

# LEGO<sup>®</sup> UCS IMPERIAL SHUTTLE #10212 LIGHT KIT INSTALLATION GUIDE



# **Light My Bricks**



LEGO<sup>®</sup> UCS IMPERIAL SHUTTLE 10212 INSTALLATION GUIDE

#### Hi There!

We're here to help you get started on the LEGO®

UCS Imperial Shuttle 10212 Light Kit.

This PDF details the instructions for the LED light kit only.

If you run into any issues, please refer to the troubleshooting section towards the end of this guide.

Have fun and enjoy!



INSTALLATION GUIDE





## **PACKAGE CONTENTS:**



8 x Green Bit Light – 30cm 4 x White Bit Light – 30cm 1 x White Bit Light – 15cm 2 x Cool White Large Bit Light – 30cm 1 x Red to Blue Bit Light – 15cm 1 x Light Bar – 12cm (76LEDs) 1 x White Strip Light

## **ASSORTED BRICKS:**

- 2 x 1x1 Round Plate w/Open Stud Black
- 2 x 1x1 Round Plate w/Open Stud White
- 14 x 1x1 Round Plate Trans Clear
- 1 x 1x1 Round Brick Black
- 2 x 1x2 Plate Black
- 1 x 1x2 Plate MW Handle On End Black
- 1 x 1x1 Tile W Clip Round Edges Black



3 x 6-Port Expansion Board 4 x 2-Port Expansion Board 1 x 8 Port Expansion Board 1 x Blink Effects Board 1 x Gun Effects Board

5x 5cm Connecting Cable 5x 50cm Connecting Cable



1x USB Power Cable (Power Source not Included)

PACKAGE CONTENTS

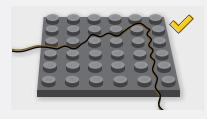


## **Contents**

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Final Product	60
Troubleshooting	61
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# 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 result in bent pins inside the port or possible overheating of the expansion board when connected.

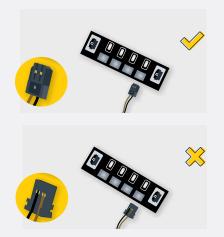






#### **Connecting Cable Connectors To Strip Lights**

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.



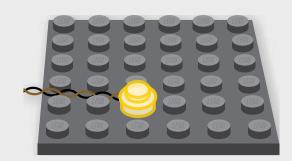
### Connecting Micro Cable Connectors To Micro Expansion Board Ports

Take extra care when inserting the micro connectors to micro ports of Micro Expansion Boards. Connecting Micro Bit Lights to Micro Expansion Boards is similar to connecting lights and cables to Strip Lights. With the expansion board 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, do not force it. Use your fingernail to push the plastic part of the connector to the micro port.



### Installing Bit Lights Under Lego<sup>®</sup> 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.









#### The Symbols Used In This Guide

When going through the following guide you will come across symbols and formats that will assist with the installation of your light kit. Take notice of them as each has a specific purpose.

#### **Light Kit Component**

This is the most important image format as it indicates which part to use from the Light Kit. Make sure you pay close attention to which part is shown.



#### Connect

Used when you need to connect a LEGO piece or LMB component.

#### Disconnect

Used when you need to remove a LEGO piece/ section or LMB component.

#### Directional

Used to show where to route cables, place components, or move them.

#### **Bend/Pivot**

Used when a component needs to be bent, or part folded or pivoted.  $\rightarrow$ 

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### Turn/ Flip

Will be found in the top left corner when the set needs to be rotated or flipped.



#### Twist/ Braid

Seen when a set of cables need to be grouped and twisted together.



#### **Power On Test**

Found at the end of a major step to test the lights. Will be located in the top left corner.



Note

Notes will be found alongside the instruction photos and explain what to do.





#### **Repeat Step**

Repeat the previous step eg. Make a spotlight, then make a second spotlight.

#### **Connect Focus**

Used to highlight a hard to see area where a component is being connected.

#### **Disconnect Focus**

Used to highlight a hard to see area where a component is being disconnected.

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#### **General Focus**

Used to highlight a hard to see area where a component needs to be acted on.



#### **General Note**

This is a sample note that is used anywhere in this guide. It will explain a difficult section where photos are hard to illustrate or easily confused.

#### **Connect Note**

The green coloured note is used when the topic focuses on a component being connected, like the shown Power Bank.

#### **Disconnect Note**

The red coloured note is used when the topic focuses on a component being disconnected or like here, the removed pieces.

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NOTE

NOTE



BRICKS

Take the 5cm Connecting Cable

from the 4-Port Micro Expansion

Board and route it into the "IN"

port of the Flicker Effects Board

Connect to a 5V USB Power Bank, 5V USB Wall Adaptor, or USB to AA Battery Pack (sold separately)

### NOTE

You should have these parts left over that were removed from the LEGO set

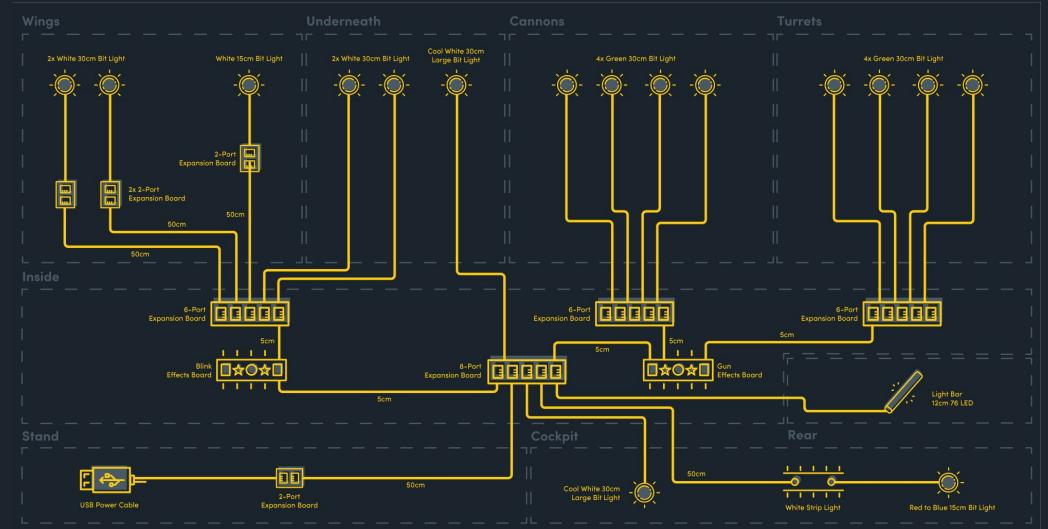


**BEFORE YOU BEGIN** 











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## **INSTRUCTIONS**

To ensure a smooth installation of your light kit, please read and follow each step carefully. If you run into any issues, please refer to the online troubleshooting guide.



Wenn Sie Probleme mit Ihrem Light My Bricks-Set haben, sehen Sie sich unser Video zur Fehlerbehebung an oder lesen Sie die Auflistung der häufigsten Ursachen, die Ihnen bei der Fehlersuche helfen hier.

Si vous rencontrez des problèmes avec votre kit Light My Bricks, regardez notre vidéo de dépannage ou consultez la liste des causes les plus fréquentes pour vous aider à les résoudre ici.

Se si verificano problemi con il set Light My Bricks, guardare il nostro video per la risoluzione dei problemi o leggere l'elenco delle cause più comuni per la risoluzione dei problemi qui.



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White 30cm Bit Light







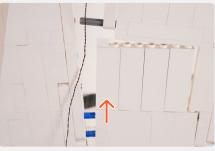


Carefully grab from each side of the wing and slowly pull the Technic section apart as shown.









INSTRUCTIONS

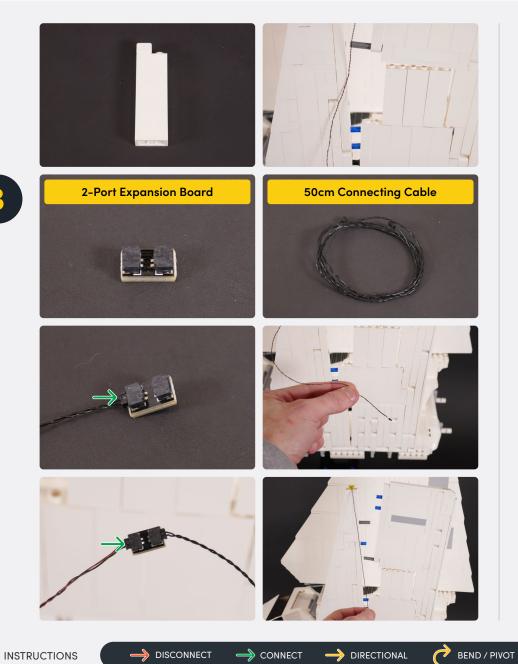
-> DIRECTIONAL OBEND / PIVOT

T TURN / FLIP

2

TWIST / BRAID

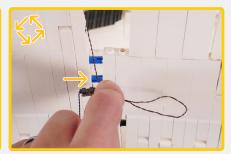




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Extend the Bit Light Cable down to the removed 1x2 Tall Brick. Twist the excess cable at the point where it connects to the 2-Port Expansion Board.

