

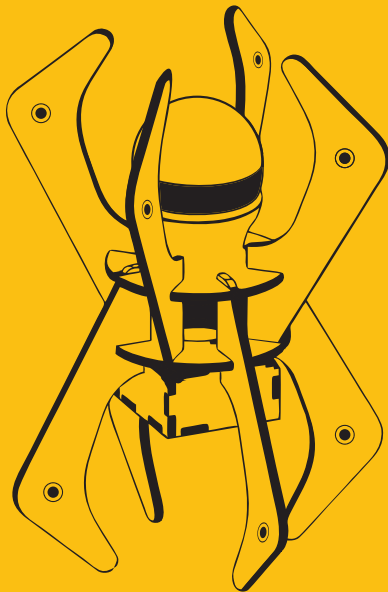


MAKER'S
ASYLUM

IOT Lamp

Assembly booklet

Make . Break . Create



For Ages 13+

Choking Hazard - Small parts, Not for under 3 years.

Assemble under Adult Supervision

Please keep this manual for future reference

Legal Disclaimer:

The lamp is a product of Maker's Asylum Innovation Pvt. Ltd.

Table of Contents:

About IOT Lamp	3
Skills & Specifications	4
Parts & Components	5
Instructions & Warning	6
Let's Begin Making!	7

About IOT Lamp:

With the world going wireless, the IoT plays a prominent role in our lives. Build your own Lamp and control it with a simple application on your mobile device. With a little bit of tweaking, you can also make the program react to your voice command.

In this course,

1. Learn how to Independently Design, Code and Build IOT products
2. Learn to work with Micro controllers like NodeMCU
3. Build your own lamp and program it

This Kit by Maker's Asylum will help you to venture into the World of IoT and also sets your course towards the Maker's Journey!

#makersgonnamake #tinkeringmadeeasy

IOT Lamp

Skills:

Assembly, Electronics, NodeMCU, Programming

Prerequisites:

1. Laptop (for coding)
2. Screw Driver
3. Wire stripper

IOT Lamp

Skills:

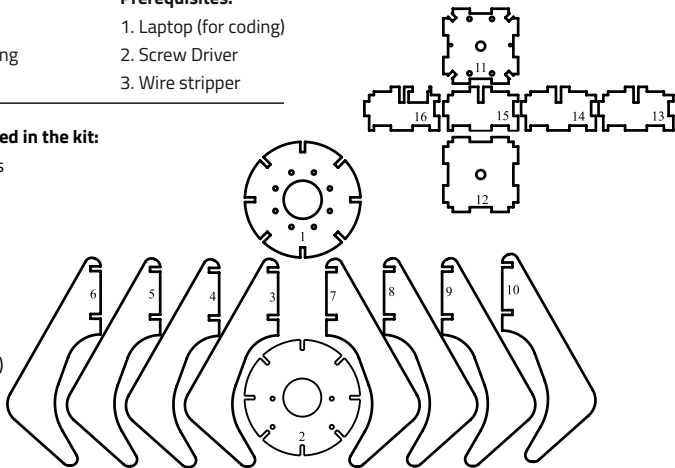
Assembly, Electronics,
NodeMCU, Programming

Prerequisites:

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Parts and Tools included in the kit:

- 1.Lamp Laser Cut Parts
- 2.Bulb Holder
- 3.Bulb
- 4.2 pin plug
- 5.Wires
- 6.Screws
- 7.Screw Driver
- 8.NodeMCU (ESP8266)
- 9.Relay module
- Jumper Cables



Instructions & Warnings:

Do not short circuit +ve and -ve of the battery and the electronics components. This will damage the battery/ ESP module

Make sure that the connections are being made under parental guidance. This project involves working with 220 Volts.

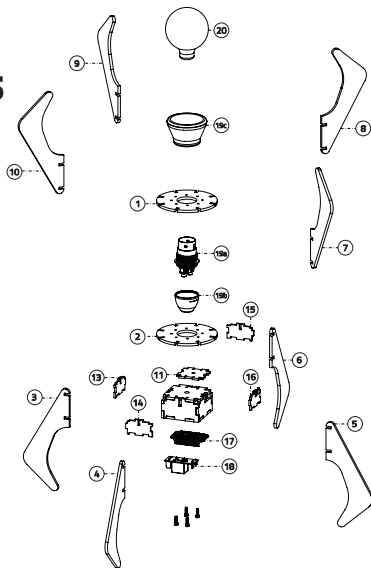
Check your electronics connection and software in your computer before assembling the lamp

Let's Begin Making!

