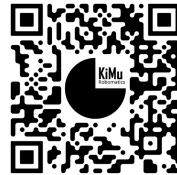


CONNECT WITH APP

Connecting the app via Wi-fi:

Connect your device through Wi-fi

Wi-fi Name: AUTOMATE
Password: automate



Points to remember while connecting the device to app:

- Connect all the components to the controller.
- Turn-off all the firewalls (eg. Anti-virus) if you are using the app in your desktop/laptop.
- Connect your mobile to the AUTOMATE Wi-fi and turn-off your mobile data/other Wi-fi.

Connecting the app via cable:

Connect your device through Micro-USB Cable
(For mobile Use Micro USB or USB-C OTG)



Give permission to your device to access AUTOMATE through USB cable.

Note:

The Wi-fi name & Password will be reset to default if you press the reset button for 5 secs.

UPLOADING PROGRAM

Click on the **MENU** button



Click on the
UPLOAD VIA CABLE / WIFI
button



SAVING & USING PROGRAM

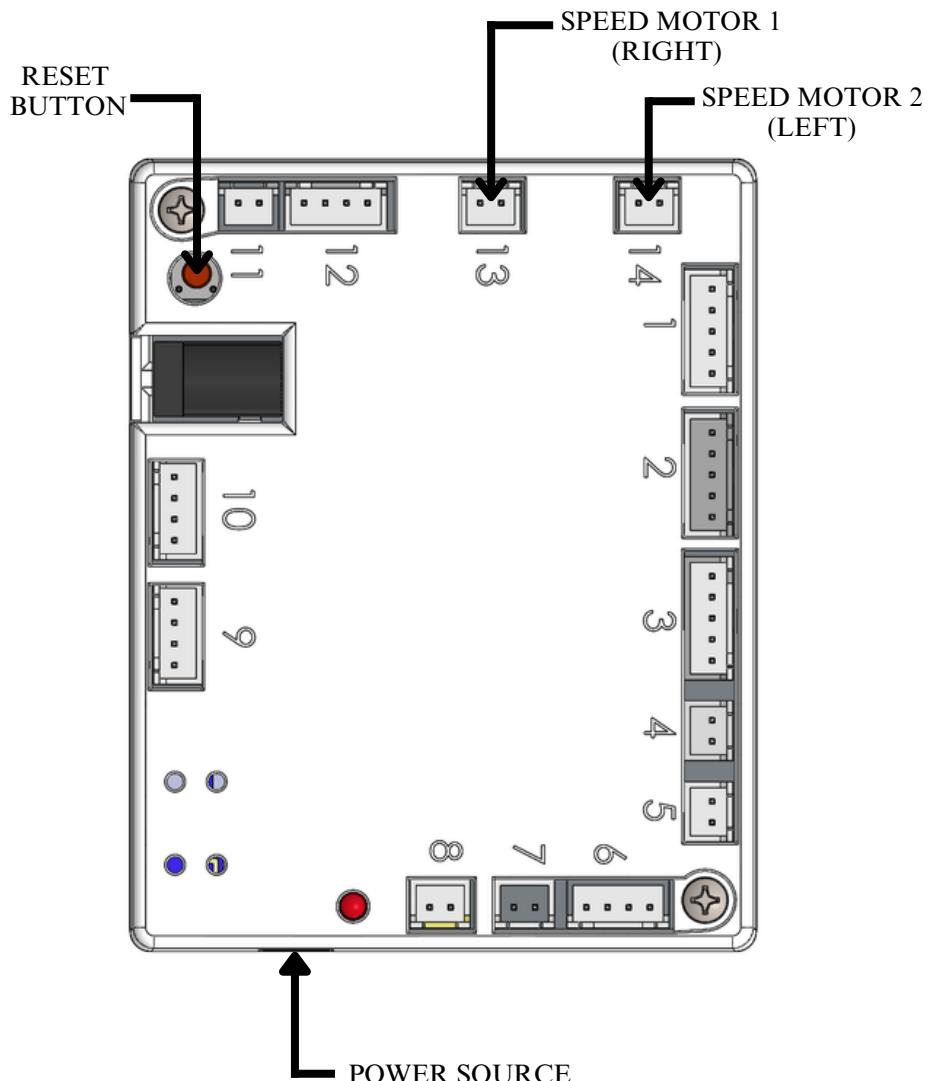
Click on **SAVE PROGRAM** to
save your configured program.

Click on **COPY PROGRAM** to
use the saved program.



REMOTE CONTROLLED CAR

Microcontroller connections



CONFIGURING THE APP

Remote controls setup

Here we have configured these steps in order to make it as arrow control like in games. User can configure at any steps they want.

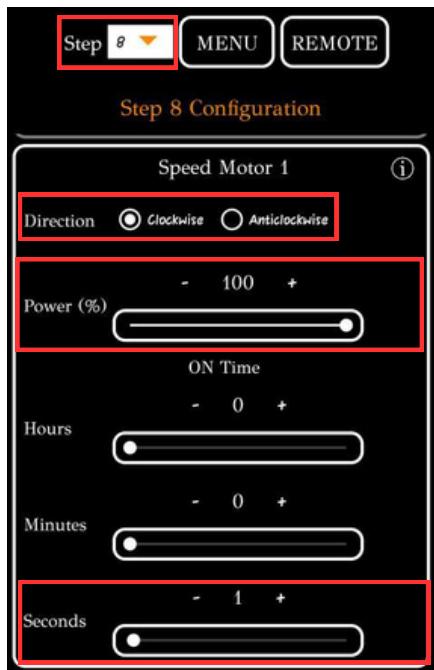
- STEP 8 - Forward motion
- STEP 14 - Backward motion
- STEP 10 - Leftward motion
- STEP 12 - Rightward motion



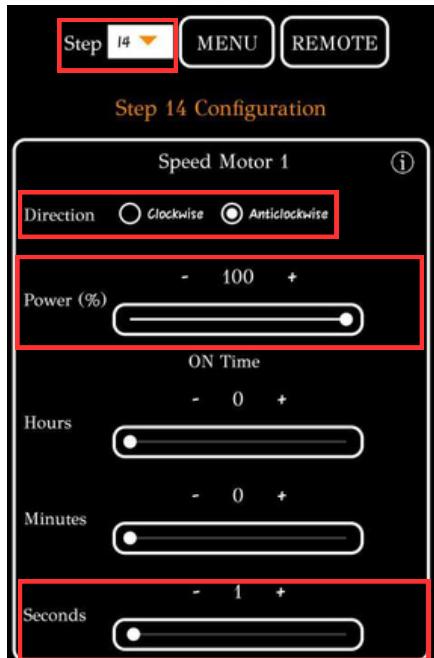
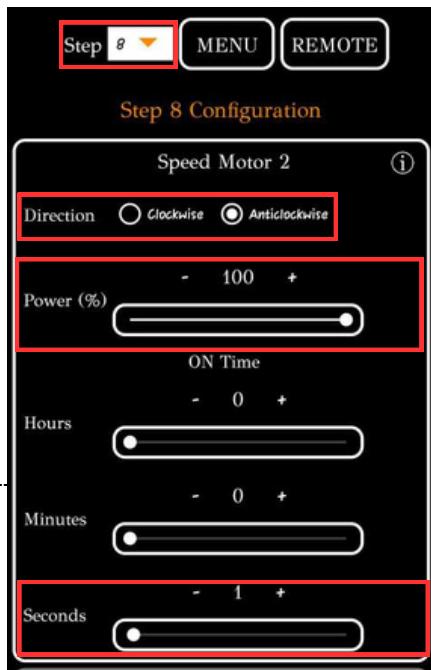
TO STOP THE CAR CLICK ON ANY BUTTON OTHER THAN THE ABOVE CONFIGURED BUTTONS.

Note:

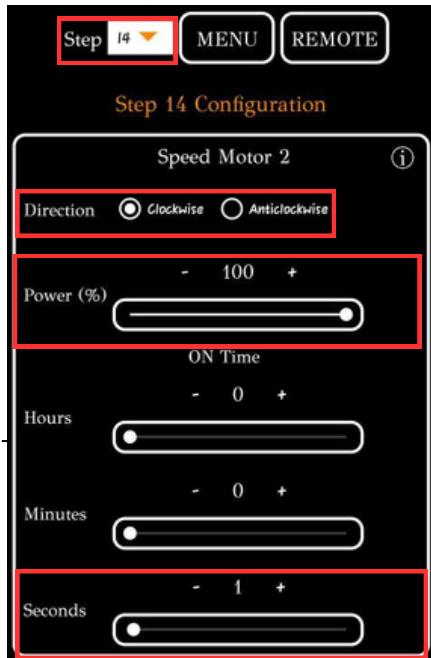
If you want to control it with a cable you can change it to "Cable" in the REMOTE page.

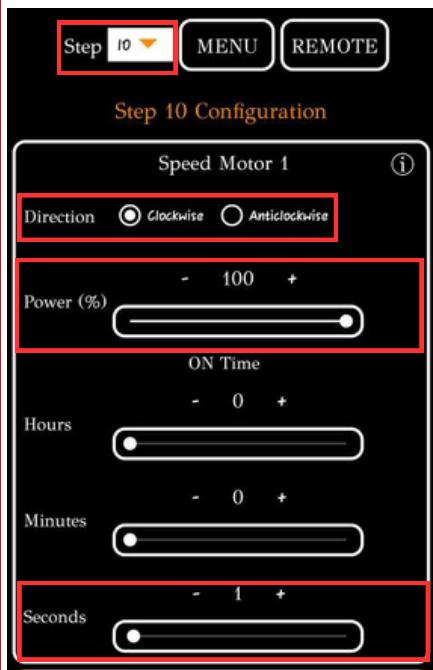
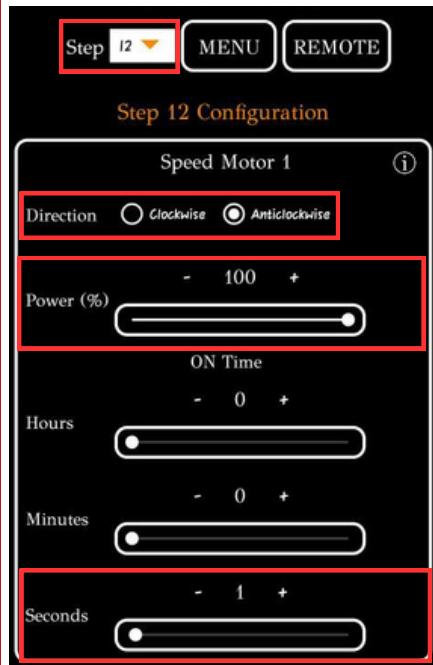
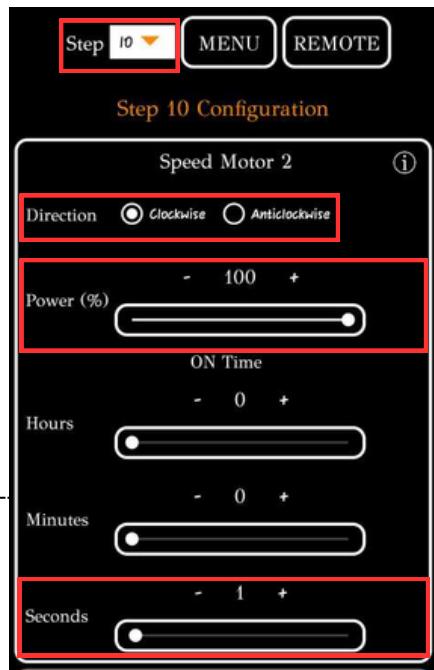
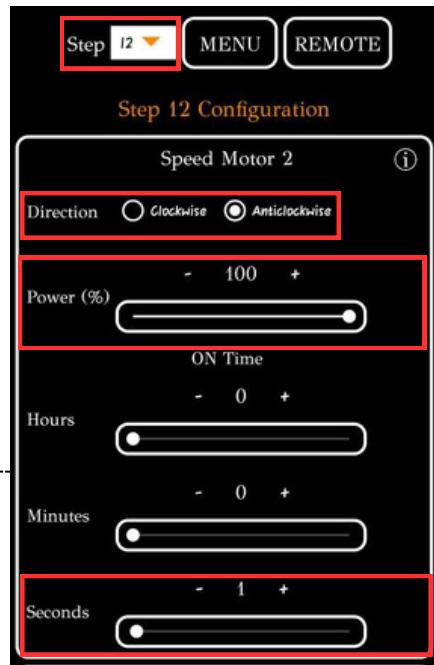


Forward Motion



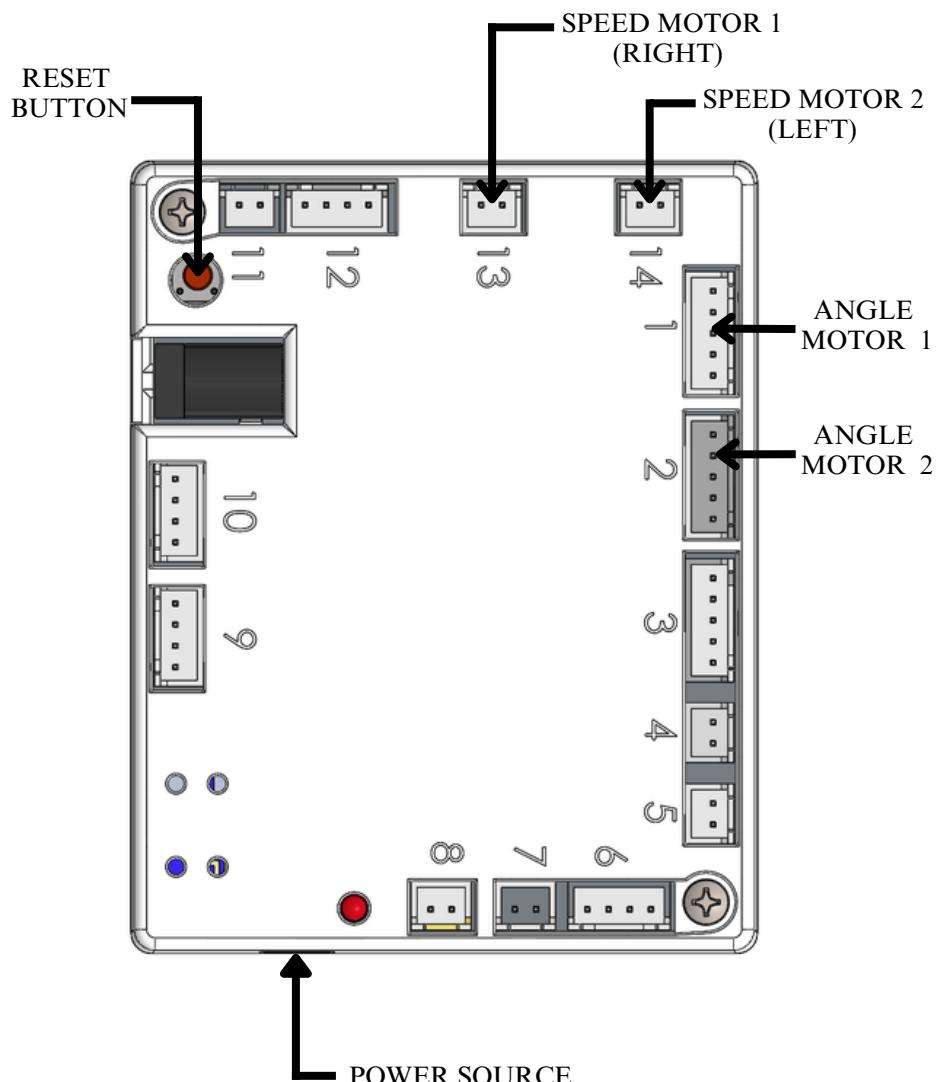
Backward Motion



*Leftward Motion**Rightward Motion*Upload this program, Now your RC Car is **READY TO RACE**

RC DUMP TRUCK

Microcontroller connections



CONFIGURING THE APP

Remote controls setup

Here we have configured these steps in order to make it as arrow control like in games. User can configure it at any steps they want.