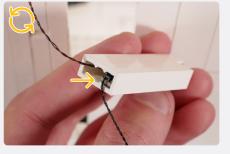
NOTE











NOTE ICON

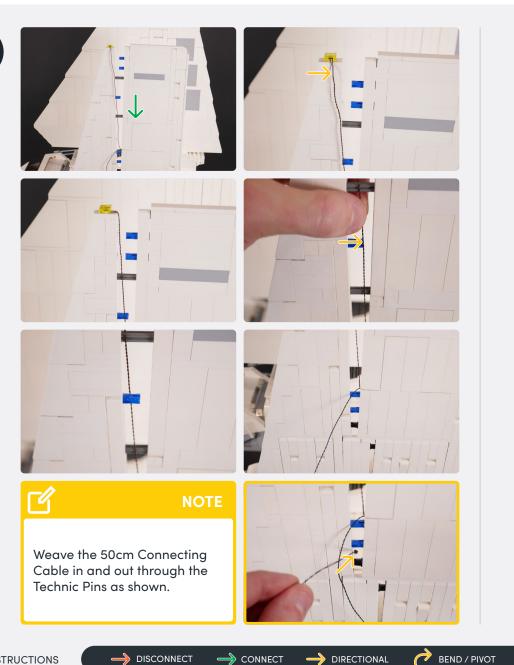
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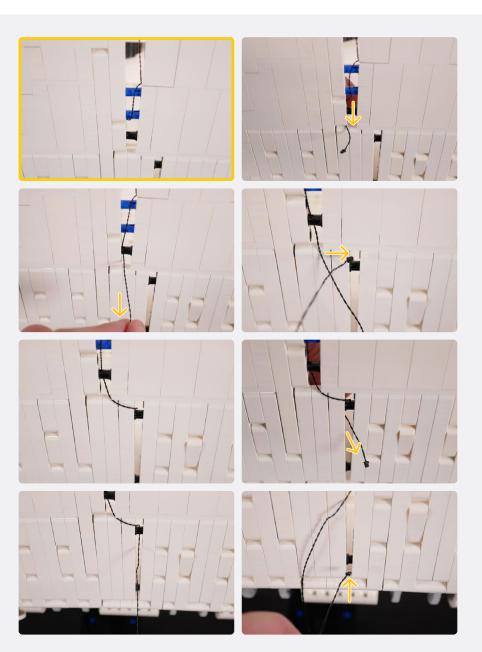


TWIST / BRAID

TURN / FLIP

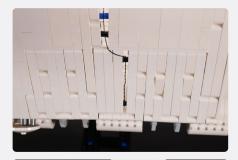






INSTRUCTIONS







#### NOTE

Lightly pull the 50cm Connecting Cable so its tightly woven around the Technic Pins. Then reconnect the two halves of the wing.

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BEND / PIVOT



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#### $\Gamma^{\prime}$

TURN / FLIP

#### NOTE

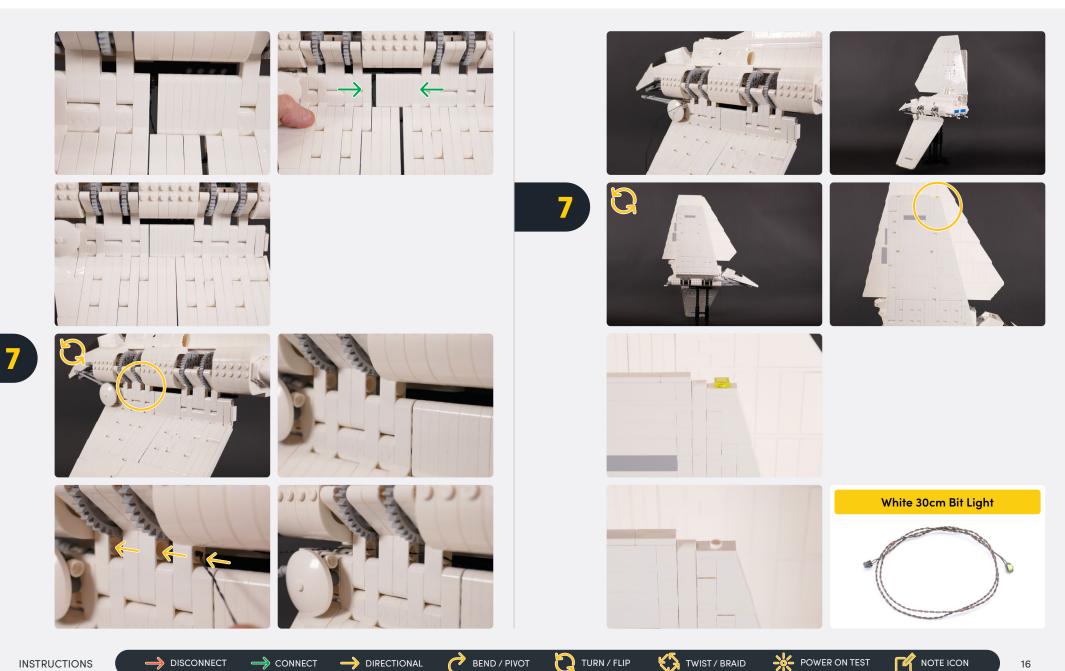
Thread the Connecting cable back through and around the last Technic pin again, carefully pulling it tight.





INSTRUCTIONS





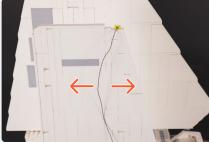
INSTRUCTIONS

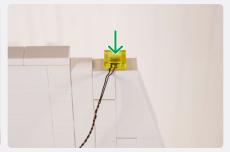
POWER ON TEST











Carefully grab from each side of the wing and slowly pull the Technic section apart as shown.









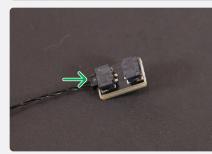
2-Port Expansion Board





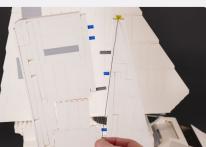
50cm Connecting Cable











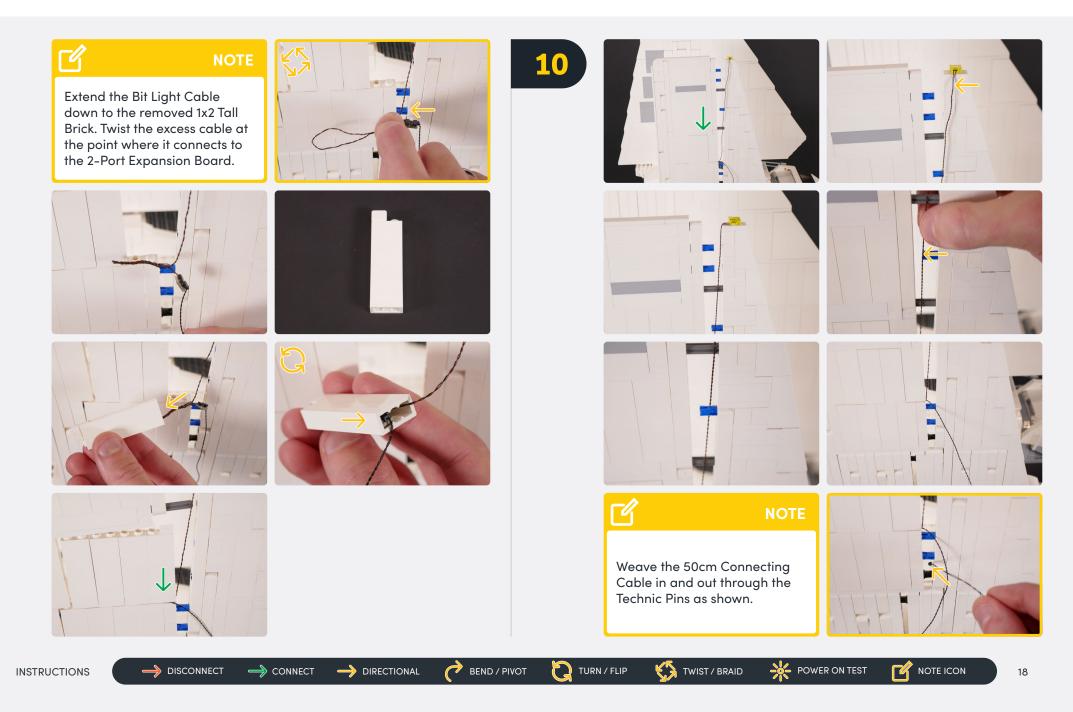
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TURN / FLIP

POWER ON TEST

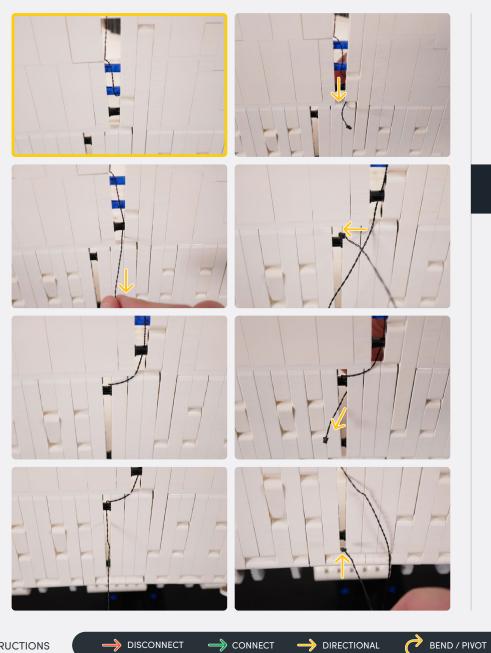


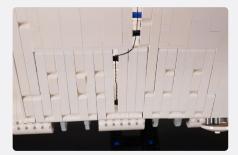




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POWER ON TEST



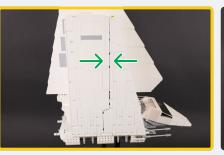




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#### NOTE

Lightly pull the 50cm Connecting Cable so its tightly woven around the Technic Pins. Then reconnect the two halves of the wing.



