

Twitter Controlled Christmas Lights

Instruction Manual

You will need:

1. Christmas lights

(Specifically the “Connectable starter kit LED multi-function light set” bought from Office Works was used)

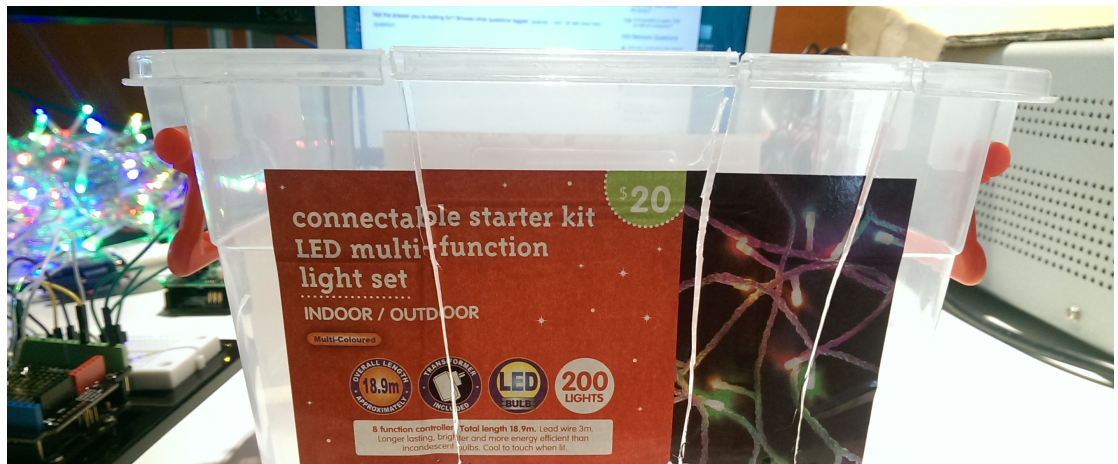


Figure 1: Connectable starter kit LED multi-function light set box.

2. Arduino Uno with inbuilt Ethernet Shield
3. Twitter account
4. MQTT

Instructions:

Step 1. Attach the Christmas lights to the Arduino with the help of *figure 2* below.

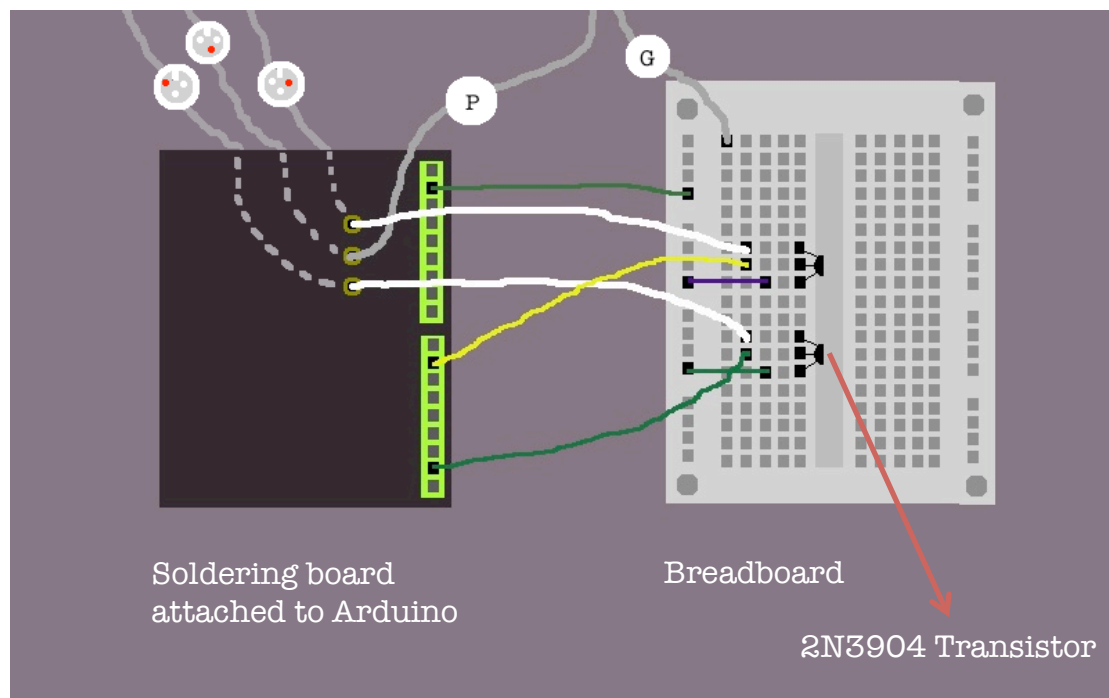


Figure 2: Layout of hardware.

