

DR WHO #21304

Package contents:

- 8x Warm White 15cm Dot Lights
- 2x Flashing Warm White 15cm Dot Lights
- 1x 6-Port Expansion Board
- 1x 8-Port Expansion Board
- 2x Multi-Effect Boards (3 effects)
- 2x 5cm Connecting Cables
- 4x Adhesive Squares
- 1x AA Battery Pack (requires 3x AA Batteries)
- 1x Flat Battery Pack (requires 2x CR2032 Batteries)

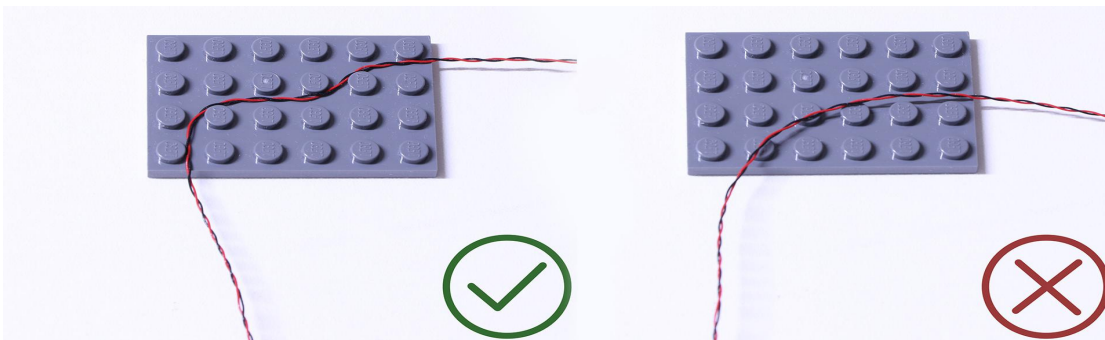
Extra LEGO pieces

- 1x Trans Red Round Plate 1x1
- 1x Trans Green Round Plate 1x1

Note:

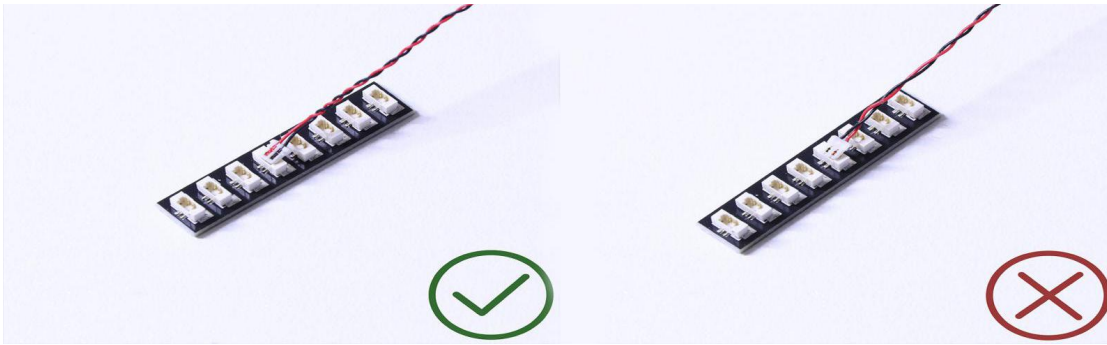
Place wires on the surface or under the LEGO building blocks.

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

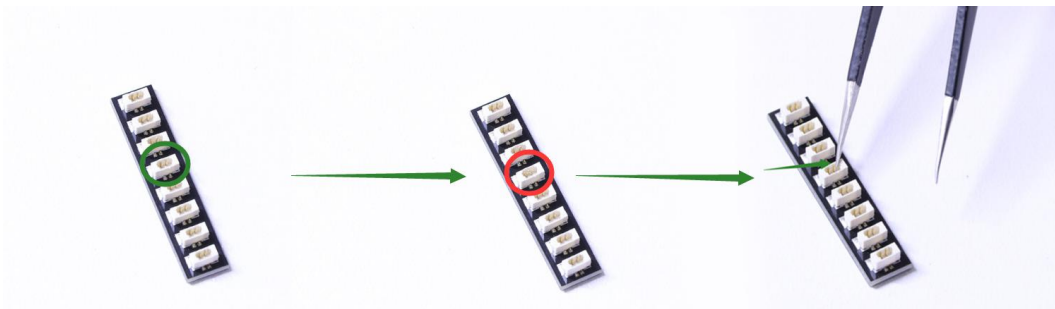


Insert the connectors to the ports.

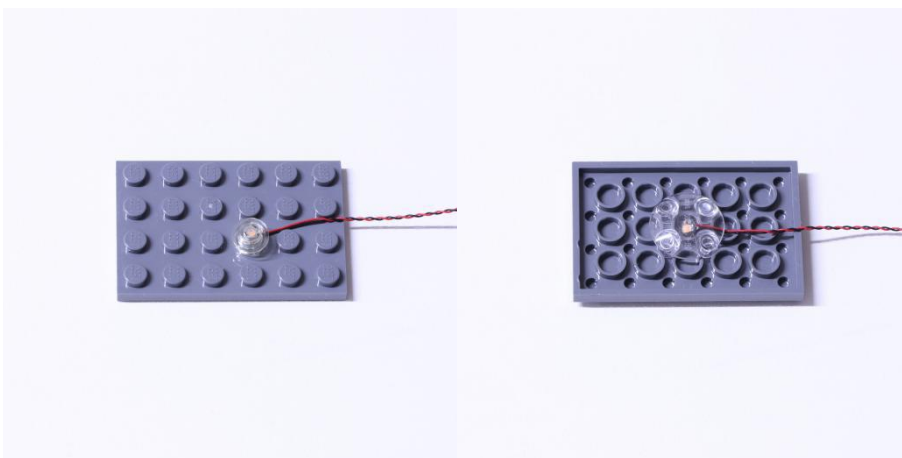
Be careful when you are operating, there's only one correct way to insert, make sure the expansion board is upward, find the soldered "=" sign on the left of the port. When you are inserting, the side which the wires can be seen should be faced to the "=" sign and if you feel hard to insert, please stop,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

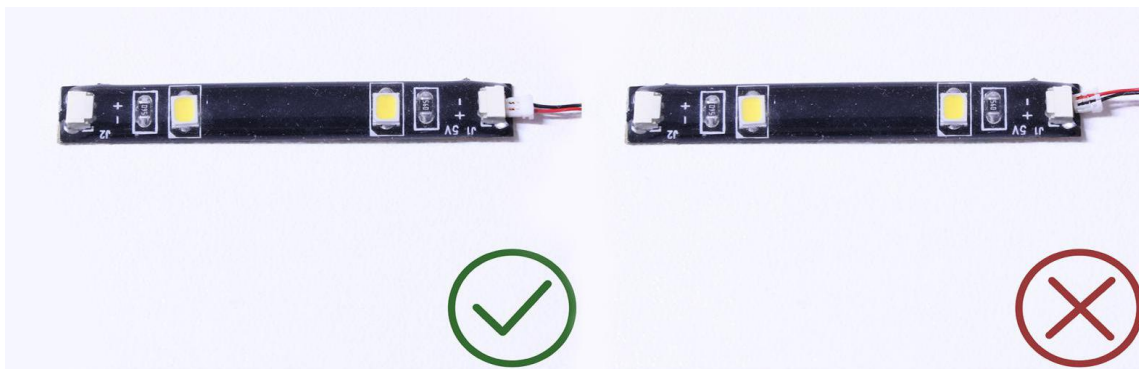


When installing dot lights, make sure they are correctly placed (Yellow LED package is exposed). You can put them either on the top of the studs or between studs.

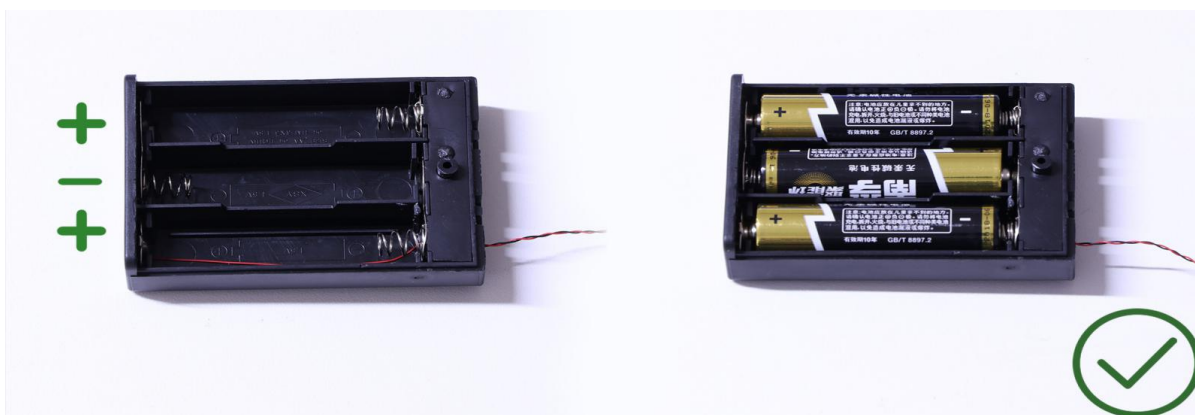


Connecting cable connectors to Strip Lights

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.

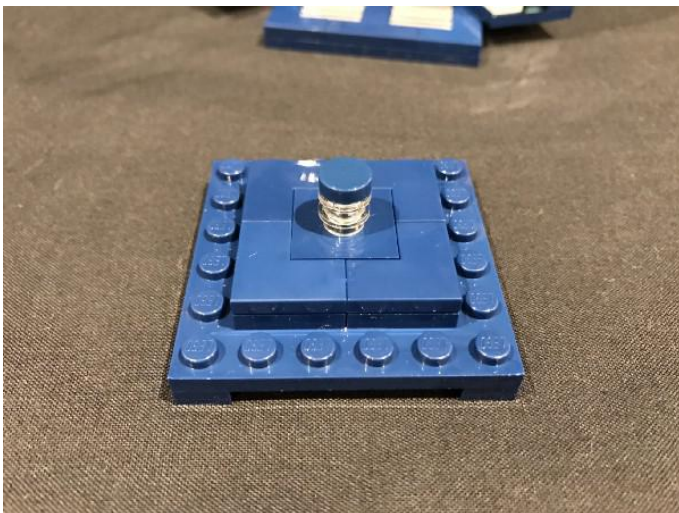


OK, Let's Begin!

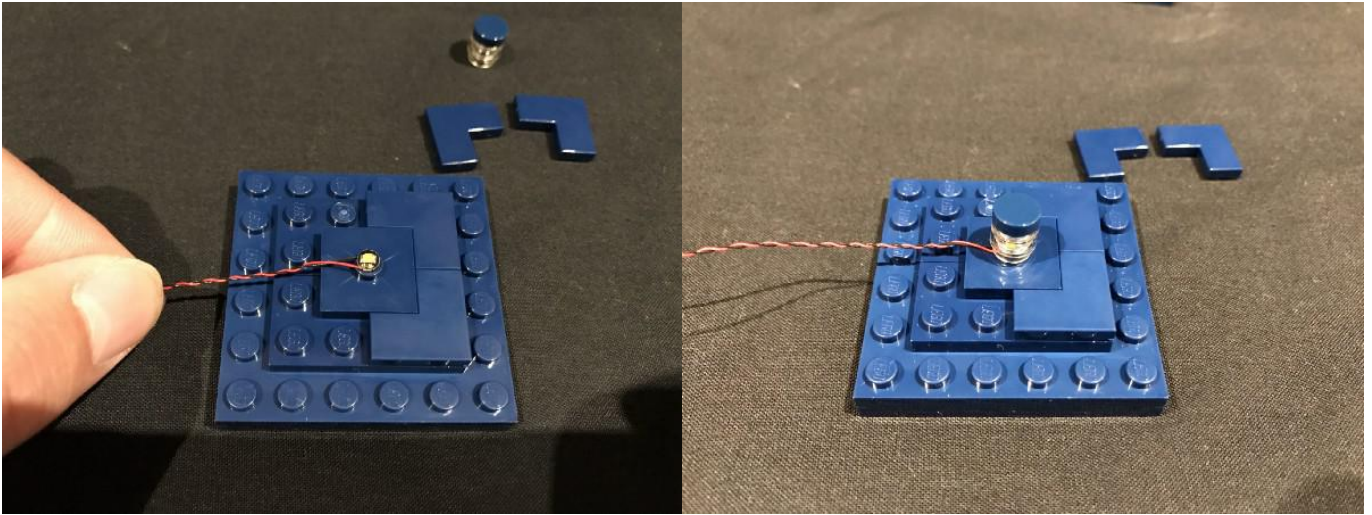
Instructions for installing this kit

Lighting the Tardis

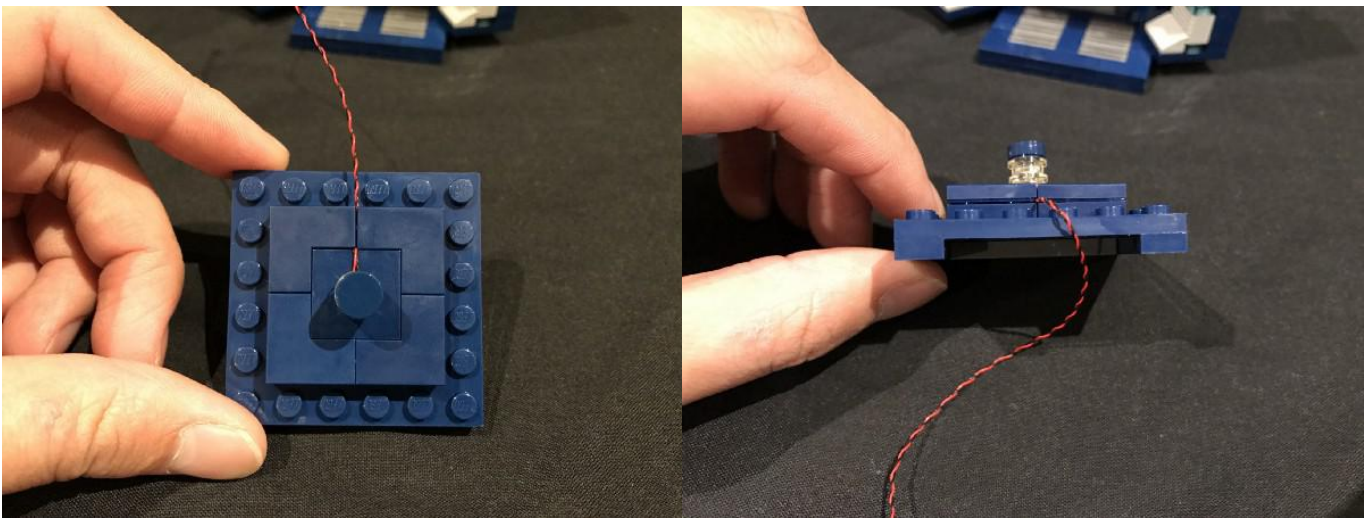
1.) We will start installing a light to the Tardis first. Remove the roof and then disconnect the following pieces from the top.



