# Light My Bricks: LEGO Hogwarts Great Hall 75954 Lighting Kit



The following page is the instructions for the Light My Bricks LEGO Hogwarts Great Hall (75954) LED light kit.

If you run into any issues, please refer to the online troubleshooting guide.

To ensure a trouble-free installation of your light kit, please read and follow each step carefully. These instructions can be downloaded in PDF format **here** 

Please note: This page lists instructions for the LED light kit only. If you are wishing to purchase the Light My Bricks LEGO Hogwarts Great Hall (75954) LED

## Package Contents:

- 8x White 30cm Bit Lights
- 4x White 15cm Micro Bit Lights
- 3x Green Strip Lights
- 1x White Strip Light
- 1x Flicker Effects Boards
- 1x Micro 4-Port Expansion Board
- 2x 6-Port Expansion Boards
- 2x 5cm Connecting Cables
- 3x 15cm Connecting Cables
- 2x 30cm Connecting Cables
- 1x AA Battery Pack (Requires 3x AA Batteries)
- 6x Adhesive Squares

#### **LEGO Pieces:**

- 6x Black Plate 1×6
- 4x Black Tile 1×1 with Clip
- 4x Black 1×1 Modified Plate Rounded with Handle
- 1x Black Round Plate 1×1 with open stud
- 1x Black Plate 1×2 modified with stud jumper
- 3x Trans Clear Plate w Rounded Bottom 2×2

# Important things to note:

### Laying cables in between and underneath bricks

Cables can fit in between and underneath LEGO® bricks, plates, and tiles providing they are laid correctly between the LEGO® studs. Do NOT forcefully join LEGO® together around cables; instead ensure they are laying comfortably in between each stud.



CAUTION: Forcing LEGO® to connect over a cable can result in damaging the cable and light.

#### **Connecting cable connectors to Expansion Boards**

Take extra care when inserting connectors to ports of Expansion Boards. Connectors can be inserted only one way. With the expansion board facing up, look for the soldered "=" symbol on the left side of the port. The connector side with the wires exposed should be facing toward the soldered "=" symbol as you insert into the port. If a plug won't fit easily into a port connector, do not force it.







Incorrectly inserting the connector can can result in bent pins inside the port or possible overheating of the expansion board when connected.

## **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.



Installing Bit Lights under LEGO® bricks and plates.

When installing Bit Lights under LEGO® pieces, ensure they are placed the correct way up (Yellow LED component exposed). You can either place them directly on top of LEGO® studs or in between.



#### OK, Let's Begin!

**1.)** We will begin with installing spot lights to the exterior of the Great Hall. First, take out the following provided LEGO pieces to make up an angled spot light.

- 2x Black Plate 1×6
- 1x Black Tile 1×1 with Clip
- 1x Black 1×1 Modified Plate Rounded with Handle





Take a **Green Strip Light** and using it's adhesive backing, stick it onto the base of the black 1×6 plate for the spot light



**2.)** Repeat the previous step to build another 3 spot lights using provided pieces and Green Strip Lights as per below:

- 4x Black Plate 1×6
- 2x Black Tile 1×1 with Clip
- 2x Black 1×1 Modified Plate Rounded with Handle
- 2x Green Strip Lights



**3.)** Take a **15cm Connecting Cable** and connect it between two of the spot lights, then take a **30cm Connecting Cable** and connect one end to the right strip light as shown below:



Connect the two spot lights to the front of the great hall in the below positions, then tuck the 15cm connecting cable underneath the base of the hall.



**4.)** Take the other end of the 30cm Connecting Cable and connect it to the third spot light (green strip light's left port), then bring it around to the right side of the hall. Disconnect and discard the following grey angled tile and connect the spot light to this position.



Hide the 30cm cable in between the spot lights underneath the base of the hall as shown below.





**5.)** Take the **AA Battery Pack** and insert 3x AA Batteries to it. Connect the battery pack cable to the left port on the spot light on the left of the Hall. Turn ON the battery pack to test the spot lights are working OK.



**6.)** Take a new **15cm Connecting Cable** and connect it to the third green Strip Light. Connect the other end of the cable to a **6-Port Expansion Board**.





Disconnect the lamp from Hagrid, then disconnect the trans yellow round brick from inside.



7.) Take a White 30cm Bit Light and thread the connector end of the cable through the bottom of the trans yellow round brick (larger hole). Thread it all the way through the brick, then slightly bend the LED component so that it is

facing down before you pull the cable all the way out from the other side.