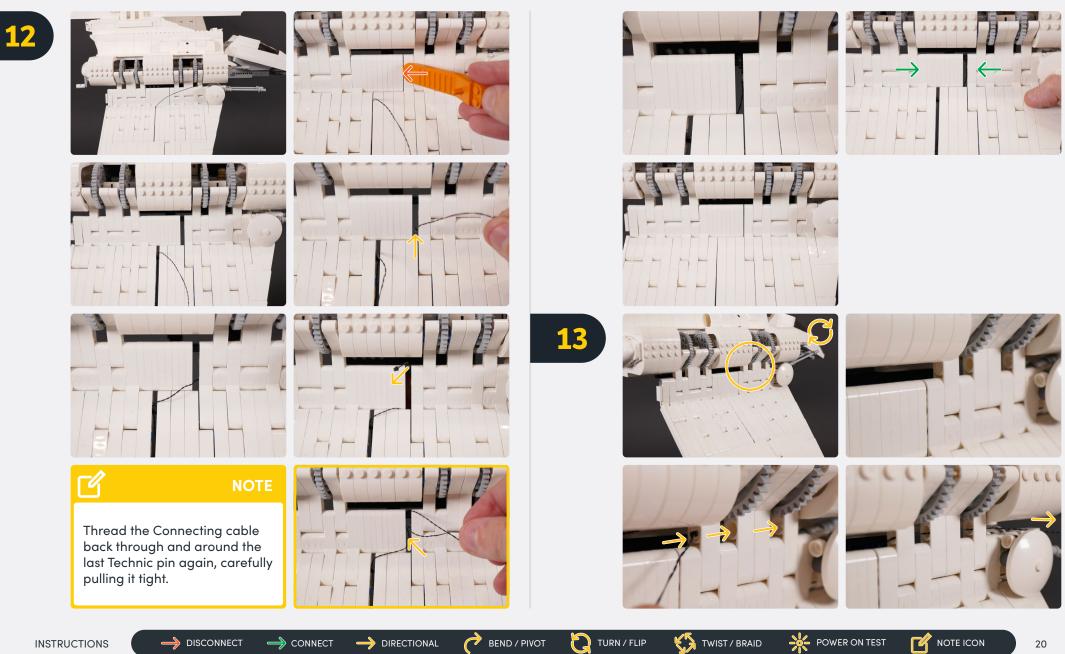


TWIST / BRAID

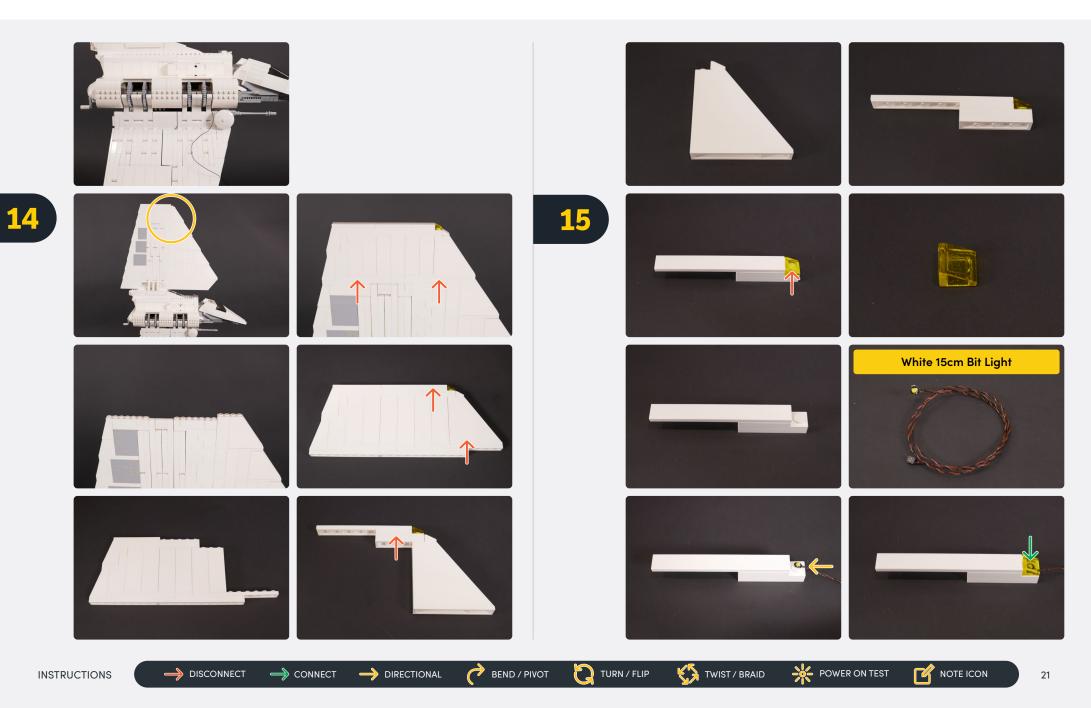
TURN / FLIP



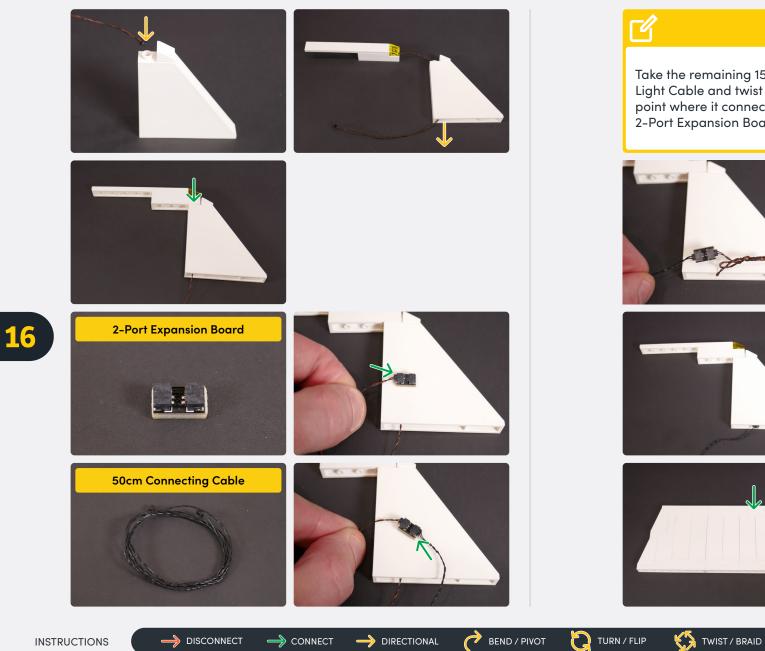








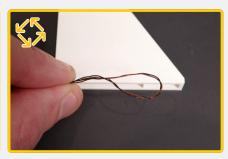




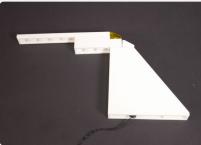
Take the remaining 15cm Bit Light Cable and twist to the point where it connects to the 2-Port Expansion Board.

