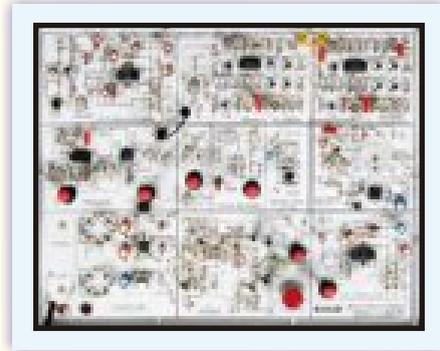




SSB-SC AMPLITUDE MODULATION/ DEMODULATION SYSTEM TRAINER

MODEL - COM103

This trainer has been designed with a view to provide practical & experimental Knowledge of Single sideband Suppressed carrier Amplitude Modulation /Demodulation technique on a SINGLE PCB.



SPECIFICATIONS

1. Power supply requirement : 230V AC, 50 Hz.
2. Built in IC based power supply.
3. On Board AF Modulating signal generator - Sine wave
Frequency Range : 300Hz to 3.4 KHz
Amplitude : 0 to 5 Vpp.
4. On Board RF carrier signal generator.
Frequency Range : 200 KHz to 1 MHz.
Amplitude : 0 to 10 Vpp.
5. On Board variable DC power supply to see the effect of DC on the output waveform: -8 to +8 VDC
6. On Board Input Audio amplifier with Volume control for modulating external signal from Mike or Tape Recorder.
7. On Board Output Audio amplifier with speaker & Volume Control.
8. On Board Band Pass Filter : (452-458 KHz).
9. Modulator Type : Balanced modulator.
10. Demodulator Type : Product detector with Local oscillator, Low pass Filter
Low Pass Filter : Cut off Freq.- 3.4 KHz.
Local Oscillators : (a) Synchronized (b) Unsynchronized
11. All parts are soldered on single PCB of size 14" x11" with complete circuit diagram Screen-printed.
12. Standard Accessories : 1. A Training Manual.
2. Connecting Patch cords.

In keeping view of SIGMA policy of continuous development and improvement, the Specifications may be changed without prior notice or obligation.

Sigma Trainers and Kits
E-113, Jai Ambe Nagar,
Near Udgam School,
Thaltej,
AHMEDABAD - 380054.
INDIA.

Phone(O): +91-79-26852427/ 26850829
Phone(F): +91-79-26767512/ 26767648
Fax : +91-79-26840290/ 26840290
Mobile : +91-9824001168
Email : sales@sigmatrainers.com
: sigmatrainers@sify.com
Web : www.sigmatrainers.com

Dealer:-

EXPERIMENTS

1. To generate SSB-SC AM signal using Double Balanced Modulator and low pass filter.
2. To see the effect of DC signal on modulation.
3. To generate Voice signal SSB-SC AM modulation and demodulation using mike.
4. To observe & measure Side band frequencies of SSB-SC signal.
5. To demodulate SSB-SC signal using Product detector (i.e. coherent detection).
6. To demodulate SSB-SC signal using Product detector Non-coherently with the help of Local Oscillator.
7. To see the effect of Low Pass filter on demodulated output.
8. To see the effect on SSB-SC AM modulated output by varying the amplitude and frequency of modulating signal.