STEP 2 - Dumping motion
 STEP 8 - Forward motion
 STEP 10 - Leftward motion

STEP 5 - Returning motion
 STEP 14 - Backward motion
 STEP 12 - Rightward motion

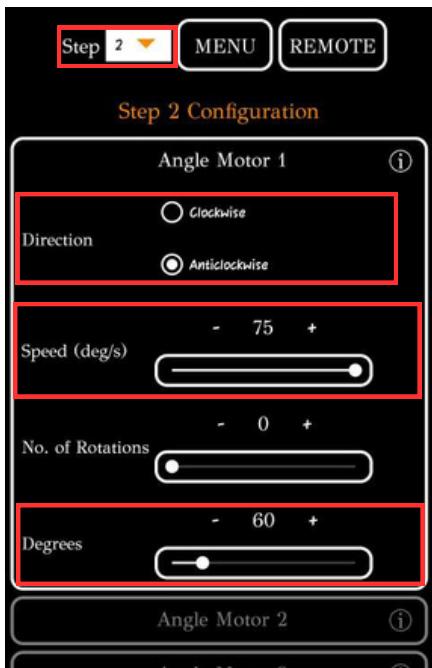


FOR CONFIGURING STEP 8,10,12,14 FOLLOW THE INSTRUCTIONS GIVEN IN RC CAR

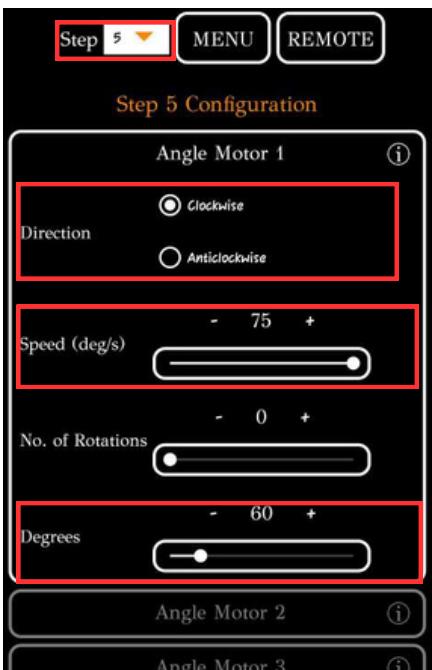
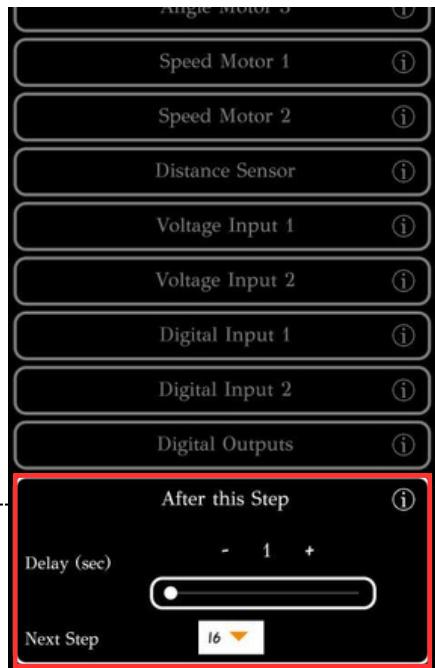
TO STOP THE TRUCK CLICK ON ANY BUTTON OTHER THAN THE ABOVE CONFIGURED BUTTONS.

Note:

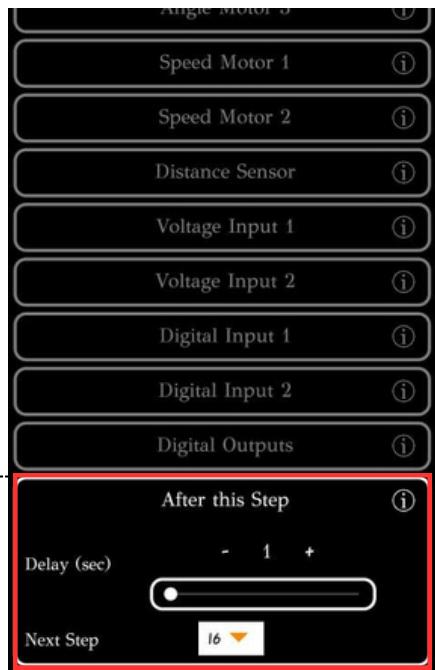
If you want to control it with a cable you can change it to "Cable" in the REMOTE page.



Dumping Motion



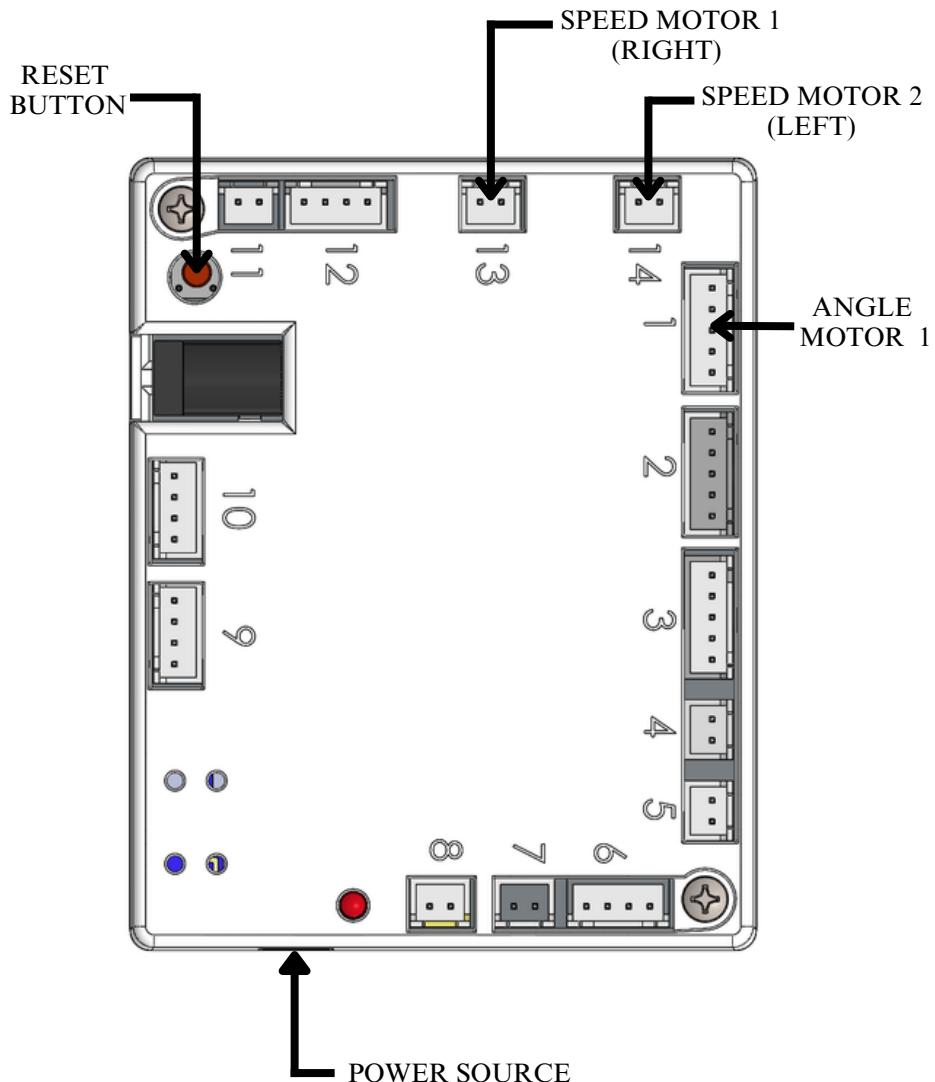
Returning Motion



Upload this program, Now your RC Dump truck is
READY TO DUMP your thoughts.

ROBOT SOCCER GAME

Microcontroller connections



CONFIGURING THE APP

Remote control set up

Here we have configured these steps in order to make it an arrow control like in games. Users can configure it at any steps they want.

STEP 1 - Kicking motion

STEP 8 - Forward motion

STEP 10 - Leftward motion

STEP 4 - Returning motion

STEP 14 - Backward motion

STEP 12 - Rightward motion

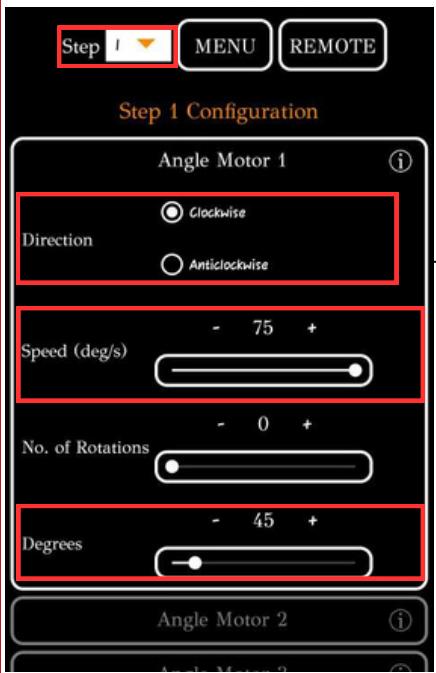


FOR CONFIGURING STEP 8,10,12,14 FOLLOW THE INSTRUCTIONS GIVEN IN RC CAR

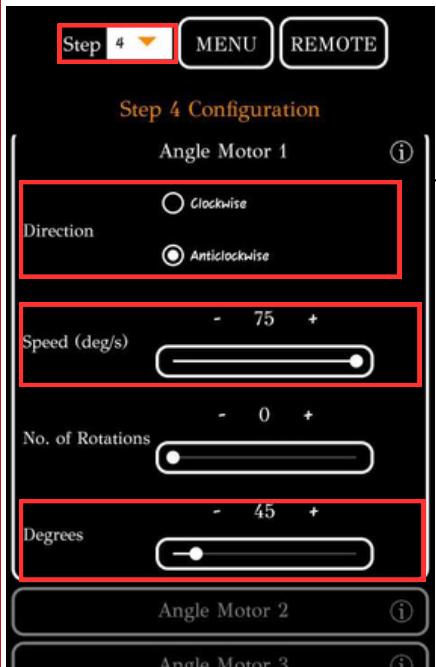
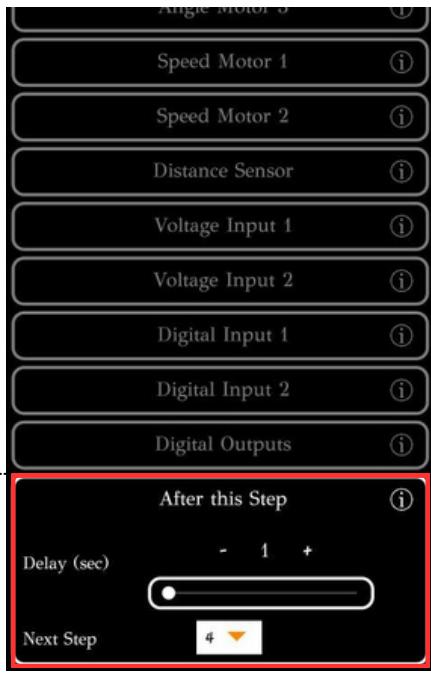
TO STOP THE ROBOT CLICK ON ANY BUTTON OTHER THAN THE ABOVE CONFIGURED BUTTONS.

Note:

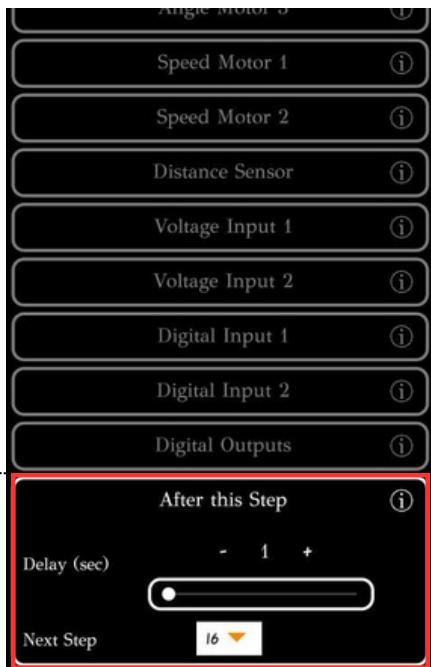
If you want to control it with a cable you can change it to "Cable" in the REMOTE page.



Kicking Motion



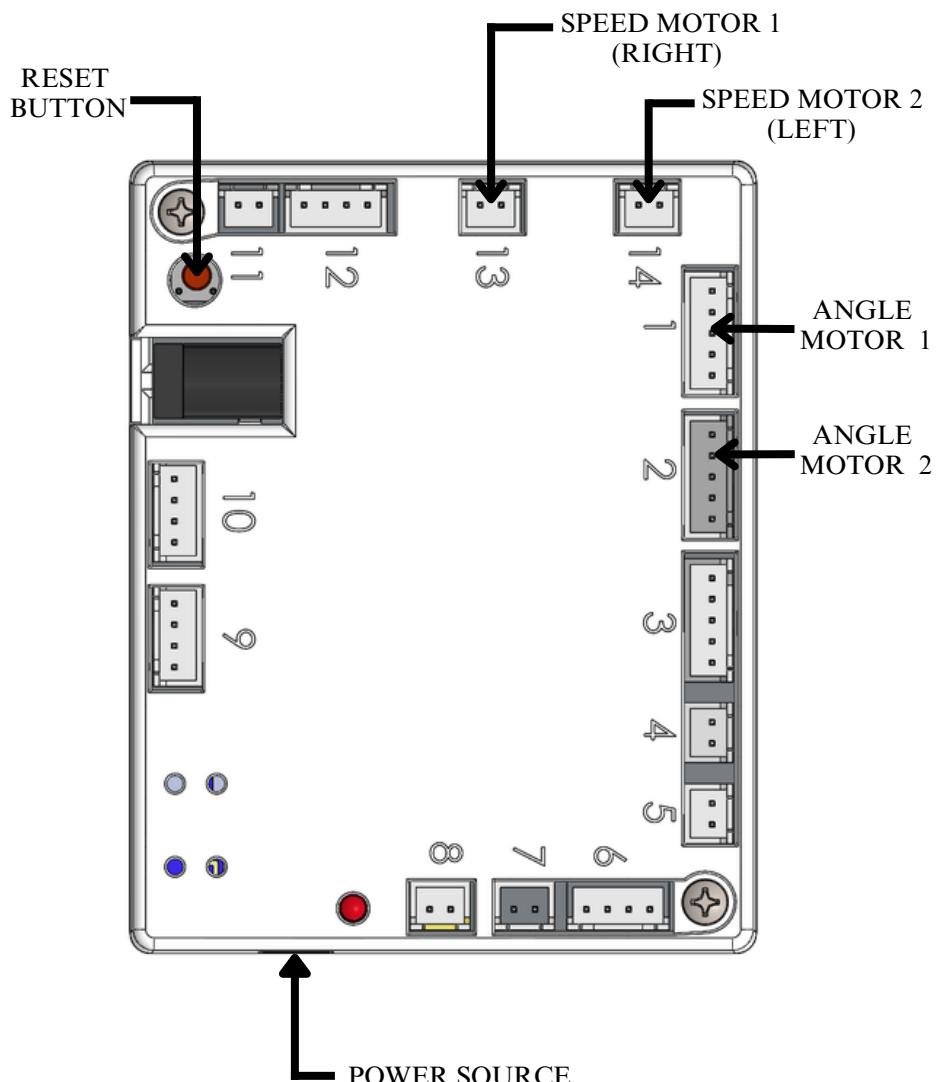
Repositioning Motion



Upload this program, Now your Soccer Robo is
READY TO PLAY

EXCAVATOR

Microcontroller connections



CONFIGURING THE APP

Remote controls setup

Here we have configured these steps in order to make it an arrow control like in games. Users can configure it at any steps they want.

