



10903A GSM MOBILE PHONE TRAINER is a unique, self contained, easy to operate, trainingplatform that demonstrates the complete arrangement of a 2G Dual SIM GSM handset to understand the working of the mobile phone. MPT-01 Understanding Dual SIM Mobile Phone Trainer is the perfect product for today's global technical professional. One of the main features of the Trainer is its real time signals. This realistic classroom training Tech Book introduces the user to the fundamental of 2G Dual SIM GSM mobile equipment and clears the concept of underlying GSM technology in simple way. The Keypad of mobile handset, SIM sockets and User Interface section of the mobile phone i.e. Vibrator, Buzzer, Microphone, Speaker, Hands free port and display LEDs have been exposed onboard with switched faults creation facility and 58 test points for signal observation and detailed study. Also its attractive features and self explanatory multicolored chart containing useful technical information will help user in creating a full understanding of dual SIM mobile phone system.

## **Specifications**

- · Real time mobile operation
- Operates on dual band frequency network (GSM 900/ DCS 1800)
- · Colour TFT display
- Full understanding of Dual SIM mobile phone working
- Provides study of all sections in Dual SIM mobile phone
- Tx/ Rx frequency measurement and band Verification
- · 2G technology GMSK signal
- · Detail study of User Interface Control signals
- · Detail study of Dual SIM operation
- · Battery identification and charging study
- · Switched faults

## **Experiments**

- · Study and observe Transmitted/Received RF signals
- Study and observe Tx IQ/ Rx IQ signals Study and observe signal constellation of GMSK signal (Rx I/Q)
- $\cdot$  Study and observe signal constellation of GMSK signal (Tx I/Q)
- Study and measure Battery voltages the Battery charging phenomena
- Analyze the 'Partially ON' mode of phone while charging
- · Study of switch faults in Battery section
- Study and measurement voltages of Power management unit
- · Study and observe signals of LCD display section
- · Study of switch faults in LCD display section
- Study of the Row/ Column configuration of key matrix
- · Study of switch faults in Keypad section
- Study of SIM card detection with and without inserting SIM card
- · Study of switch faults in SIM interface section
- · Study and analyze the Buzzer section
- Study and analyze the vibrator section
- Study and analyze the LED control section
- · Study and analyze MIC & Speaker section
- Study and analyze the Hands Free section (MIC/Speaker)
- · Study of switch faults in User Interface Section
- · Study and analyze Microprocessor Control unit
- Analyze that a mobile is powered On at the alarm set time
- · Analyze the active mode of a mobile phone
- · Analyze the acting dead mode of a mobile phone
- · Analyze the sleep mode of a mobile phone

Note: Specifications are subject to change.