Light My Bricks

Installation Instructions for Light My Bricks LED Lighting Kits Jan 16 \cdot 28 min read \cdot % Unlisted

Light My Bricks: LEGO UCS Millennium Falcon 75192 Lighting Kit



Here is the instructions document for the LEGO UCS Millennium Falcon set 75192 LED lighting kit. Please read and follow the steps carefully to ensure this lighting kit is installed properly.

If you run into any issues, please refer to the online **<u>troubleshooting</u>** guide.

This user guide is also available to download in PDF format here.

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Package contents:

- 10x White 30cm Bit Lights
- 8x Red 30cm Bit Lights

- 2x Blue 30cm Bit Lights
- 2x Flashing White 30cm Bit Lights
- 6x White Strip Lights
- 1x Multi Effects Board
- 5x 6-Port Expansion Boards
- 1x 12-Port Expansion Board
- 4x 30cm Connecting Cables
- 8x 5cm Connecting Cables
- 1x AA Battery Pack

LEGO Pieces:

- 10x Trans Red Round Plate 1x1
- 1x Trans Clear Round Plate 1x1

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.

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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.) Start by removing the top sections of back half of the Falcon as per below:

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2.) Take **6x White Strip Lights** and **6x 5cm Connecting Cables** and then connect them all together. Leave one end of the connecting cables spare as shown below:

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3.) Take the **12-port Expansion Board** and connect the connecting cable with the spare end to the port furthest to the right.



4.) Disconnect the outer section of the back jets(left side) and then stick the first strip light (closest to the expansion board) down using it's adhesive backing. Pull the cable and expansion board over the left side so that it is sitting inside the falcon then reconnect the outer section of the back jets(left side).





Reconnect the outer section of the back jets.



5.) Stick the second strip light (using it's adhesive backing) to the section as per below image.



6.) Stick the third strip light to the same positions as in the below images. Note that we will only be sticking down about .5cm of the strip light.



7.) Disconnect the middle section of the back jets and then lay the cable that leads to the fourth strip light in between studs. Stick the fourth strip light in the below position (again using only .5cm of the left side of the strip light) and then reconnect the middle section to secure the cable in place.



8.) Stick the fifth and sixth strip lights down to the following positions ensuring you disconnect the back jet at the right side before sticking down the sixth strip light.



Reconnect the back jet at the right side.



9.) Take the **AA Battery Pack** and insert 3x AA batteries to it. Connect the battery pack cable to the 12-port expansion board and then turn the battery pack ON to test the lights for the back jets.



Place the battery pack down underneath the expansion board and inside the back section of the inside of the falcon.



10.) We will now light the interior cabin section closest to the back. Start by disconnecting the corridor section to the left.





Take an **Adhesive Square** and stick it underneath this section. Take **White 30cm Bit Light** and stick it down to the adhesive square with the cable facing down as per below.



Reconnect this corridor section ensuring the cable is facing behind then pull the cable behind and then down the centre of the falcon.





11.) Disconnect the corridor section in the middle and then take anAdhesive Square and stick it underneath this section. Take a White30cm Bit Light and stick it down to the adhesive square with the cable facing down as per below.



Reconnect this corridor section ensuring the cable is facing behind. Secure the cable by laying in between studs underneath the dark grey 2x2 plate.





12.) Remove the control panel section toward the right of the middle corridor and then disassemble this section as per below





Take a **Flashing White 30cm Bit Light** and the place it directly over the stud on top of the brick. Reconnect the top section and ensure the cable is facing the back of the brick as per below



Thread the connector side of the flashing bit light behind in the space between the technic bricks before reconnecting this control panel section.



13.) Pull both cables (from the middle corridor and control panel) behind and toward the right. Lay them in between studs and secure down underneath the light grey 2x4 plate.





Thread the two cables behind and through the left hole of the lower black technic brick as per below



Connect the two cables to the 12-port expansion board.



14.) We will now install an LED inside the hyperdrive. First disconnect the top section as shown below.



Take a **White 30cm Bit Light** and thread the connector side through the hole of the black technic brick in the corner. Pull the cable all the way through from the other side and then stick the Bit Light down (LED facing up) in the following position using an **adhesive square**.





Reconnect the top section of the hyperdrive.



Thread the cable from the hyperdrive bit light through the back hole (to the right of the hole we threaded the 2 bit light cables earlier). Pull the cable all the way through and then connect it to the 12 port expansion board.



15.) We will now install a flashing light in the corridor and another light above. First remove the following section as shown below:



Take a **White 30cm Bit Light** and stick it underneath the roof of the corridor using an **adhesive square**.



Place the corridor section down and then disconnect the wall section followed by the trans green plate as shown below:





16.) Take a **Flashing White 30cm Bit Light** and place the LED over the grey stud before reconnecting the trans green plate to secure the Bit Light in place. Ensure the cable is facing the same way as the example below



17.) Reconnect the section back to the rest of the corridor then thread the Flashing Bit Light cable through the technic pin hole to the right. Reconnect the corridor section back to it's original position.