STEP 7 - Arm 1 Dump

STEP 8 - Forward motion

STEP 10 - Leftward motion

STEP 13 - Arm 1 Revive

STEP 9 - Arm 2 Dump

STEP 14 - Backward motion

STEP 12 - Rightward motion

STEP 15 - Arm 2 Revive

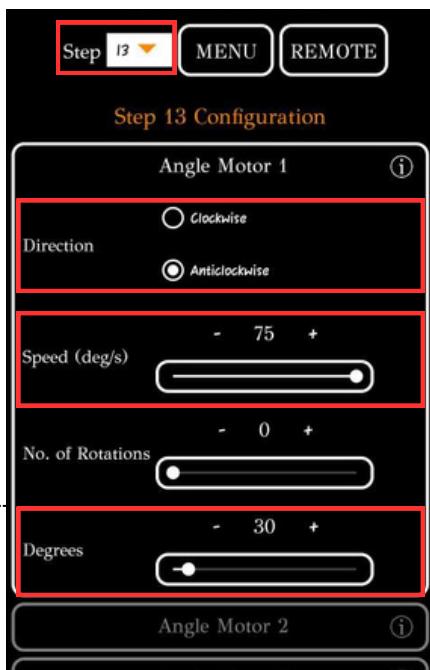
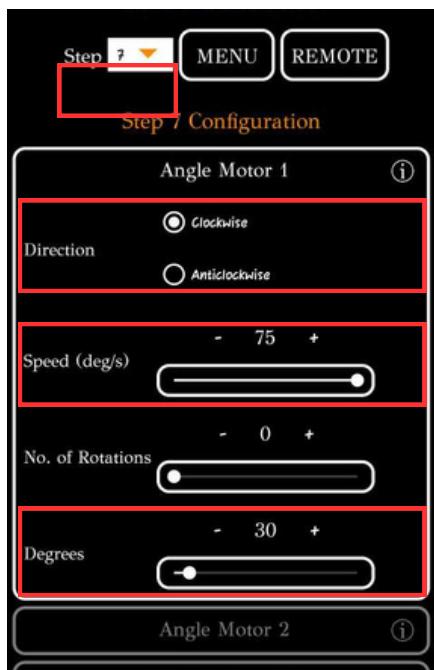


FOR CONFIGURING STEP 8,10,12,14 FOLLOW THE INSTRUCTIONS GIVEN IN RC CAR

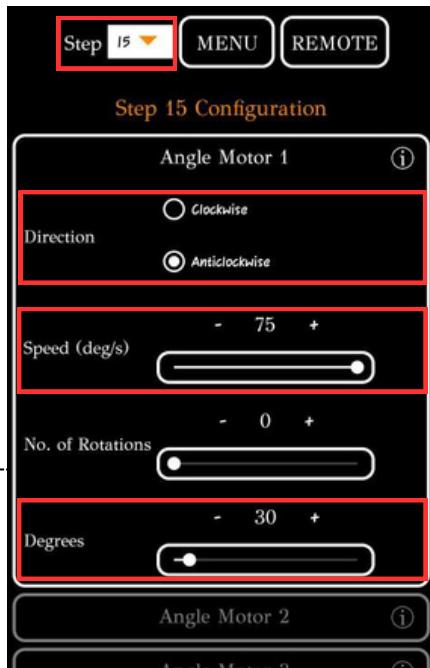
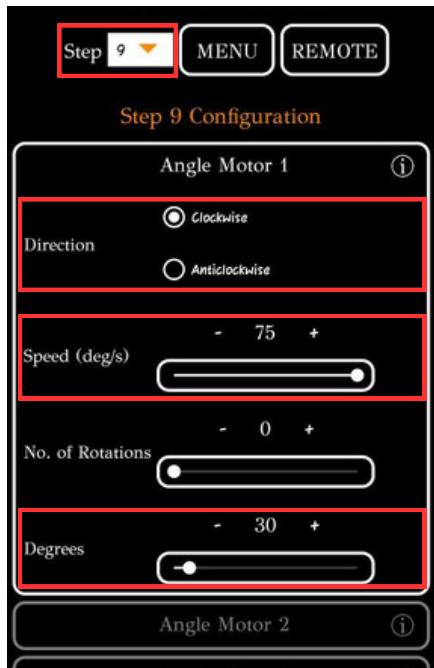
TO STOP THE EXCAVATOR CLICK ON ANY BUTTON OTHER THAN THE ABOVE CONFIGURED BUTTONS.

Note:

If you want to control it with a cable you can change it to "Cable" on the REMOTE page.



ARM 1 Motion

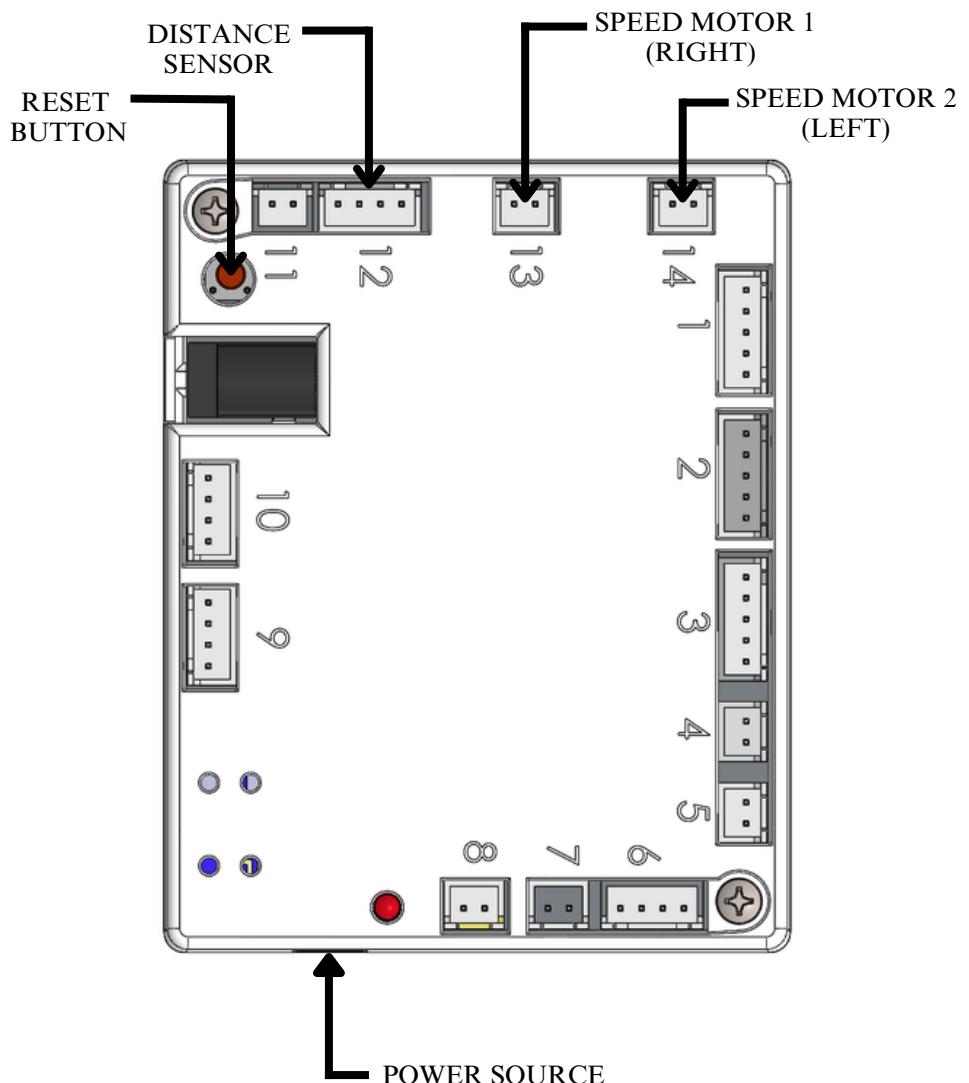


ARM 2 Motion

Upload this program, Now your Excavator is
READY TO EXCAVATE

OBSTACLE AVOIDING ROBOT

Microcontroller connections



CONFIGURING THE APP

Remote controls setup

Here we just need to start the obstacle avoiding robot rest of things are taken care of by the DISTANCE SENSOR.

STEP 1 - Start-Move forward
[STEP 2 - Turn rightward]



TO STOP THE OAR CLICK ON ANY BUTTON OTHER THAN THE ABOVE CONFIGURED BUTTONS.

Note:

If you want to control it with a cable you can change it to "Cable" in the REMOTE page.

Step 1 MENU REMOTE

Step 1 Configuration

Speed Motor 1 (i)

Direction Clockwise Anticlockwise

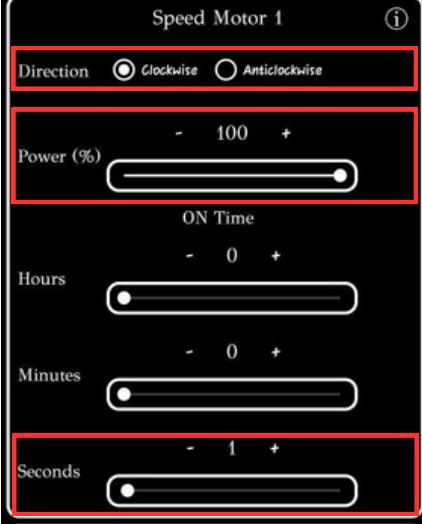
Power (%) - 100 +

ON Time - 0 +

Hours - 0 +

Minutes - 0 +

Seconds - 1 +



Step 1 MENU REMOTE

Step 1 Configuration

Speed Motor 2 (i)

Direction Clockwise Anticlockwise

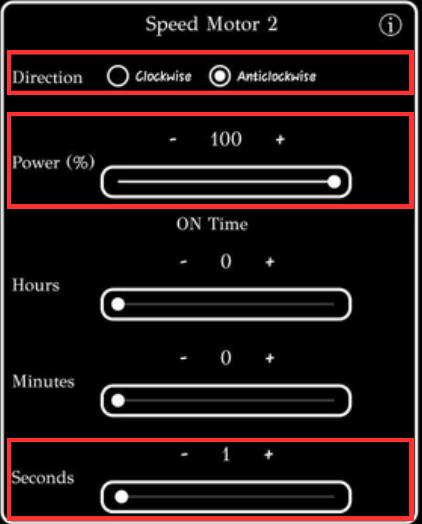
Power (%) - 100 +

ON Time - 0 +

Hours - 0 +

Minutes - 0 +

Seconds - 1 +



Step 1 MENU REMOTE

Step 1 Configuration

Angle Motor 1 (i)

Angle Motor 2 (i)

Angle Motor 3 (i)

Speed Motor 1 (i)

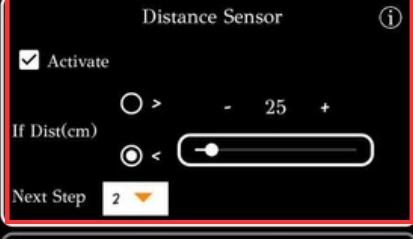
Speed Motor 2 (i)

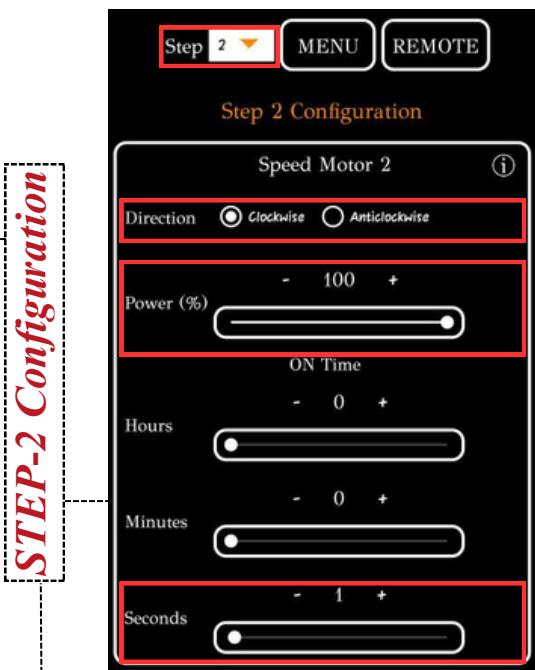
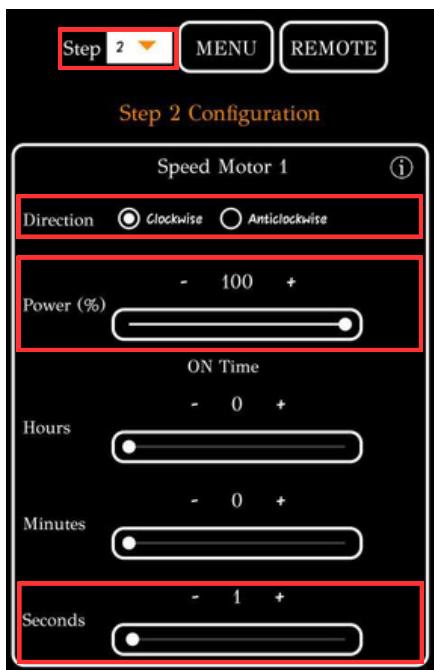
Distance Sensor (i)

Activate

If Dist(cm) > - 25 +
 <

Next Step 2 ▾





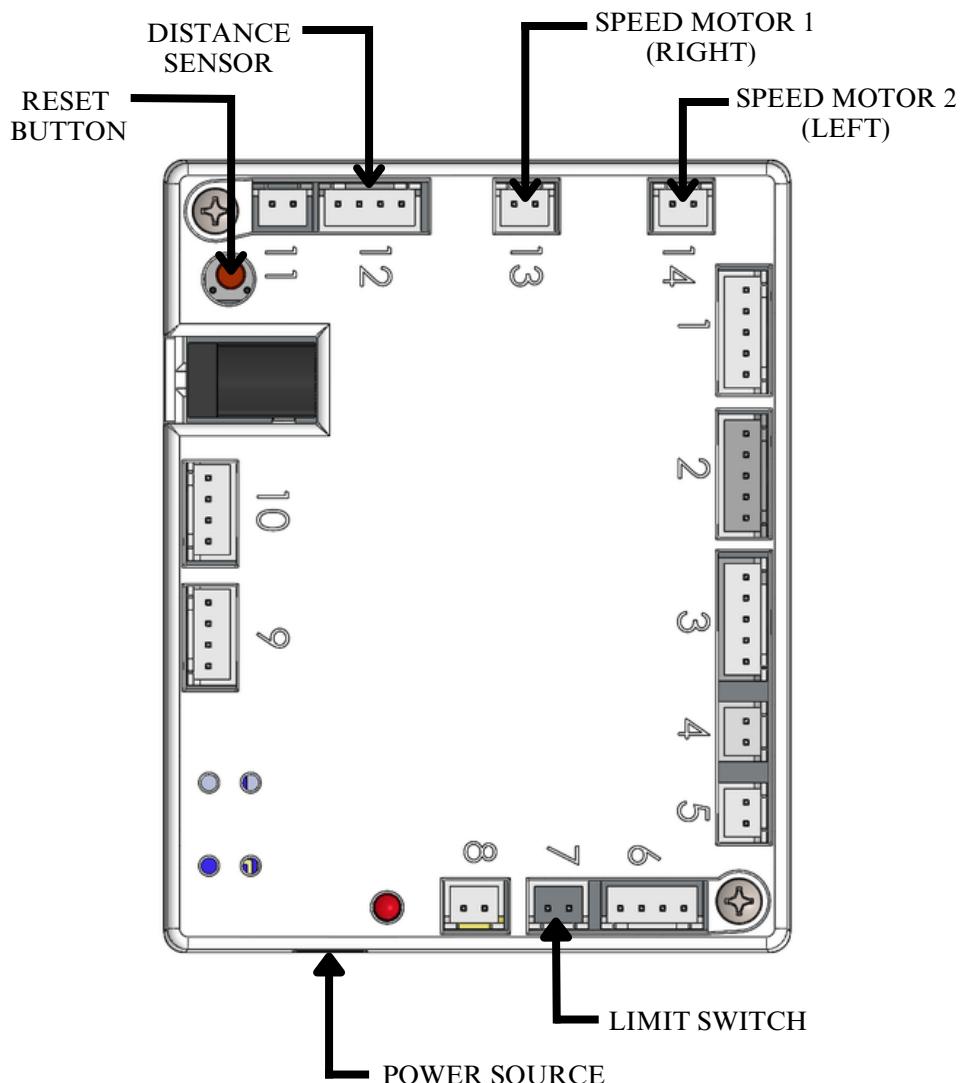
STEP-2 Configuration



Upload this program, Now your Obstacle avoiding robot is
READY TO RUN

OBSTACLE AVOIDING ROBOT WITH FAIL SAFE MECHANISM

Microcontroller connections



CONFIGURING THE APP

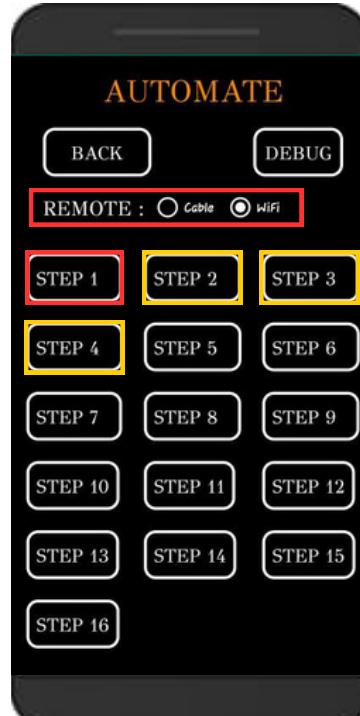
Remote controls setup

Here we just need to start the obstacle avoiding robot with fail safe mechanism rest of the things are taken care of by the DISTANCE SENSOR & LIMIT SWITCH.