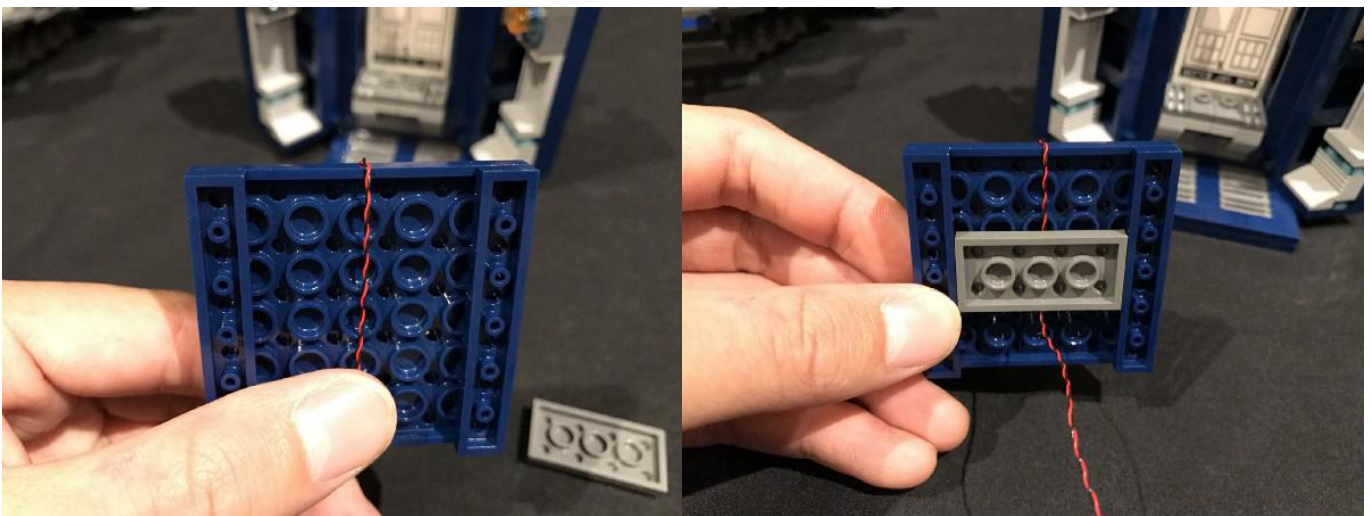
2.) Take a White 15cm Dot Light and then place it directly over the top of the centre stud as per below. Secure the dot light in place by reconnecting the LEGO light pieces.



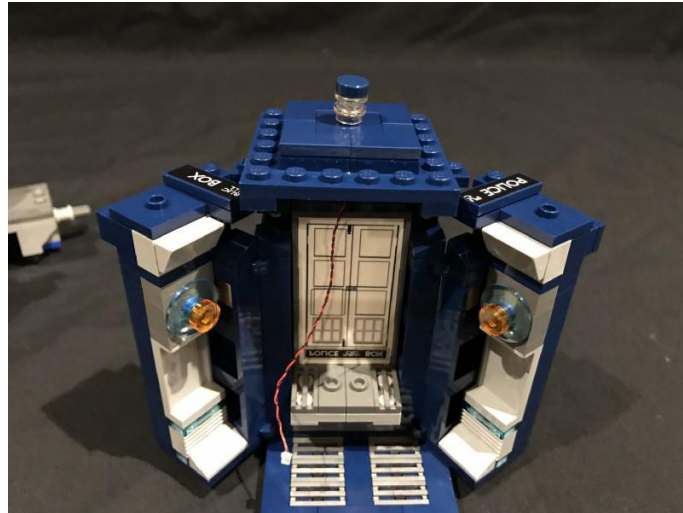
3.) Reconnect the 'L' shaped tiles ensuring the Dot Light cable is neatly laid in between studs.



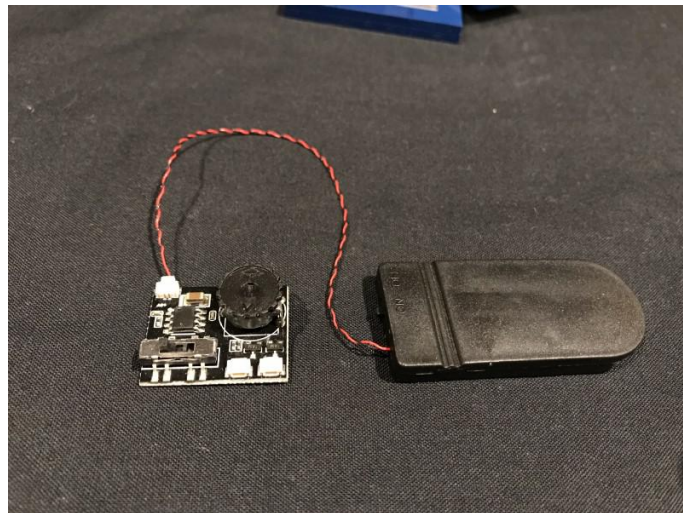
Turn the roof over and then pull the cable down and then disconnect the grey 2x4 plate from underneath. Reconnect the plate over the top of the cable to secure it.



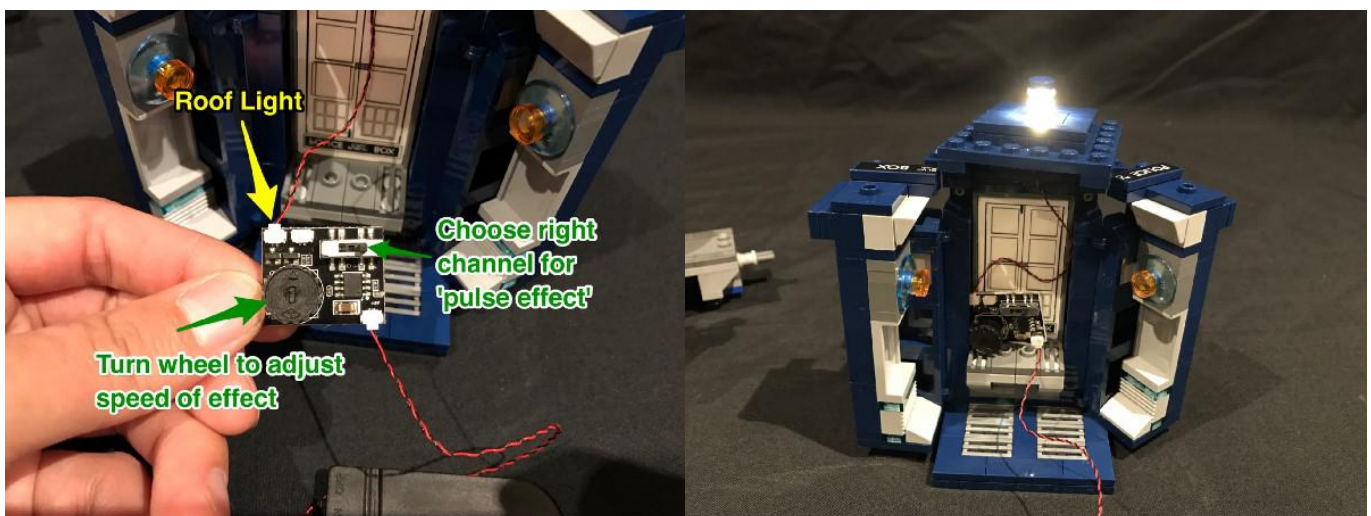
Place the roof back on top of the Tardis.



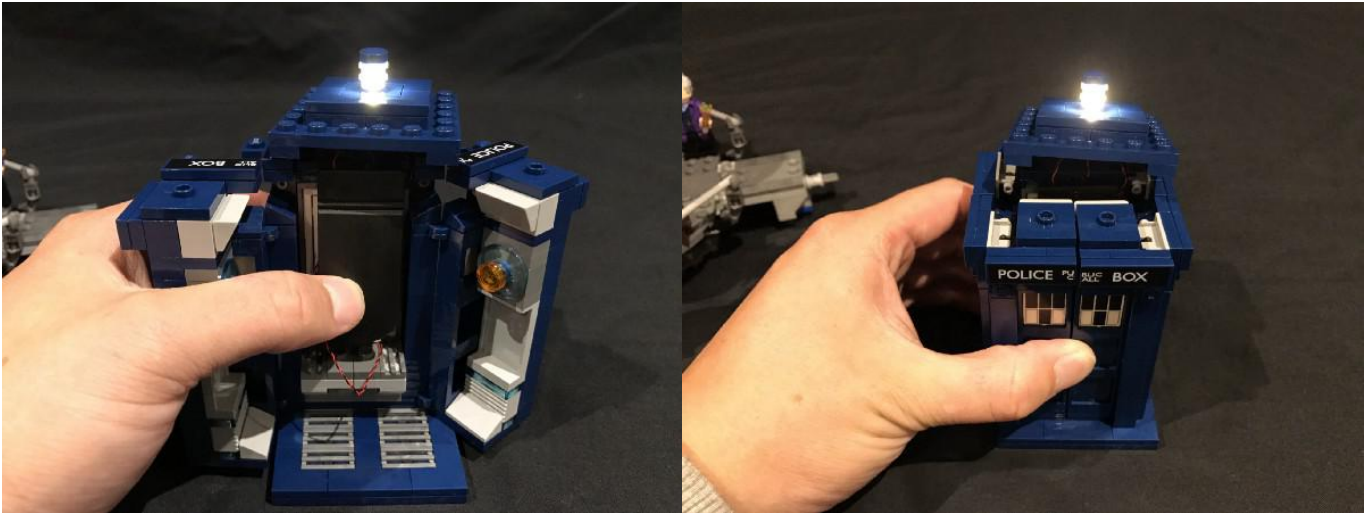
4.) Take the Flat Battery Pack and insert 2x CR2032 batteries to it. Insert the connecting cable to the input port of the Multi-Effects Board (side with 1 port)



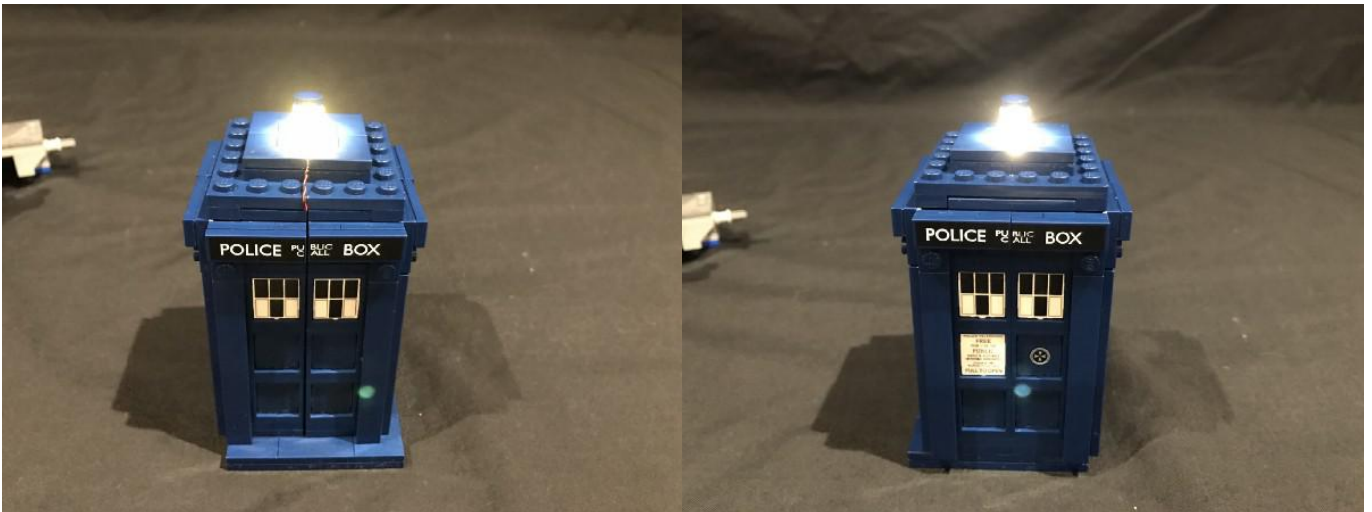
Connect the Dot Light cable from the roof to one of the output ports of the Multi-Effects Board. Turn the channel far left for the “pulse” effect and then turn on the battery pack. Adjust the speed of the effect by turning the wheel either clockwise or anticlockwise.



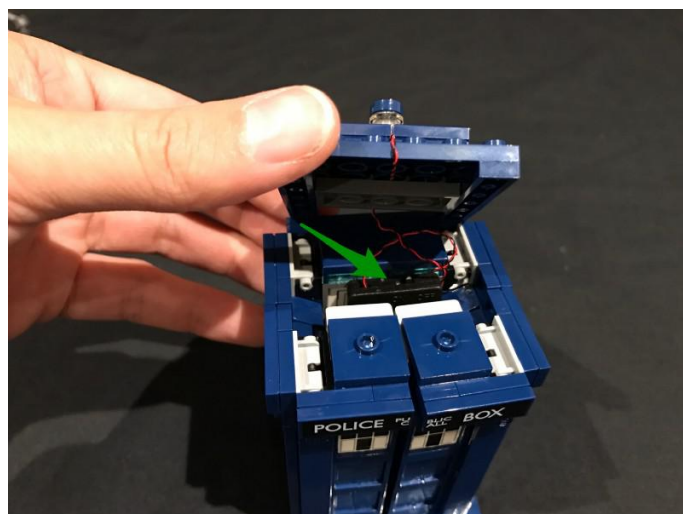
5.) Place expansion board and battery pack into the middle of the TARDIS before closing the doors.



6.) Lift up the top side panels and then turn the roof around before connecting down so that the cable is exposed (as we want to prevent the cable from being seen from the front of the Tardis)



You should be able to turn the light on/off by simply removing the roof and accessing the battery pack switch inside.