Thread the connector end of the bit light through the inside of the lamp then all the way out before reconnecting the trans yellow round brick inside. Reconnect the lamp to Hagrid's hand, then connect the bit light cable to the 6-Port Expansion Board. Turn ON the AA Battery Pack to test the lamp light is working OK.





Note: If you experience any issues with the lights not working and suspect an issue with a component, please try a different port on the expansion board to verify where the fault lies (with the light or expansion board). To correct any issues with expansion board ports, please view the section addressing expansion board issues on our **online troubleshooting guide.** 

Tuck both 15cm connecting cable and bit light cable underneath the bases of the set as shown below:





8.) Disconnect the lamp from the boat and disassemble as shown below:



Take a **White 30cm Bit Light** and bend the cable into a hook with the Bit Light facing out. Thread the Bit Light inside the trans bright yellow brick, then bring the cable to the top and loop it around the stud on top before reconnecting it to the gold tile with clip. Ensure the Bit Light component is facing the outside before re-clipping the gold tile back to the lamp post.





**9.)** Pull the cable down the front of the lamp post then loop it underneath the base before reconnecting it to the boat.





Connect the bit light into the next port on the 6-port expansion board, then tuck the cable underneath the base of the castle. Turn the AA Battery Pack ON to test the boat light is working OK.



Note: If you experience any issues with the lights not working and suspect an issue with a component, please try a different port on the expansion board to verify where the fault lies (with the light or expansion board). To correct any issues with expansion board ports, please view the section addressing expansion board issues on our **online troubleshooting guide.** 

**10.)** Turn the set around to the back, then connect a new **30cm Connecting Cable** to the 6-port expansion board. Close up the staircase, then thread the other end of the 30cm cable through the following space that leads to the right side of the tower. Pull it out from the right side as shown below:





Thread the cable back underneath and up the space which leads to the gap on the second floor. Pull the cable all the way out.



**11.)** From the front of the set, lift up the two side roof sections above the front door. Pull the other end of the 30cm cable over to this side and secure it by disconnecting the right roof side section and reconnecting it over the cable, ensuring the cable is laid in between studs.



Connect the other end of the 30cm connecting cable to a new **6-Port Expansion Board** 



12.) Take a 5cm Connecting Cable and connect it a White Strip Light. Take a15cm Connecting Cable and connect one end to the other port on the WhiteStrip Light. Connect the other end of the 5cm Connecting Cable to the 6-portExpansion Board we just installed.





Peel off the White Strip Light's adhesive backing, then bring it underneath the centre (right side) and stick the strip light underneath this centre section as shown below. Pull the other end of the 15cm Connecting Cable from the strip light out from the other side (left side).





Turn the AA Battery Pack ON to test the white strip light is working OK.



**13.)** Remove the entire roof off the great hall at each side as shown below, then thread the other end of the 15cm Connecting Cable from previous step through the archway nearby. Pull the cable all the way out, then place the expansion board inside the top of the front entrance.



Secure the dangling cable from the inside of the tower ground floor by connecting it underneath the base plate of the second floor as shown below:





**14.)** We will now light the tower section of the set, starting with the ground floor. We will be using trans clear 2×2 with rounded bottom plates to secure bit lights to the roof of each floor.



First take a **White 30cm Bit Light** and thread the bit light through the top where the front entrance roof is. Thread the bit light down so that it comes through to the ground floor. Take a provided **Trans Clear Plate w Rounded**  **Bottom 2×2** and place the LED component of the Bit Light in the centre of the plate. Ensuring the bit light is facing down, connect the trans clear plate to the roof of the ground floor in the below position:





Bring the other end of the Bit Light cable over and tuck it into the side of the roof section. Connect it to the 6-port expansion board above the front entrance, then turn the AA Battery Pack ON to test the ground floor light is working OK.



Note: If you experience any issues with the lights not working and suspect an issue with a component, please try a different port on the expansion board to verify where the fault lies (with the light or expansion board). To correct any issues with expansion board ports, please view the section addressing expansion board issues on our **online troubleshooting guide**. **15.)** We will now light the second floor of the tower. First disconnect the top section just above the second floor using a LEGO Removal Tool, then place the top section onto it's front so we can access underneath.



