Motion Repeater implementation on UGV

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Contents

***Abstract*—This manual is for making UGV repeat the motion**

1 Hardware setup

Build the toycar refering the manual in the below link

```
https://github.com/gadepall/ugv/tree/main/manual
```

2 Software setup

Flash the code available in below link of the platformio project

```
https://github.com/Hruday-Beeravelli/UGV-Project/tree/main/UGV-Motion-Repeat1
```

either using VSCode or using command line

```
pio run
```

for compiling the code

```
pio run -t nobuild -t upload
```

for uploading the code into esp32

3 Circuit setup

Connect the componets based on the diagram Fig 3.0

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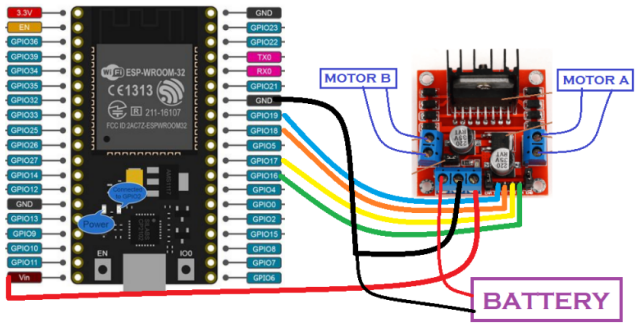

Fig. 2.1.3: UGV circuit

Fig. 3.0

TABLE I: Dabble buttons and their functions

Button	Funtion
1	Forward
2	Left
3	Backward
4	Right
5	Starts Motion from recorded sample
6	Starts Recording the inputs and duriation
7	Stops recording the inputs

4 Controlling

Install “Arduino & ESP32 Bluetooth Controller App - Dabble” from

```
https://play.google.com/store/apps/details?id=io.dabbleapp
```

connect to ESP32 by clicking the unplugged button on top right corner, and selecting bluetooth name. find the similar interface like in fig 4.0 by clicking GamePad. and use the buttons accordingly by refering to table

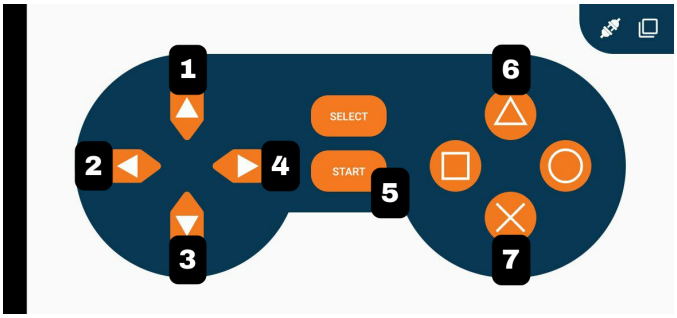

Fig. 4.0