Step 2. Open the CL.py python script and add your own twitter account information as asked of in lines 8-12.

```
8  # ----- INSERT YOUR ACCOUNT INFORMATION BELOW -----
9  CONSUMER_KEY = "INSERT YOUR CONSUMER KEY HERE"
10 CONSUMER_SECRET = "INSERT YOUR CONSUMER SECRET KEY HERE"
11 ACCESS_KEY= "INSERT YOUR ACCESS KEY HERE"
12 ACCESS_SECRET = "INSERT YOUR ACCESS SECRET KEY HERE"
```

Figure 3: Lines 8-12 of python script CL.py.

Step 3. Open MQTT and subscribe to topic "ChristmasLights"

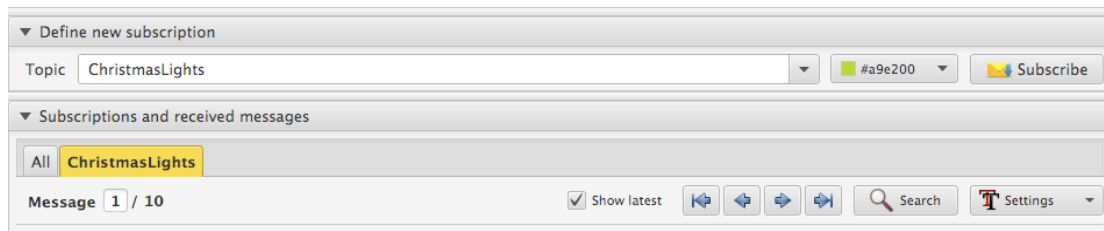
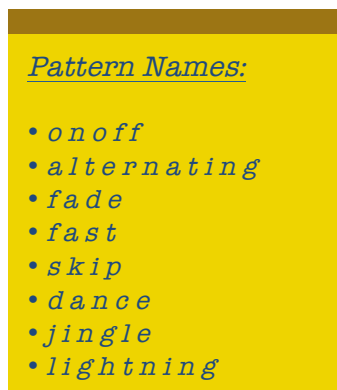


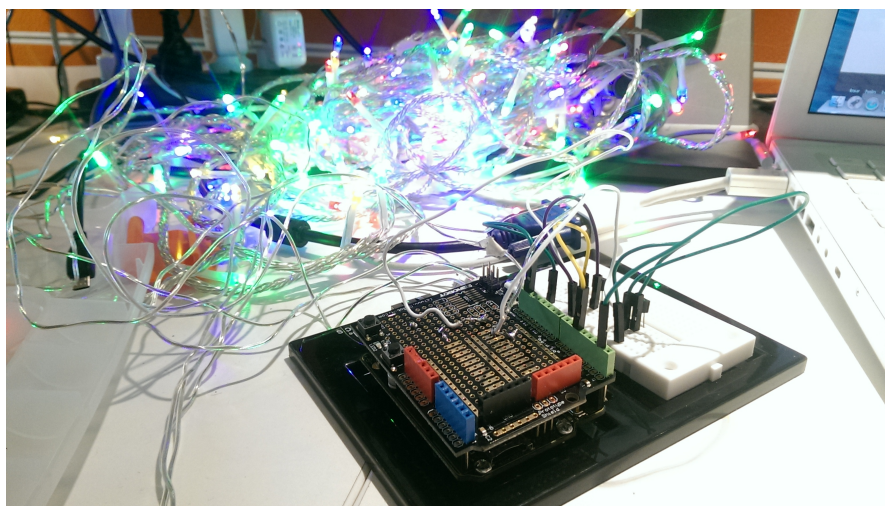
Figure 4: Snapshot of MQTT.

Step 4. Run the python script.

Step 5. Message a pattern name to the twitter account.



Step 6. Enjoy the amazing light display!



Step 7.

What now? Edit the `TwitterXmasLights.ino` to make your own light patterns!