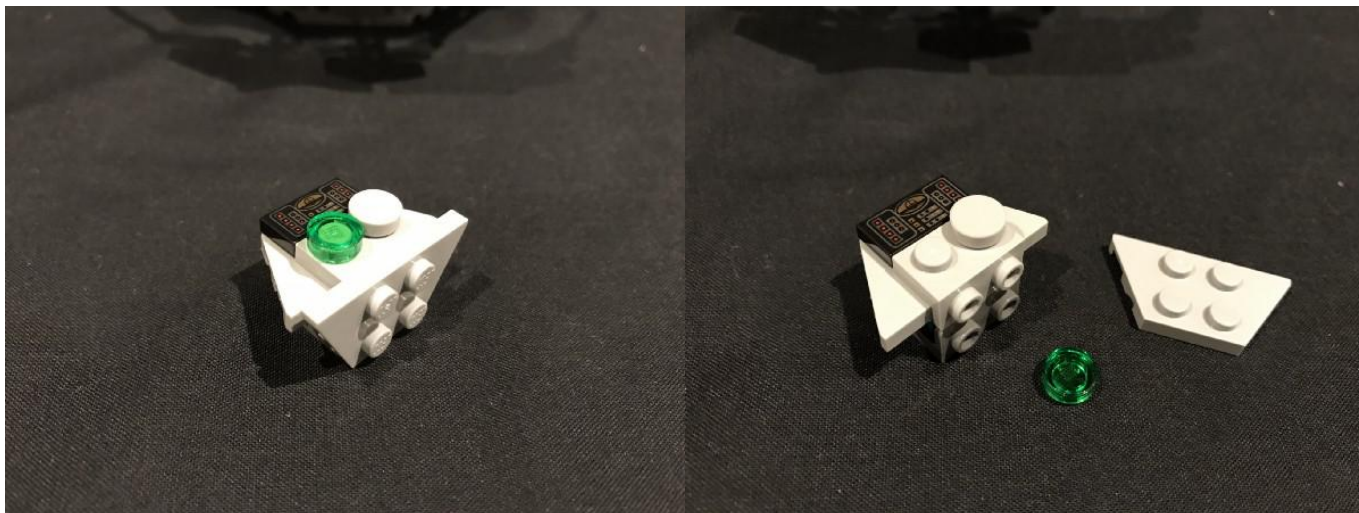
Lighting the Console Room

1.) Start by removing sections from the middle of the console room.



2.) We will install a flashing light to the green light below. First remove the panel section and then disassemble as per below.





3.) Take a Flashing White 15cm Dot Light and then place it directly over the grey stud. Secure it in place by connecting the provided Trans Green Round Plate over the top ensuring the cable is facing downward.



Pull the cable down and lay in between studs before reconnecting the grey plate over the top.



Before reconnecting this panel section to the middle, thread the dot light cable underneath so that it

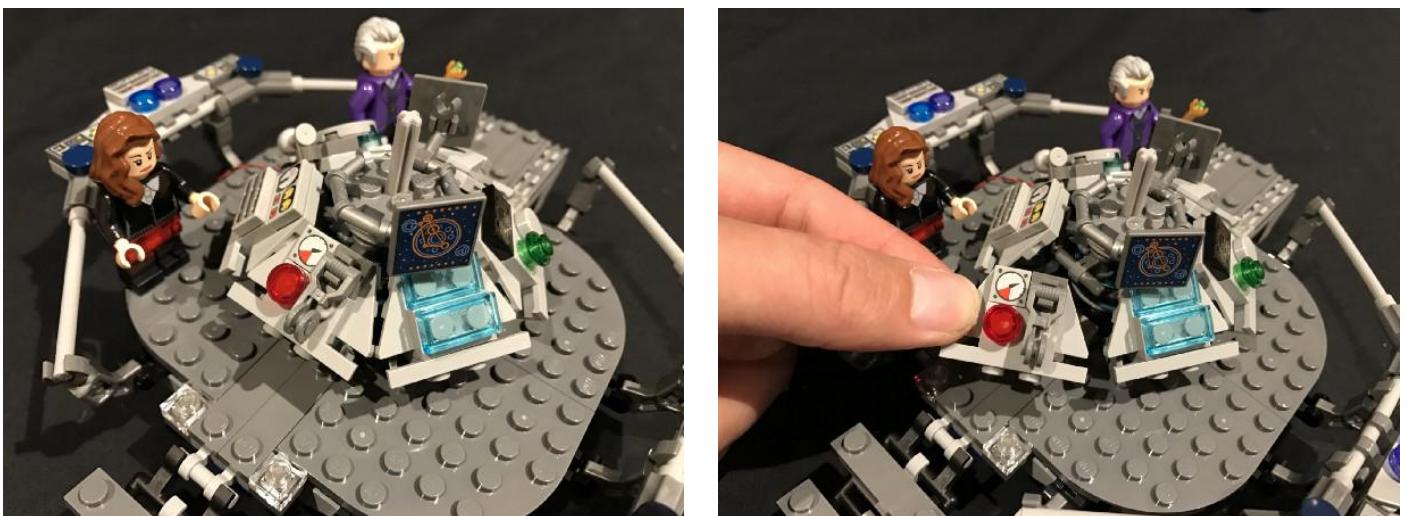
leads to the back.



Thread the cable underneath the railings.

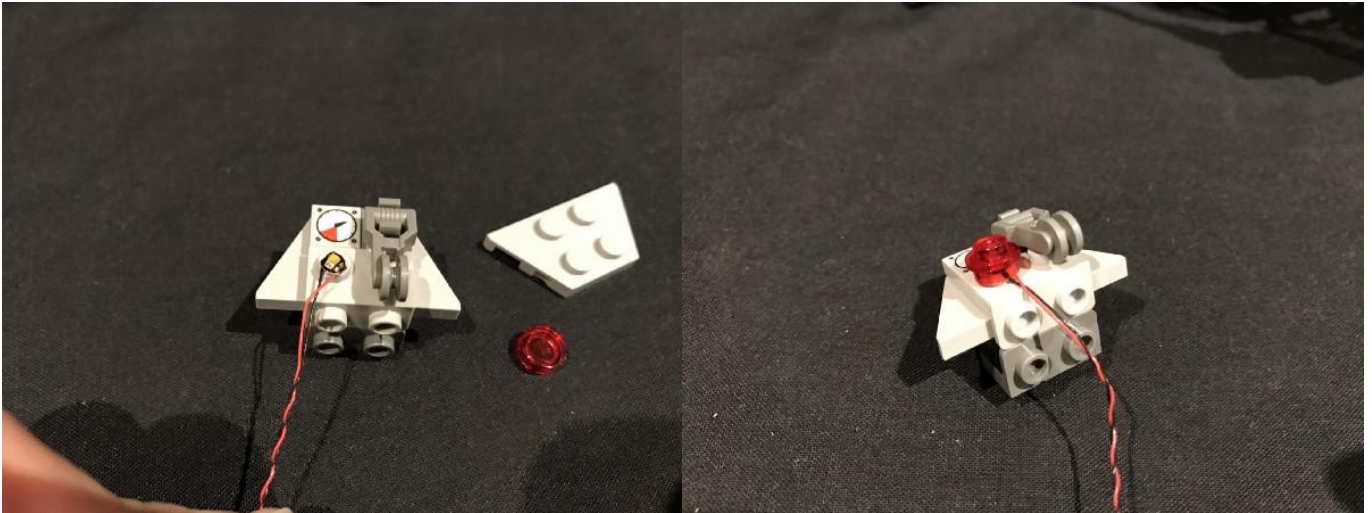


4.) We will now install another flashing light to the red light on the other side. First remove this section and disassemble pieces as per below.

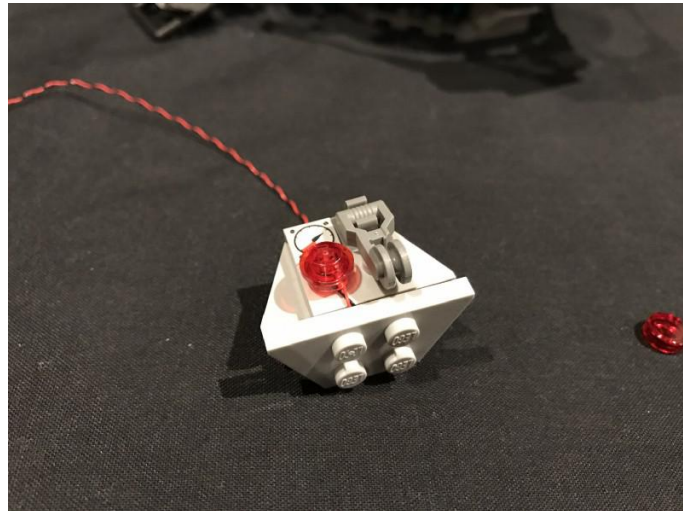


5.) Take a Flashing White 15cm Dot Light and then place it directly over the grey stud. Secure it in

place by connecting the provided Trans Red Round Plate over the top ensuring the cable is facing downward.



Pull the cable down and lay in between studs before reconnecting the grey plate over the top.



Reconnect this panel section back to the middle ensuring you first thread the cable underneath so that it threads through to the back section.

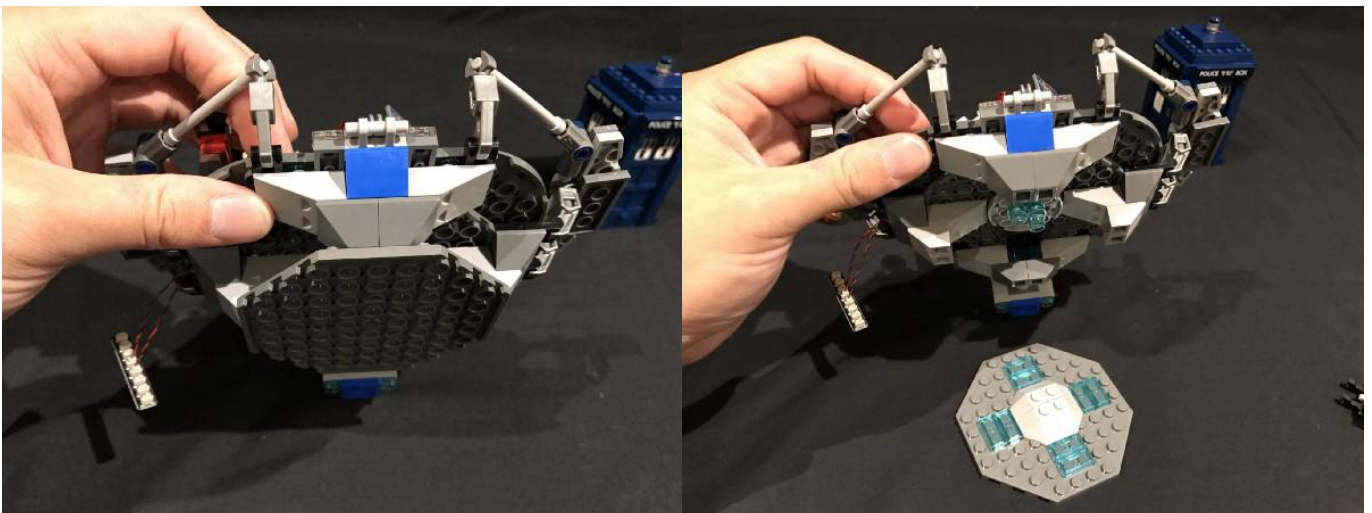
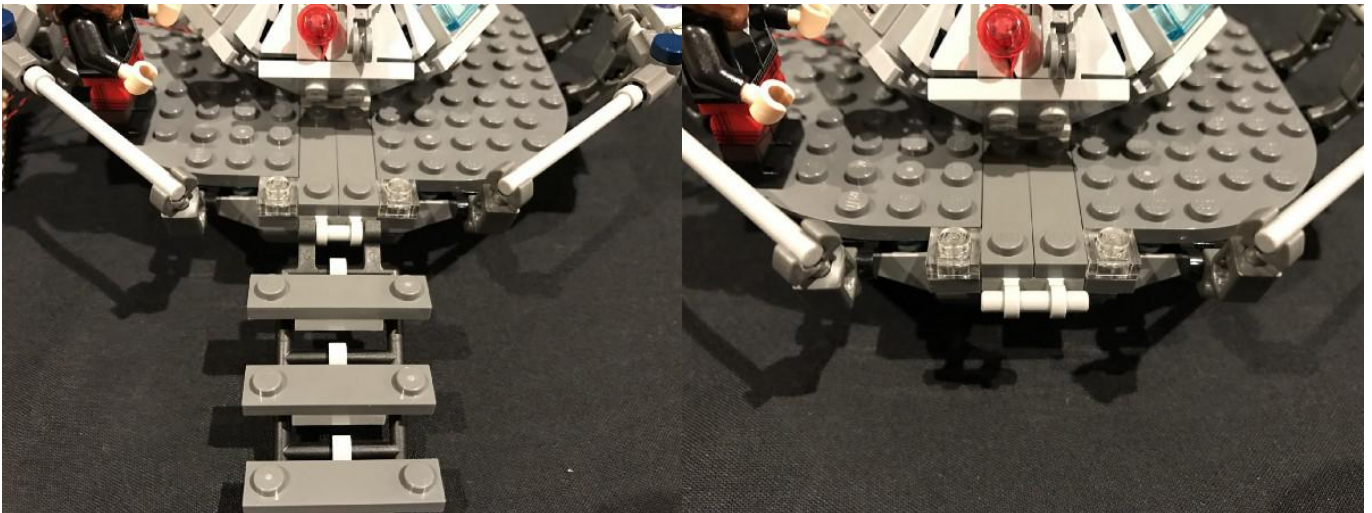


6.) Turn the console room around to the back and then take the 8-Port Expansion Board and then

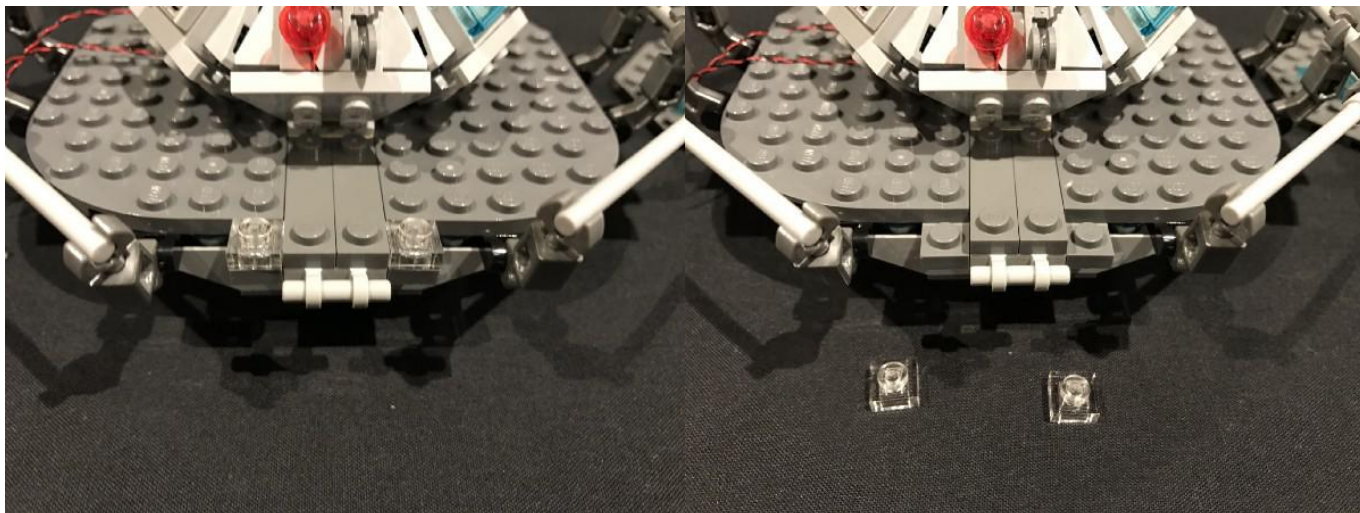
connect the 2 light cables to the middle ports.