STEP 1 - Start-Move forward

[STEP 3 - Move backward]

[STEP 2&4 - Turn rightward]



TO STOP THE OAR CLICK ON ANY BUTTON OTHER THAN THE ABOVE CONFIGURED BUTTONS.

Note:

If you want to control it with a cable you can change it to "Cable" in the REMOTE page.

Step | MENU REMOTE

Step 1 Configuration

Speed Motor 1

Direction Clockwise Anticlockwise

Power (%) - 100 +

ON Time - 0 +

Hours

Minutes - 0 +

Seconds - 1 +

STEP-1 Configuration

Step | MENU REMOTE

Step 1 Configuration

Speed Motor 2

Direction Clockwise Anticlockwise

Power (%) - 100 +

ON Time - 0 +

Hours

Minutes - 0 +

Seconds - 1 +

Step | MENU REMOTE

Step 1 Configuration

Distance Sensor

Activate

If Dist(cm) > - 25 +

<

Next Step 2

Voltage Input 1

Voltage Input 2

Digital Input 4

Activate

5 Volts 0 Volts

Next Step 3

Step 2 MENU REMOTE

Step 2 Configuration

Speed Motor 1 (i)

Direction Clockwise Anticlockwise

Power (%) - 100 +

ON Time - 0 +

Hours - 0 +

Minutes - 0 +

Seconds - 1 +

STEP-2 Configuration

Step 2 MENU REMOTE

Step 2 Configuration

Speed Motor 2 (i)

Direction Clockwise Anticlockwise

Power (%) - 100 +

ON Time - 0 +

Hours - 0 +

Minutes - 0 +

Seconds - 1 +

Step 2 MENU REMOTE

Step 2 Configuration

Angle Motor 1 (i)

Angle Motor 2 (i)

Angle Motor 3 (i)

Speed Motor 1 (i)

Speed Motor 2 (i)

Distance Sensor (i)

Activate

If Dist(cm) > - 60 +

<

Next Step 1

Step 3  MENU REMOTE

Step 3 Configuration

Speed Motor 1 (i)

Direction Clockwise Anticlockwise

Power (%) - 100 + 

ON Time - 0 + 

Hours - 0 + 

Minutes - 0 + 

Seconds - 1 + 

Step 3  MENU REMOTE

Step 3 Configuration

Speed Motor 2 (i)

Direction Clockwise Anticlockwise

Power (%) - 100 + 

ON Time - 0 + 

Hours - 0 + 

Minutes - 0 + 

Seconds - 1 + 

Angle Motor 3 (i)

Speed Motor 1 (i)

Speed Motor 2 (i)

Distance Sensor (i)

Voltage Input 1 (i)

Voltage Input 2 (i)

Digital Input 1 (i)

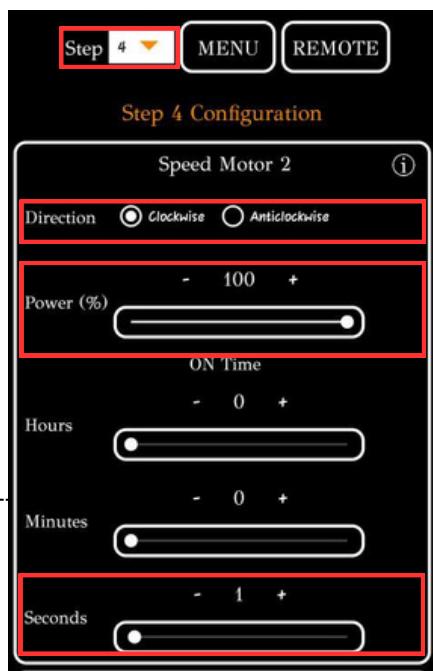
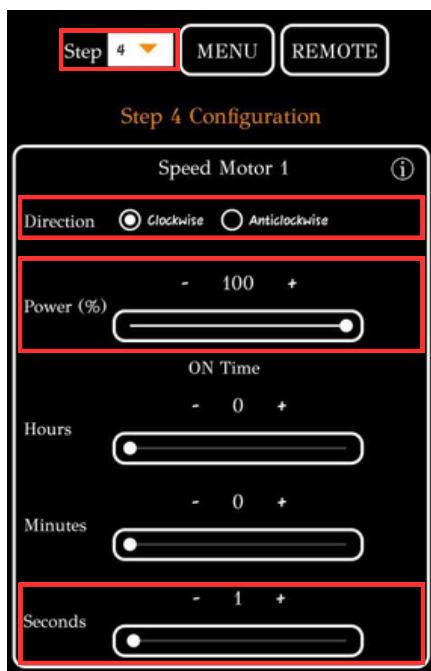
Digital Input 2 (i)

Digital Outputs (i)

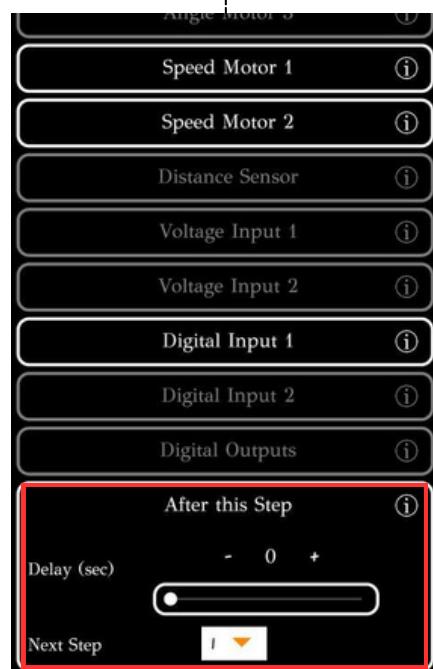
After this Step (i)

Delay (sec) - 0 + 

Next Step 



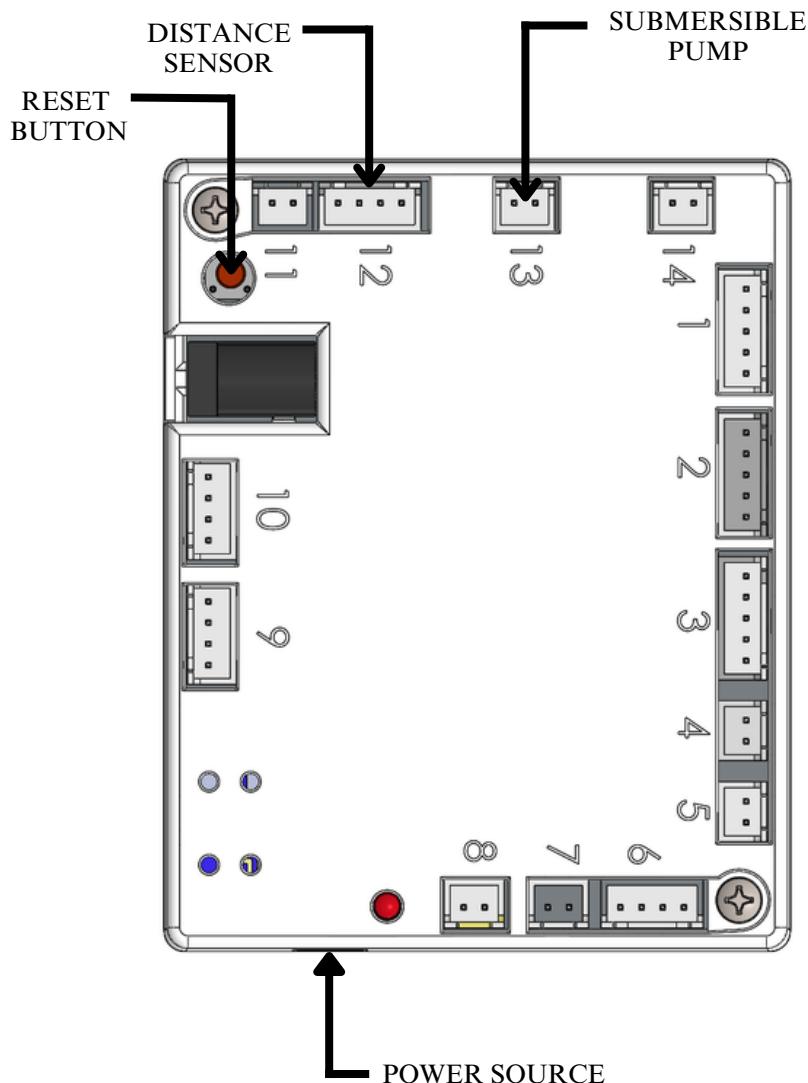
STEP-4 Configuration



Upload this program, Now your OAR with fail safe is
READY TO RUN

AUTOMATIC SANITIZER DISPENSER

Microcontroller connections



CONFIGURING THE APP

Remote controls setup

After initiating the task of an Automatic sanitizer dispenser when we showed our hands in front of the DISTANCE SENSOR, It will work.

STEP 1 - Sensing the distance

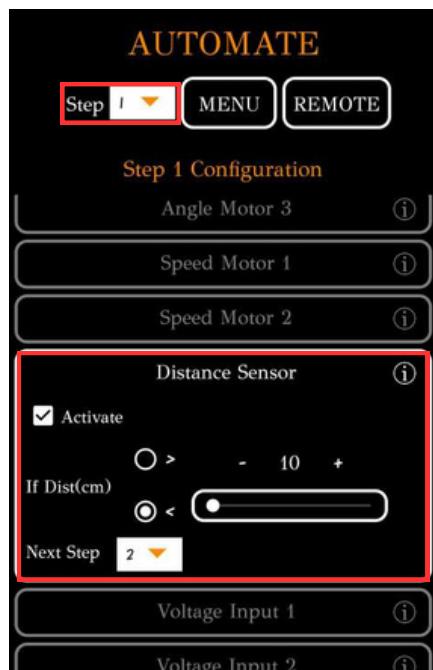
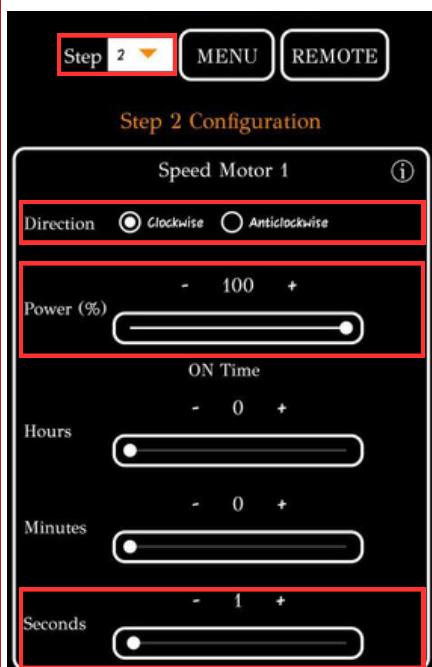
STEP 2 - Running of pump



TO STOP CLICK ON ANY BUTTON OTHER THAN THE ABOVE CONFIGURED BUTTONS.

Note:

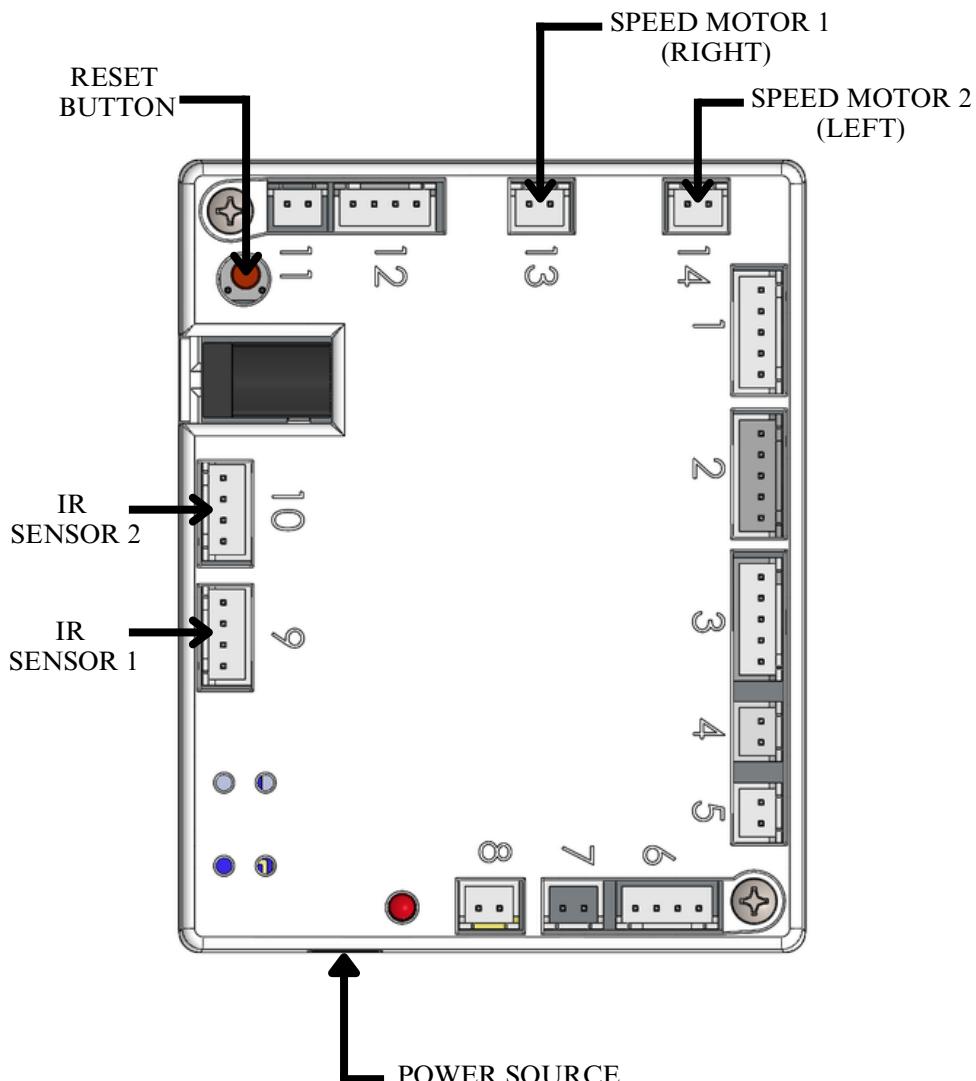
If you want to control it with a cable you can change it to "Cable" in the REMOTE page.