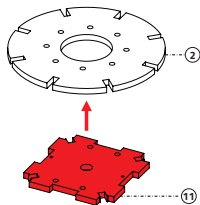
Step 1: Gather all the parts & components

Total Components

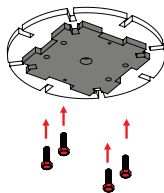
- 1 & 2 - Circular pieces x 2 (1 & 2)
- 3 to 10 - Lamp Legs x 8
- 11 to 16 - electronics enclosure box parts x6
- 17 - ESP8266
- 18 - Relay
- 19 - Bulb Holder
- 20 - Bulb



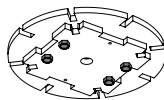
Step 2: Starting with the basics



Step 2a: Hold component (11) under component (2) and secure the two parts with the screws



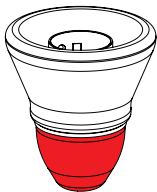
Step 2b: Make sure to leave the holes at the center of the pieces empty for now



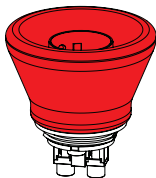
Step 2c: Take a note that the two holes at the center of the pieces should be left empty for now.

Step 3:

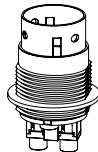
Unwind the cap of the bulb holder



Bulb Holder (#19)



Step 3a: Make a connection after unscrewing the bottom part of the bulb



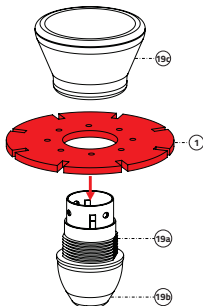
Step 3b: Keep aside the cap which was opened

Step 3c: Stripping the wire and connecting

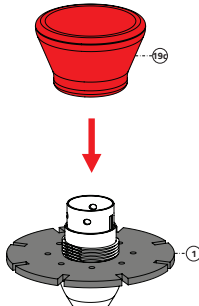


Scan Here!

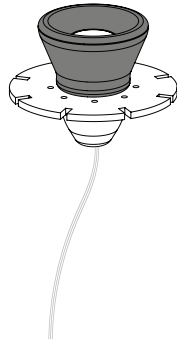
Step 4: Complete the Bulb setup



Step 4a: Place the circular cut out part on the top before reattaching the component (19c)

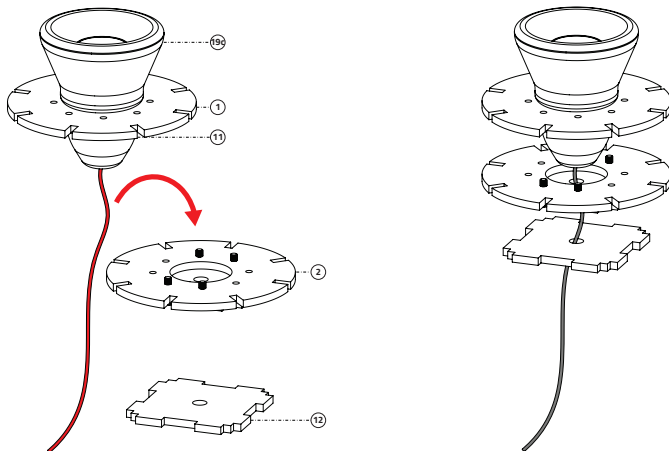


Step 4b: Screw 19c on top of the laser cut circular piece (1)



Note: Make sure that the top cover is tightened and the cover part is not wobbling

Step 5: Connecting the 2-pin connection



Step 5a: Pass the wires through part 2 and part 12 and connect the two pin

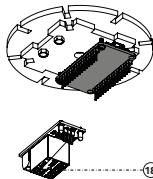
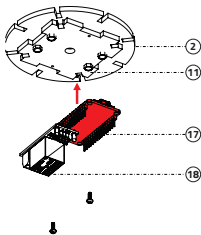
Step 5b: Connect the 2-pin plug here



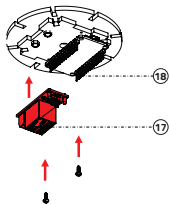
Step 5c: Check for the working of the lamp.

Step 5d: After the connection check, remove the bulb and put it aside

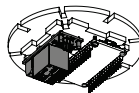
Step 6: Electronics set up



Step 6a: Refer to the image and hold the NodeMCU accordingly



Step 6b: Screw NodeMCU module using M2 screws

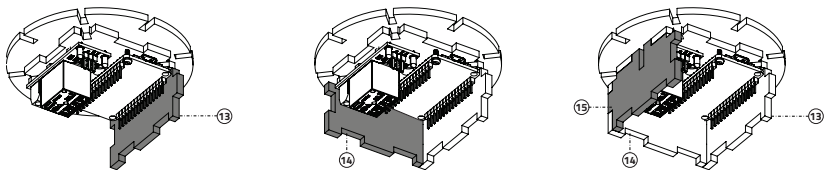


Step 6c: Fix the relay on the board besides the NodeMCU module, with double sided tape attached to the underside

