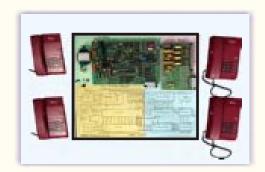


# **TELEPHONY TRAINER**

**MODEL - TELEPHONY100** 

This trainer has been designed with a view to provide Practical and experimental Knowledge of a general circuit of Telephony.





## **SPECIFICATIONS**

#### Telephone:

Line in Section : One DOT line connection socket
Hand set : One Handset connection socket

3. keyboard : 4 x 3 Matrix Key Board

4. Dialing Modes : Pulse and Tone.

5. Facilities : Redial, Mute, Flash, Pause, On/Off hook switches.

6. Indicators : Line In, Ringer

7. Controls : Ringer Volume, Pulse/Tone

8. Speech Path : Fully Non-Blocking9. Dial Pulse Ratio : 10pps±10%

10. Tone Frequency : 430Hz

11. Power supply requirement : From Phone lines.12. Lock Facility : By Key Switch.

13. Faults : 10 Nos.

#### **EPBX:**

1. Telephone Lines : Two DOT Lines Four Extension Lines. (Expandable to 8)

2. Telephones Instruments : 4 nos.

3. CPU Section : Microprocessor Z-80 based stored program Control technique CMOS cross

point switching.

Memory
64K Program memory, 32K Data RAM for buffer
Line Section
Opto Isolation for Trunk Line and 4 Extension Line.
Tone Generation
Dial Tone, Busy Tone, Ring Back Tone, Hold-on Music

7. Speech Path : Fully Non-Blocking

8. Longitudinal Balance : 60dbm

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:-

9.Loop Resistance : (a) Extension-600 ohms, (b) Co line-1200 ohms.

10. Cross Talk Attenuator : Greater than 70dbm11. Idle Channel Voice : Greater than 70dbm

12. Insertion Loss : Extension to Extension Not Less than 60db,

Extension to DOT Line Not Less than 60 db

13. Dial Speed : 10 + 1 PPS

14. Break Ratio : 33:6615. Cabling : Single pair

16. UPS : In built (without Batteries)17. Input Power : 230 VAC + 10% 50Hz

18. Test Points : 30 Nos.

19. Standard Accessories : 1. Training Manual.

2. Operating Manual.

### **EXPERIMENTS**

- 1. Introduction to EPBX system
- 2. To study Theory of EPBX Systems
- 3. To study Block diagram and Working principle
- 4. To study Power supply section
- 5. To study COL interface circuit section
- 6. To study Cross point switch circuit section
- 7. To study Intercom section
- 8 To study Data communication circuit section
- 9. To study Control (CPU) Section
- 10. To study Speech amplifier circuit & tone generator section
- 11. To study DTMF Generator section
- 12. To study DTMF Receiver section
- 13. To study Dual tone ring generator section
- 14. To study Installation procedure
- 15. To study Features of EPBX System
- 16. To study Monitoring Tones of EPBX
- 17. To study Different codes for operations
- 18. To study Operating procedure for different features
- 19. To study Console programming.
- 20. To study troubleshooting method
- 21. To study Data sheets of Ics used