



# HOME AUDIO WIRLESS SYSTEM

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**Abstract – Audio System** is a system which is used to transmit audio taken from televisions, laptops or any other similar devices to number of receiving devices. The receiving devices can be connected to any head-phones, ear-phones, speakers or any other listening devices.

## INTRODUCTION

This is a system mainly consists of 2 parts

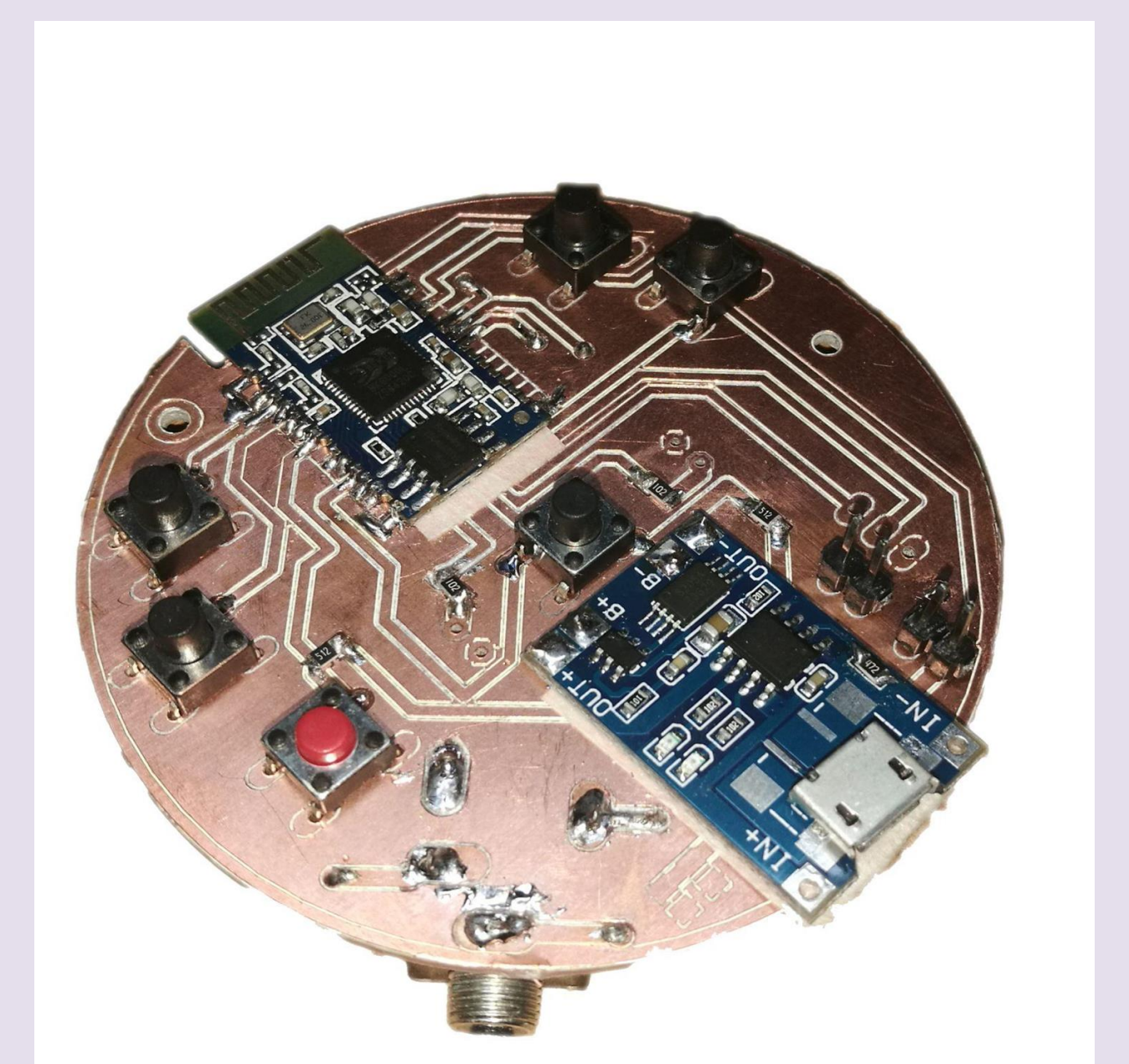
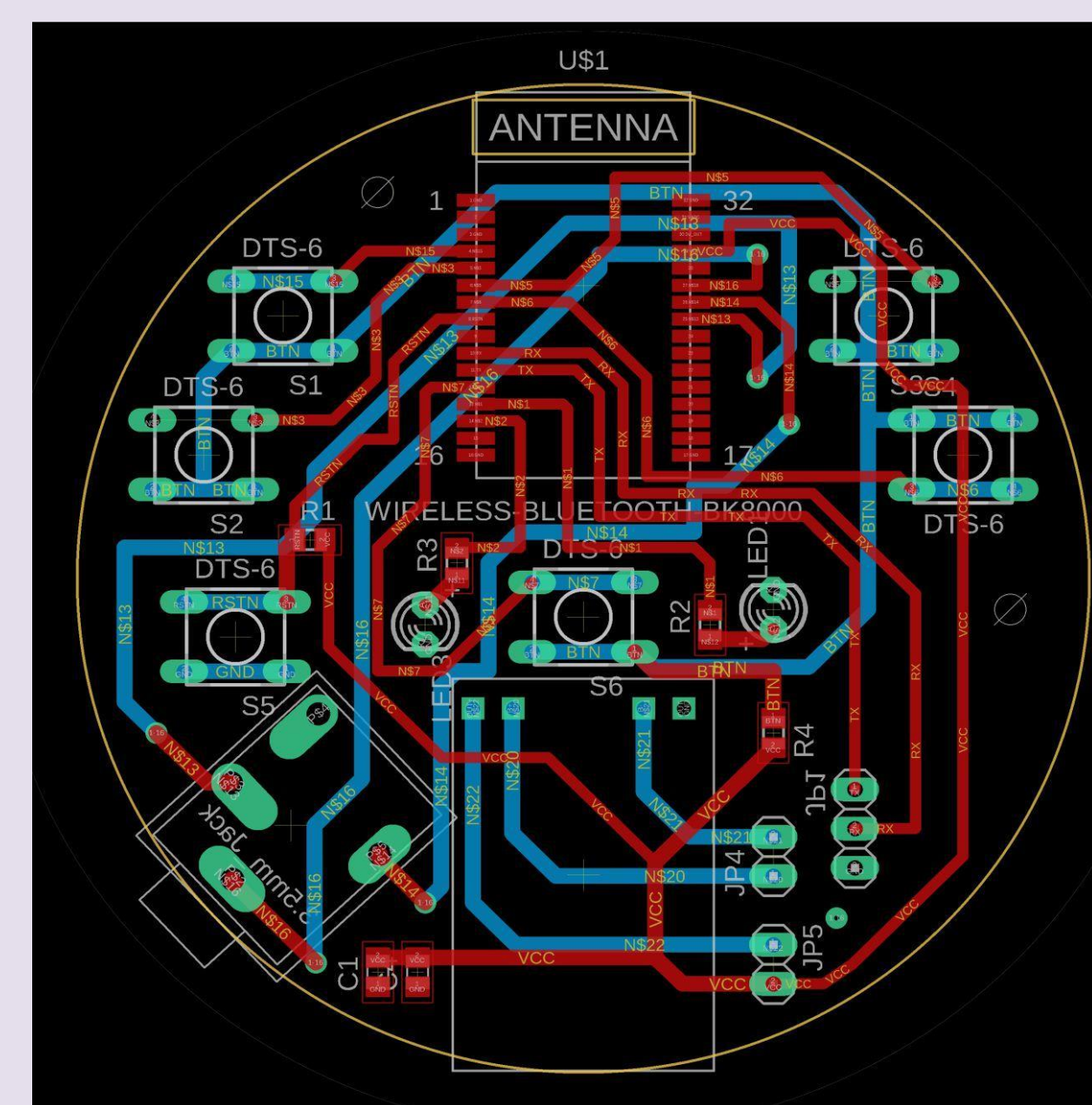
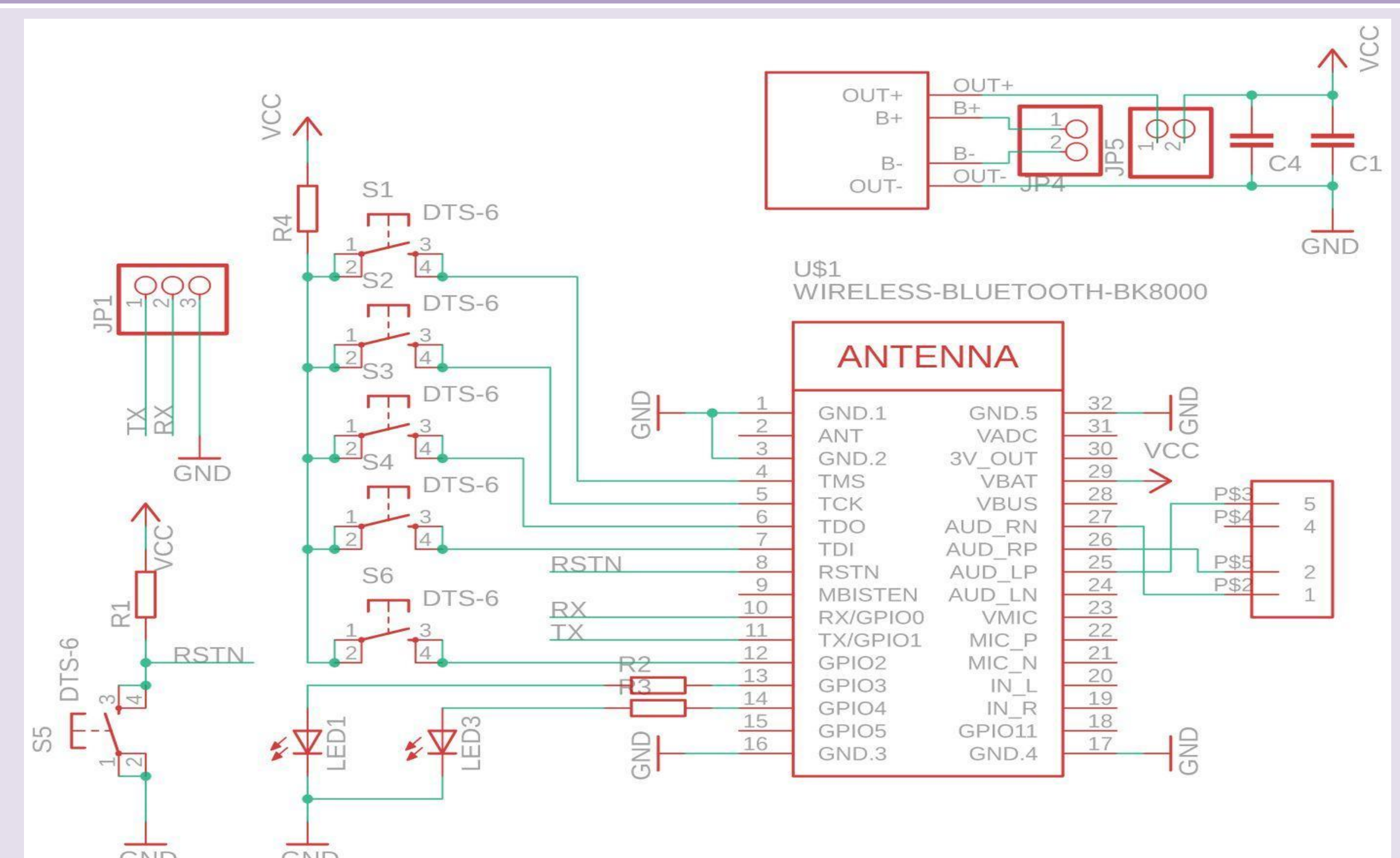
### (i). Audio transmitter device