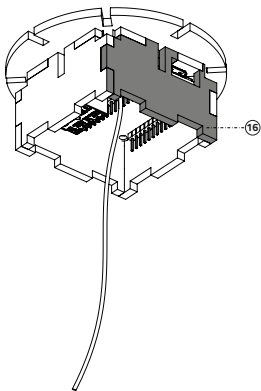
Step 7:

Schematic Connection of the electronics

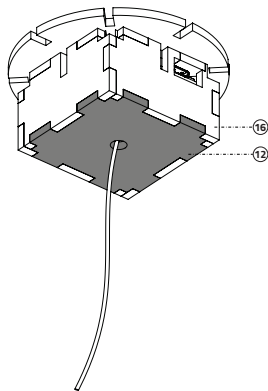
Step 8: Enclosure Assembly



Step 8a: Connect part 13, 14 and 15 to cover up the enclosure box

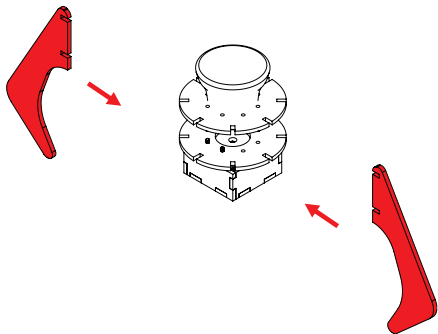


Step 8b: The MicroUSB port has to be attached in the direction of the hole, so that the cable can be attached easily while programming the lamp

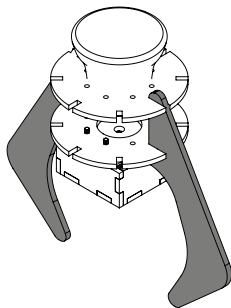


Step 8c: Finally close the box from the bottom, and make sure that it fits nicely

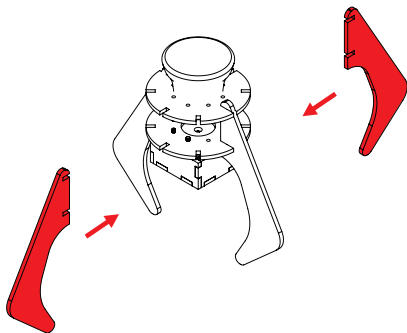
Step 9: Connect the legs



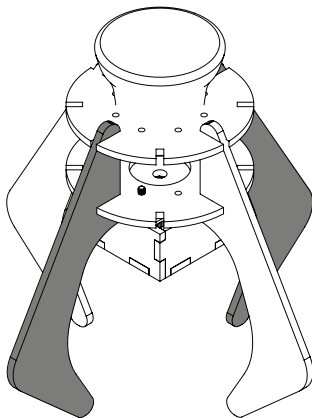
Step 9a: Connect the legs of the slots

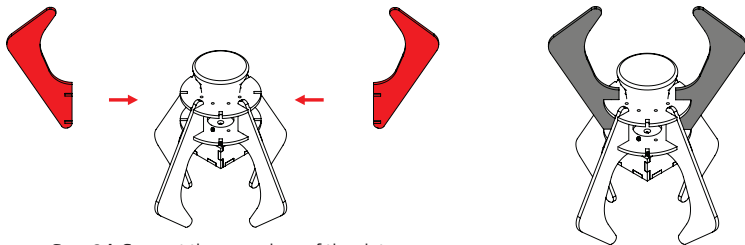


Step 9b: Attached the legs on the two sides to secure the two assembly components

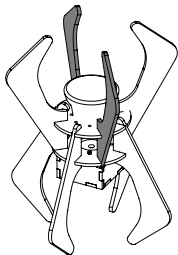


Step 9c: Connect the other legs of the slots

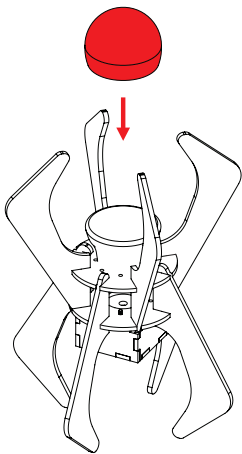




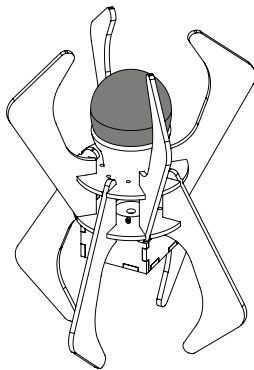
Step 9d: Connect the upper legs of the slots



Step 9e: Connect the other two upper legs of the slots



Step 9f: Connect the Bulb to the slots



Completed IOT Lamp!



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