**STEP-1 Configuration****STEP-2 Configuration**

Upload this program, Now your Automatic sanitizer dispenser is **READY TO USE**

LINE FOLLOWING ROBOT

Microcontroller connections



Note:

Connect the IR sensors to U3 of sensor boards and connect sensor boards to connector no's 9,10 of the microcontroller(AUTOMATE).

CONFIGURING THE APP

Remote controls setup

After programming and placing the robot in the black track it will start to move by following the track you created.

STEP 1 - Forward Motion

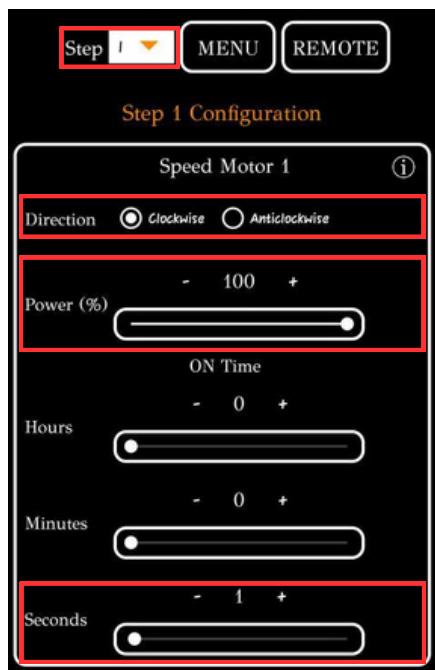
STEP 2 - IR sensing and deflection



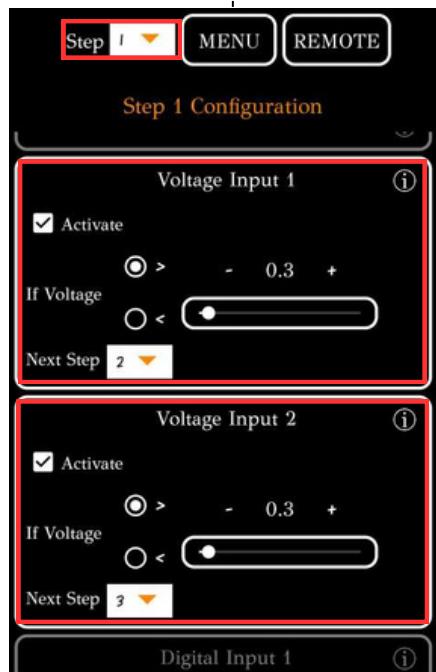
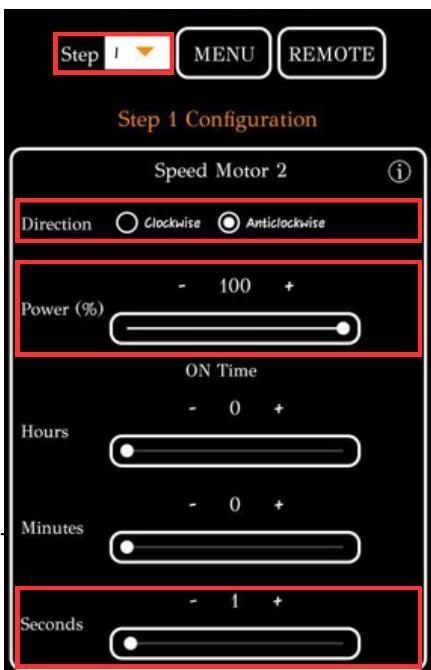
TO STOP THE ROBOT CLICK ON ANY BUTTON OTHER THAN THE ABOVE CONFIGURED BUTTONS.

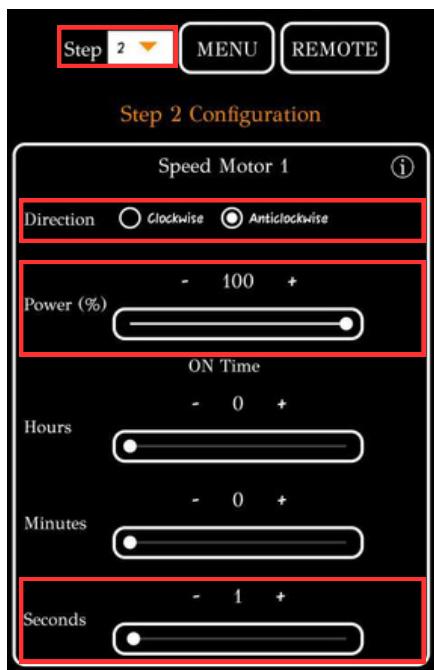
Note:

If you want to control it with a cable you can change it to "Cable" in the REMOTE page.

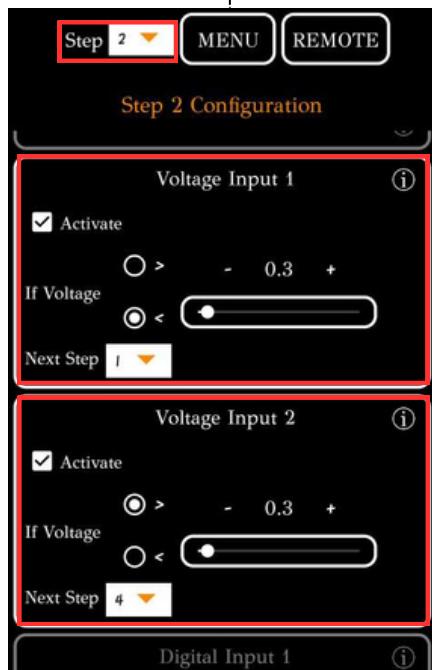
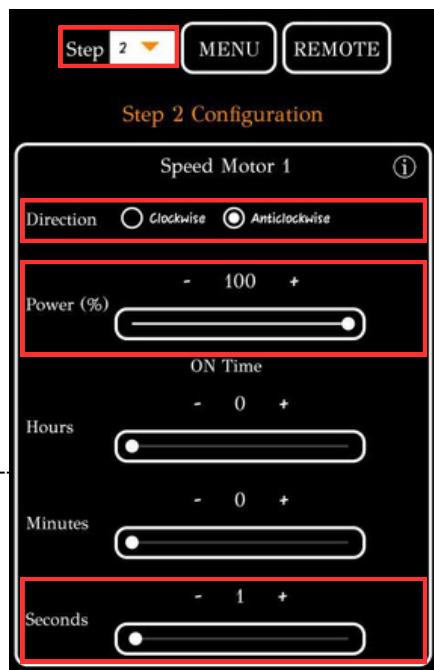


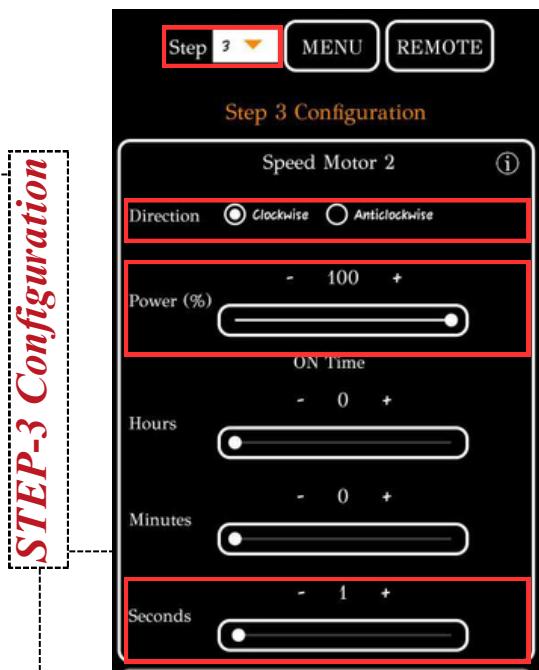
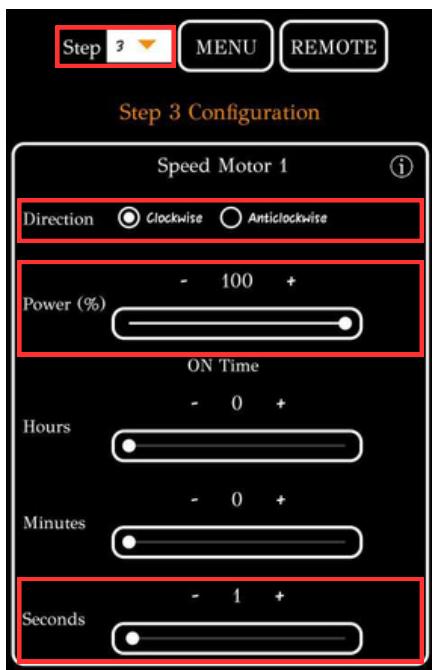
STEP-1 Configuration



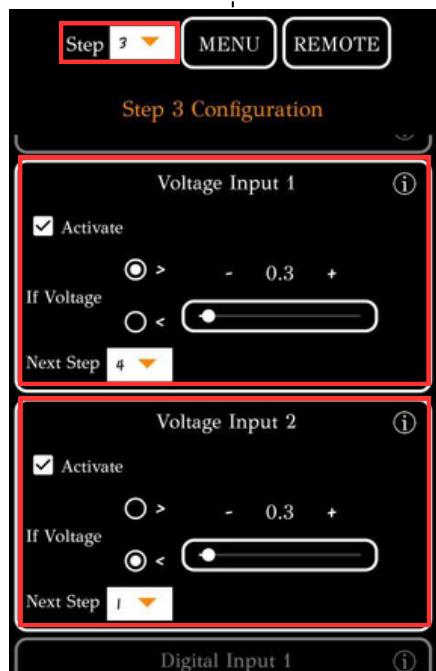


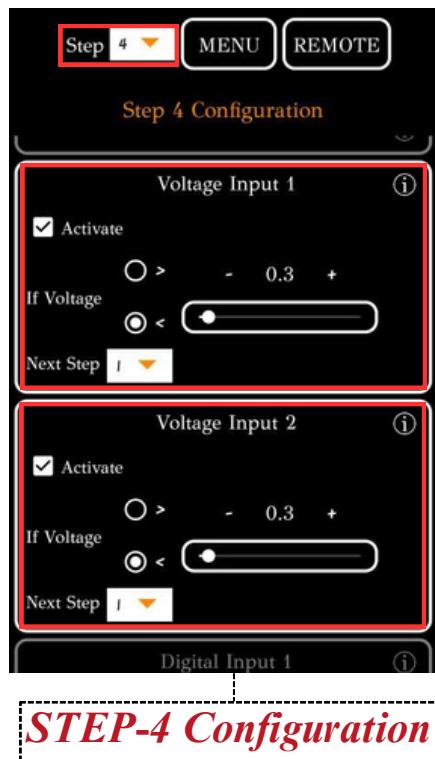
STEP-2 Configuration





STEP-3 Configuration

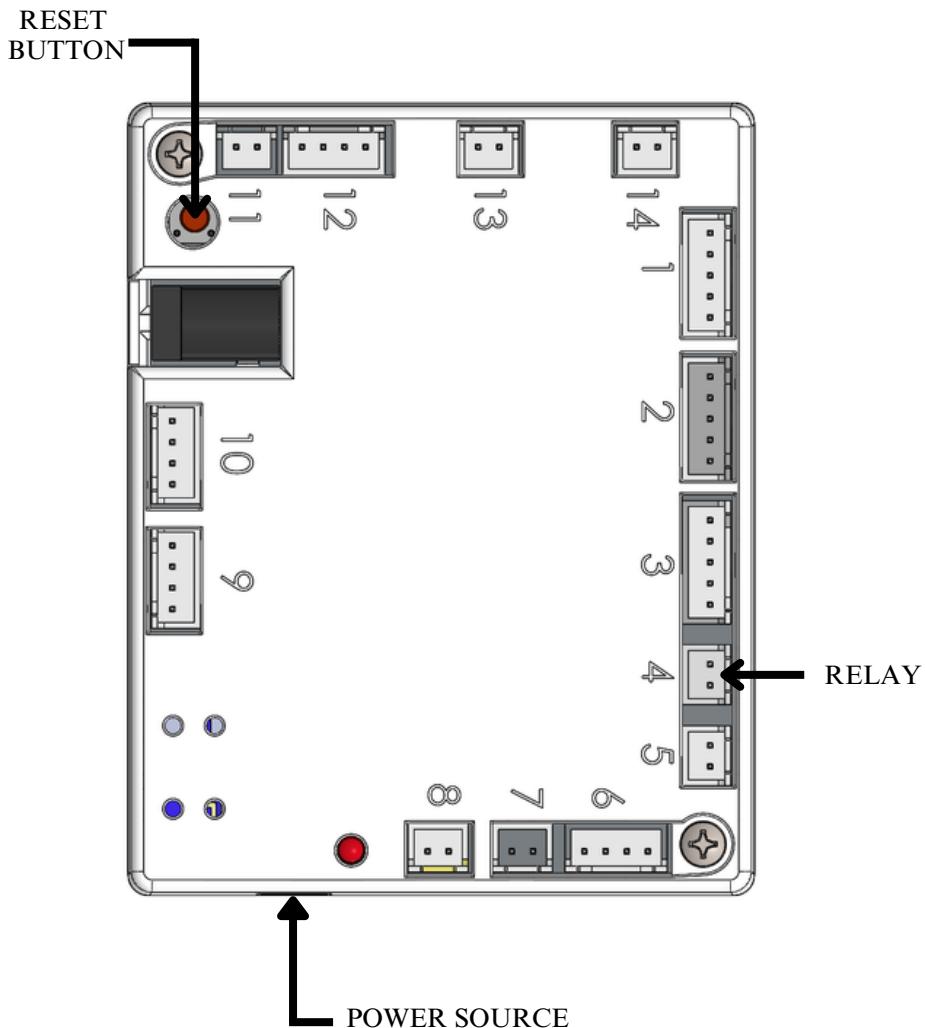




Upload this program, Now your Line following robot
is **READY TO RUN**

LIGHT BULB ON/OFF WITH REMOTE

Microcontroller connections



CONFIGURING THE APP

Remote controls setup

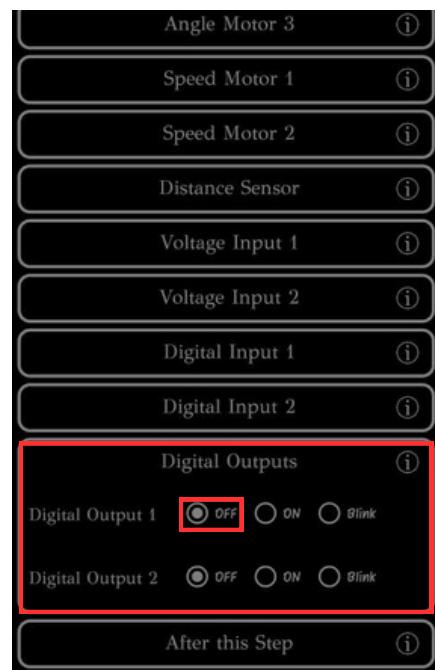
STEP 1 - OFF

STEP 2 - ON

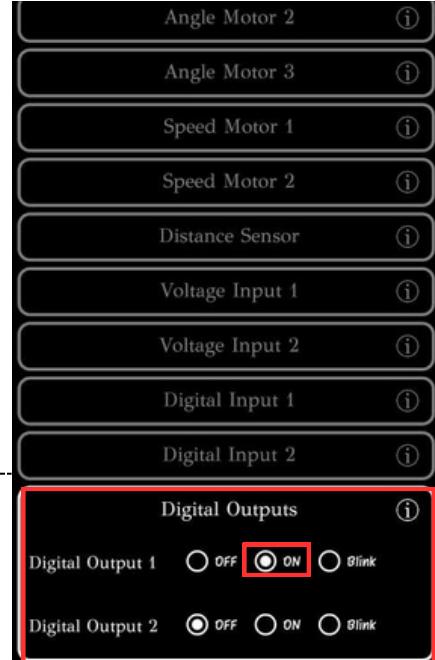


Note:

If you want to control it with a cable you can change it to "Cable" in the REMOTE page.