Take a **White 30cm Bit Light** and with the cable facing the right, place the LED underneath this section in the centre position as shown below. Ensuring the

LED is facing down, secure it in place by connecting a provided **Trans Clear Plate w Rounded Bottom 2×2** over the top.



**16.)** Lay the cable down in between the indent, then reconnect the tower on top of the second floor. Bring the cable from the bit light down the right side of the tower and connect it to the next available port on the 6-port Expansion board. Turn the AA Battery Pack ON to test all lights installed so far are working OK.





Note: If you experience any issues with the lights not working and suspect an issue with a component, please try a different port on the expansion board to verify where the fault lies (with the light or expansion board). To correct any issues with expansion board ports, please view the section addressing expansion board issues on our **online troubleshooting guide**.

**17.)** Use the LEGO removal tool to disconnect the tower roof section from the top of the third floor. Turn this section over onto it's front so we can access underneath it as shown below:





Take a **White 30cm Bit Light** and with the cable facing the right, place the LED underneath this section in the middle position as shown below. Ensuring the LED is facing down, secure it in place by connecting a provided **Trans Clear Plate w Rounded Bottom 2×2** over the top.



**18.)** Lay the cable down in between the following indent, then reconnect the tower on top of the second floor. Bring the cable from the bit light down the right side of the tower and connect it to the next available port on the 6-port Expansion board. Turn the AA Battery Pack ON to test all lights installed so far are working OK.



Note: If you experience any issues with the lights not working and suspect an issue with a component, please try a different port on the expansion board to

verify where the fault lies (with the light or expansion board). To correct any issues with expansion board ports, please view the section addressing expansion board issues on our **online troubleshooting guide**.

**18.)** We will now install a spot light inside the roof section to shine up onto an object. In this case have chosen to place the Owl here instead of Fawkes the phoenix. First, remove this whole section at the 4×4 dark grey plate, then disconnect the black 1×4 tile as we will be connecting our spotlight here. (If wish to keep the mirror of erised here, then leave this tile connected as you can place the spotlight on the front edge instead).



**19.)** Take out the following provided pieces, then build them into a spot light as shown below:

- Black Tile 1×1 with Clip
- Black 1×1 Modified Plate Rounded with Handle
- Black Plate 1×2 modified with stud jumper



Take a provided **Black Round Plate 1×1 with open stud** and thread the connector end of a **White 30cm Bit Light** through the base of it (larger hole). Thread the bit light all the way through then slightly bend the Bit Light so that it sits flat against the inside of the stud.





**20.)** Connect the top of the black round stud to the spot light we assembled earlier, then thread the cable through the space of the plate with handle. Pull the cable all the way out from the back of the spot light, then connect the spot light in the following position so that it is pointing up to the Owl.





**21.)** Pull the right side of the roof out, then thread the cable from the spot light we installed inside the tower and through the gap on the right side. Thread it all the way through and pull it out from the gap in between the back and right roof section. Carefully reconnect the 4×4 dark grey plate ensuring the bit light cable is neatly laid in between the brown and grey brick as shown below.





If you prefer the spotlight to shine up onto the mirror of erised, connect the spot light to the brown brick in front as shown below:



**22.)** Bring the cable from the spot light down the right side of the tower and connect it to the remaining port on the 6-Port Expansion Board. Turn the AA Battery Pack on the test all lights in the tower are working OK.





Neaten the cables going down the side of the tower by first grouping the three cables together at the bottom of the tower. Slightly disconnect the dark tan plate on the right corner, then tuck the three cables underneath and pull the cables up from the other side to eliminate excess cables from the outside of the tower. Reconnect the plate at the corner as shown below:





**23.)** Bring all the cables and expansion board inside the front entrance roof section. Ensure the cables are brought through the right side of the dark grey plate. Neaten up the cables by twisting/folding them around each other a few times to form a neat bunch. Tuck the bunch of cables along with the expansion board inside the roof section before folding down the right side of the roof to secure everything in place.





Secure the cables running down the side of the tower using sticky tape.



**24.)** Take **2x Adhesive Squares** and stick them to the back of the 6-Port Expansion Board at the bottom of the tower. Mount the expansion board to the base of the ground floor underneath the stair case, then secure the cables underneath the dark grey tile as shown below:





**25.)** We will now light up the fireplace and candles inside the great hall. First disconnect the following table, then follow the images below to disconnect sections to remove the entire fire place.





Remove the following black brick from the fireplace, then take a **White 30cm Bit Light** and with the cable facing the back, place it over the right stud, where the flame was connected to. Disconnect the flame piece from the black round plate, then use this round plate to secure the Bit Light down.





