 4-port expansion board, assemble them as per below.



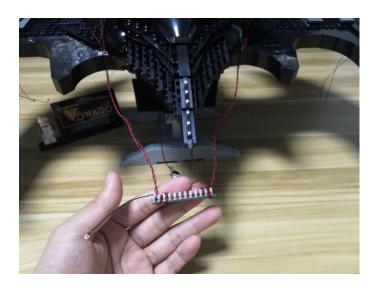
Connect the connecting cable and the cable from the strip light to the expansion board.



Take a 5cm connecting cable, a 12-port expansion board, assemble them as per below.



Connect the following 6 cables to the expansion board.



Turn to the front.



Take a 30cm connecting cable, a 4-port expansion board, assemble them as per below.



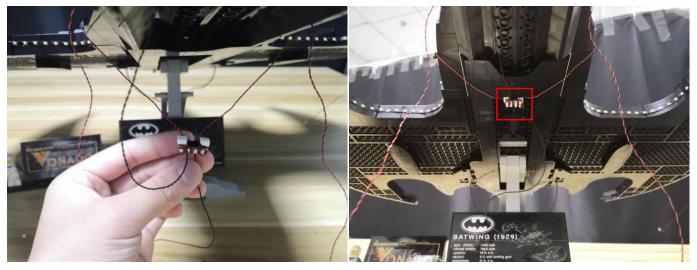
Connect the following 3 cables from the strip lights to the expansion board.



Take 2 adhesive squares.



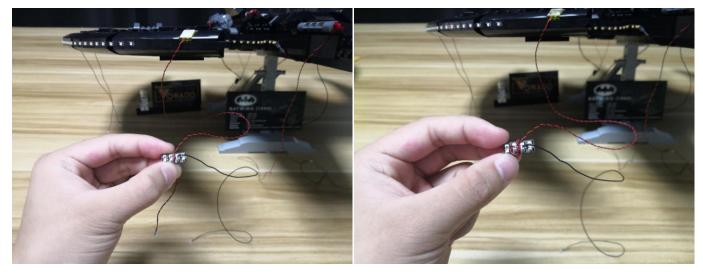
Stick the adhesive squares to the back of the expansion board, and stick the expansion board to the following place.



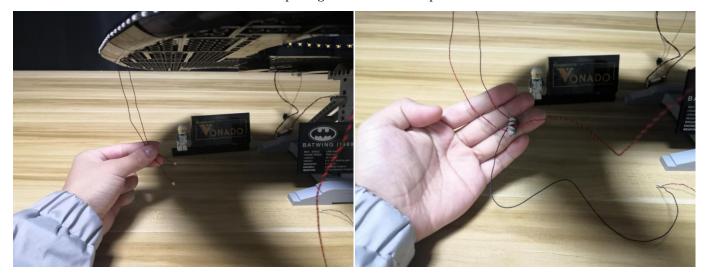
Take a 30cm connecting cable, a 4-port expansion board, assemble them as per below.



Connect the cable from the left side to the expansion board.



Connect the cables from the 2 strip lights to the expansion board.



Take 2 adhesive squares.



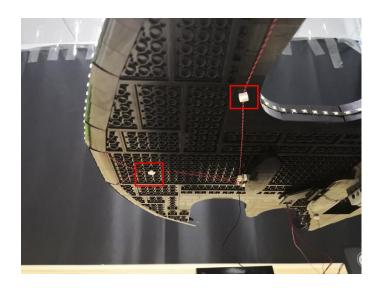
Stick the adhesive squares to the back of the expansion board, and stick the expansion board to the following place.



Take 2 adhesive squares.



Stick them to the following places to secure the cables.



Take a 30cm connecting cable, a 6-port expansion board, assemble them as per below.



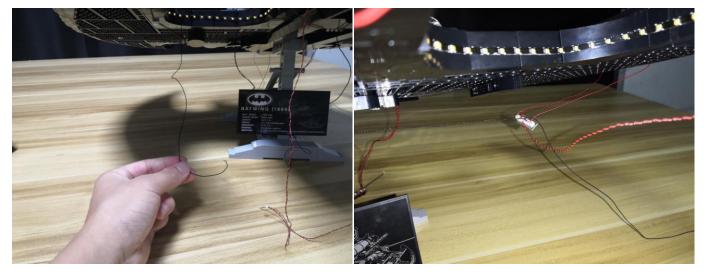
Take the following cable from the right side, connect it to the expansion board, tuck excess cable around the expansion board.



Take the following cable of the strip light from the right side, connect it to the expansion board.



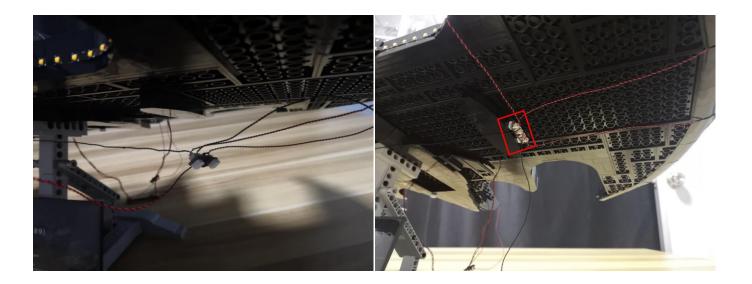
Connect the following cable from the left expansion board to the right expansion board.



