

# USER MANUAL

## DOOR MONITOR

GROUP 20

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- Make sure that your hands and devices are both dry when **plugging** in the setup.
- Avoid **meddling** with the setup during rain.
- Unplug the power supply during **lightning** to avoid frying the internal circuits,

### **About the Product**

This product can help you open the door using nothing but your android application and also get an image of the person staying outside with a click of a button. Also, to manually open the door securely there is a keypad and a display in which you can open the door by inserting the correct password.

The device contains

- Two Arduino Uno boards.
- A WIFI module.
- A 0.3 MP camera.
- A 4x4 keypad.
- A 16x2 LCD display.
- A solenoid door lock.
- Android application.

## **How to Setup**

Our product contains a box which contains the Arduino, a keypad and the LCD display and also the solenoid lock. This box has a power which should be connected to a power supply.

And a separate camera which should be placed at a good position so that you can capture an image of the person at the front door.

If you need any help with setting up or have difficulty in setting up please contact us anytime.

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## **Information about operation.**

You will be provided with a two mac addresses and two IP addresses mapped to those mac addresses. You need to go to your router setting by typing the URL of the IP in the browser. Then you will need to go to setting DHCP and then DNS settings and set static IP to the given mac addresses.

Firstly, you need to plug in the box to a current supply using the given power pack. Then you should observe the display is powered up.

Soon as the display is powered up you should be able to see insert password or change password. If this is the first time you need to go to change password and add the password you need.

After setting up the password if you enter the correct password then the solenoid lock opens. If an incorrect password is entered thrice the display and keyboard freezes for a given time delay.

Then you need predefine a proper challenge which is only known by your family members or authorized personnel. For example, let's say you decided on adding

the first number and the final number of the challenge then to connect of the challenge you get from the server is 16723 then your response should be (1+3) 4.

Then you need to give the specific usernames of each authorized member to the Arduino. Only these usernames are allowed to connect.

Next you need to set the camera where the person entering can be seen clearly. There is no need to provide power we have given already provided you with a battery. You will need to replace it after about 6 months of use.

Now you can open the app and connect only if properly authorized and open and close the door as you please. Also, you can get the image of the person who is in front at any time from the click of the button.

For more information on how the operation work feel free to watch the videos given below.

- [https://www.youtube.com/watch?v=FHzFEZQiz\\_M](https://www.youtube.com/watch?v=FHzFEZQiz_M)
- <https://www.youtube.com/watch?v=jRmJqqWUpQo&t=66s>

### **Maintaining the product**

There is nothing much you need to do to maintain just make sure there is a constant power supply to the Arduino and make sure you unplug the setup during lighting storms.

And also, you need to make sure you change the batteries of the camera every six months for optimal performance.

### **Troubleshooting**

- If you have trouble with the getting an image make sure that the battery hasn't died.
- If there is a problem with connecting to the Arduino using the application first open the given box and check if any wire has come loose. If not the static IP configurations of the router and the mac addresses have been reset somehow