**26.)** Repeat the previous step to install another **White 30cm Bit Light** to the stud on the left, then while ensuring both cables are laid in between the brown studs behind, reconnect the black piece we removed earlier, along with the surrounding fireplace hood section.





Take the two flame pieces and carefully snip off the tip ends of each piece using a pair of scissors. This will allow us to then reconnect them to the black round plates with bit lights underneath.



**27.)** Take the two cables from behind the fireplace and thread them up the following gap in the ceiling. Pull the two cables all the way out from the top, then reconnect the fireplace.



Secure the two cables in between studs underneath the following angled roof brick, then pull the cables back inside as shown below:





**28.)** Reconnect the left roof section above the entrance, then bring the 15cm connecting cable from this side across to the right and connect it to the IN port on the **Flicker Effects Board**.



Take the two Bit Light cables from the fireplace and connect each cable to the OUT ports on the Flicker Effects Board. Turn ON the AA Battery Pack to test the fireplace lights are working OK with the flicker effect.



Note: If you experience any issues with the lights not working and suspect an issue with a component, please try a different port on the expansion board to verify where the fault lies (with the light, expansion board, or effects board). To correct any issues with expansion board ports, please view the section addressing expansion board issues on our **online troubleshooting guide.** 

Reconnect the table we removed earlier



**29.)** We will now light up the candles on the roof. First disconnect this section by pulling them out at the technic brick holes, then disconnect the candle and flame pieces as shown below:



Take out a **White Micro 15cm Bit Light** and carefully bend the LED back as shown in the below image.



Thread the Bit Light into the hole of the candle piece as shown below, then reconnect the flame piece. We want the LED to be as close to the flame tip as possible therefore, threading the cable all the way to the end of the hole is not necessary.





**30.)** Reconnect the candle to the roof frame, then repeat previous process to install another **3x White Micro 15cm Bit Lights** to the remaining 3x candles.



![](_page_49_Picture_0.jpeg)

**31.)** Reconnect the candle frame section to the Great Hall roof, then thread each candle light cable through the following holes of the black technic brick above.

![](_page_49_Picture_2.jpeg)

![](_page_50_Picture_0.jpeg)

![](_page_50_Picture_1.jpeg)

![](_page_50_Picture_2.jpeg)

![](_page_50_Picture_3.jpeg)

![](_page_50_Picture_4.jpeg)

![](_page_50_Picture_5.jpeg)

![](_page_50_Picture_6.jpeg)

![](_page_51_Picture_0.jpeg)

**32.)** Connect each Micro Bit Light to the ports on the **Micro 4-Port Expansion Board**. Ensure you follow the below images to ensure you are connecting the light cables into each port correctly.

![](_page_51_Picture_2.jpeg)

![](_page_52_Picture_0.jpeg)

Take a **5cm Connecting Cable** and connect it to one of the larger ports on the Micro 4-Port Expansion Board. Connect the other end of the connecting cable to the remaining OUT port on the flicker effects board. Turn the AA Battery Pack ON to test the candle lights are working OK with the flickering effect.

![](_page_52_Picture_2.jpeg)

Note: If you experience any issues with the lights not working and suspect an issue with a component, please try a different port on the expansion board to

verify where the fault lies (with the light, expansion board, or effects board). To correct any issues with expansion board ports, please view the section addressing expansion board issues on our **online troubleshooting guide**.

**33.)** Turn the set over to the front, then take **4x Adhesive Squares** and stick two to the back of the Flicker Effects Board, and another two to the back of the Micro 4-Port Expansion Board. Mount the two boards to the right side of the black technic brick as shown below:

![](_page_53_Picture_2.jpeg)

Neaten up the wiring by grouping the two bit light cables from the fireplace and twisting/folding them around each other into a neat bunch. Tuck the bunched up cables through the archway space on the right, then pull the micro bit light cables toward the right side as shown below. Do your best prevent any wiring from dangling down and being seen from the inside of the hall.

![](_page_54_Picture_1.jpeg)

The last step is to reconnect the main roof section.

![](_page_54_Picture_3.jpeg)

![](_page_55_Picture_0.jpeg)

This finally completes installation of the Light My Bricks Hogwarts Great Hall Light Kit. We thank you for purchasing this product and hope you enjoy!

![](_page_55_Picture_2.jpeg)