

# Range-less Robot by using DTMF frequency

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**Abstract-** Practically every general population understands about robots in the current time. Robots are taking major role in human lives. Robots are a machine that in significant works in enterprises, construction, and so on, reduces human efforts and makes life easy. We're here with our next robot, which is a Range-less ROBOT. We really find it a Range-less considering the transmitter and Receiver which works this ROBOT has an unbounded scope of activity and can be worked from anyplace round the globe.

The robot is essentially electro-mechanical machine or gadget that is controlled either by PC program or with electronic circuit to play out an assortment of physical undertakings. With the slow improvement in innovation researchers concoct new thoughts and developments of robots. In the present life robots are turning into a vital piece of human life. The mechanical innovation additionally gives mechanization in medical clinic, office and plant. Other than robotization this innovation likewise utilized in Defence powers, Entertainment, Space investigation, Security Systems

## 1. INTRODUCTION

### 1.1 Range-less ROBOT:

Contemplating our Mobile Phones we realize that we can call any individual who can be at anyplace around this world until there is a system existing for correspondence. So how in the event that we introduce a cell phone on the Robot and speak with that Robot with another cell phone utilizing the calling capacity. We can accomplish this thing by utilizing the DTMF innovation which as of now exist in our Mobile telephone's Dial Pads. DTMF represents Dual Tone Multiple Frequency. There are a few frequencies that we use to make DTMF tone. In basic words by including or blending at least two frequencies creates DTMF tone. DTMF is stand for Dual Tone Multi Frequency which is produced by

mobile phone when any key is squeezed. At the point when any key is squeezed then it made association between the tones of Row and Column which create double tone recurrence. This double tone is utilized to figure out which key is squeezed. Presently here is the means by which this DTMF controlled robot is constrained by cell phone When we press '2' by remote telephone, robot begin to pushing ahead and pushing proceeds ahead until next order comes. When we press '8' by remote telephone, robot change his state and begin moving in reverse heading until other order comes. When we press '4', Robot get turn left till next direction executed. When we press '6', robot went to right. What's more, for halting robot we pass '5'.

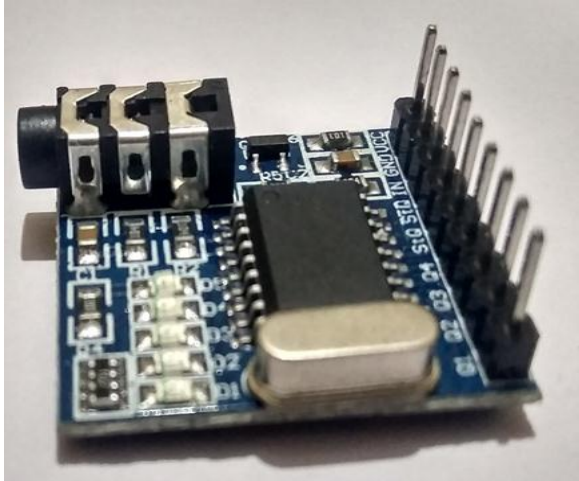
### 1.2 Application of Range-less ROBOT:

It can work savvy observation robot for military application with the assistance of this robot we realize the continuous state of fringe zone without utilizing an any human source. The reconnaissance robot gives us live gushing video as per that we give the direction. This robot can work anyplace for reconnaissance, for example, industry, military and mining industry likewise. This range less robot additionally can fill in as moving cctv surveillance.

## 2 BACKGROUND

### 2.1 DTMF:

DTMF is a Dual Tone Multiple Frequency decoder module which has a MT8870 DTMF decoder IC which deciphers DTMF tone sign to advanced sign that are worthy for Arduino carefully. Here an aux wire is required for associating DTMF module to telephone.



### 2.2 ARDUINO:

Arduino is an open-source stage utilized for structure gadgets ventures. Arduino comprises of both a physical programmable circuit board (frequently alluded to as a microcontroller) and a bit of programming, or IDE (Integrated Development Environment) that keeps running on your PC, used to compose and transfer PC code to the physical board. The Arduino stage has turned out to be very mainstream with individuals simply beginning with hardware,