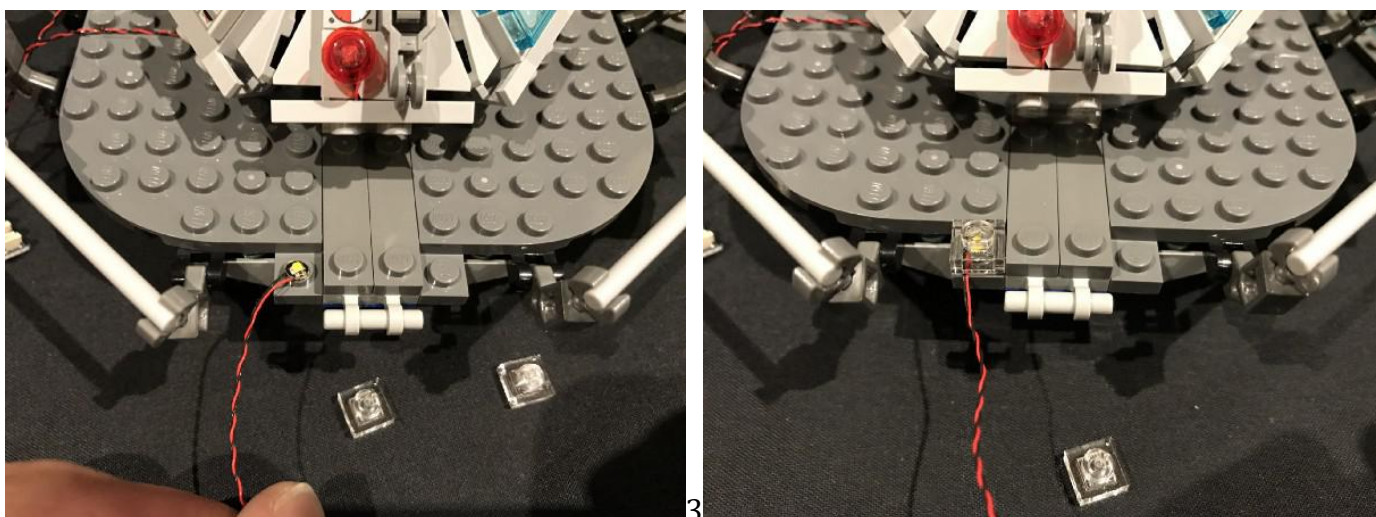
7.) We will now light up the floor lights starting from the ones located near the steps. First remove the steps section and then remove the octagon plate from underneath.



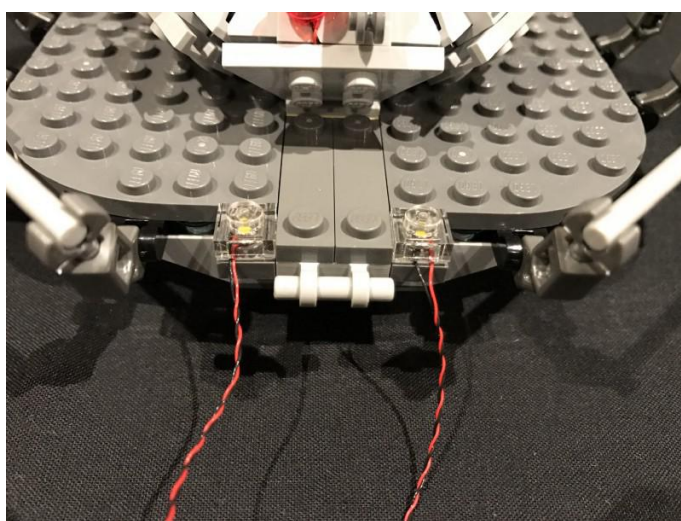
Remove the trans white square plates



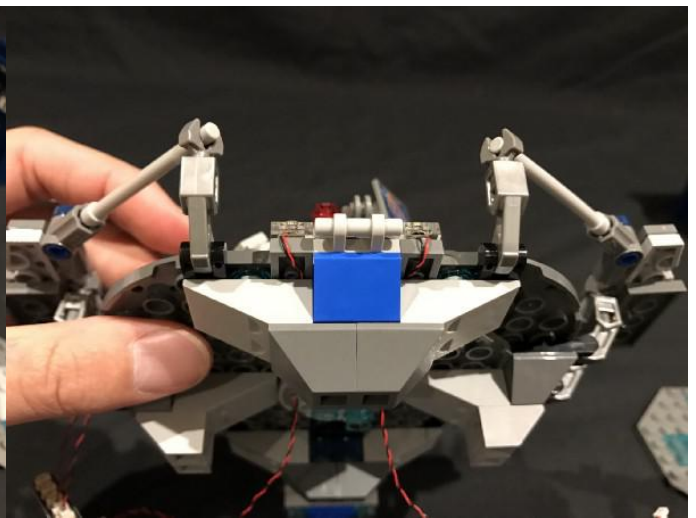
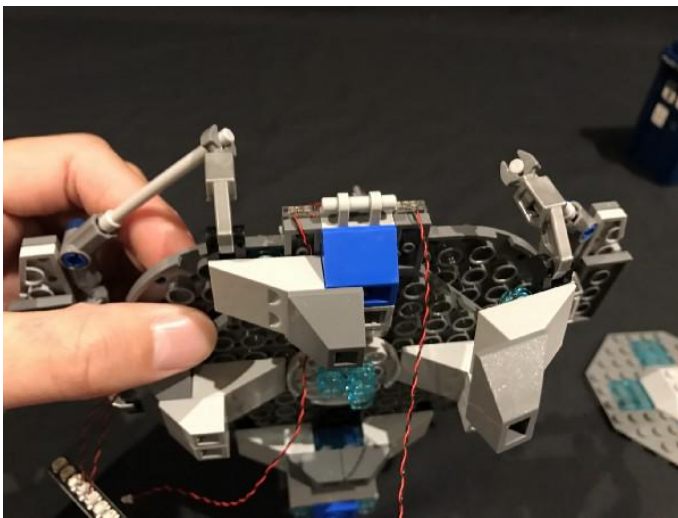
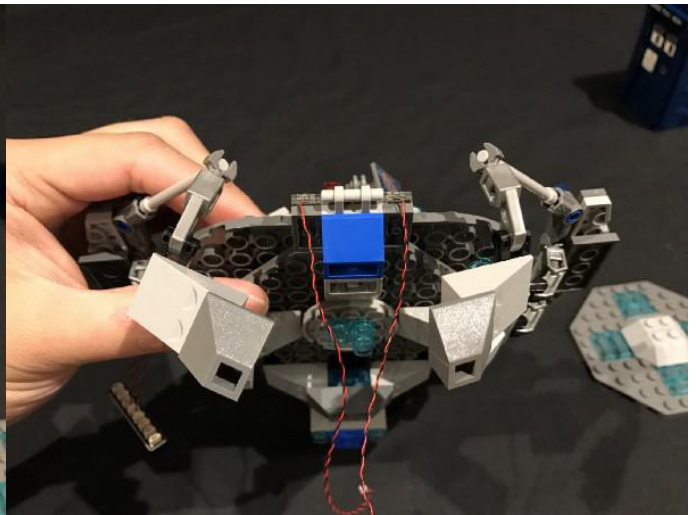
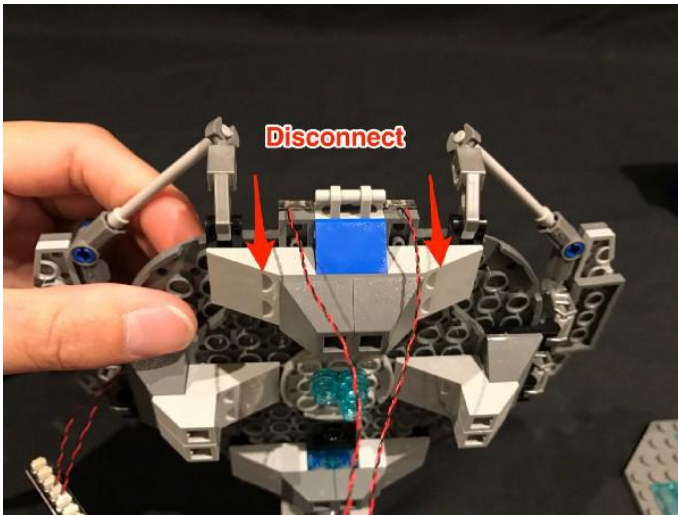
8.) Take a White 15cm Dot Light and then place it directly over the grey stud on the left. Secure the light in place by reconnecting the trans white plate over the top as per below.



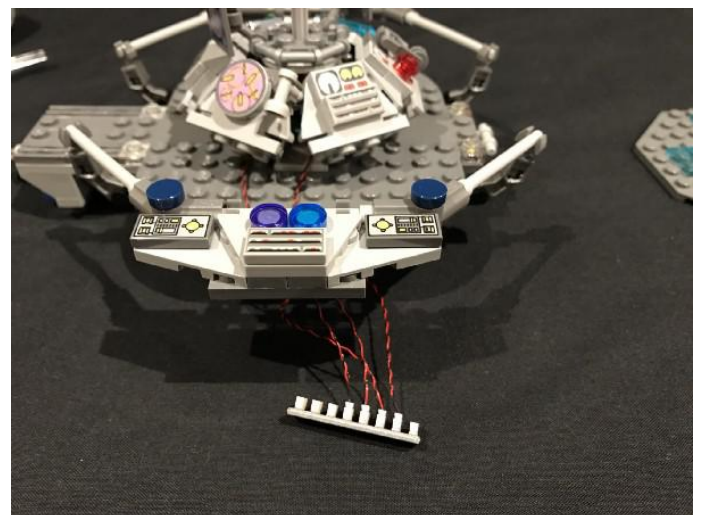
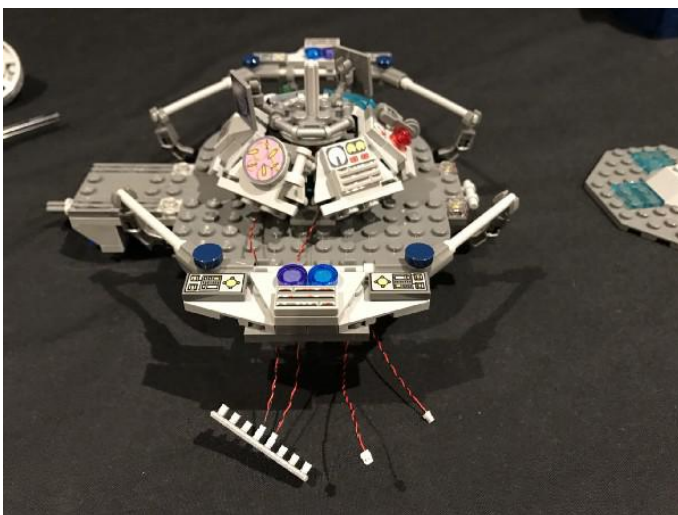
Install another White 15cm Dot Light to the right side using the same method as above.



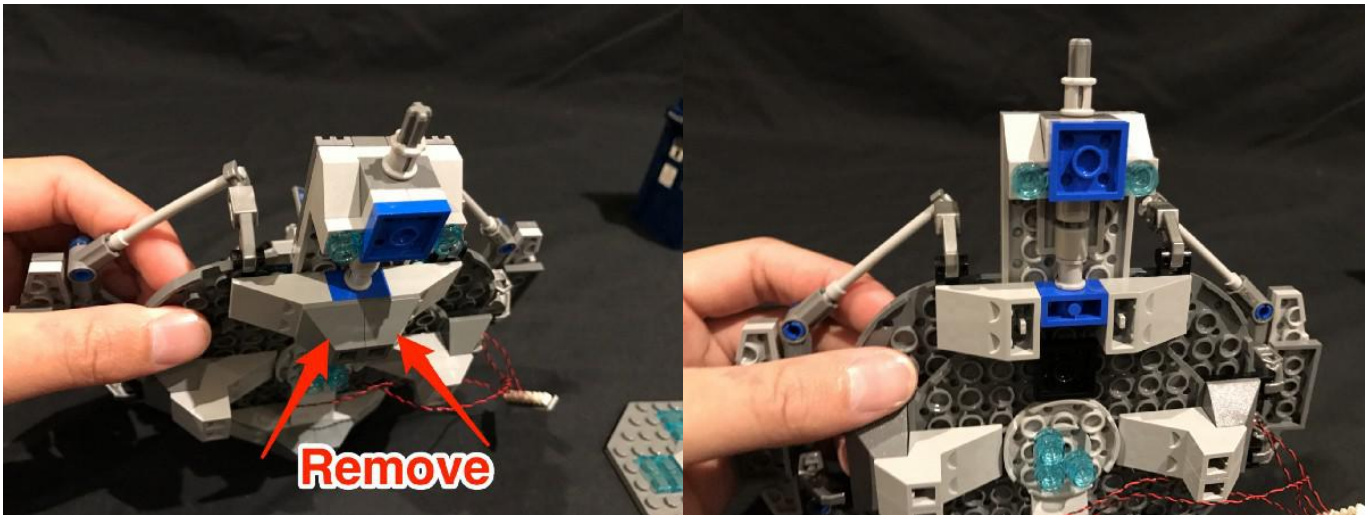
9.) Pull both cables down underneath and then disconnect sections below to allow us to lay a cable from each side underneath them. Reconnect these sections to secure cable in place.