STEP-1 Configuration

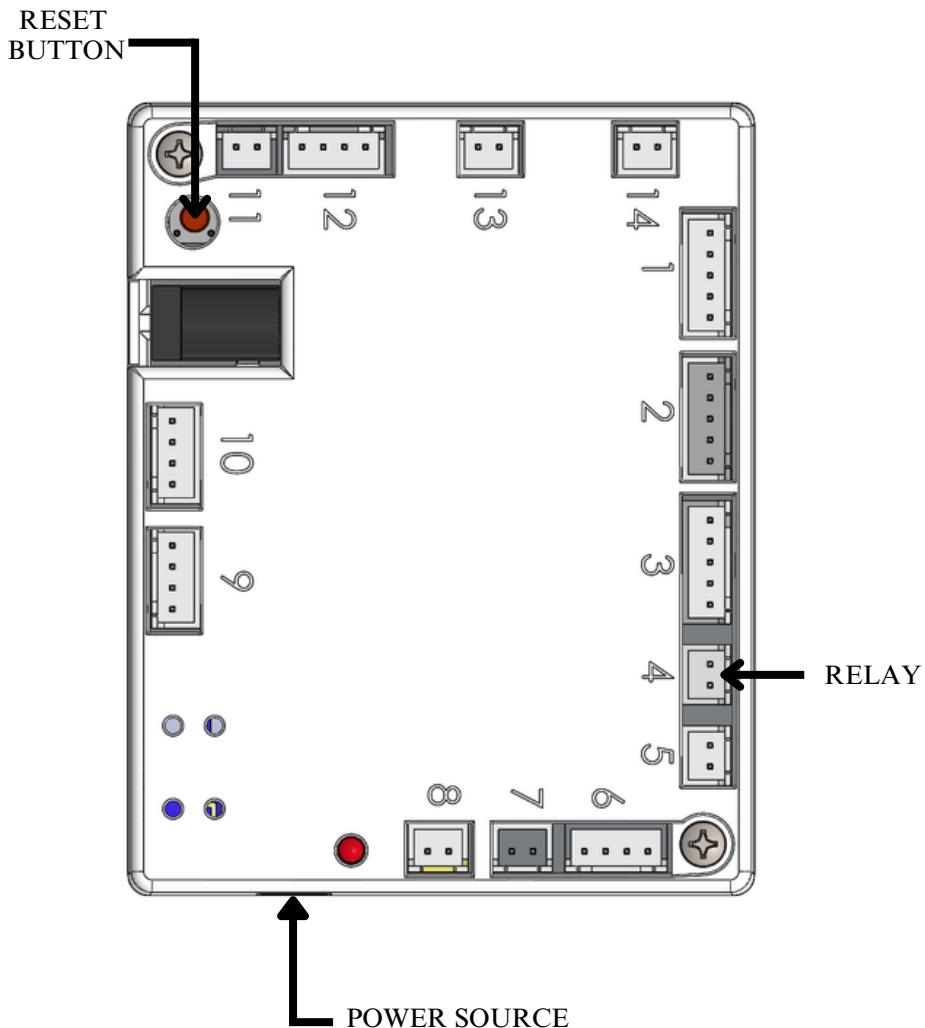


STEP-2 Configuration

Upload this program, Now you can control your light bulb by **REMOTE**

LIGHT BULB ON/OFF WITH TIMER

Microcontroller connections



CONFIGURING THE APP

Remote controls setup

Here the light glows on/off automatically based on time. For example, at 18:00 hrs it will be set to on and at 21:30 hrs it turns off automatically.

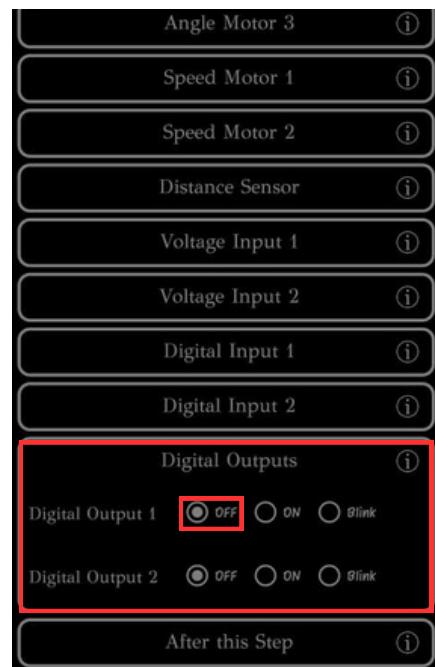
STEP 1 - OFF

STEP 2 - ON

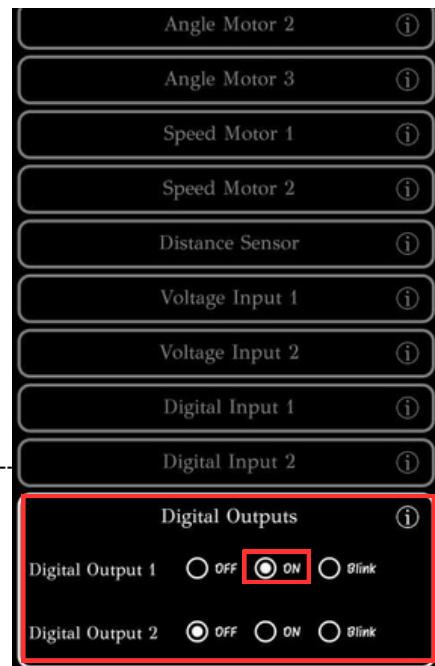


Note:

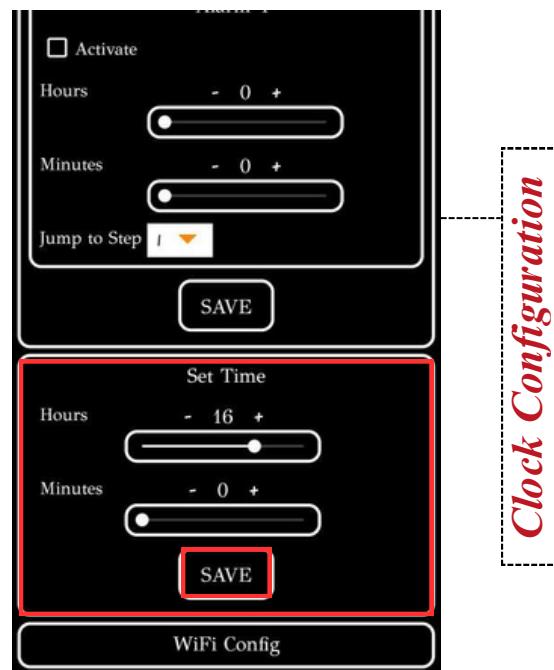
If you want to control it with a cable you can change it to "Cable" in the REMOTE page.



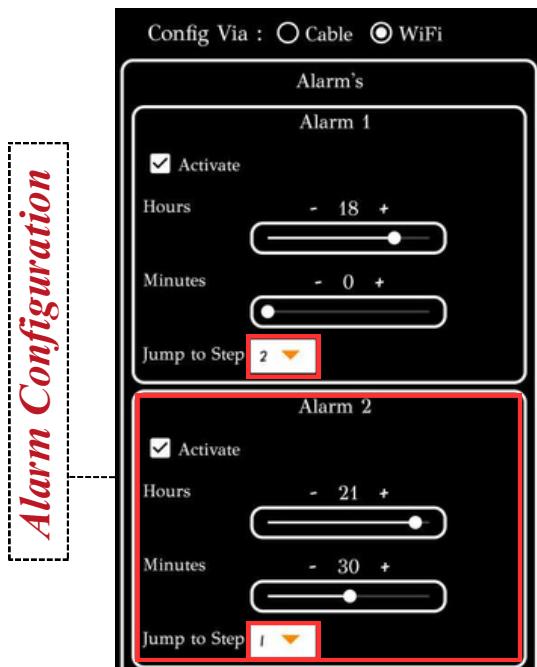
STEP-1 Configuration



STEP-2 Configuration



Clock Configuration

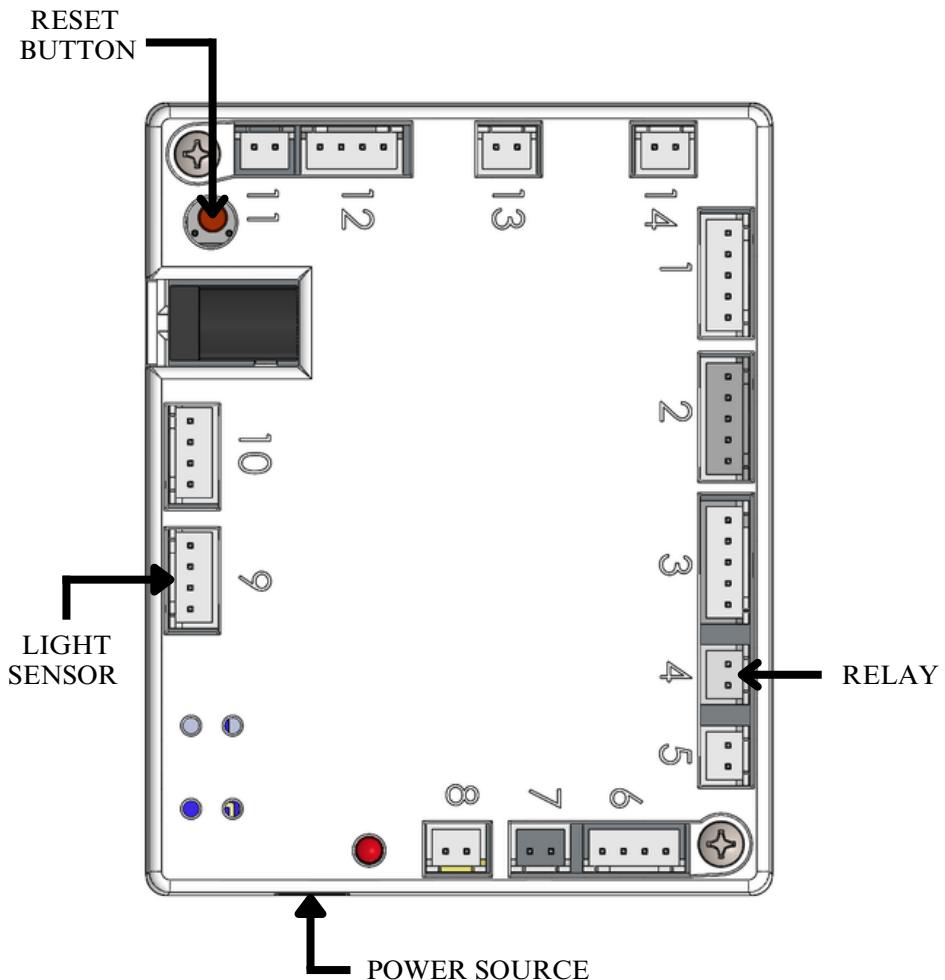


Alarm Configuration

Upload this program, Now you can control your light bulb by **TIMER(ALARM)**

LIGHT BULB ON/OFF WITH LIGHT SENSOR

Microcontroller connections



Note:

- Connect light sensor to U1 connector of sensor board and connect sensor board to connector no 9 of control unit(AUTOMATE).
- Rotate the potentiometer to adjust the sensitivity using a screwdriver. (For the time being, rotate the potentiometer to somewhere in between the max and min positions)

CONFIGURING THE APP

Remote controls setup

Here the light glows on/off automatically based on the lighting in the room.

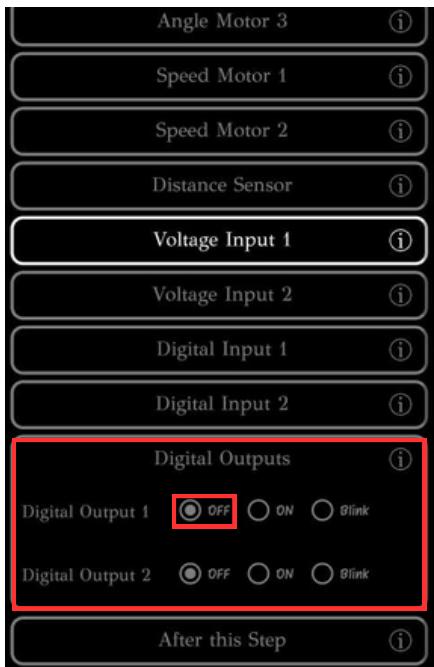
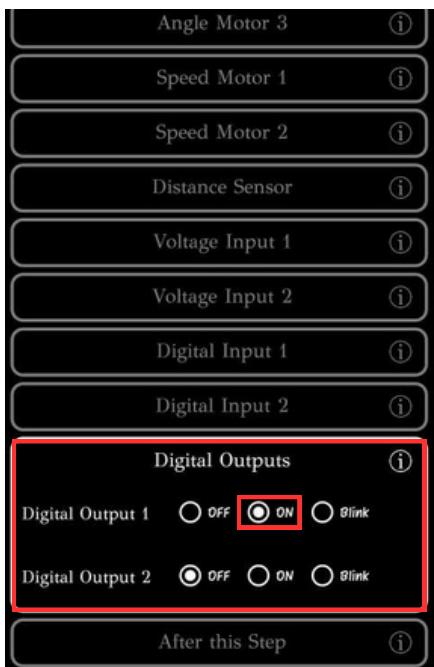
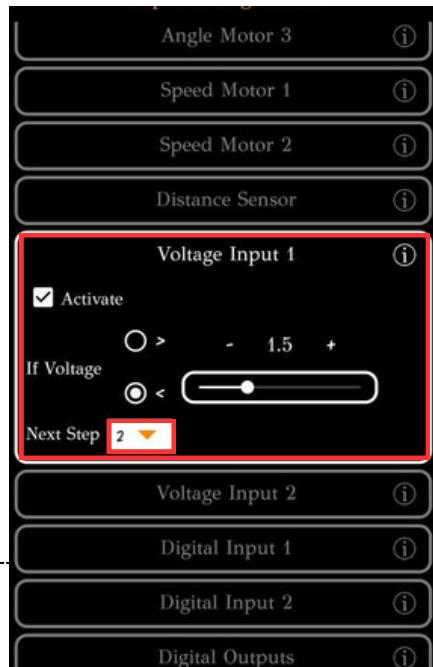
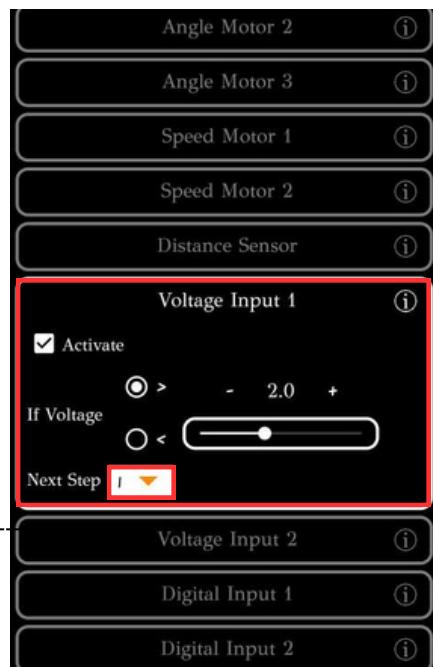
STEP 1 - OFF

STEP 2 - ON



Note:

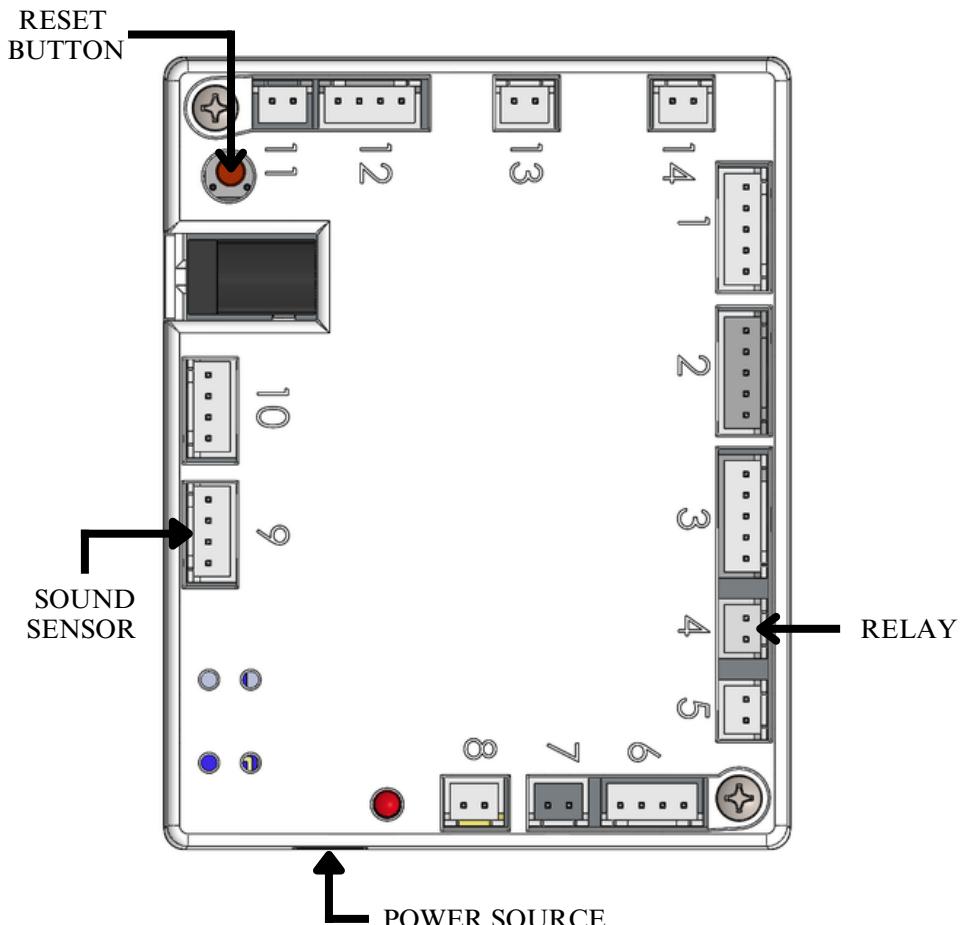
If you want to control it with a cable you can change it to "Cable" in the REMOTE page.

**STEP-1 Configuration****STEP-2 Configuration**

Upload this program, Now your light bulb is
AUTOMATED

LIGHT BULB ON/OFF WITH SOUND SENSOR

Microcontroller connections



Note:

- Connect the Sound sensor to the U3 connector of the sensor board and connect the sensor board to connector no 9 of the control unit(AUTOMATE).
- First you have set a reference sound by rotating the potentiometer using a screwdriver (blue cube). (For the time being, rotate the potentiometer to somewhere in between the max and min positions)

CONFIGURING THE APP

Remote controls setup

Here the light glows on/off automatically based on Sound in the room.

STEP 1 - OFF

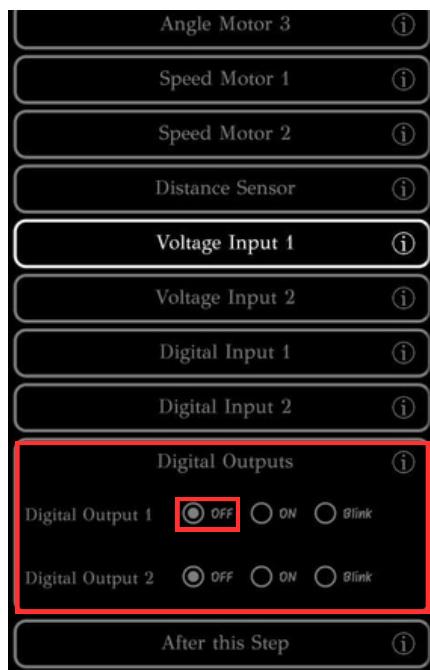
STEP 2 - ON



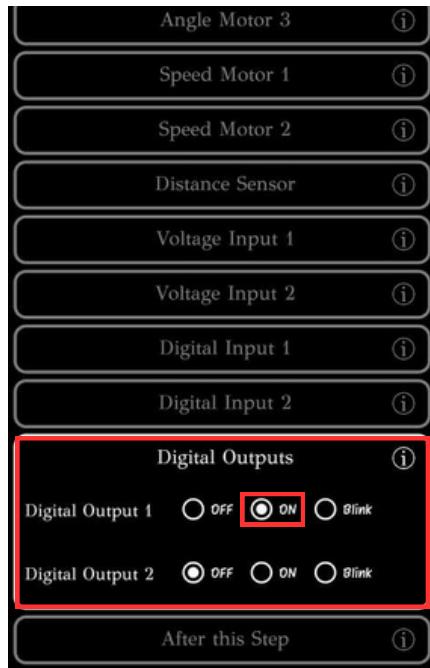
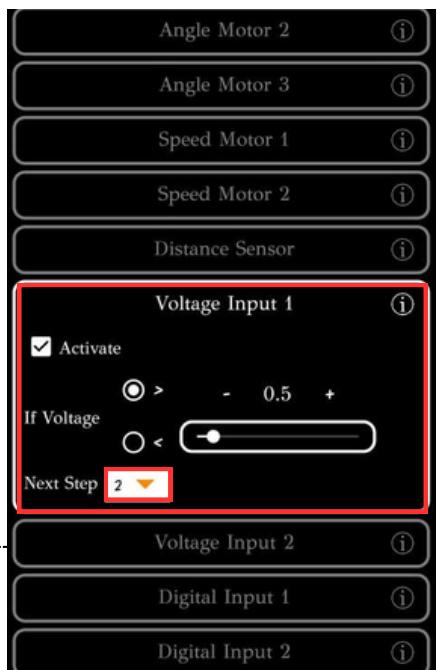
Note:

If you want to control it with a cable you can change it to "Cable" in the REMOTE page.

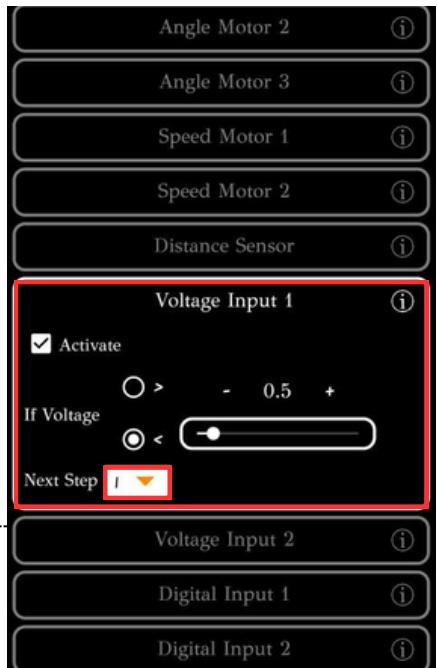
LIGHT BULB ON/OFF WITH SOUND SENSOR



STEP-1 Configuration



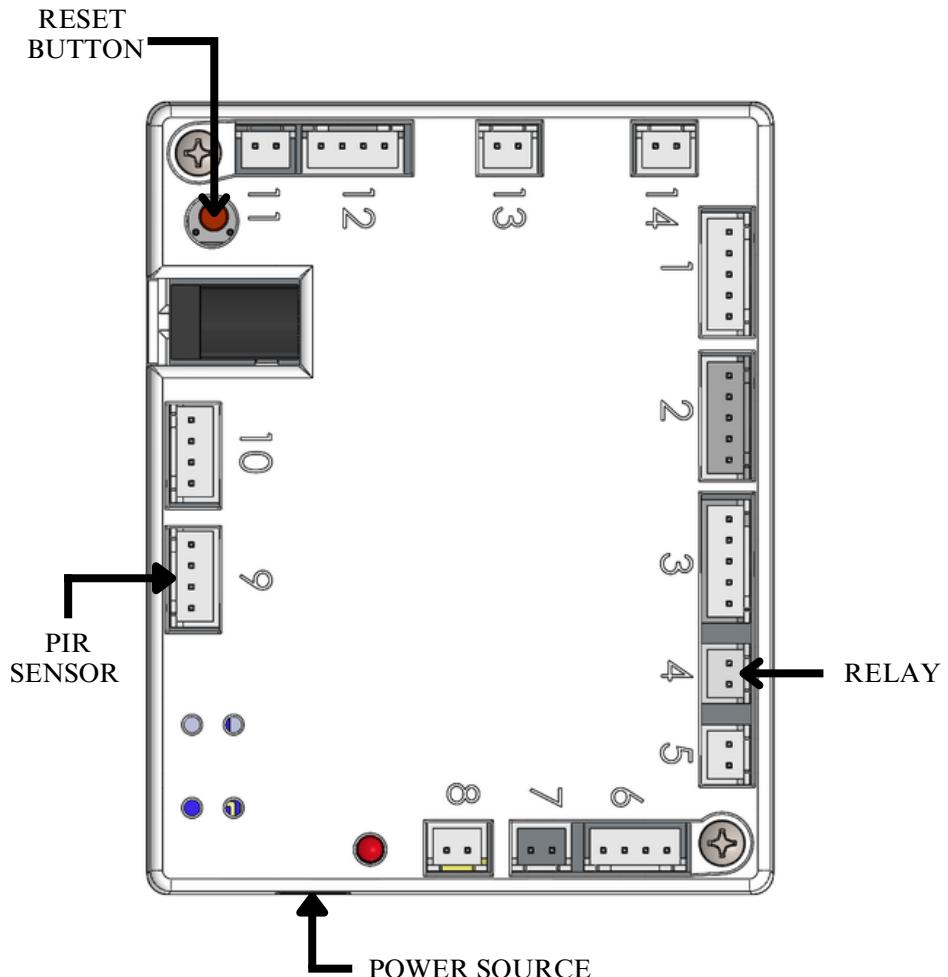
STEP-2 Configuration



Upload this program, Now your light bulb is
AUTOMATED

LIGHT BULB ON/OFF WITH PIR SENSOR

Microcontroller connections



Note:

Connect PIR sensor to U3 connector of sensor board and connect sensor board to connector no 9 of microcontroller(AUTOMATE).

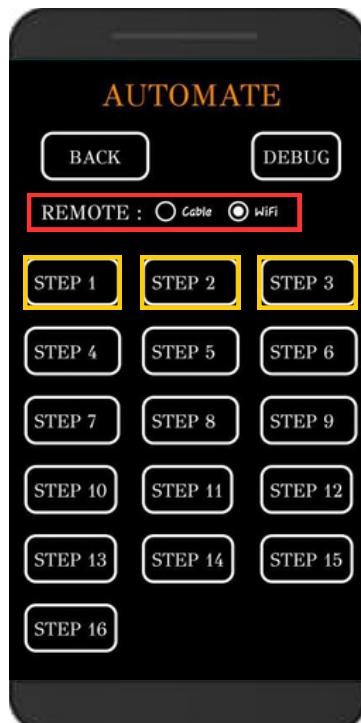
CONFIGURING THE APP

Remote controls setup

Here the light automatically turn on lights when a person enters the room and turn off if no one is in the room.

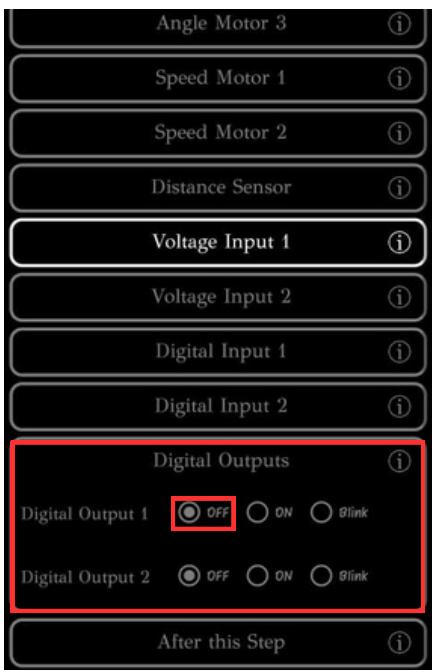
STEP 1 - OFF

STEP 2 - ON

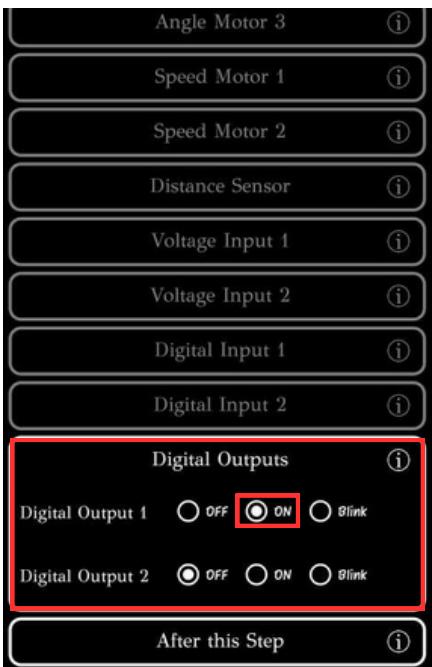
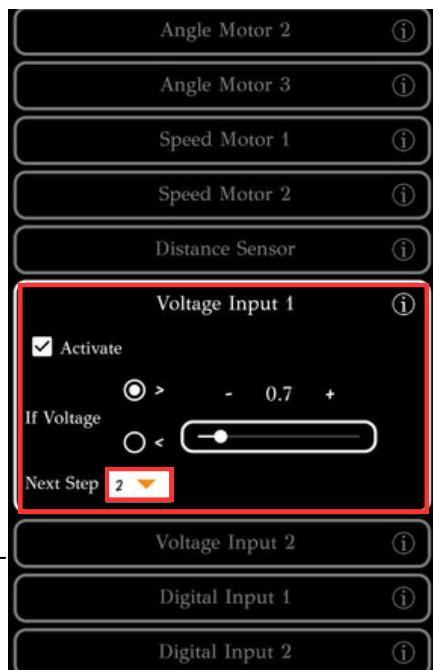


Note:

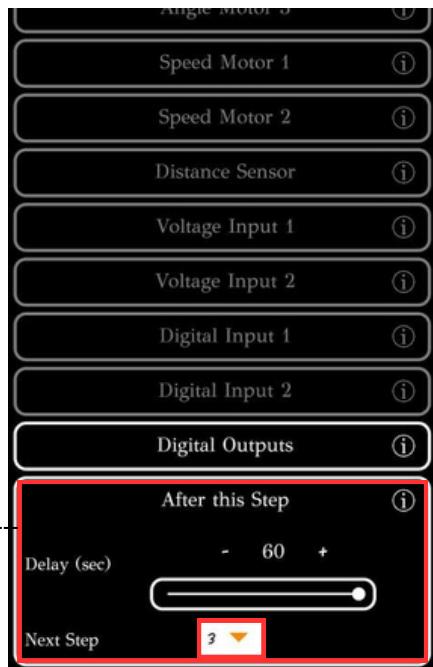
If you want to control it with a cable you can change it to "Cable" in the REMOTE page.