Thread the bit light from the wall section light through the middle section of bricks as shown below then reconnect this whole section to the base of the falcon.



Thread the cable from the corridor roof down in between sections and then thread underneath spacing as shown below



Connect the both Flashing White 30cm Bit Light and White 30cm Bit Lights into the 12 port expansion board.



18.) Locate the end of the White 30cm Bit Light from the left corridor (from step 10) and pull it down the centre behind sections and then across to the right to connect to the 12-port expansion board.



Turn the Battery Pack on to test all the lights we have installed so far are working correctly



19.) Take **2x 30cm Connecting Cables** and connect them to spare ports on the 12 port Expansion board and then pull both cables across to the left toward the middle of the Falcon.





20.) Remove the roof off the middle section as well as the section toward the left as shown below:



21.) Take a **6-Port Expansion Board** and connect one of the 30cm connecting cables we pulled across to one of the ports on the board.



Take the **Multi-Effects Board** and connect the other 30cm connecting cable we pulled across to the input port on the board (side with only one port)



Place the multi-effects board down the middle section as shown below



22.) Remove the following section and lay the 2 connecting cables as well as the cable from the left corridor underneath in between studs. Reconnect the section we removed.





Tuck in the 12-port expansion board as well as the Battery Pack in the space in between sections and tuck in any access cables from the bit lights ensuring they are not visible from the outside





Reconnect roof sections of the back of the falcon



23.) Remove the light grey 2x8 plate in the middle section. Thread the6-port expansion board underneath through the space in betweenbefore reconnecting the light grey 2x8 plate over the top




24.) We will now light the corridor in this section. First remove the top and then take a **White 30cm Bit Light** and stick underneath the corridor roof using an **adhesive square**.





Reconnect the corridor section ensuring the cable is laid neatly behind. Connect this Bit Light into the 6-port expansion board and then neatly lay the cable behind before securing it underneath the following LEGO piece.



25.) Remove the following section toward the side of the ship. Place it upside down and then disconnect the two light grey 2x4 bricks connected underneath.



Take a **White 30cm Bit Light** and place it (facing up) directly in the centre of the round plate. Carefully reconnect one of the 2x4 bricks ensuring the cable is laid in between studs. You should be able to see the Bit Light peaking out.





Reconnect the second 2x4 brick ensuring the cable is laid in the middle, before reconnecting this section to the side of the ship. The Bit Light should now be facing down.



26.) Pull the cable behind and toward the right. Thread it thought the space which leads to the other side and then thread it underneath, up toward the middle before reconnecting it to the 6-port expansion board.







27.) Take another **White 30cm Bit Light** and this time connect the connector side first into the next available port on the 6-port expansion board. Leave the Bit Light end as is for now as we will stick this end to the roof of the middle section later.



28.) Take another **30cm Connecting Cable** and connect this to the next available port on the 6-port expansion board.



Thread the other end of the cable down the middle of the falcon toward the left. Feed the cable through the technic holes as shown below:





29.) Take the roof of the middle section and before we reconnect this section, turn it over and then using another **adhesive square**, stick the White 30cm Bit Light from step 27 to the following position.



Reconnect the middle section securely.



Turn the Battery Pack on to test the lights we have installed to this cabin section.



30.) Take another **6-port Expansion Board** and connect the other end of the 30cm connecting cable from step 28 to the first available port on the expansion board. Bring the expansion board over to the left



31.) We will now install lights to the front of the Millennium Falcon. First remove the front plate sections from each side as shown below.





Remove the following pieces from each plate.



Starting with the left plate, take a **White 30cm Bit Light** and place it directly over the stud shown below ensuring the cable is laid the same way. Take a provided **1x1 Round Plate (trans red)** and connect it over the top securing the Bit Light in place.



Reconnect the remaining piece ensuring the cable is laid underneath and then reconnect this section back to the front left of the ship.



32.) Repeat the previous step for the front right side using another White 30cm Bit Light and provided 1x1 Round Plate (trans red)





33.) Pull the cable from the front left side across the inside and secure them underneath the dark grey bar as shown below before connecting the Bit Light into the 6-port expansion board.





Secure the cable underneath the light grey tap pieces as shown below:





34.) Repeat this process for the front right side.



Turn on the Battery Pack to test the front lights are working OK



35.) Take the remaining **30cm Connecting Cable** and connect it to the 6-port expansion board. Leave the other end as is as we will connect this later.



Neatly place the expansion board in between sections as per below



36.) Remove the entire roof section that leads to the cockpit.



Remove the cockpit window, as well as the section underneath.





Remove the right section of the cockpit as well as the following section underneath.



37.) Take the remaining White 30cm Bit Light and place it directly over the middle stud at the front ensuring the cable is facing out.Connect the provided 1x1 Round Plate (trans clear) over the top of the bit light, securing it in place.



