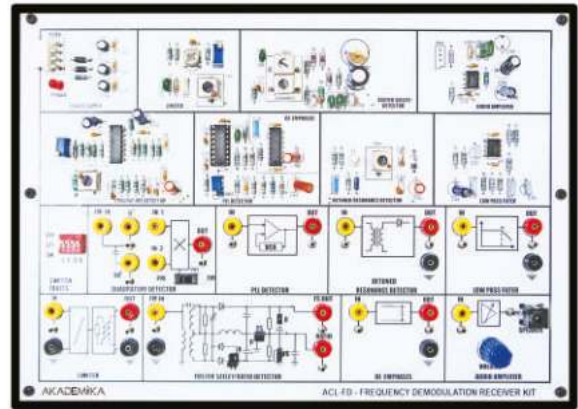


ACL-FD

Frequency Demodulation Receiver Kit



FEATURES

- Frequency demodulator
 - Foster seeley detector
 - Ratio detector
 - Phase locked loop detector
 - Quadrature detector
 - Detuned resonance detector
- De-emphasis
- Amplitude limiter
- Low pass filter
- Audio amplifier

SPECIFICATIONS

Foster-seely detector

- Operating frequency : Adjustable from 400 KHz ~ 500 KHz
- Input amplitude : 1Vpp

Ratio discriminator detector

- Operating frequency : Adjustable from 400 KHz ~ 500 KHz
- Input amplitude : 1Vpp

Phase Lock Loop detector

- Operating frequency : Adjustable from 400 KHz ~ 500 KHz
- Input amplitude : 1Vpp

Phase Detector and FM Quadrature Detector

- Operating frequency : Adjustable from 400 KHz ~ 500 KHz
- Input amplitude : 1Vpp

Amplitude Limiter

- Operating frequency : 455 KHz
- Input amplitude : 0.5 ~ 5 Vpp
- Output limited amplitude : 1.5 Vpp

Low Pass Filter

- 4th order butterworth filter
- Cut-Off frequency : 3.4 KHz

De-Emphasis Ckt - Time period of 50 us

Audio output

- Amplifier with Headphone
- Audio amplifier gain : Adjustable

Switch faults

- 4 switch faults are provided on board to study different effects on circuit

Interconnection

- 2 mm PCS2 socket

Test points

- Test points are provided on board to observe intermediate signals

Power supply

- GND, +5V, +12V, -12V

EXPERIMENTS

- Study of FM Demodulators
 - Foster Seely detector
 - Ratio detector
 - Phase Locked Loop detector
 - Quadrature detector
- Study of Phase demodulator
- Voice reception on various demodulation methods
- Switch faults
- Study of Detuned Resonance detector
- study of De-amphasis