NOTE



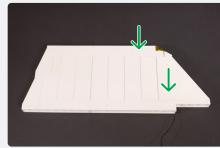








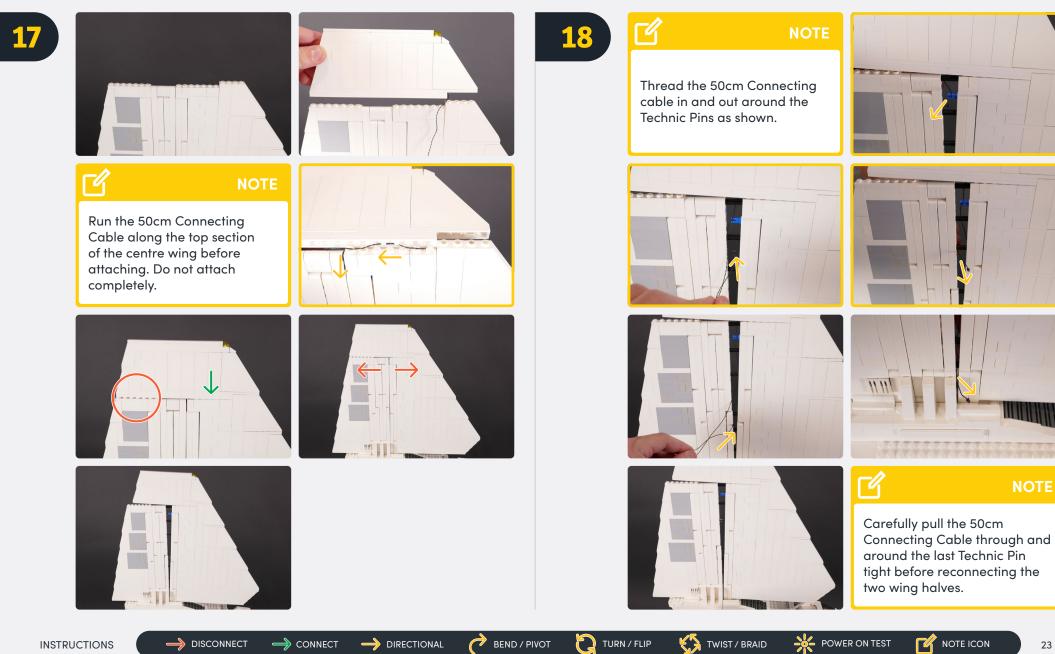
NOTE ICON



POWER ON TEST



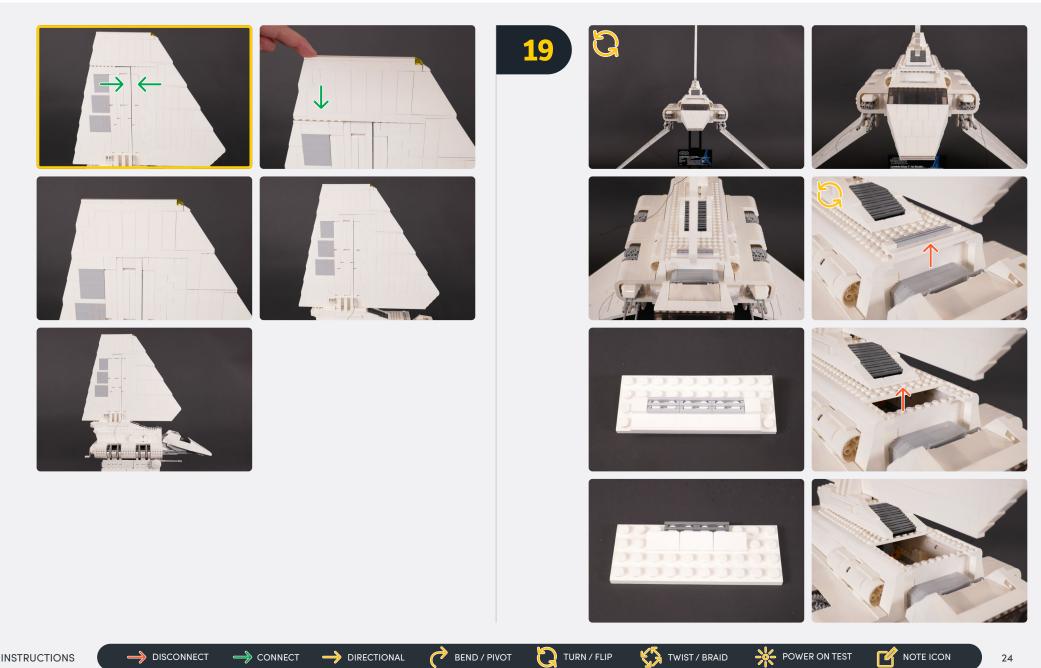




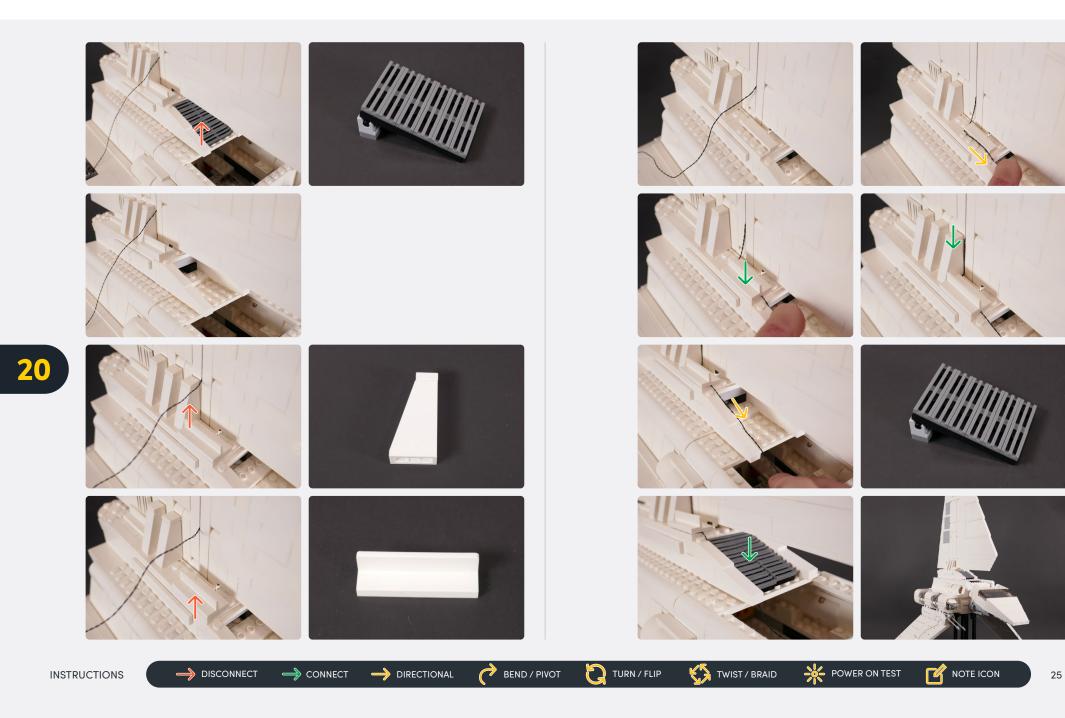
BEND / PIVOT

TURN / FLIP





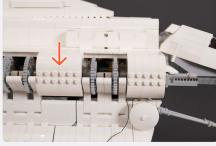






















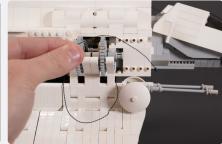
BEND / PIVOT

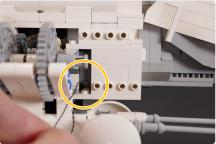
TURN / FLIP









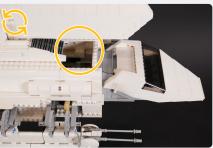




POWER ON TEST

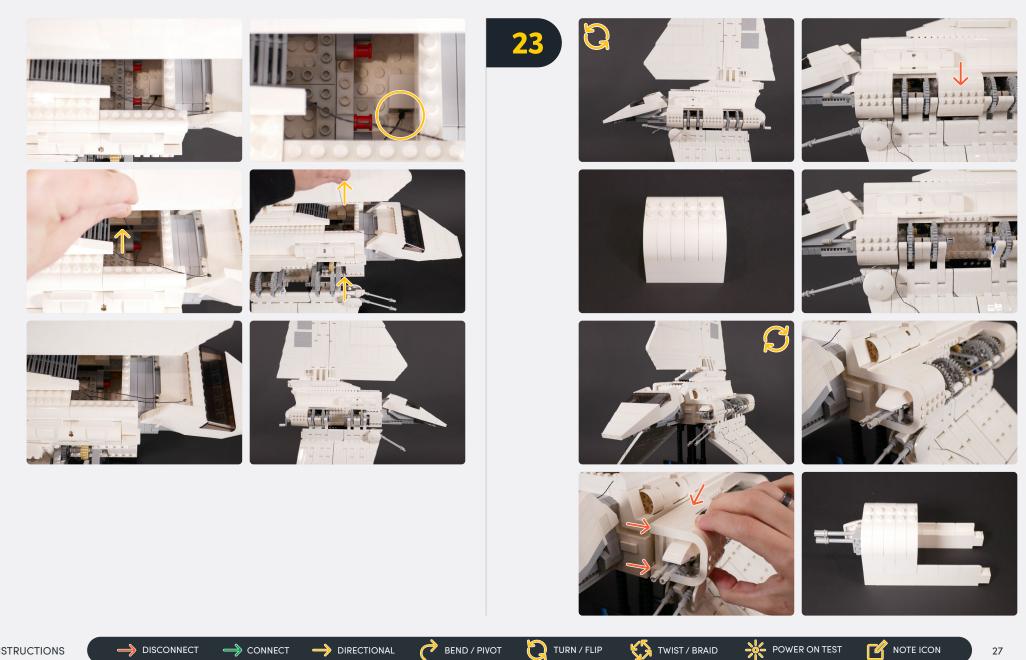


TWIST / BRAID









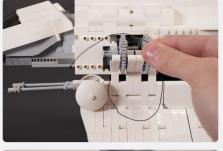
TURN / FLIP



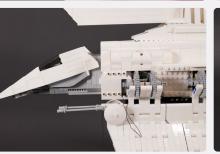












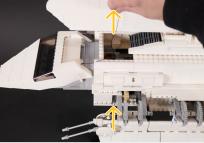






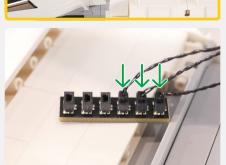






Grab the three Connecting Cables coming from each of the wings that are now threaded to the centre cavity.