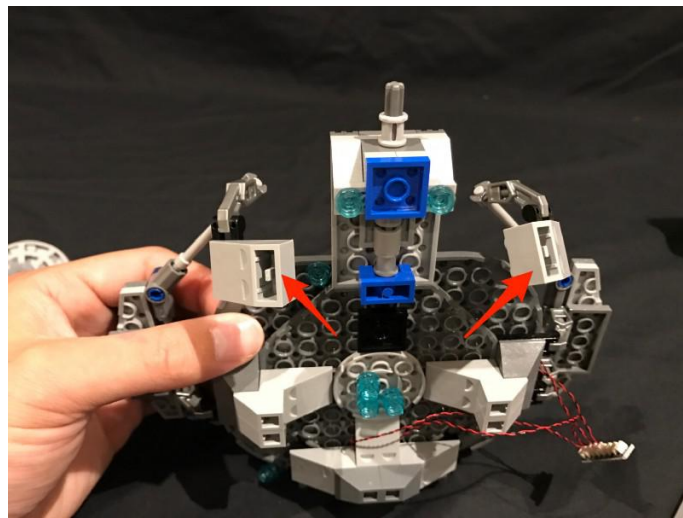
10.) Turn the Console Room around to the back and then pull the cables we have just installed to connect them to the 8-port Expansion Board.



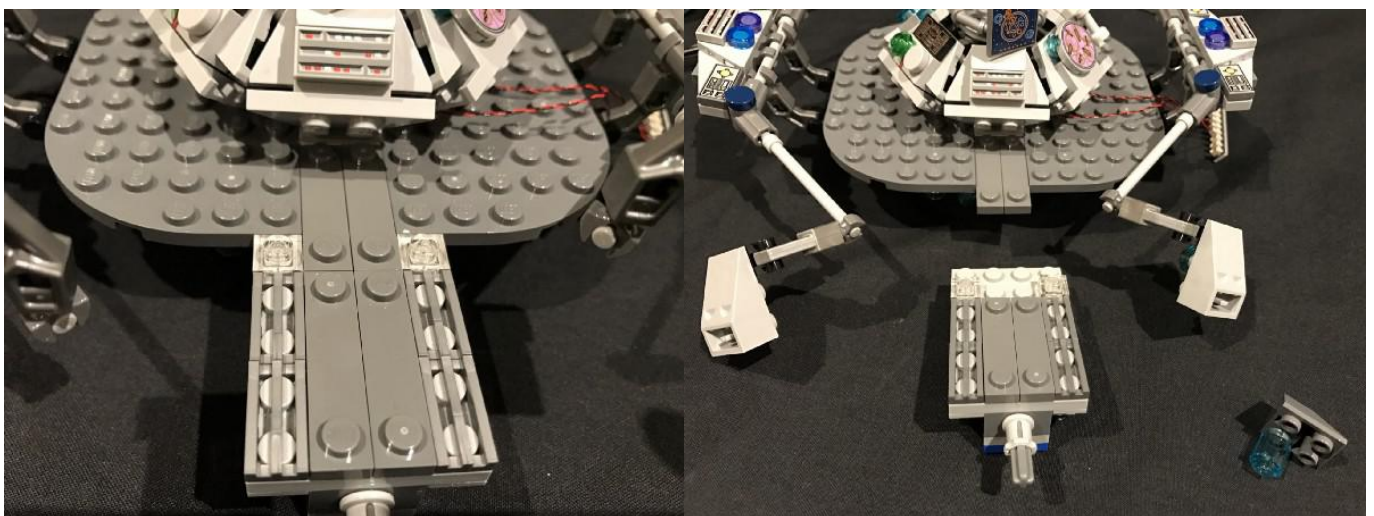
11.) We will now install lights to the floor lights on the opposite side. First remove the following pieces from underneath.

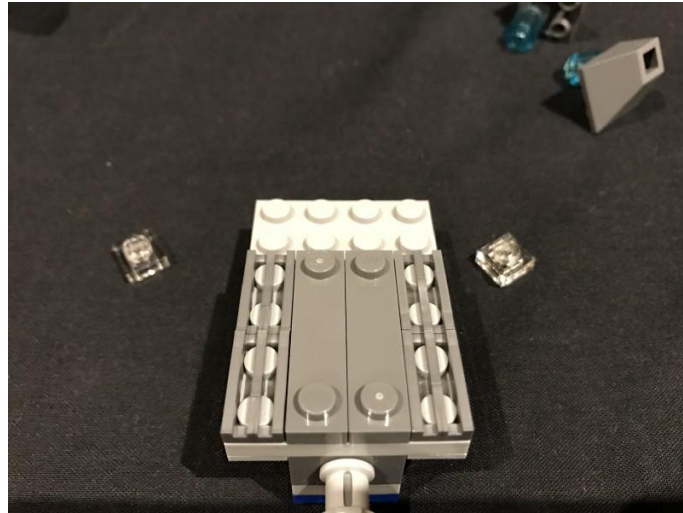


Disconnect sections from each side as per below.

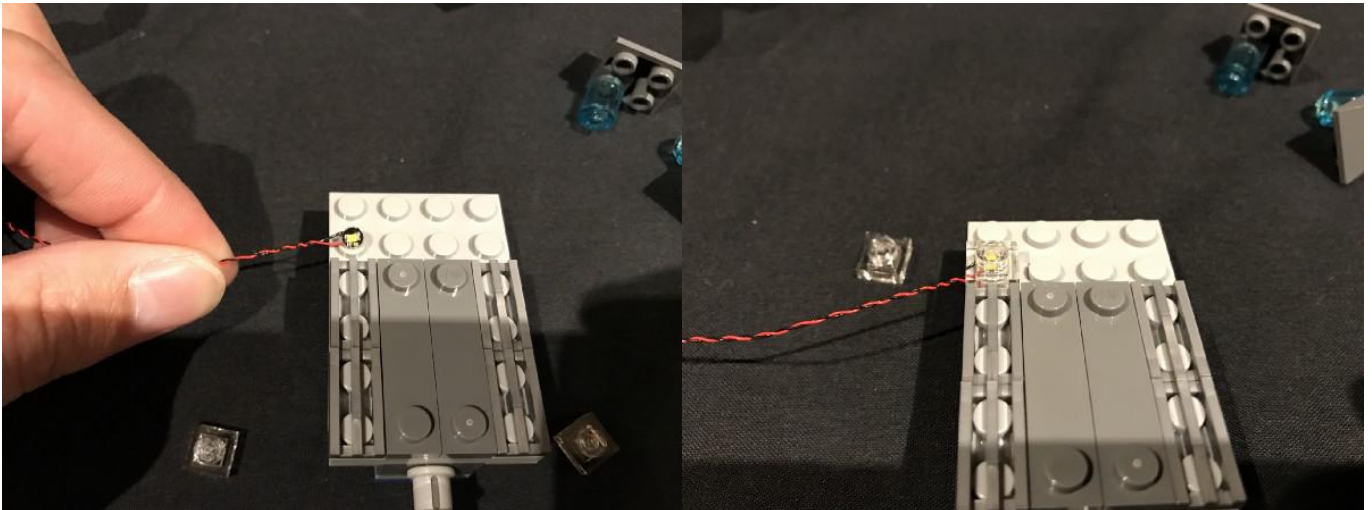


Turn back over and then disconnect the floor light section, followed by the trans white square plates from each side.

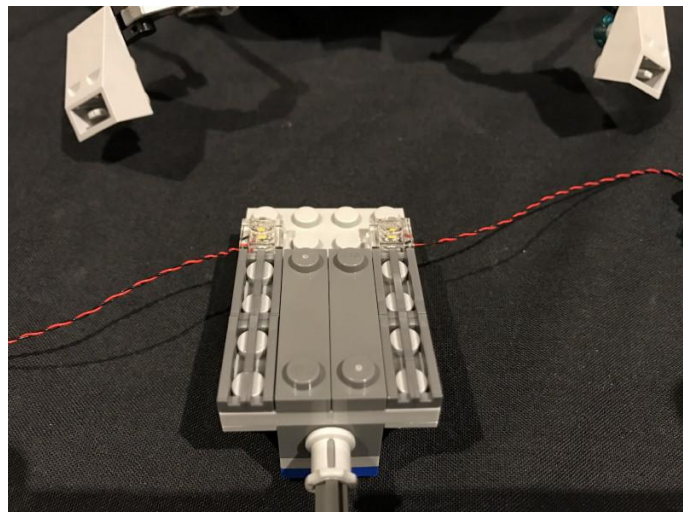




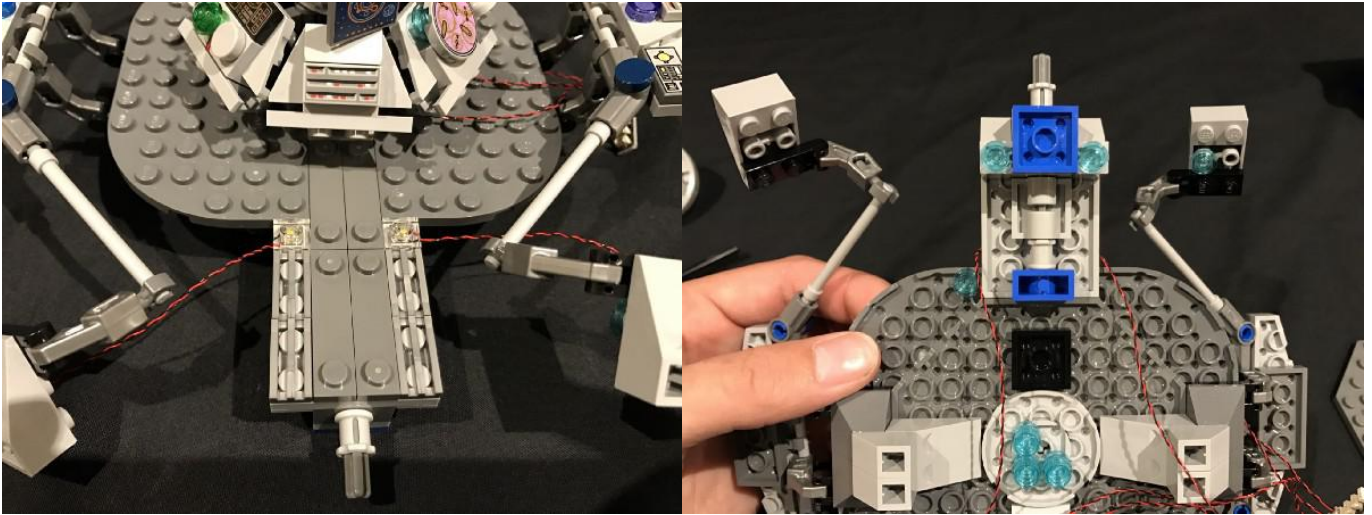
12.) Take a White 15cm Dot Light and then place it directly over the grey stud on the left. Ensure cable is facing toward the left and then secure the light in place by reconnecting the trans white plate over the top as per below.



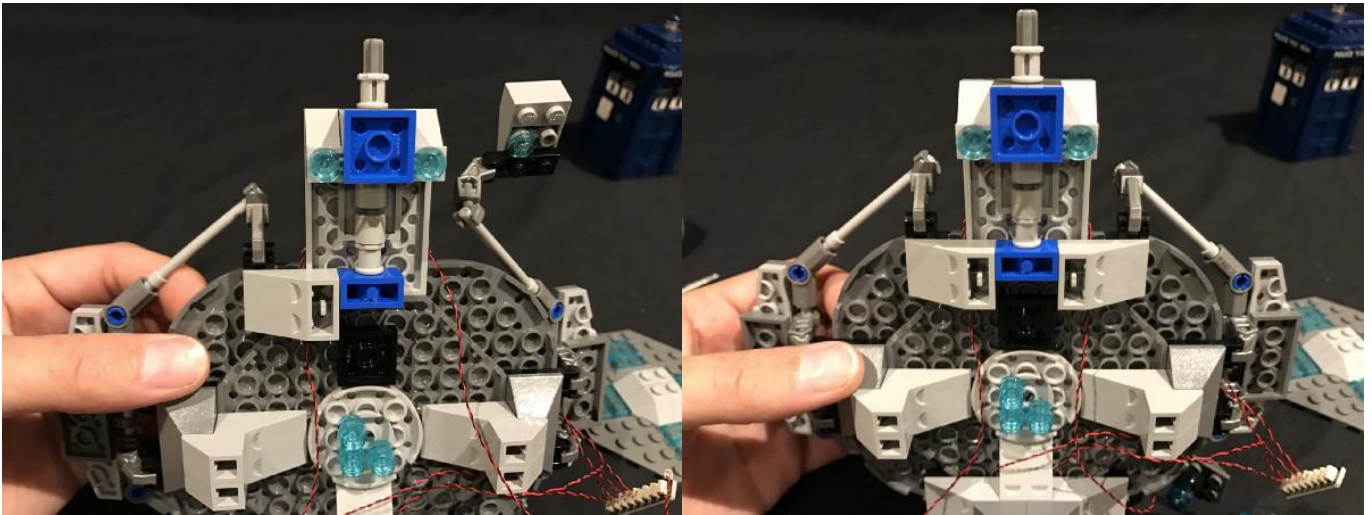
Install another White 15cm Dot Light to the right side using the same method as above.



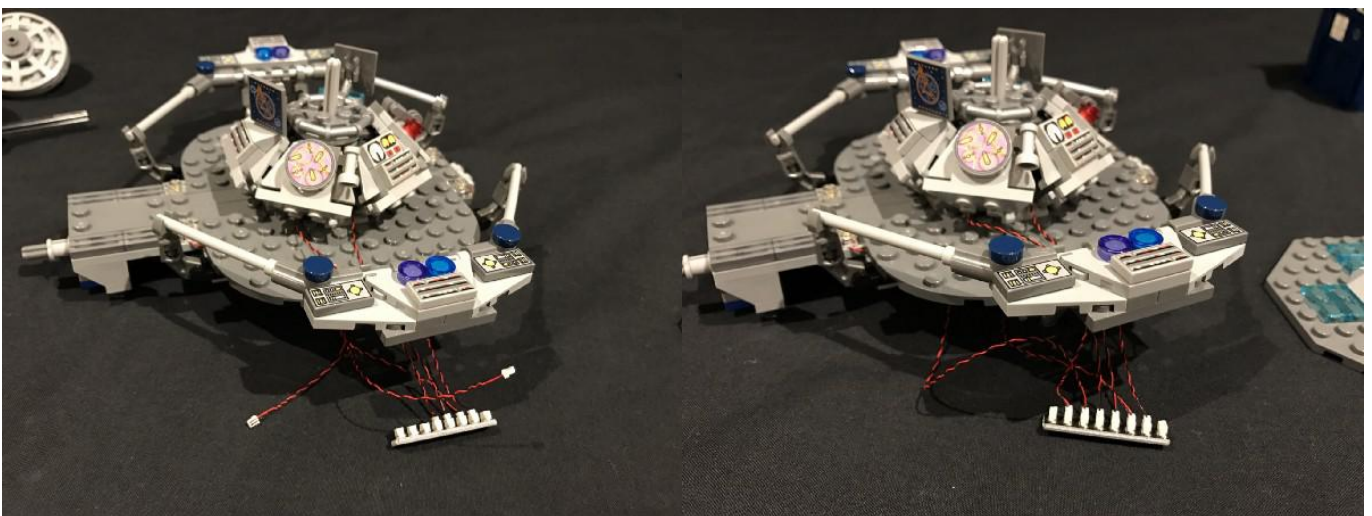
13.) Reconnect this floor section back and then pull the cables down underneath.