Pull the bit light cable underneath and secure it in the space in between the side and middle.



28.) Take the section underneath the cockpit and then stick **2x adhesive squares** in the following positions.



Take the **2x Blue 30cm Bit Lights** and then stick them on the adhesive squares with cable facing the same way as shown below.



Reconnect the section underneath the cockpit and thread all cables along the right side.



29.) Reconnect the section underneath the right section of the cockpit we removed earlier and then connect the underneath piece securely.



Reconnect the right section of the cockpit ensuring all cables are neatly hidden underneath.



Reconnect the cockpit window.



30.) Group the 3x Bit Light cables together and then thread them underneath the white bar that leads inside the falcon. Take a **6-Port Expansion Board** and then connect the bit light cables to available ports.





Locate the other end of the 30cm connecting cable from the expansion board earlier (step 35) and connect this to an available port.



Neatly place the expansion board inside the middle compartment and then turn the Battery Pack on to test all lights are working so far.





31.) Reconnect corridor roof sections that lead to the cockpit as well as the front half roof sections of the ship ensuring all cables and components are neatly hidden underneath.





32.) We will now install lights for the top and bottom cannons. First remove the main round roof section above and then disconnect the cannon section at the technic blue pin.





Disassemble pieces from the 4 cannon sections as per below.



33.) Take one of the **Red 30cm Bit Lights** and thread the connector side through the top of the 1/2L technic pin. Thread the bit light all the way through and then bend the LED component slightly so that it sits flat against the top of the pin.



Take one of the provided **Trans Red 1x1 Round Plate** and connect it directly over the top of the Bit Light to secure it in place.



34.) Reconnect the 1/2L technic pin to the section below and then thread the bit light cable through the technic ring.



Bring the ring up and then reconnect it to the pole section ensuring you eliminate excess cable by pulling the end of the cable down as you bring the ring up.



Reconnect the dark grey 1x1 round brick underneath.



Repeat the previous 2 steps to install another **Red 30cm Bit Light** to another cannon.



35.) Reconnect the 2 cannons with lights to the cannon base. Connect one on the top left and the other on the bottom right ensuring the cables are facing the same way as per below.



Take the 2 cables and then wind them around each other from top to the bottom so they become one larger cable.



36.) Repeat steps 34 and 35 to install lights to the other 2 remaining top cannons using another 2x **Red 30cm Bit Lights** and provided **Trans Red 1x1 Round Plates.**







37.) Reconnect the 2 cannons with lights back to the cannon base (this time top right and bottom left) and then wind the 2 cables around each other just like we did for the previous 2 cables.





38.) Take **2x 6-Port Expansion Boards** and **2x 5cm Connecting Cables**. Connect a 5cm cable to each expansion board and then connect 2 bit lights from each cannon to each expansion board as shown below.




39.) Wind all the cables around each other from top to bottom forming one larger cable.



Take the round roof section, open the window and then thread the expansion boards and rest of the cable through the top. Thread it all the way through.





Before reconnecting the cannon section, disconnect one of the side pieces and then neatly place the large cable inside before reconnecting this section.







Note: if you decide that it is more visually appealing to leave the trans red pieces off, you can simply remove them so they look more like the original set.



40.) Place the upper cannon section on the roof of the falcon but do not reconnect it just yet.



Connect the ends of each 5cm cable from the each expansion board into each output port of the Multi Effects Board we connected in step 21.



42.) We now need to setup the chosen effect on the Multi Effects Board. First turn on the Battery Pack and then set the switch on the multi effects board to the middle (we will be using the emergency effect to imitate the shooting canon effect). Turn the effect dial all the way to the left for the slowest effect. You should now see the upper cannons firing away in sequence.



43.) We will now install lights to the cannons below the ship. First remove the canon section at the technic blue pin then disconnect the cannon section at the technic blue pin and then disassemble pieces from the 4 cannon sections as per below.









Repeat steps 32–37 to install another **4x Red 30cm Bit Lights** to the 4 lower canons using the provided **Trans Red 1x1 Round Plates**.







Wind all the cables around each other from top to bottom forming one larger cable and then thread the cable into the space in the middle of the canon base.



44.) From the top of the Millennium Falcon use a long stick/straw/pen to push down to open the round LEGO glass piece then feed up from underneath the large cable of Bit Light cables.



Pull the cables up from the middle section and then connect 2 of the cables to each 6-port expansion board. We need to ensure that 2 cables from the top left and bottom right cannons are connected to one expansion board and the other cables from the top right and bottom left cannons are connected to the other expansion board. Turn the battery pack on to verify/adjust accordingly.



Reconnect the bottom cannons at the technic blue pin and pull up (from above) any excess cable before closing the LEGO glass piece.



Before reconnecting the main round roof section above, neatly tuck the expansion boards, effects board, and any excess cabling into the middle section.







This finally completes installation of your UCS Millennium Falcon Lighting Kit. Now turn ON your light kit and ENJOY!