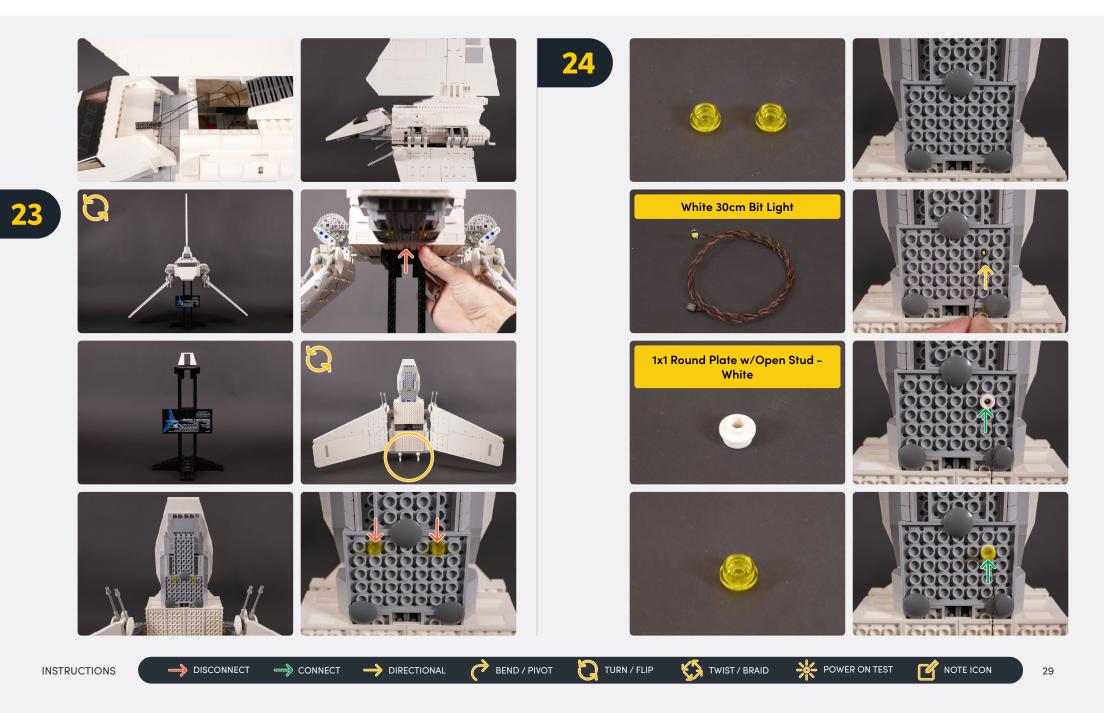
INSTRUCTIONS

-> DIRECTIONAL BEND / PIVOT

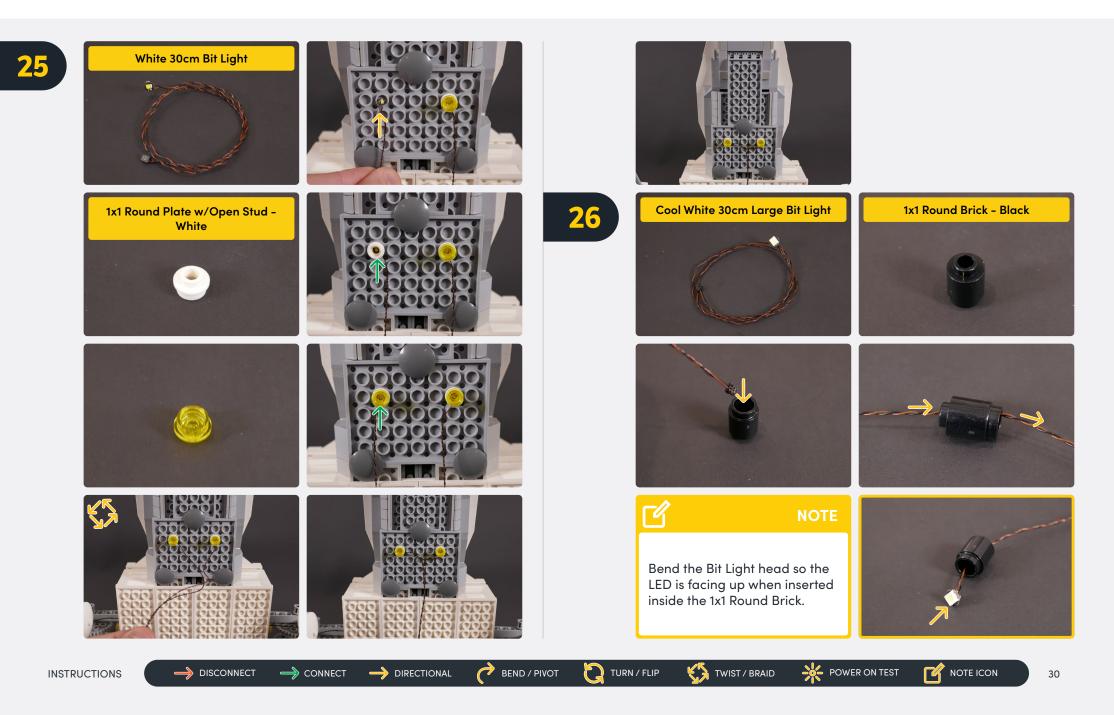
TURN / FLIP

NOTE

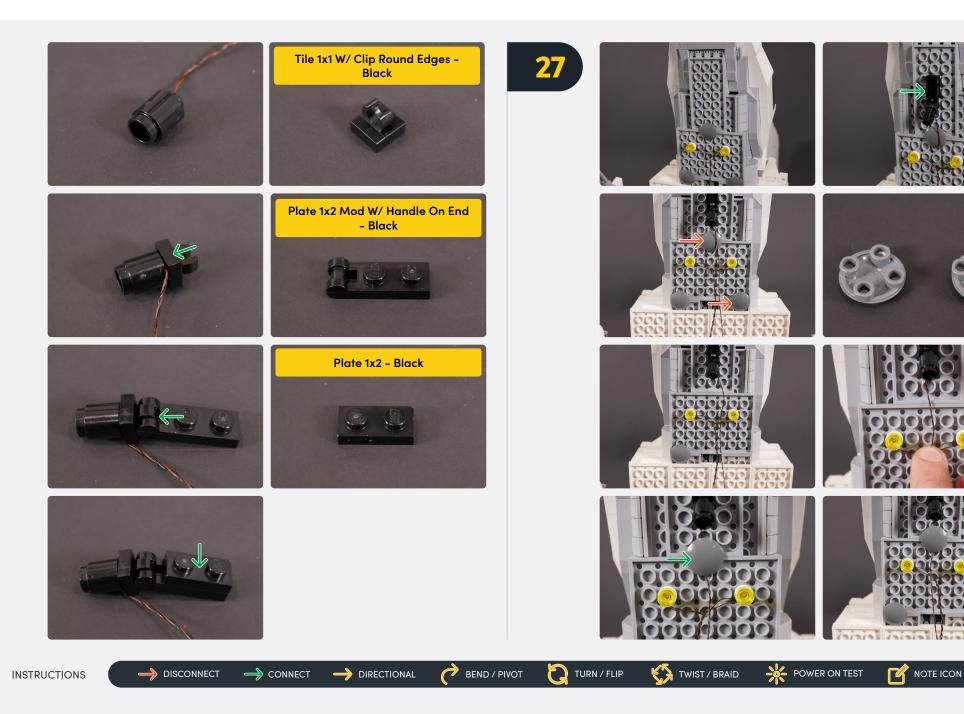




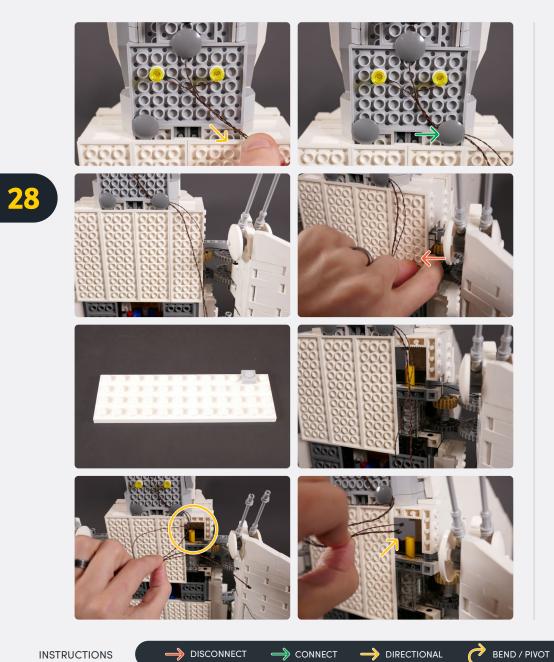


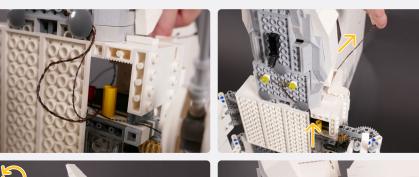


















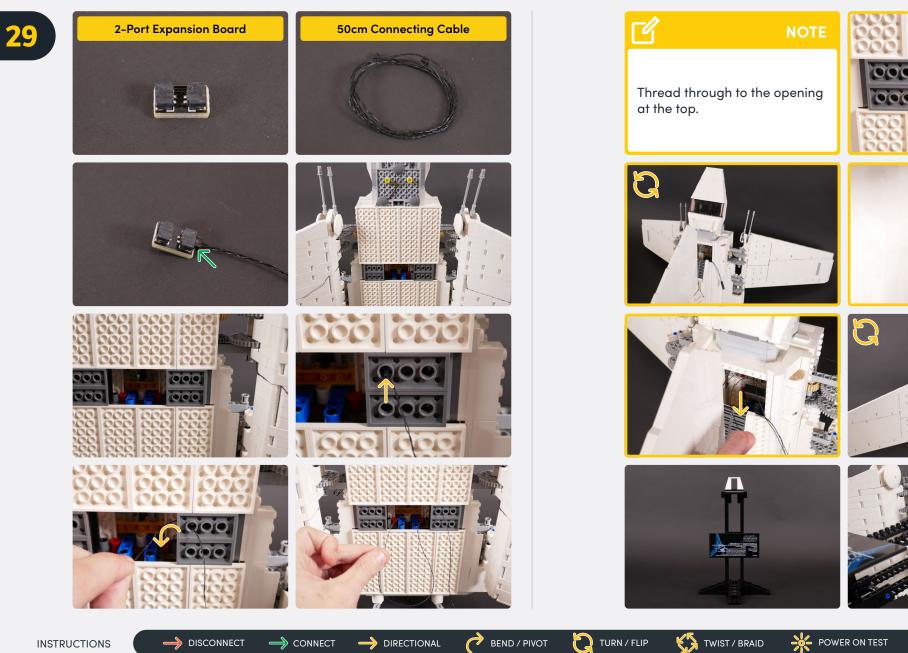




TWIST / BRAID

TURN / FLIP

























Take the two Bit Light Cables that are twisted together coming from the centre cavity and plug them into the 6-Port Expansion Board.

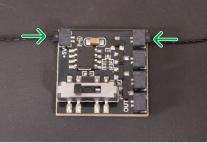






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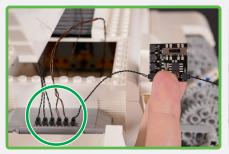




Ľ Connect the 5cm Connecting Cable connected to the "OUT" port of the Blink Effects Board into the 6-Port Expansion Board.

NOTE

2 x 5cm Connecting Cable









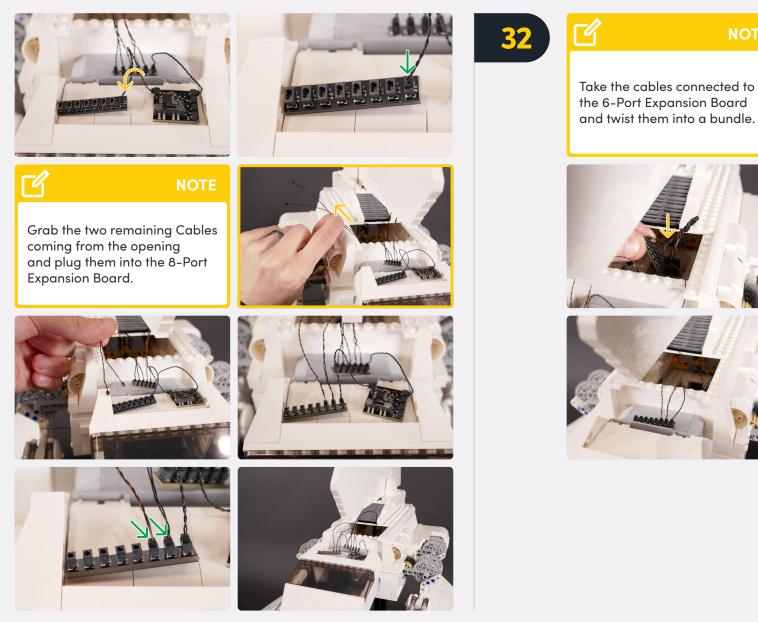
INSTRUCTIONS

BEND / PIVOT 

TURN / FLIP

TWIST / BRAID





#### NOTE

the 6-Port Expansion Board and twist them into a bundle.