Reconnect the left and right sections back to the base ensuring the cable for each side is laid underneath.

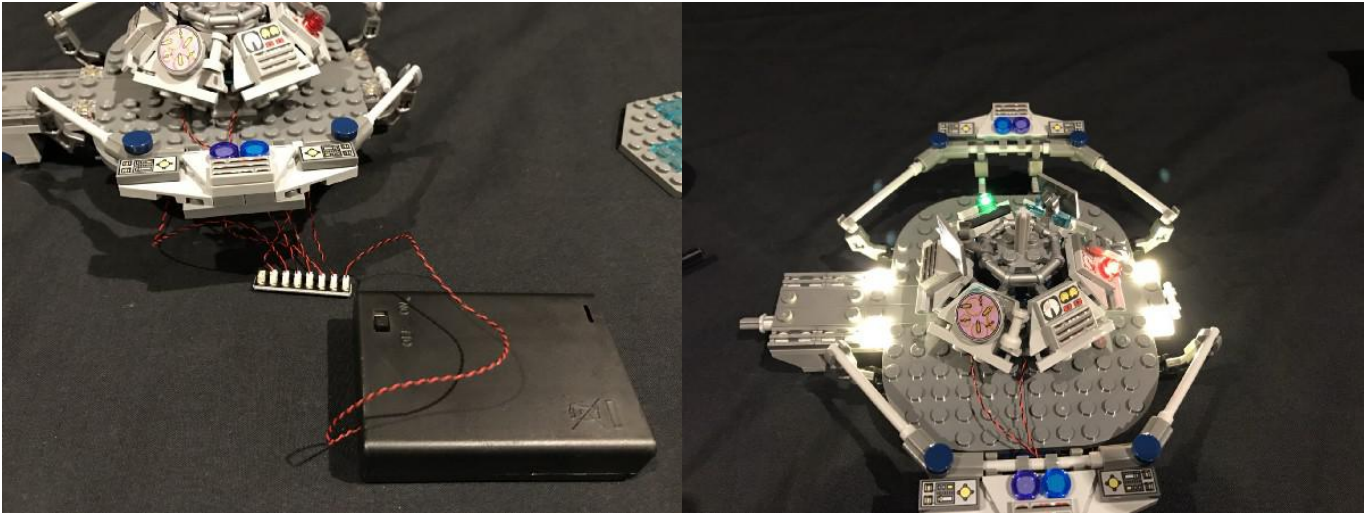


14.) Pull cables from the 2 lights we just installed underneath and out toward the back before connecting them into the next available ports on the 8-Port Expansion Board.

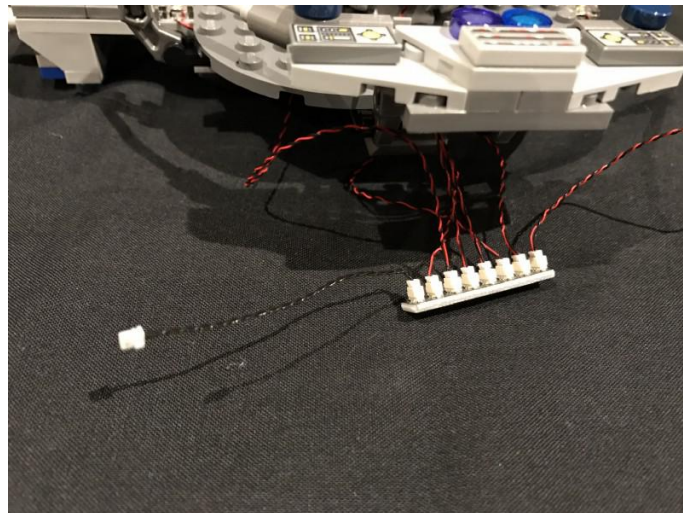


15.) Take the AA Battery Pack and insert 3x AA batteries. Insert the battery pack cable to the port on the far right of the expansion board. Turn on the battery pack and ensure all the lights we have

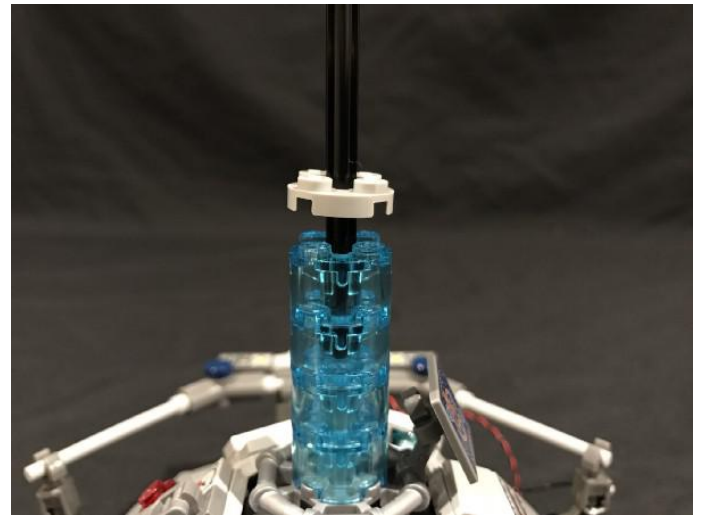
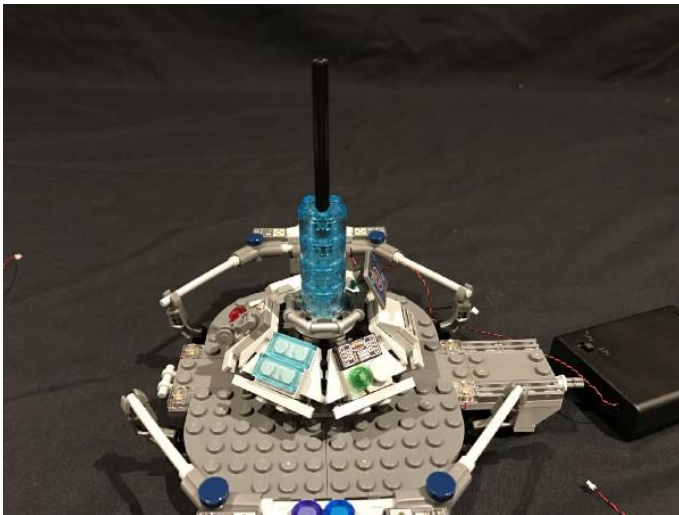
installed so far are working.



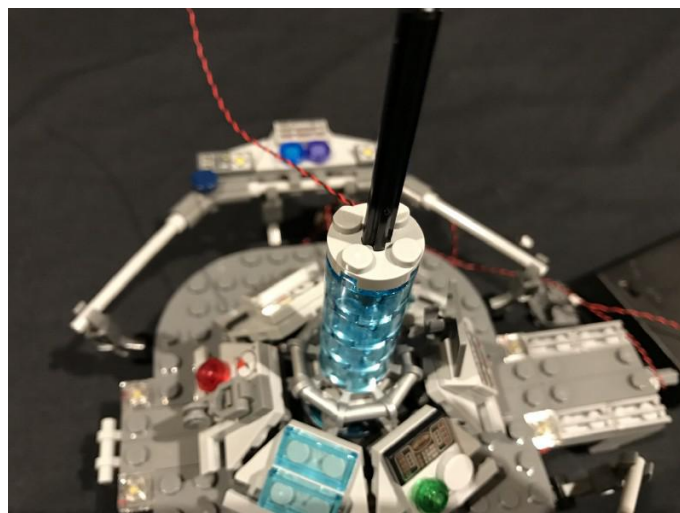
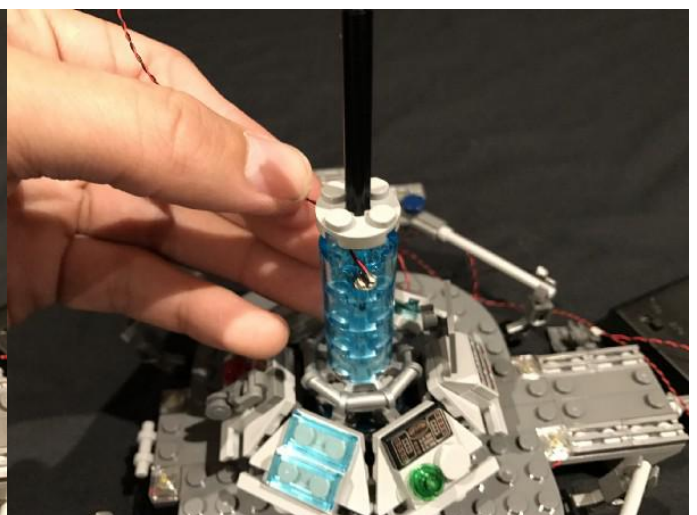
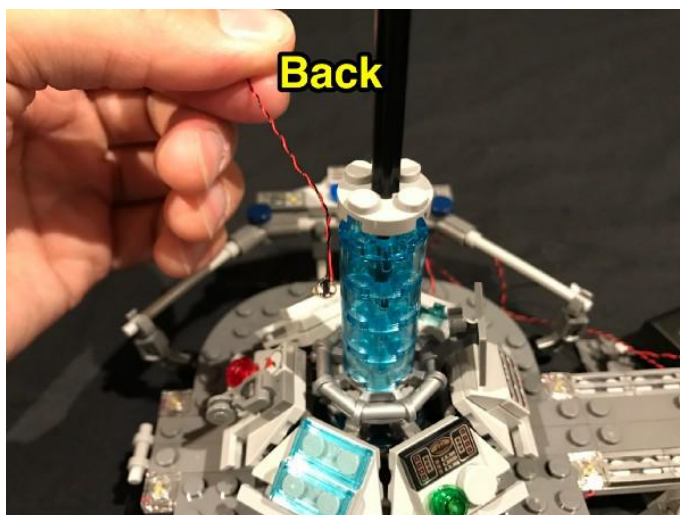
16.) Take a 5cm Connecting Cable and connect it to the remaining available port on the expansion board.



17.) We will now install lights to the middle of the time machine. First reconnect the following trans blue pieces followed by the round grey piece. Do not completely connect the grey piece but leave about a 5mm gap.

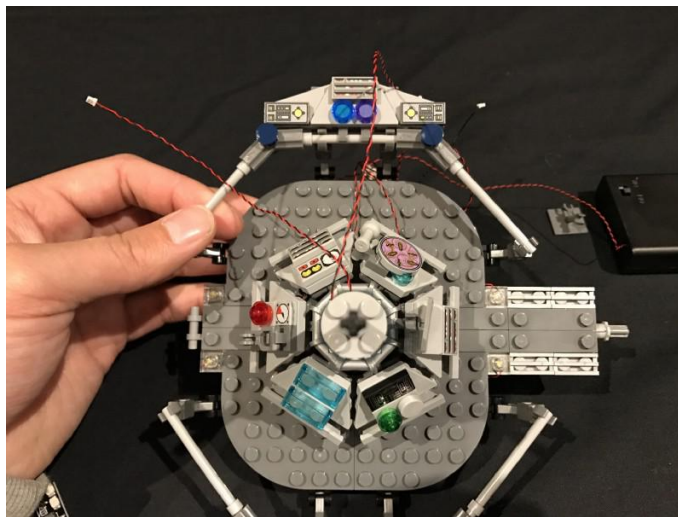
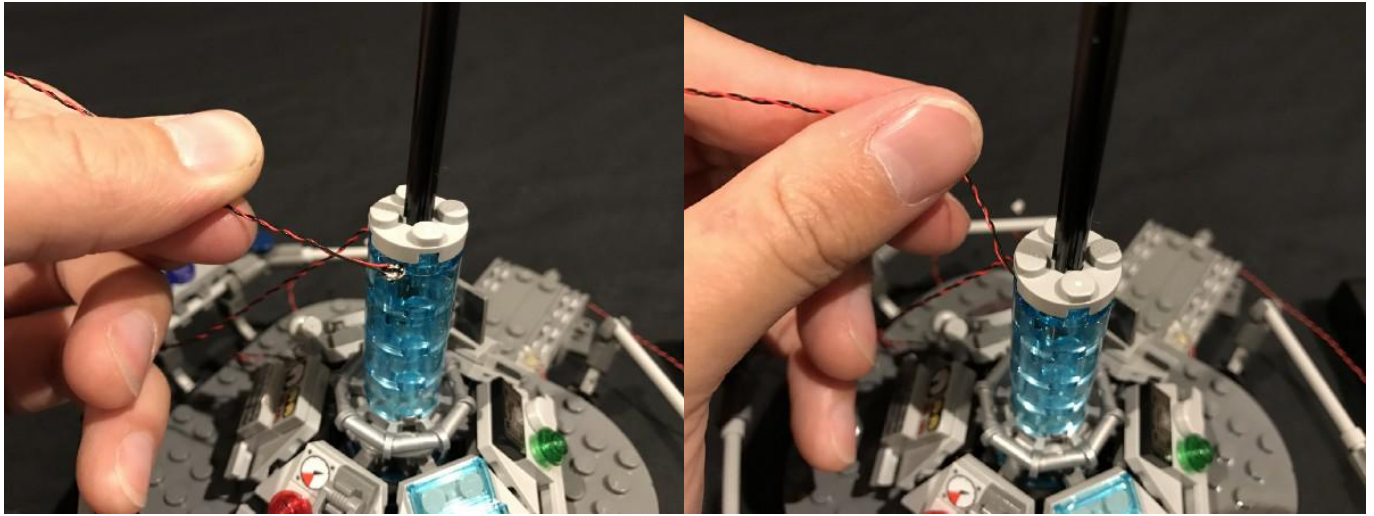


18.) We will be installing 3 Dot Lights facing down in between the gap we have created. One light on the left and right sides, and another in the middle toward the front. Take a White 15cm Dot Light and with the dot light facing down and cable facing toward the back, thread the dot light through the left side side. We want the dot light to be placed in between the trans blue studs at the front. Secure the light in place by pushing the grey piece above to close up the gap.

