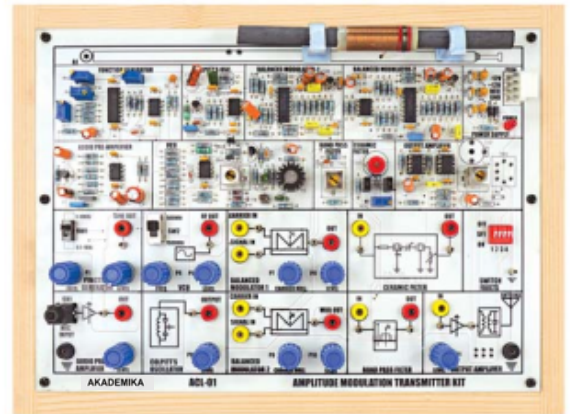


## ACL-AM

# Amplitude Modulation Transmitter Kit



### FEATURES

- Dedicated Amplitude Modulation trainer board for practical study of AM concepts.
- Includes on-board message and carrier signal generation.
- Supports study of DSB, DSB-SC and SSB concepts through different circuit sections.
- Allows step-by-step signal tracing from input to output.
- Facilitates learning of transmitter architecture and signal flow in communication systems.
- Provides test points for easy measurement and analysis of different communication signals.
- Designed for hands-on laboratory learning of analog modulation techniques.
- Integrated on-board antenna for wireless signal transmission and reception experiments.
- Enables practical study of antenna connection.
- Mobile based interactive e-manual

### SPECIFICATIONS

#### Audio oscillator (sine wave generator)

- Frequency : 100Hz ~10KHz
- Amplitude : 0 ~ 2Vpp
- Audio input : Audio preamplifier with microphone input

#### Voltage controlled oscillator (VCO)

- Output signal : Sine wave
- Frequency range : 1) 400 KHz ~ 500KHz  
2) 400 KHz ~ 1500 KHz
- Amplitude : 0 ~ 2Vpp
- Output impedance : 50Ω

#### AM/DSB/SSB/modulator

- Modulation : Amplitude modulation, Double side band, Single side band (LSB )
- Carrier input : 1 ~ 1000 KHz
- Modulating input : 0.1 ~ 100KHz

- Carrier level : Adjustable
- Output Amplitude : Adjustable

#### Output amplifier

- Gain adjustable connected to cable or antenna

#### Antenna

- MW Coil

#### Switch Faults

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

#### Interconnection

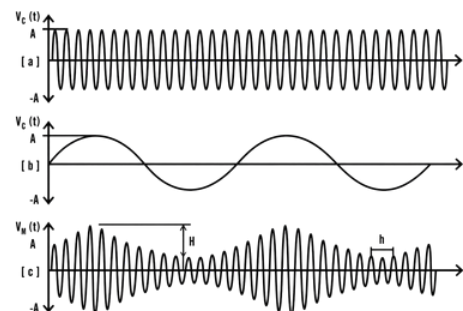
- 2mm banana socket

#### Power supply

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

### EXPERIMENTS

- Study of double side band AM generator
- Study of single side band AM generator
- Study of adjustment of transmitter tuned circuits
- Voice transmission with DSB/SSB AM transmission
- Effect of switch faults



A) CARRIER SIGNAL B) MODULATING SIGNAL  
C) MODULATED SIGNAL