Audio transmitter device can be plugged into a device so that audio signals coming out of the device can be transmit over a wider range and the transmitter device is capable of connecting to multiple receiver devices wirelessly.

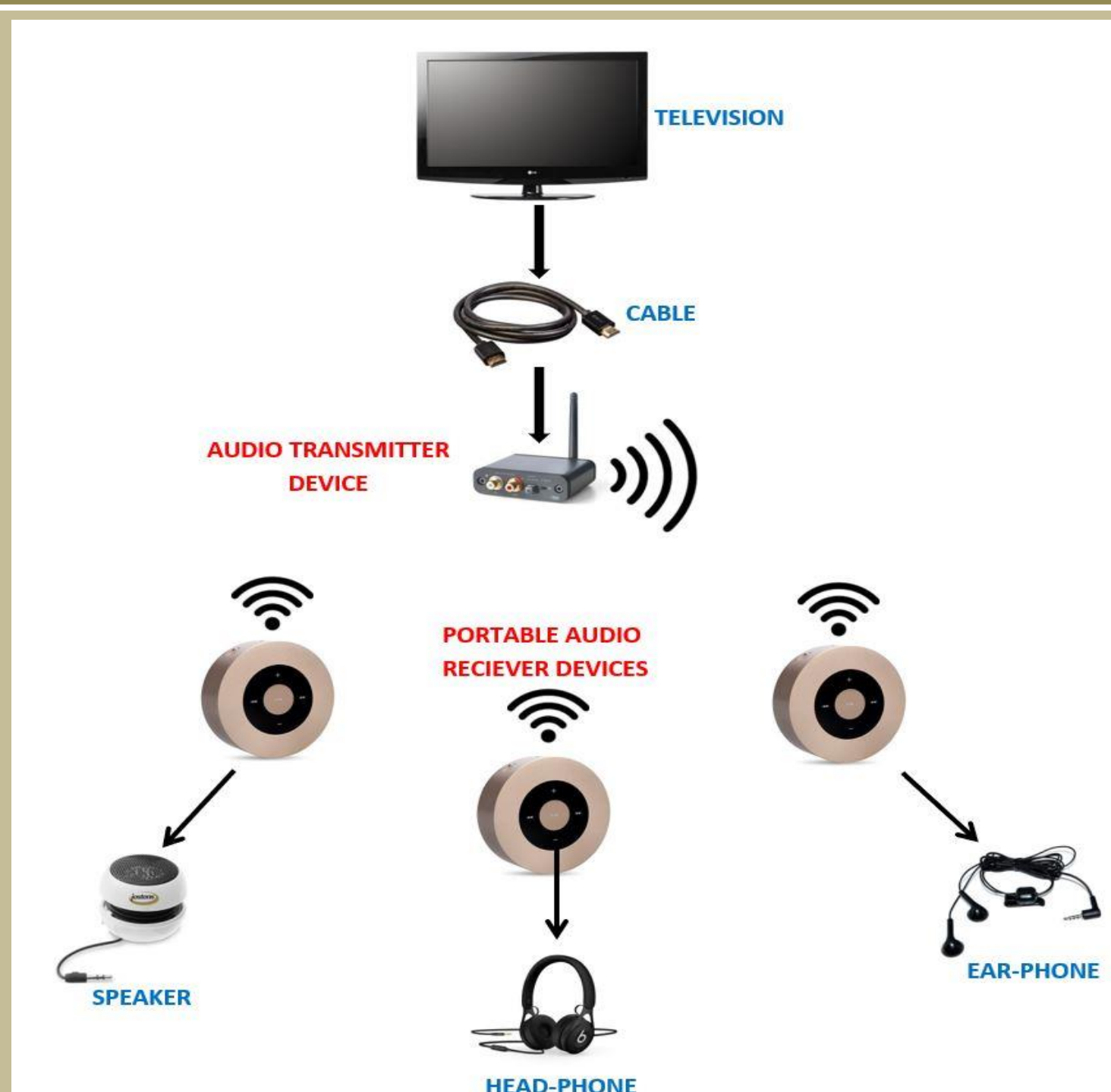
### (ii). Audio receiver devices

Media output device such as headphone, earphone or small speaker can be connected to an audio receiver device via 3.5mm jack. Volume can be changed from each device according to the personal preferences. Pause/Play/Stop commands were added and, each device consists of a rechargeable battery pack.

## CIRCUIT DIAGRAM AND HARDWARE



## SYSTEM DIAGRAM



## MAIN FEATURES

- ☐ Volume control
- ☐ Pause / Play / Stop commands
- ☐ Fully wireless transmission via Bluetooth
- ☐ Rechargeable batteries for both receivers and the transmitter
- ☐ Transmitter device can be accessible thorough several receiver devices

## FINAL PRODUCT



## CONCLUSION AND FURTHER IMPROVEMENTS

The device performed the intended objective to multicast audio signals from a single transmitter to multiple receivers.

Improvements can be listed as

- 1.Increase the operation range
- 2.Include an amplifier to drive large speakers
- 3.Increase the number of receivers