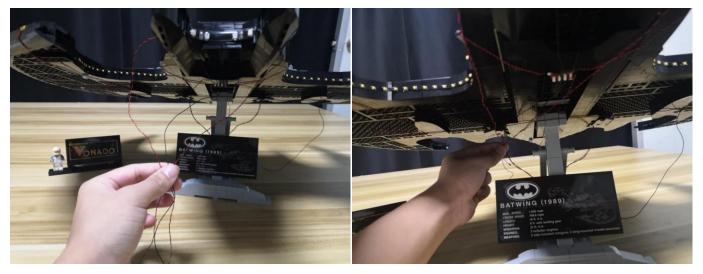
Take 2 adhesive squares.



Stick the adhesive squares to the back of the expansion board, and stick the expansion board to the following place.



Place the following 3 cables to the back.



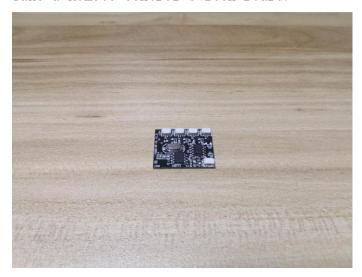
Turn to the tail.



Connect the following 2 cables to the expansion board.



Take a Remote Control Switch Board.



Take the following cable, connect it to the A port.



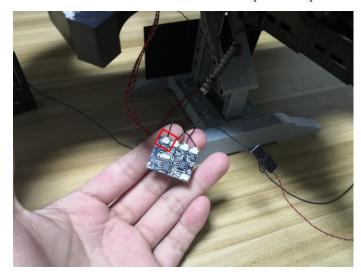
Take the following cable, connect it to the B port.



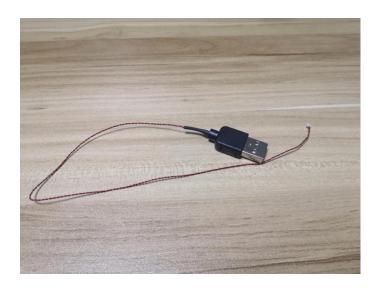
Connect the cable from the 4-port expansion board to the C port.



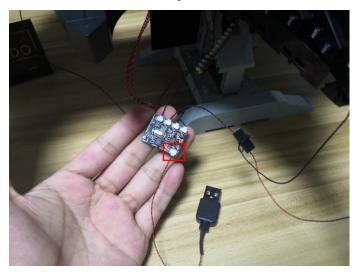
Connect the cable from the 12-port expansion board to the D port.



Take a USB cable.



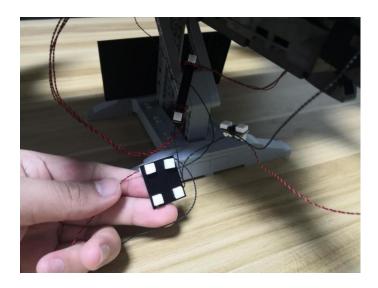
Connect it to the IN port.



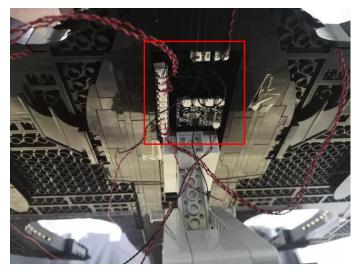
Take 8 adhesive squares.



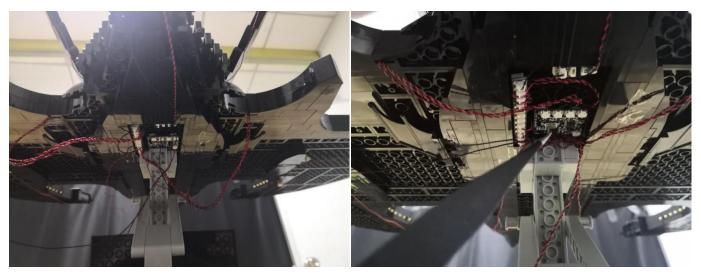
Stick the adhesive squares to the back of the expansion board and the back of the Remote Control Switch Board as per below.



Stick them to the following places as per below.



Tuck excess cables with the tweezer.



This completes installation of this LED Lighting Kit. ENJOY! (A port: lights at the outer part; B port: headlights; C port: spoiler lights; 4 port: cannon lights.)



The above are ideas and instructions provided by our designers. Please move on:

- 1: Do you have any suggestions about the material and quality of our products?
- 2: Do you have any suggestions on the installation instructions and the degree of difficulty of the installation?
- 3: If you have better installation method and ideas, please contact us in time.