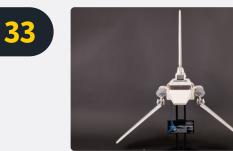


BEND / PIVOT

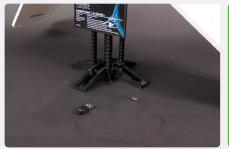
TURN / FLIP















NOTE

Connect to a 5V USB Power Bank, 5V USB Wall Adaptor, or USB to AA Battery Pack (sold separately)

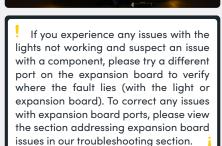
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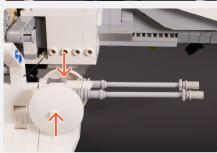
🔁 TURN / FLIP 🛛 🐇



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INTERNAL DRAW



BEND / PIVOT











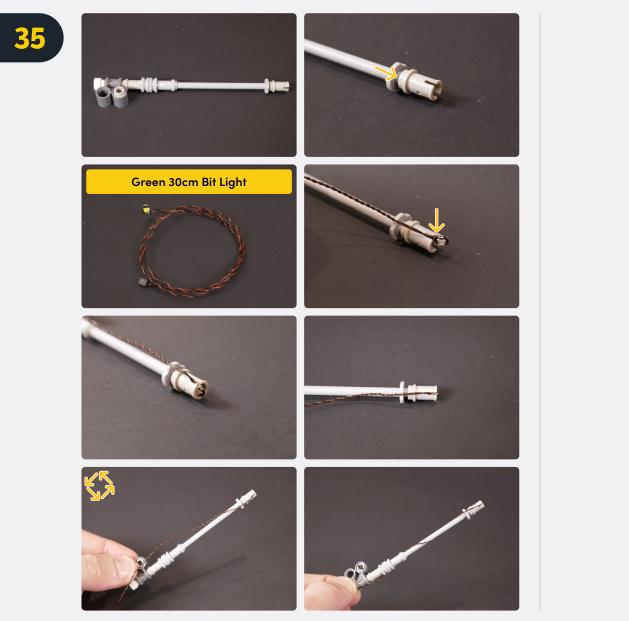


INSTRUCTIONS

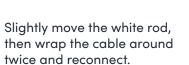
POWER ON TEST



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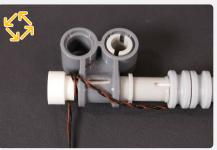






NOTE









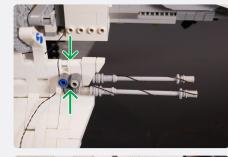
🔿 BEND / PIVOT 🛛 🔁 TURN / FLIP

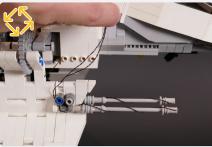










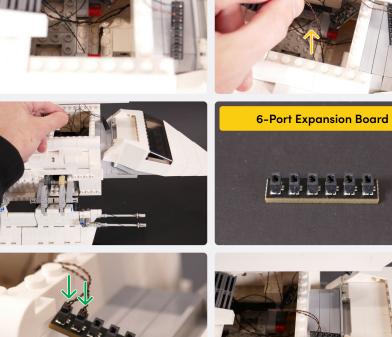


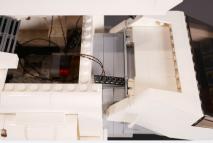




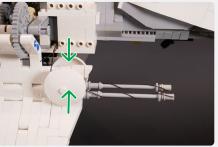












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TWIST / BRAID

NOTE ICON

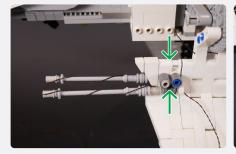
POWER ON TEST

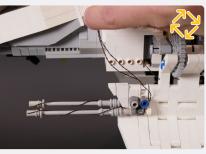


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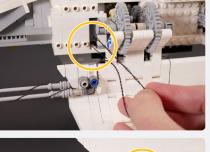


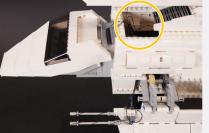










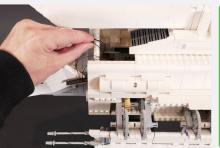


BEND / PIVOT

TURN / FLIP









NOTE

Connect to the same 6-Port Expansion Board from Step 36.





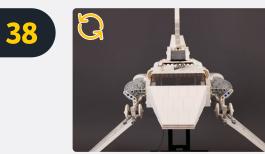
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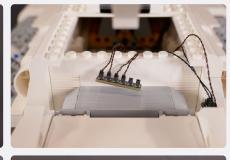
TWIST / BRAID

POWER ON TEST

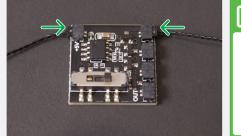


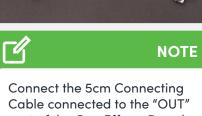


**Gun Effects Board** 



2 x 5cm Connecting Cable





port of the Gun Effects Board into the same 6-Port Expansion Board.













NOTE ICON

















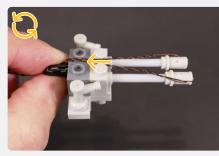








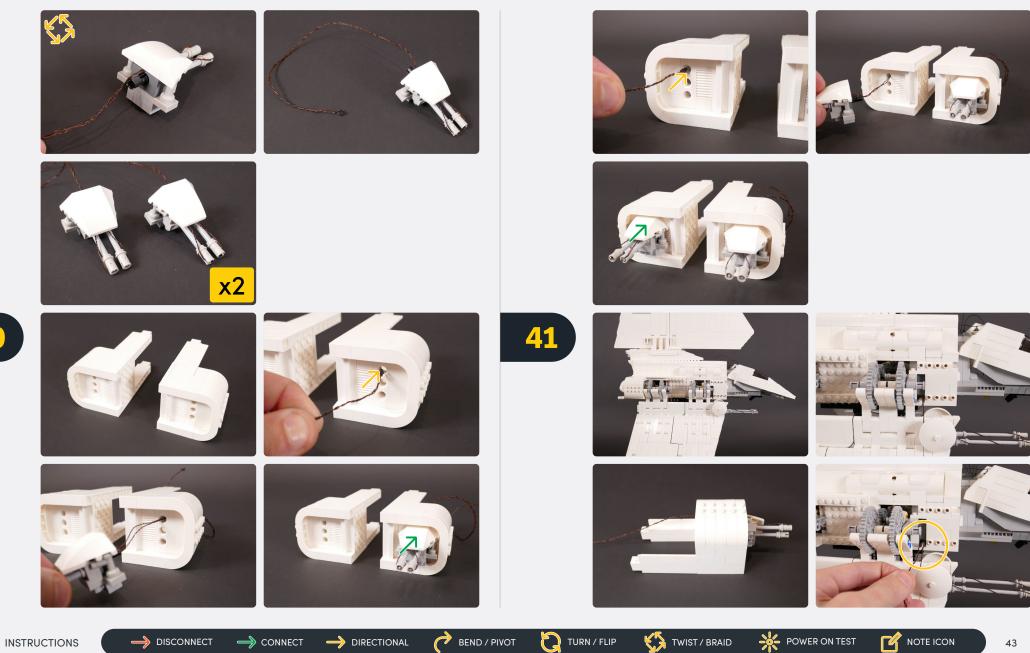






DIRECTIONAL
BEND / PIVOT





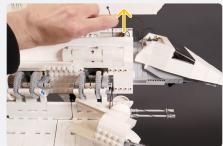












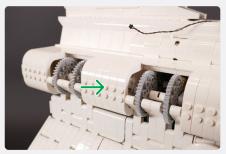
















6-Port Expansion Board







INSTRUCTIONS

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TWIST / BRAID

POWER ON TEST





























VOT 门 TURN / FLIP

POWER ON TEST



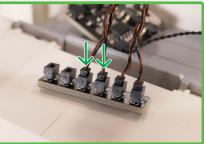






#### NOTE

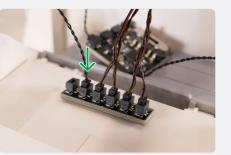
Connect the two Bit Light Cables into the 6-Port Expansion Board with four empty Ports.

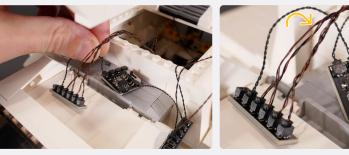




**46** 

5cm Connecting Cable

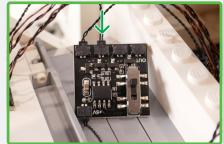




NOTE

### 

Connect the other end of the 5cm Connecting Cable into the "OUT" Port of the Gun Effects Board.