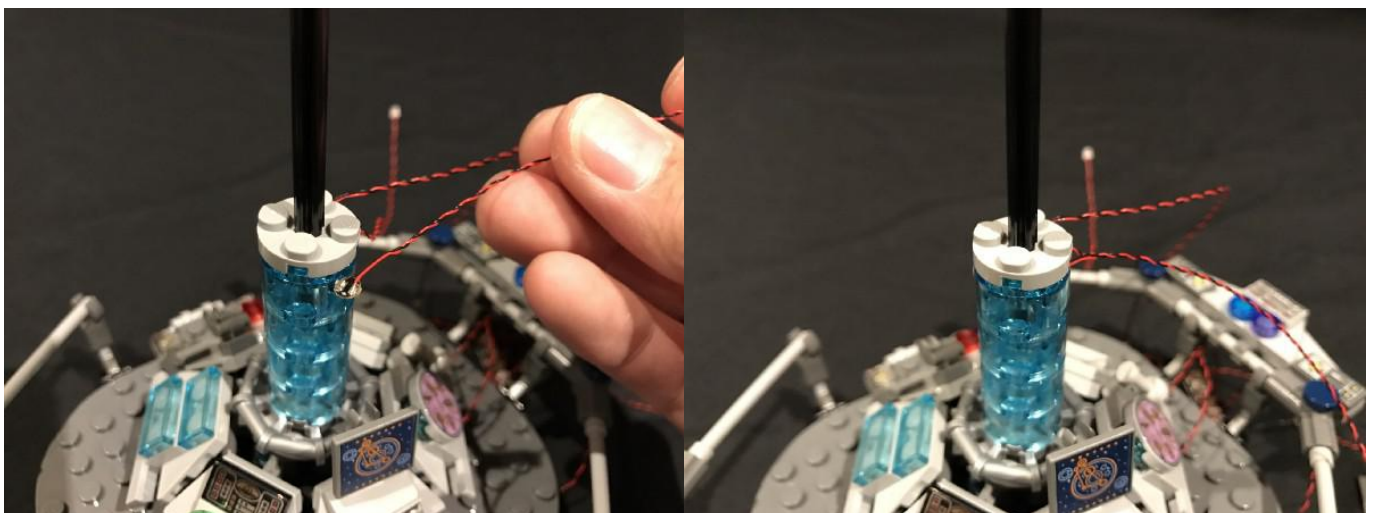


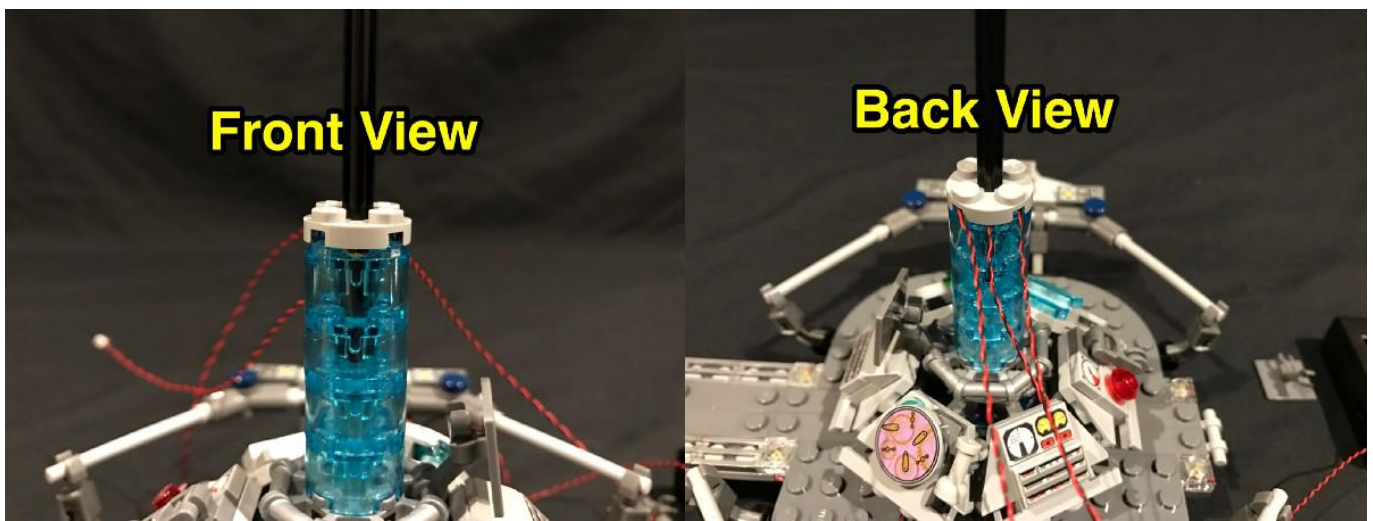
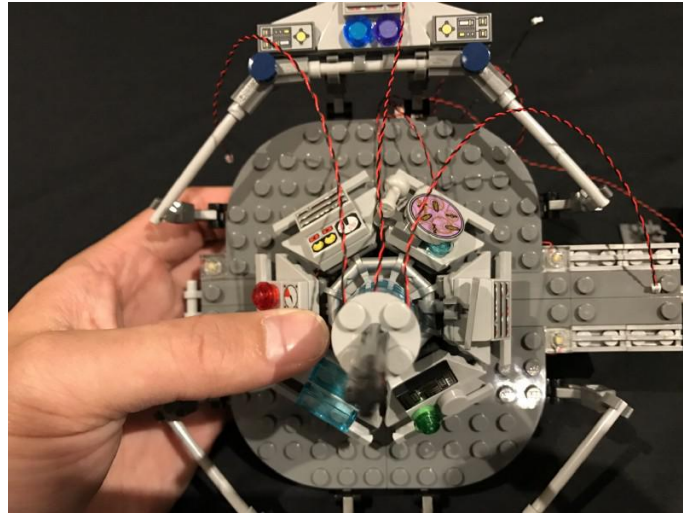
Take another White 15cm Dot Light and with the dot light facing down and cable facing the back ,

thread it through the left side. You may need to lift up the grey lego piece above to do this. Be careful and ensure the middle light we installed earlier does not fall out. We want the dot light to be placed in between the trans blue studs on the left side.

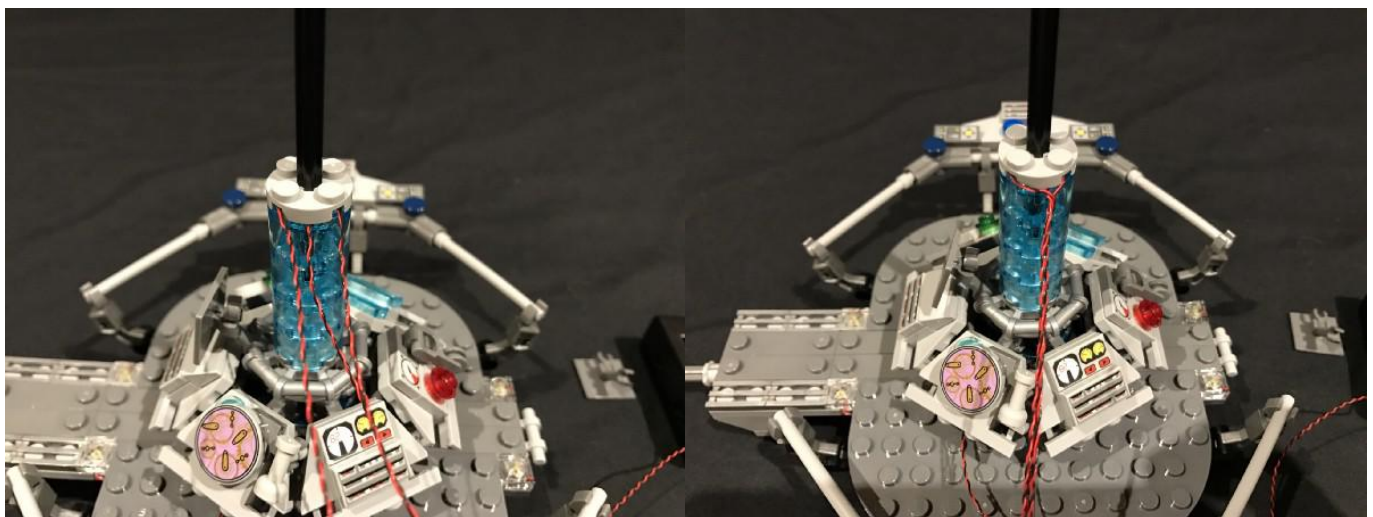


Take the third White 15cm Dot Light and with the dot light facing down and cable facing the back , thread it through the right side. You may need to lift up the grey lego piece above to do this. Be careful and ensure the middle light we installed earlier does not fall out. We want the dot light to be placed in between the trans blue studs on the right side.



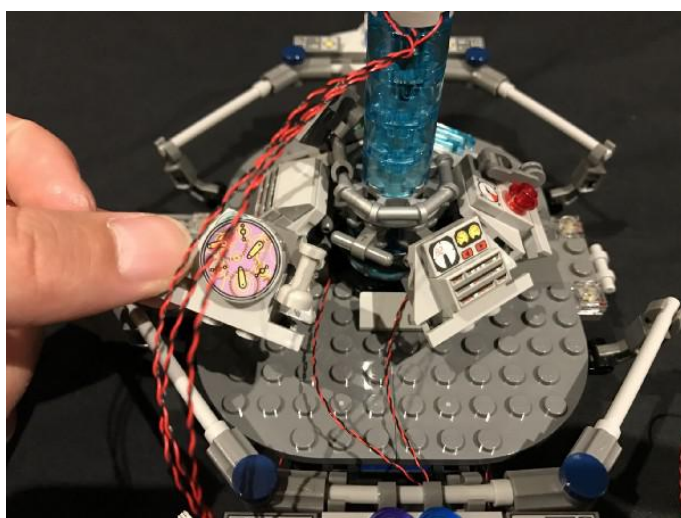
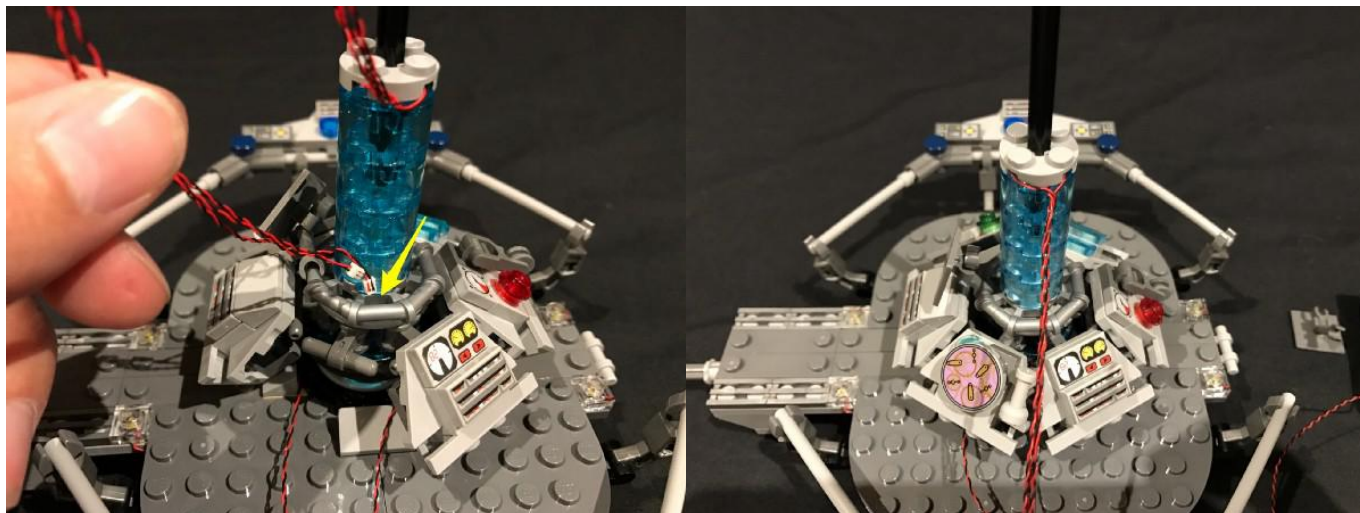


19.) From the back of the console room, take the 3 cables and then twist them together at the top.

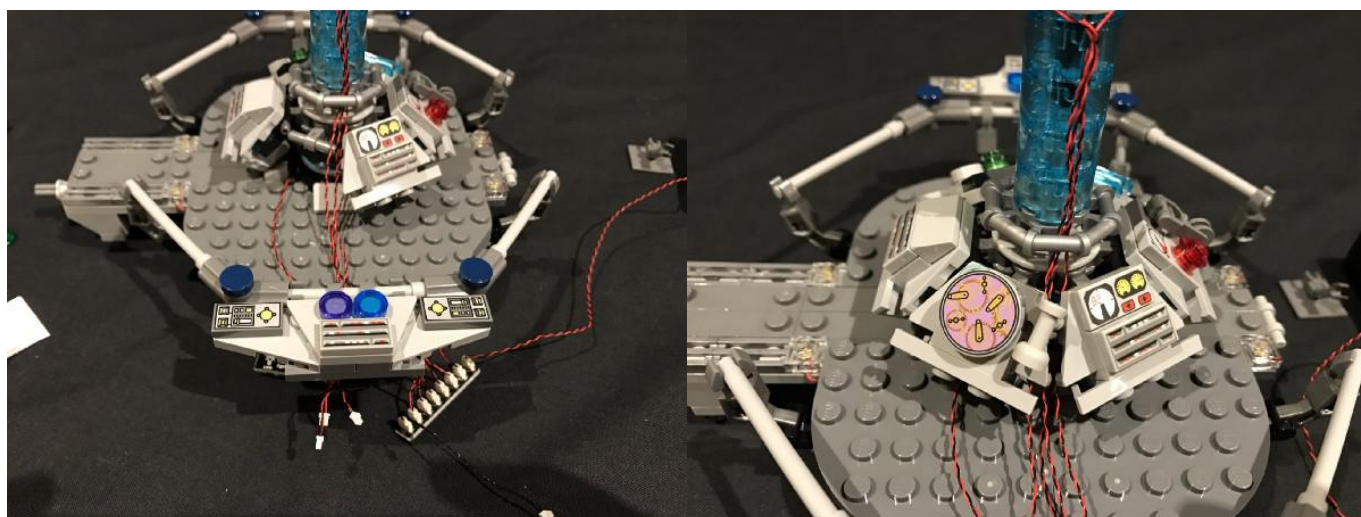


Remove one of the control panel sections below so that we can thread each cable in the spacing on the middle wheel.

