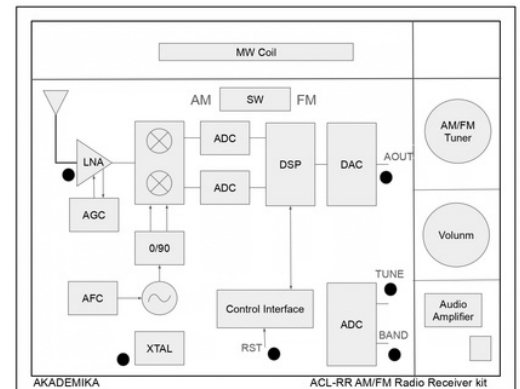


ACL-AM-FM

AM - FM Radio Receiver Kit



FEATURES

- Educational AM/MW and FM broadcast receiver for practical study of radio reception.
- The trainer demonstrates the use of two different antenna arrangements for two different radio bands. The ferrite-rod antenna is used for AM/MW reception, while the telescopic antenna is used for FM reception, helping students understand how antenna selection depends on the operating radio band.
- A manual tuning control is provided to select different AM/MW and FM broadcast stations. By varying the tuning control, the receiver changes the tuning condition and selects the nearest available radio station, giving students a practical understanding of radio tuning.
- A mechanical slide switch allows the user to select between AM/MW and FM operation. According to the selected band, the corresponding antenna and signal-input path are connected to the receiver section, making the band-selection process easy to observe and understand.
- The recovered audio signal passes through a volume-control section before reaching the audio amplifier. This enables practical study of audio-level adjustment and demonstrates how the final electrical audio signal is converted into audible sound.
- Receiver, audio amplifier, volume control and headphone output available as one functional chain.

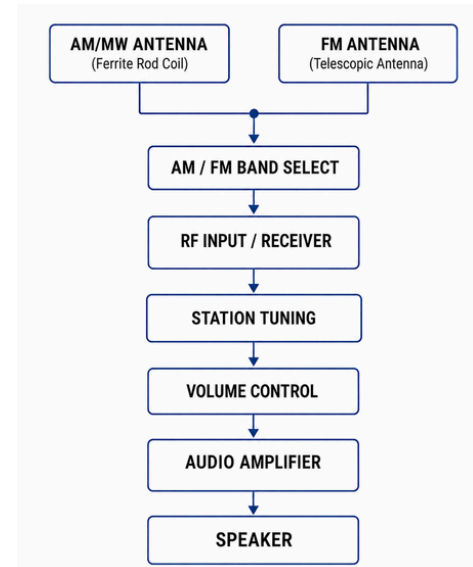
SPECIFICATIONS

- **Frequency Bands** : AM (MW), FM
- **FM Frequency Range** : 88 MHz - 108 MHz
- **FM Antenna** : External telescopic whip antenna
- **Tuning** : Manual, using linear potentiometer
- **AM / MW Frequency Range** : 522 kHz - 1440 kHz
- **Input Supply** : -12 V , + 12 V , + 5 V, GND
- **Voltage Regulator** : LM317
- **Receiver Supply** : Regulated 3 V

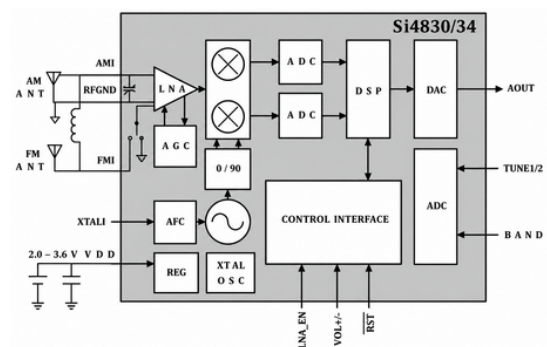
- **AM / MW Antenna** : Ferrite rod with MW coil
- **Band Selection** : Mechanical AM/FM slide switch
- **Audio Output** : Amplifier with audio jack Headphone

EXPERIMENTS

- To study the AM/MW Radio Receiver
- To study the FM Radio Receiver



Flowchart of AM/FM Radio Receiver



Receiver IC internal Diagram