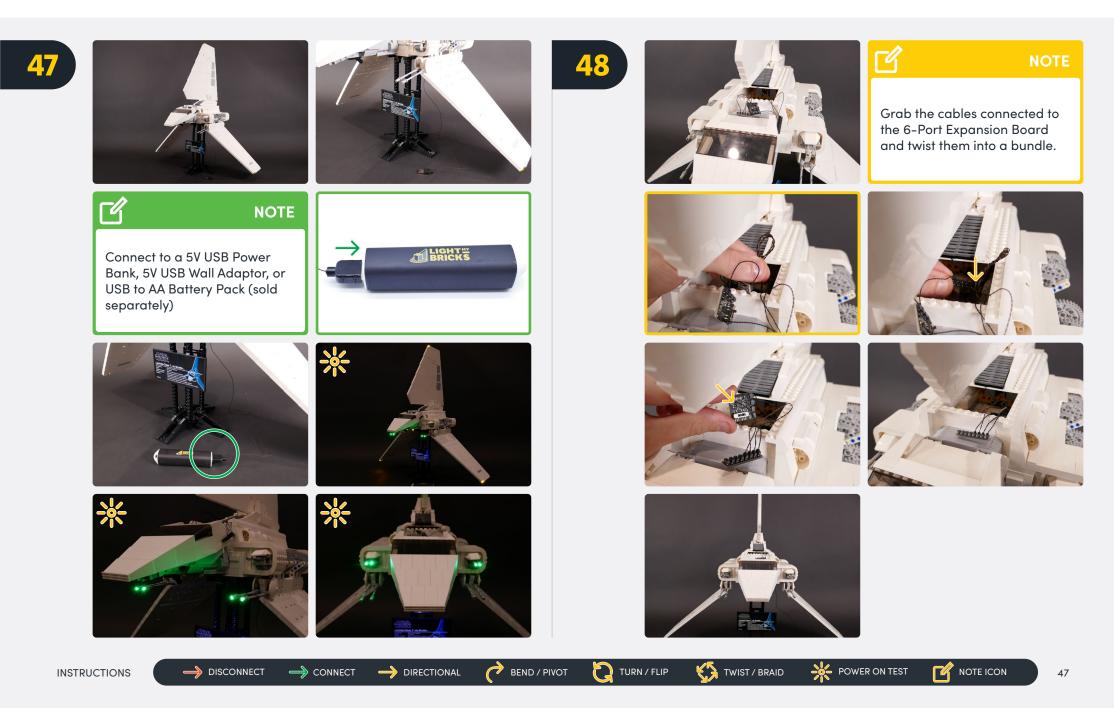


INSTRUCTIONS

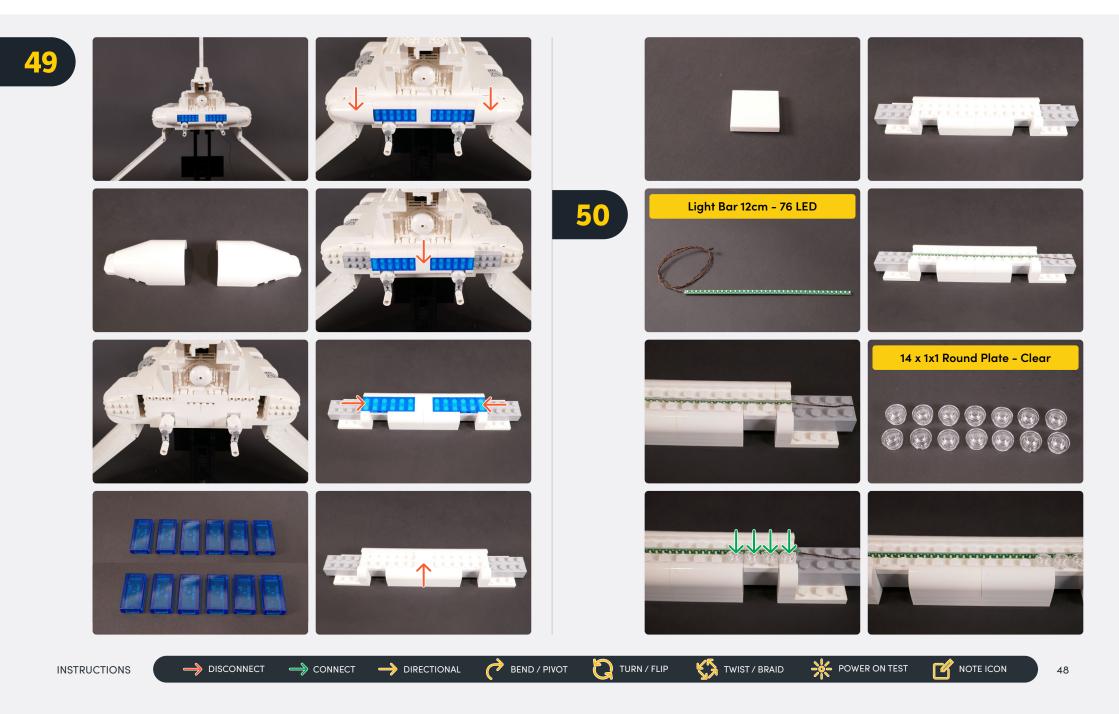
BEND / PIVOT

TURN / FLIP





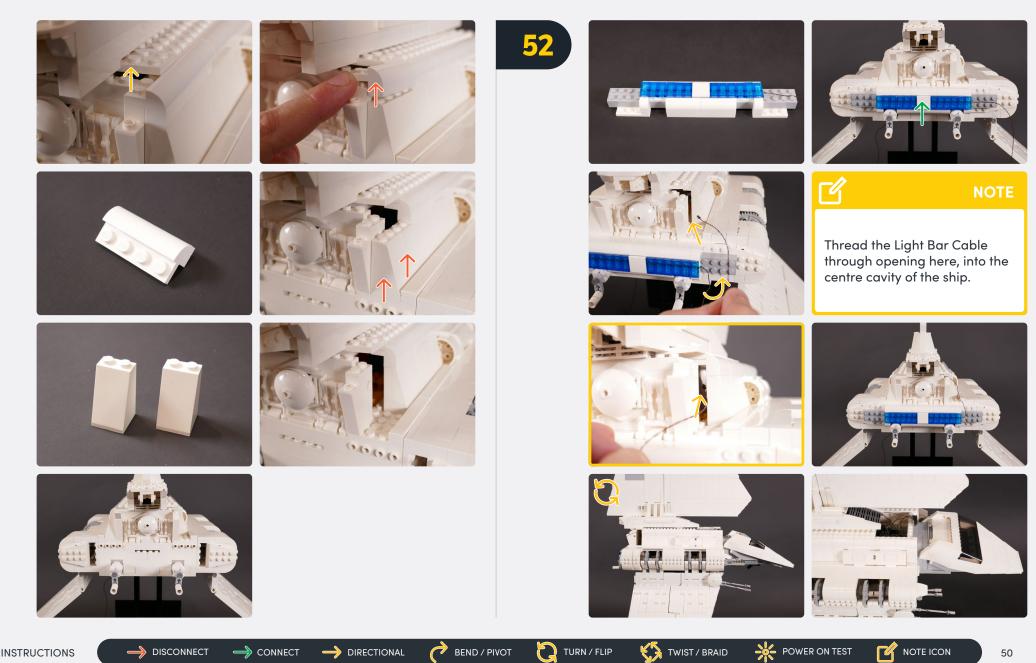












INSTRUCTIONS



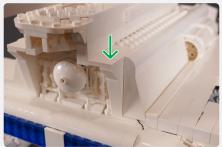


INSTRUCTIONS









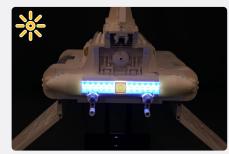
NOTE

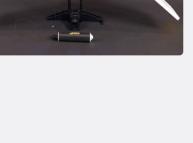
Connect to a 5V USB Power Bank, 5V USB Wall Adaptor, or USB to AA Battery Pack (sold separately)