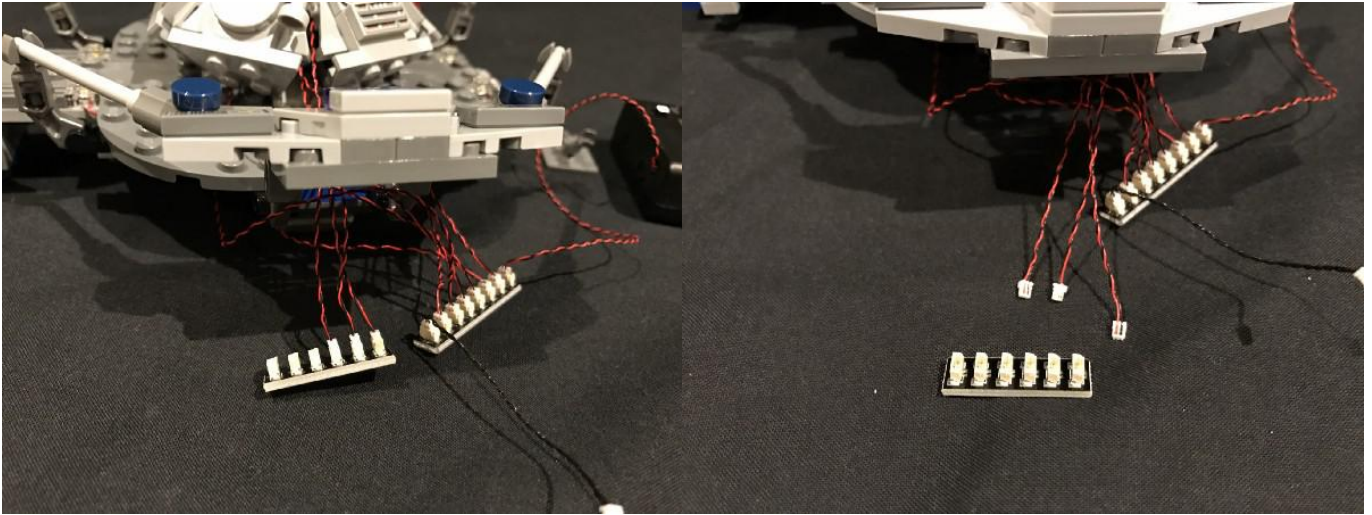
Note: In order to get all three cables threaded through, you may have to lift this section up a little.



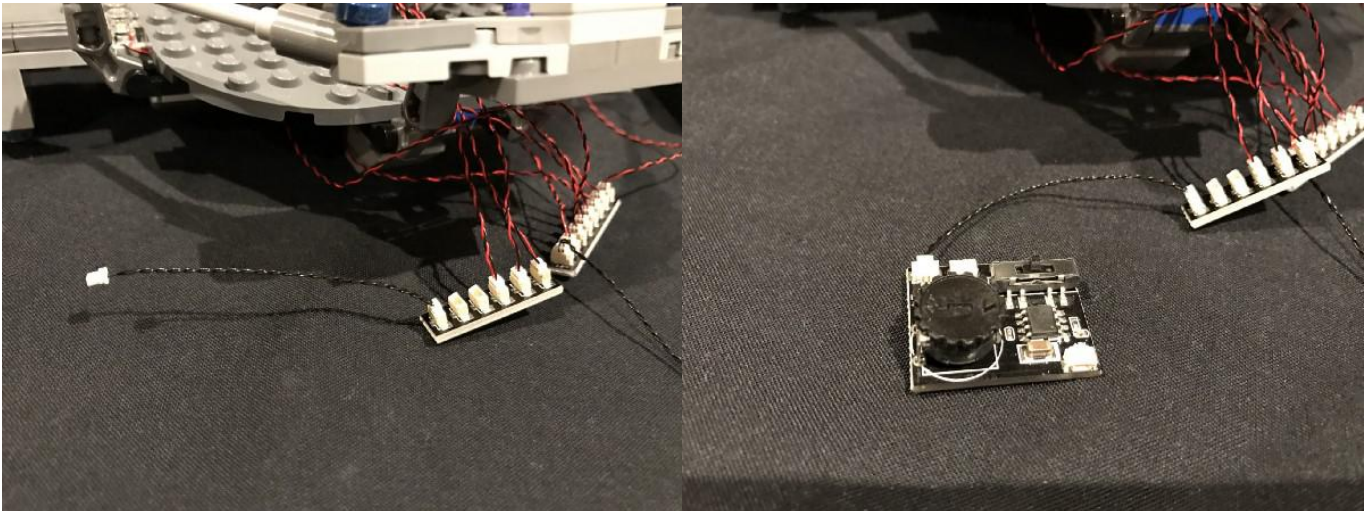
Thread the cables through the railing before reconnecting the control panel section.



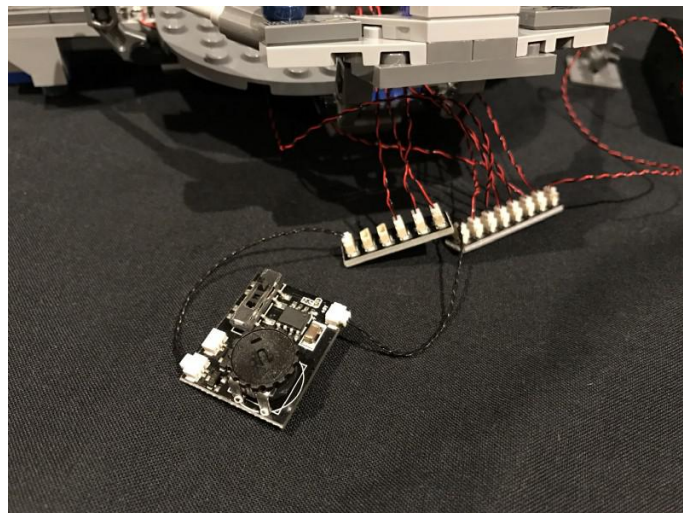
20.) Take the 6-Port Expansion Board and then connect the 3 dot light cables into the ports.



21.) Take the last 5cm Connecting Cable and connect it to one of the ports on the 6-port Expansion Board. Take the Multi-Effects Board and then connect the 5cm connecting cable we just connected to one of the output ports (side with 2ports)

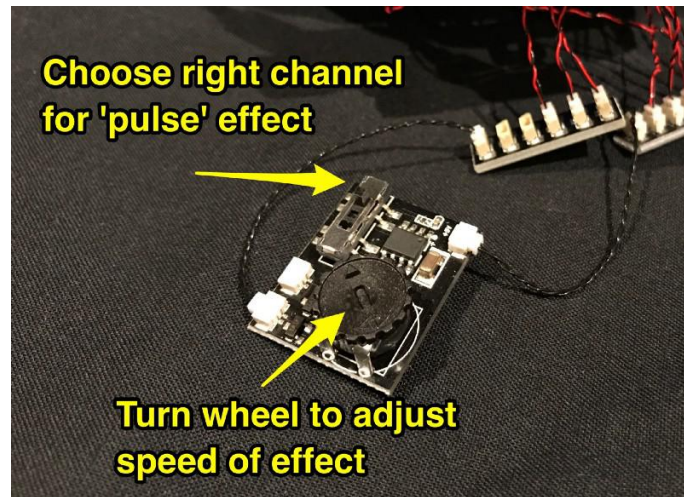


22.) Connect the other end of the 5cm connecting cable from the 8-port Expansion Board to the output channel of the Multi-Effects Board (side with 1 port)

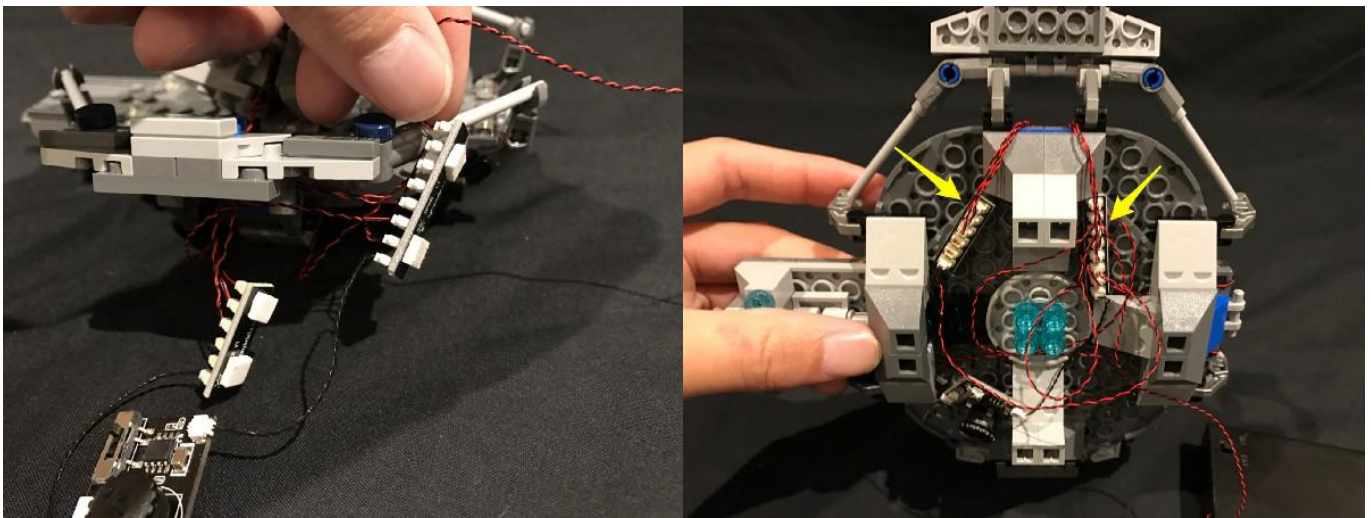


Flick the channel switch to the far right for 'Pulse' effect and turn the wheel to adjust the speed of the

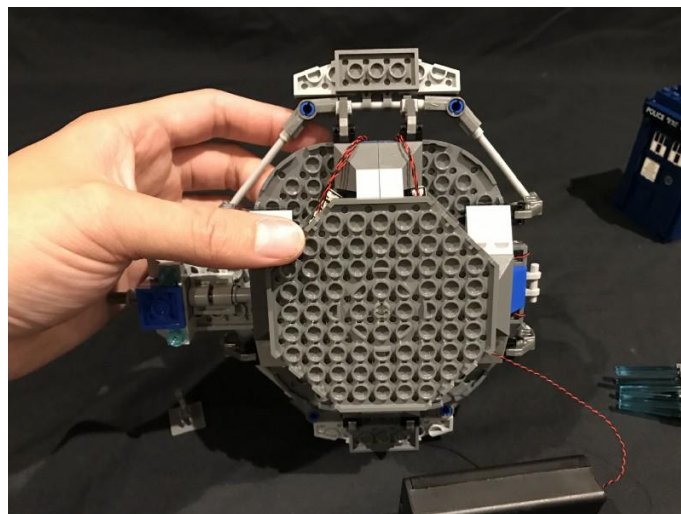
effect.



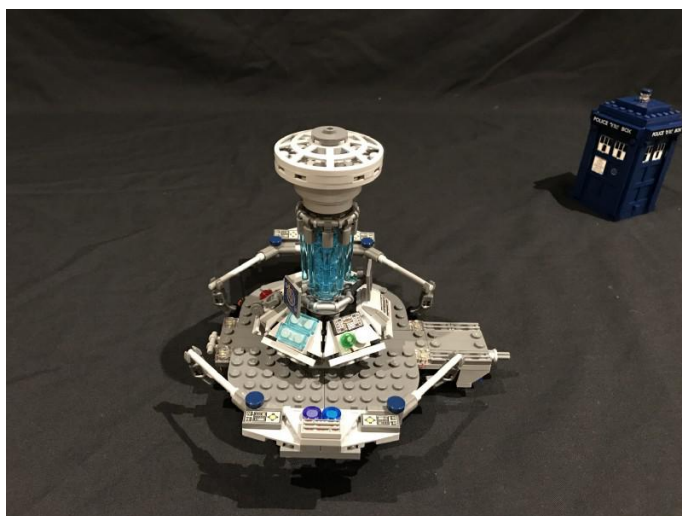
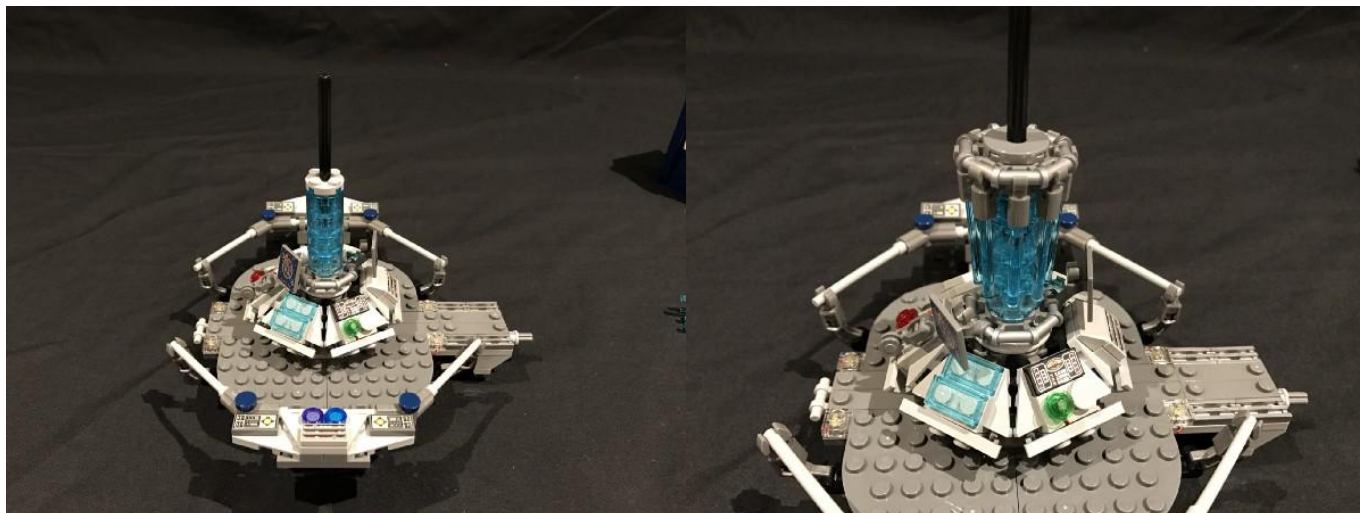
23.) Use the provided double sided adhesive squares to stick onto the expansion boards. Mount both expansion boards underneath in the below positions.



Tuck the multi-effects board underneath before reconnecting the Octagon plate we removed earlier.



24.) Finally, reconnect all the sections we removed from the centre of the control panel.



Installation of your lighting kit is complete. Neatly place the battery pack behind, turn on and ENJOY!

