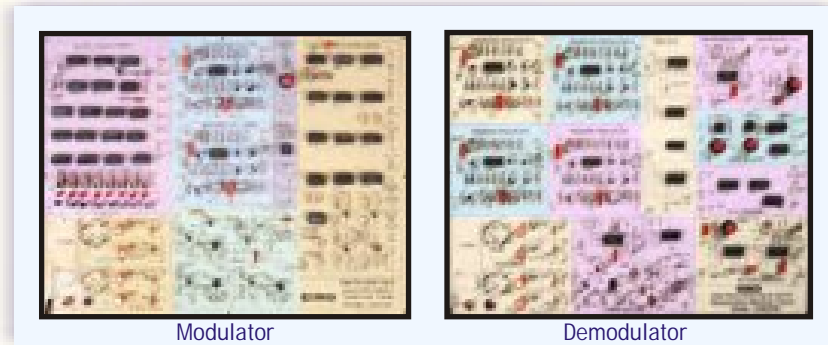




# BASE BAND COMMUNICATION TRAINER

MODEL - BBCOM100

This trainer has been designed with a view to provide practical / experimental knowledge of Base band Communication on a SINGLE P.C.B.



## SPECIFICATIONS

### On board Signal Generator

1. SINE WAVE  
Fixed Frequency : 250Hz, 500Hz, 1 KHz, 2KHz  
Variable Frequency : 1Hz to 30Hz, 0 - 2 Vpp
2. Sampling Clock  
Frequency : 2 KHz, 16KHz, 32KHz, 64KHz, 128 KHz  
Duty Cycle : 10 - 90% Selectable
3. D. C. Signal : 0 - 5 V
4. Clock Frequency : 240 KHz
5. Frame Frequency : 8 KHz
6. Data Clock : 512KHz.
7. Carrier Sine Waves : 500KHz & 1MHz.
8. 8 bit variable NRZ-L pattern.
9. 14 bit PRBS signal generation

### Modulation section

1. Analog signal sampling : Sample & hold, Natural sampling, Flat-top sampling
2. 4-Channel Analog Time Division Multiplexing
3. Odd, Even Parity and Hamming Code Generator
4. Pulse code modulation
5. Data Encoding NRZ(L), NRZ(M), NRZ(S), Biphase (Manchester, Mark, Space), URZ, Alternate Mark Inversion (AMI), unipolar to bipolar and bipolar to unipolar
6. ASK, FSK, PSK Modulation
7. Delta / Adaptive Delta / Sigma Delta / CVSD Modulation
8. Signal compression
9. PAM / PPM / PWM Modulation.
10. Audio pre-amplifier with microphone interface

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

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**Dealer:-**

### **Demodulation Section**

1. 2nd order and 4th order low pass filters
2. 4-Channel Time Division Demultiplexing
3. PLL clock recovery
4. Odd, Even Parity and Hamming Code Recovery
5. Single bit error detection and correction
6. Pulse code demodulation
7. Data Decoding NRZ(L), NRZ(M), NRZ(S), Biphasic (Manchester, Mark, Space), URZ, Alternate Mark Inversion (AMI), ASK, FSK, PSK Demodulation
8. Delta / Adaptive Delta / Sigma Delta / CVSD Demodulation
9. Signal Expander
10. PAM / PPM / PWM Demodulation.
11. Audio amplifier with headphone / speaker interface

### **Accessories :**

1. Power Supply cable
2. Patch cords and necessary cable and connector supplies in required numbers