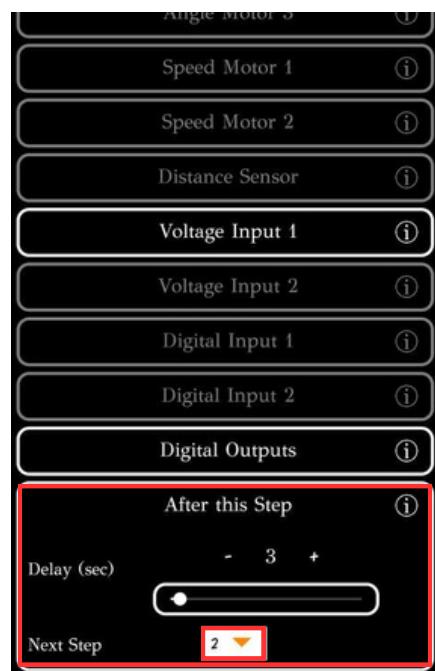
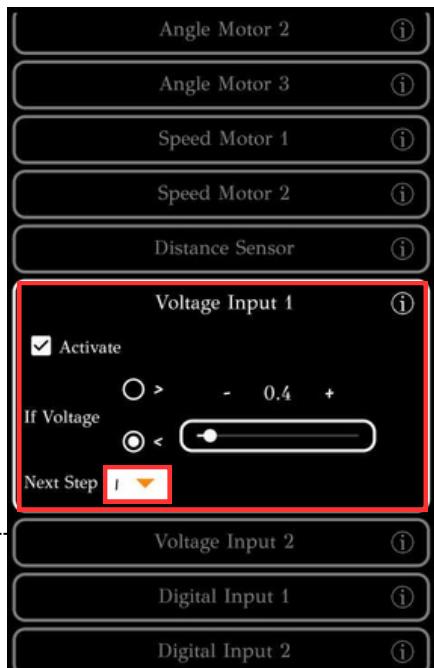
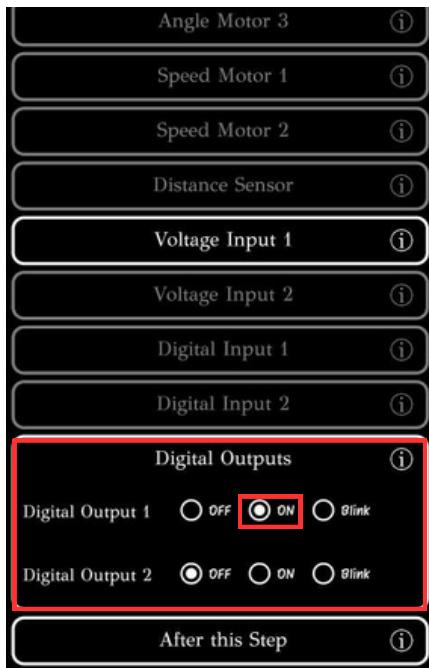
STEP-1 Configuration



STEP-2 Configuration



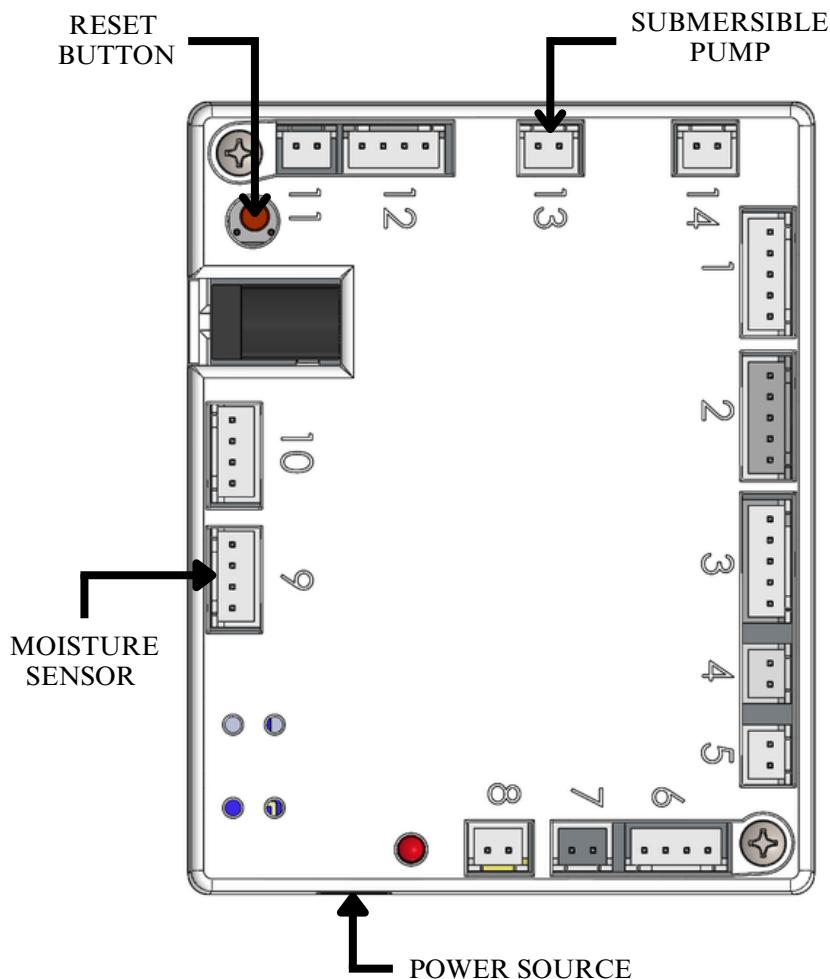
LIGHT BULB ON/OFF WITH PIR SENSOR



Upload this program, Now your light bulb is
AUTOMATED

TANK WATER LEVEL MAINTAINER

Microcontroller connections



Note:

Connect the Moisture sensor to the U1 connector of the sensor board and connect the sensor board to connector no 9 of the microcontroller (AUTOMATE).

CONFIGURING THE APP

Remote controls setup

Here the moisture sensor senses the moisture, if there is no moisture in the tank it automatically turns on the motor which runs for 30 mins to fill the tank.

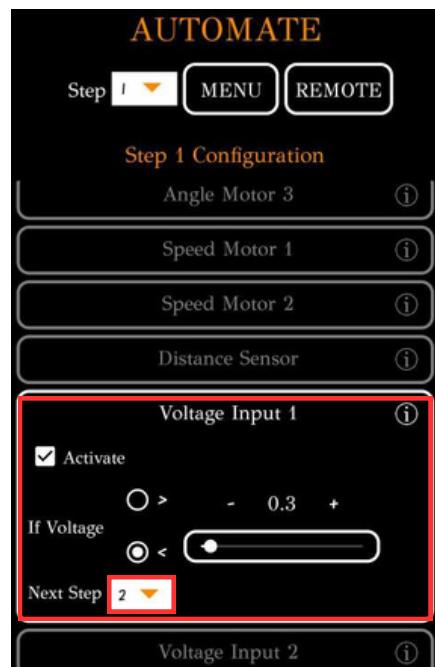
STEP 1 - Moisture check

STEP 2 - Running the pump

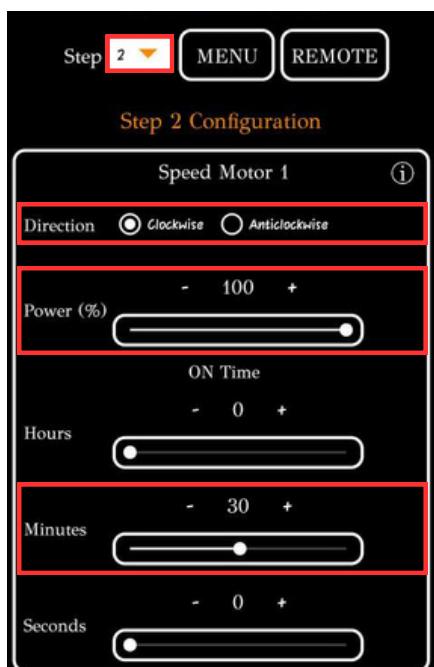


Note:

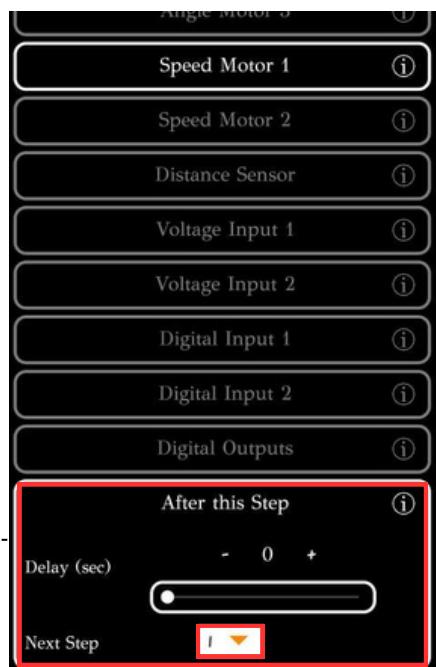
If you want to control it with a cable you can change it to "Cable" in the REMOTE page.



STEP-1 Configuration



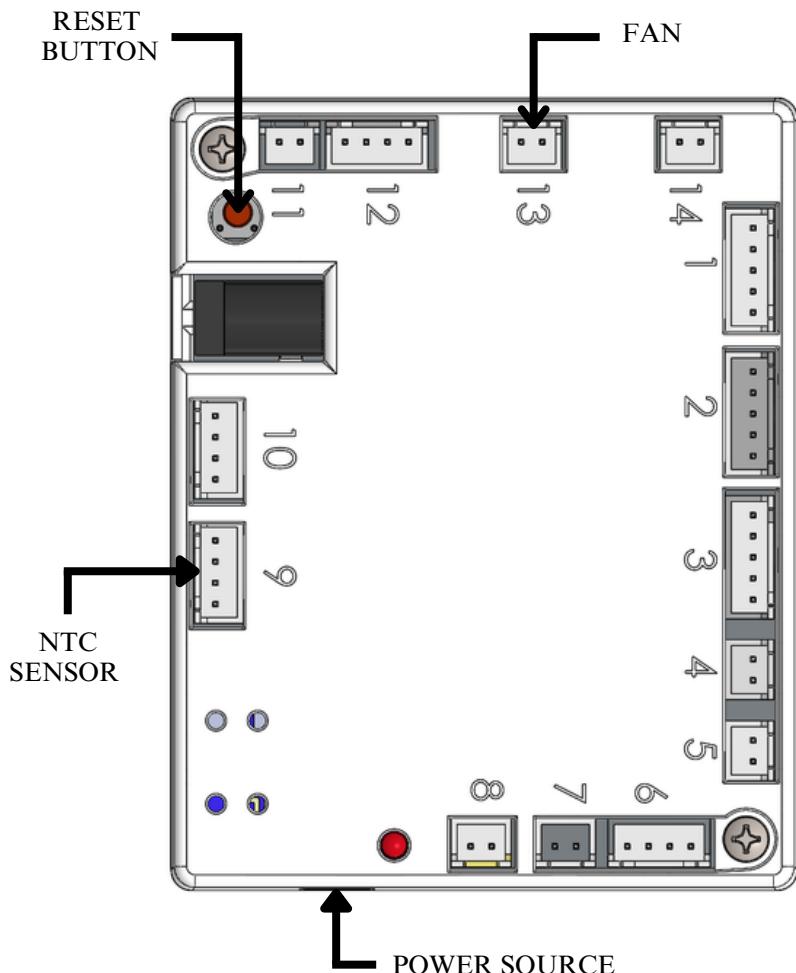
STEP-2 Configuration



Upload this program, Now your water tank will be maintained **AUTOMATICALLY**

AUTOMATIC FAN ON/OFF WITH NTC SENSOR

Microcontroller connections

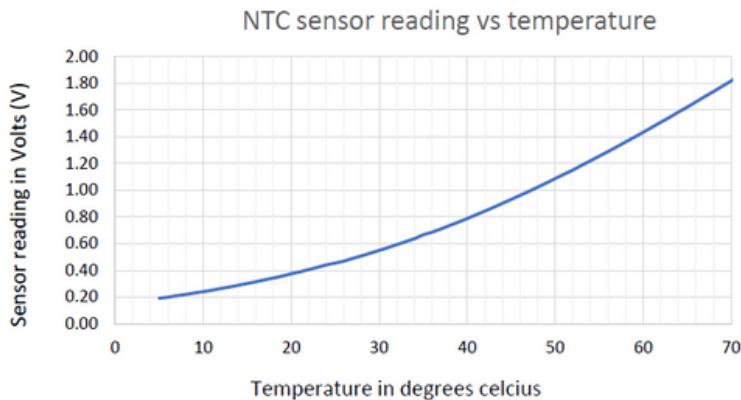


Note:

Connect NTC sensor to U1 connector of sensor board and connect sensor board to connector no 9 of microcontroller (AUTOMATE).

Understanding of NTC Sensor

Use debug feature to check the NTC sensor reading at room temperature. Usually, it gives about 0.4V when its temperature is 25°C. The reading increases if the temperature increases. Please refer to the below graph.



CONFIGURING THE APP

Remote controls setup

Here the fan automatically turn on when temperature rises above 35°C and turn off when it is reduces to 25°C in the room(You can configure the temperature according to your convenient).

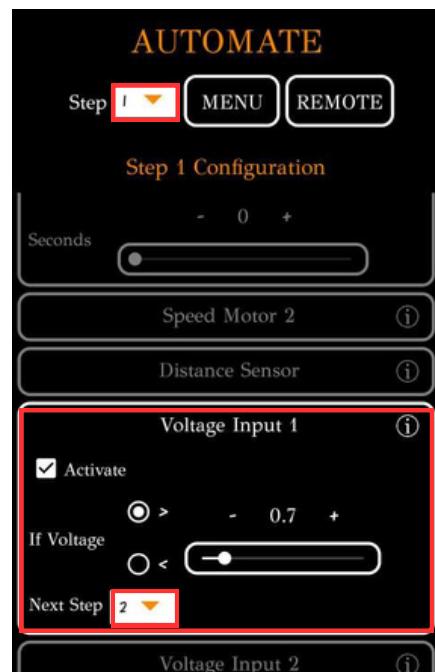
STEP 1 - Sensing the temperature

STEP 2 - Running of fan

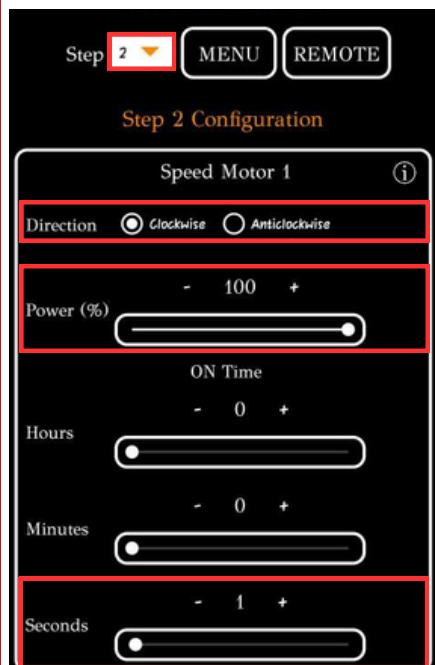


Note:

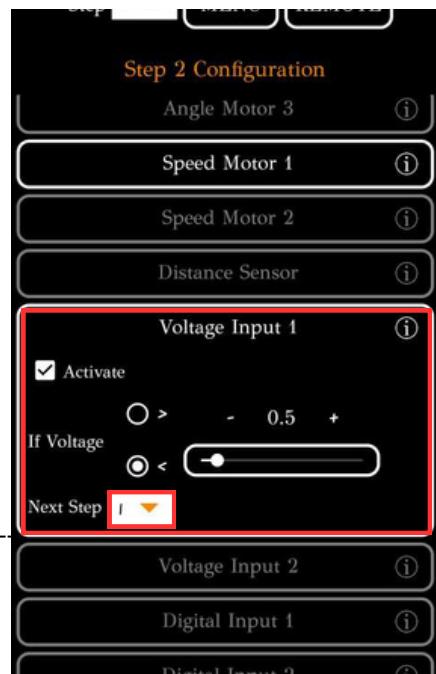
If you want to control it with a cable you can change it to "Cable" in the REMOTE page.



STEP-1 Configuration



STEP-2 Configuration



Upload this program, Now your Fan is
AUTOMATED