

## Circuit Description

### Receiver

The receiver obtains power from either a 12V DC adapter or 8 pcs AA alkaline battery. It utilizes a DSP, a MCU, a RF receiver module and an antenna of ~131.5mm in length to receive operation commands transmitted from the remote in the 418MHz band. The RF receiver module handles RF demodulation and sends recovered data in serial form to the MCU. The MCU decodes the serial data and sends operation command to the DSP. The DSP analyzes the command and performs operation accordingly.

There is a LCD panel to indicate the operating status of the receiver. There is an audio amplifier with 2 speakers to deliver audio sound. There is internal memory storage to store audio files. The internal memory can be accessed by a computer via USB connection.