



# DIGITAL LINE CODING & DECODING TRAINER MODEL - COM122

This trainer has been designed with a view to provide practical and experimental knowledge of the process of coding and decoding of digital data into different formats on single PCB.



## SPECIFICATIONS

1. Power supply requirement : 230V AC, 50 Hz.
2. Built in IC based power supply.
3. On Board Modulating Digital Data signal generator to generate any binary input word with Bit clock & Word clock.  
Word Length : 8 Bits.  
Word Clock Frequency : 8 KHz
4. Data Format Generator :
  1. NRZ (Unipolar)
  2. NRZ M
  3. Bipolar NRZ
  4. RZ (Unipolar)
  5. Bipolar RZ
  6. Bi-Phase (Manchester)
  7. AMI (Alternate Mark Inversion)
5. Decoding Section : Comparator, Bit Clock Recovery and Bit Clock Decoder.
6. All parts are soldered on single PCB with complete circuit diagram Screen-printed in multicolor.
7. Standard Accessories :
  1. A Training Manual
  2. Connecting Patch cords.

## EXPERIMENTS

1. To study theory of digital line coding and decoding.
2. To generate following different line codes and decode them.
  1. NRZ (Unipolar)
  2. NRZ-M
  3. Bipolar NRZ
  4. RZ (Unipolar)
  5. Bipolar RZ
  6. Bi-Phase (Manchester)
  7. AMI (Alternate Mark Inversion)

**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:-**