 $\square$ 









**55** 



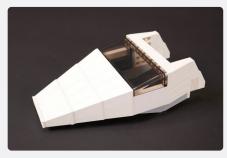










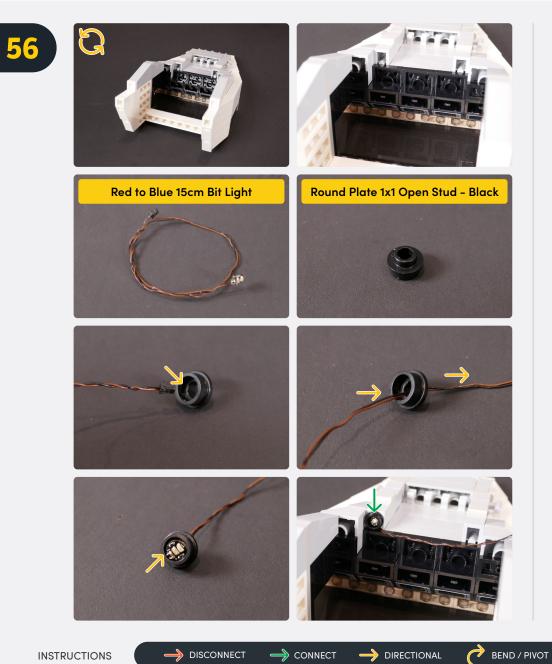


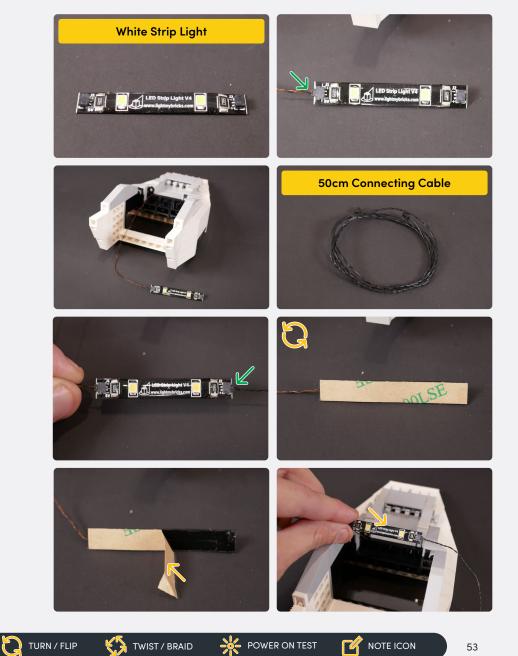
INSTRUCTIONS

DIRECTIONAL
BEND / PIVOT

ot 门 TURN/FLIP









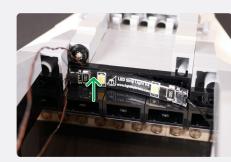






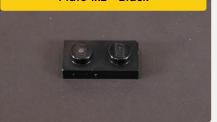








Plate 1x2 - Black









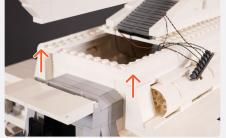








POWER ON TEST





INSTRUCTIONS

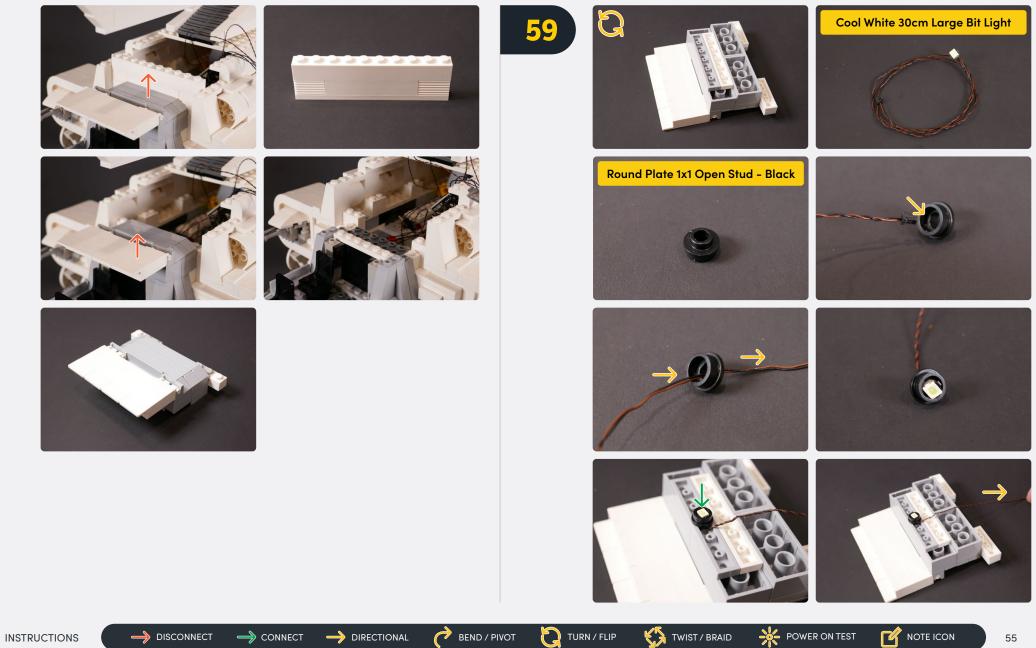
-> DIRECTIONAL OBEND / PIVOT

T 🏹 TURN / FLIP

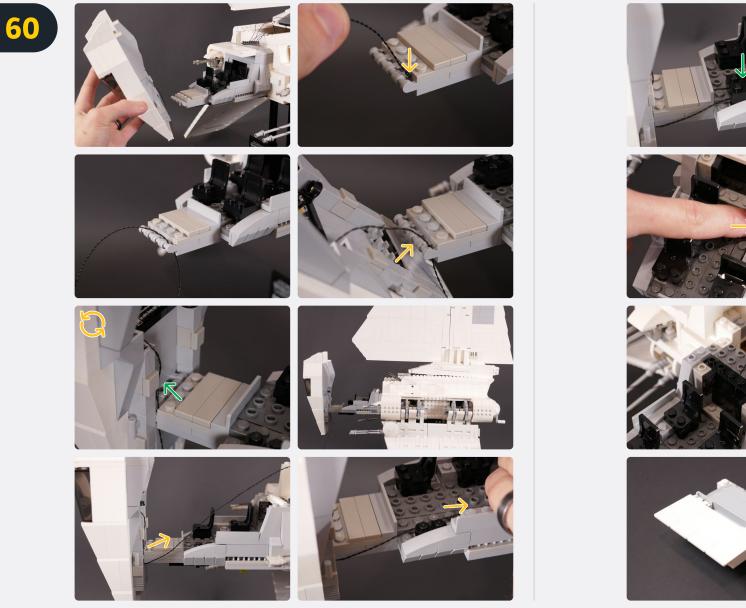
**58** 

TWIST / BRAID



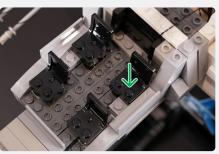


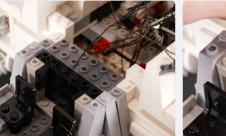


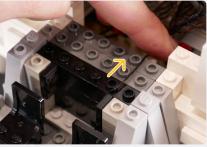














BEND / PIVOT  $\rightarrow$  directional

TURN / FLIP

POWER ON TEST TWIST / BRAID





#### NOTE

Take both the Connecting Cable and the Bit Light Cable from the Cockpit and plug both into the 8-Port Expansion Board.

























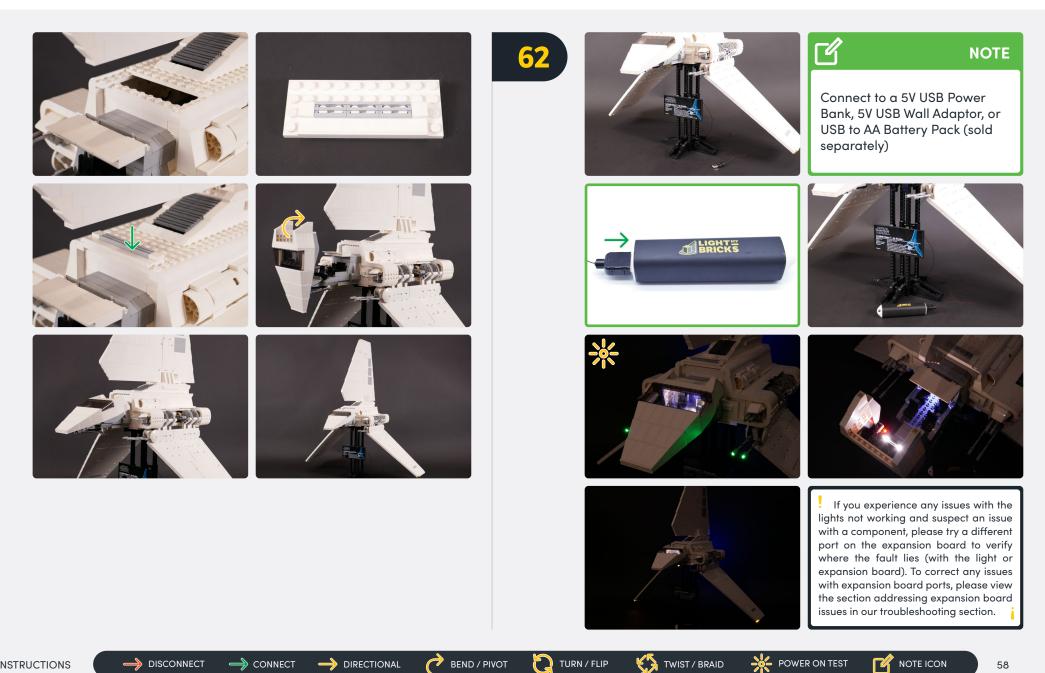


INSTRUCTIONS

OT 🔁 TURN / FLIP

POWER ON TEST



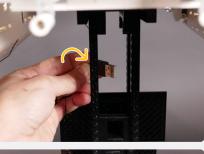


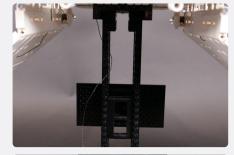
TURN / FLIP

















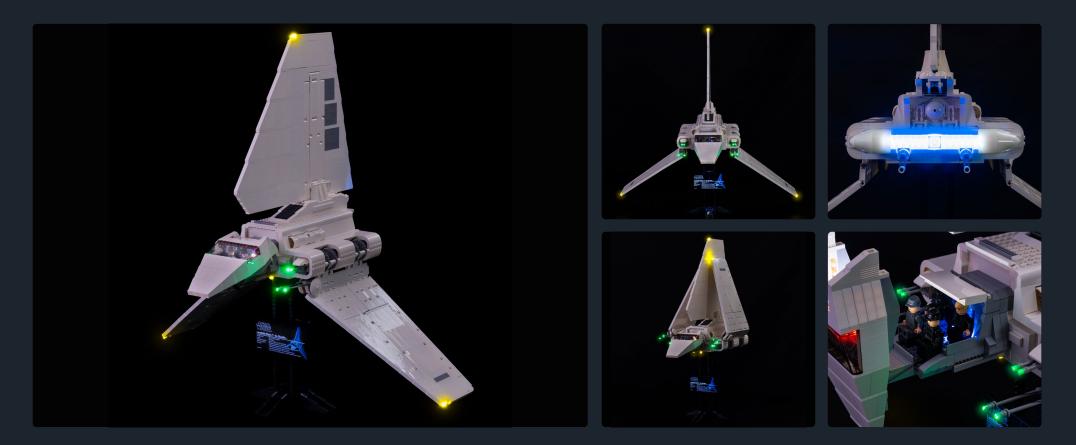




# **FINAL PRODUCT**

This finally completes installation of the Light My Bricks

LEGO<sup>®</sup> UCS Imperial Shuttle 10212 Light Kit.







# TROUBLESHOOTING

- Light My Bricks lighting kits contain individual components that are very small and can be easily damaged if not handled correctly.
- To prevent unnecessary damage to components, we highly recommend that the User Guide section, **"Important things to note"** is read carefully. Follow the handling procedures in the User Guide to help prevent faults and damages to your Light My Bricks components.

If you are experiencing issues with your Light My Bricks set, watch our troubleshooting video or read on for a list of common causes to help you troubleshoot.



Wenn Sie Probleme mit Ihrem Light My Bricks-Set haben, sehen Sie sich unser Video zur Fehlerbehebung an oder lesen Sie die Auflistung der häufigsten Ursachen, die Ihnen bei der Fehlersuche helfen hier.

Si vous rencontrez des problèmes avec votre kit Light My Bricks, regardez notre vidéo de dépannage ou consultez la liste des causes les plus fréquentes pour vous aider à les résoudre ici.

Se si verificano problemi con il set Light My Bricks, guardare il nostro video per la risoluzione dei problemi o leggere l'elenco delle cause più comuni per la risoluzione dei problemi qui.



## **Troubleshooting**

Firstly, ensure that the batteries have power using a battery charge gauge.

If the batteries have no power, replace the batteries.

If the batteries still have power, check to see if the batteries have been inserted correctly into the battery pack.

### Check for AA batteries using the AA battery pack

Inside the battery pack are symbols indicating which direction the AA battery should be inserted. The flat side of the battery should be paired with the spring side of the battery pack.

If the batteries have been installed correctly and your kit still isn't operating correctly, the next step is to check the wiring.







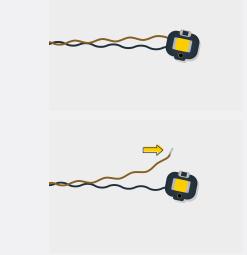
## **Troubleshooting**

#### **Check Your Wires**

In order for Light My Bricks components to fit in between and underneath LEGO® bricks, the components need to be very small. Due to this nature, Light My Bricks components can be easily damaged when not handled correctly.

Be careful when removing unpacked components out of the packaging and ensure not to forcibly pull at the wires as this can damage the soldering that attach the wires to the LEDs. If the wiring is detached from the LED itself, the light will not operate.

When connecting lights to your LEGO® set, check that there are no pinched wires underneath or in between bricks and plates. When the wires are pinched and the exposed wires are touching each other, this can cause a crosswire and the lights to not function correctly.





## **Troubleshooting**

### Check Your Expansion Board Ports/ Strip Light Ports / Effects Board Ports

It is important to note that connectors can only be inserted to the expansion board, strip light, or effects board ports in one direction.

Forcibly inserting connectors in the incorrect direction will result in damaging the pins inside each of the ports on your component board.

Not only will a light connected to the damaged port not work, but if the pins inside the port are bent to a point they are touching each other, this can result in all other lights in the system to stop working. This is a short circuit.





A short circuit can also result in overheating of the board, cable or batteries. If you suspect a short circuit, DISCONNECT POWER IMMEDIATELY Batteries can fail, catch fire, or even explode if left connected to a short circuit for too long.

If you suspect you have a faulty component due to a bent pin, try the following steps:

If you look carefully inside each of the ports, each port contains 2 small pins that should be straight. You will be able to identify a faulty port if it has any bent pins.













# **CONTACT US**

If you have an enquiry regarding the online shop, our products or a general enquiry please refer to our Frequently Asked Questions webpage. Alternatively, you can contact our Customer Services team by visiting our online support portal.

### support.lightmybricks.com

We thank you for purchasing this product and hope you enjoy!



lightmybricks.com

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