### 3. IMPLEMENTATION

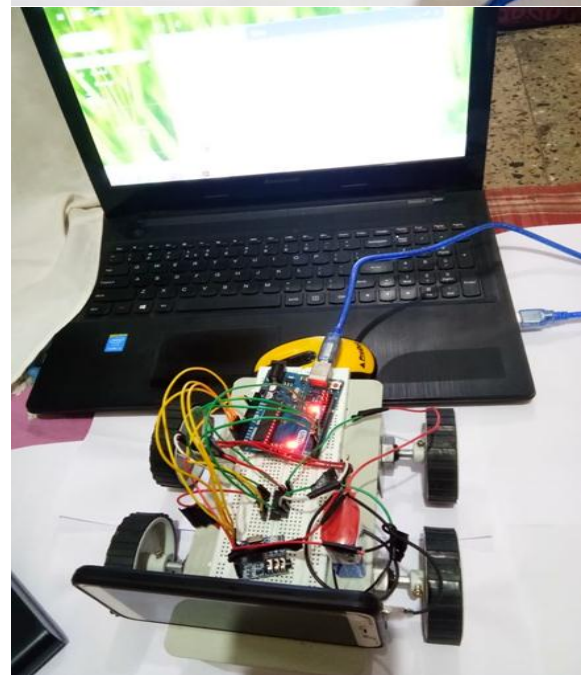
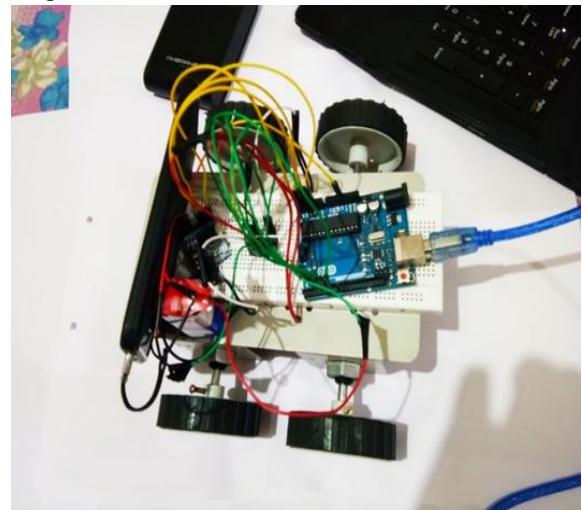
Considering our Mobile Phones, we realize that we can call anybody, who can be anyplace around this world until there is a system existing for correspondence. So how in the event that we introduce a cell phone on the Robot and speak with

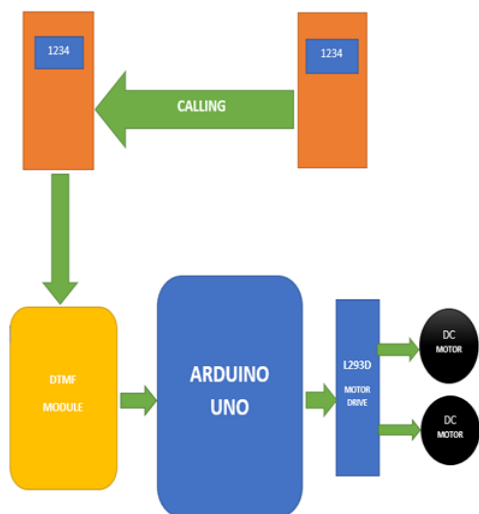
that Robot with another cell phone utilizing the calling capacity.

We can accomplish this by utilizing the DTMF innovation which as of now exist in our Mobile telephone's Dial Pads. DTMF represents Dual Tone Multiple Frequency. There are a few frequencies that we use to make DTMF tone.

DTMF is a Dual Tone Multiple Frequency decoder module which has a MT8870 DTMF decoder IC which unravels DTMF tone sign to advanced sign that are adequate for Arduino carefully. Here an aux wire is required for associating DTMF module to telephone.

In basic words by including or blending at least two frequencies creates DTMF tone.





#### 4. ALGORITHM STEPS

The working of the task can be clarified in the accompanying advances: Stage 1: Initially power supply is given to the DTMF robot.

Stage 2: Make a call to another versatile which is set on the robot.

Stage 3: Call is picked by the robot administrator physically.

Stage 4: Directions are given by the administrator utilizing dialling cushion.

Stage 5: When key 2 is squeezed, robot pushes ahead.

Stage 6: When key 8 is squeezed, robot goes in reverse.

Stage 7: When key 4 is squeezed, robot moves left.

Stage 8: When key 6 is squeezed, robot moves right.

Stage 9: When key 5 is squeezed, robot moves stop.

Stage 10: Surveillance should be possible through camera present in advanced cell associated with DTMF robot.

Stage 11: Video spilling from the workstation utilizing AIRDROID application

#### 5. CONCLUSION

The errand has been effectively formed and attempted. It has been basically, planned to make aware of new spot using robots through web. Various current systems have discussed the robots and have proposed various for diminishing these undertakings. Remembering the ultimate objective to dodge the inconvenience, as opposed to controlling the robots

physically using RF, GSM, and Bluetooth propels our errand winning with respect to moving the robot using DTMF module. Right when the charges given by the disabled individual sitting in one put in, according to that requests the motors will move which subsequently moves the robot. The crucial ideal position of our mechanical vehicle is that it can accomplish any spots, for instance, little sections, and squanders, etc. Due to this reason it generally used as a piece of military and also ask about procedure.

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