

RF Wireless Communication Trainer

Model : SA-941

SINCOM SA-941 RF Wireless Communication Trainer serves as an extensive training system for the study of the Transmission and Reception of Analog and Digital Data Input using ASK RF wireless communication link. This trainer features Analog Audio Inputs , Voice/MIC audio input, 4 bit Parallel Digital Data Input and Serial Data Input, Speaker and TX RX Antennas. It includes the capability to study the signal and voltage analysis of RF communication link.

Features

- ❖ Separate RF Transmitter and RF Receiver sections
- ❖ Variable Analog Input
- ❖ MIC on board
- ❖ Speaker on board
- ❖ Digital Data Encoder and Serial Digital Data output
- ❖ LED Indications for Digital Data TX and RX
- ❖ Easy selection of Analog and Digital TX RX Link
- ❖ Built in DC Power supply
- ❖ Functional Block Diagram printed in multicolor on the front panel of the white board
- ❖ Enclosed in an attractive, light weight, High Quality elegant wooden cabinet
- ❖ Interconnections by 2mm high quality banana sockets and pins.
- ❖ Maximum Test points to thoroughly explore all facets of the experiments



An ISO 9001:2015 Co.

Technical Specifications

▪ AC Mains Power Supply	: 230V \pm 10%, 50Hz
▪ DC Power Supply	: +5V, 12V regulated for TX and RX Unit
▪ No. of Units	: 2 Units (RF Transmitter and RF Receiver)
▪ Input to RF Transmitter	: Analog and Digital Signals
▪ Selection of TX RX signal	: Through Switches
▪ Analog Input to RF Transmitter	: Analog AF Input and Analog Sine Input
▪ Digital Input to RF Transmitter	: Square Data Input, Four bit Encoded Data and Serial Digital Data
▪ Analog Signal Generator	: Sine wave Amplitude 0-5Vpp , Frequency variable upto 100KHz
▪ Voice Audio	: Through MIC
▪ Analog Audio Input range	: 300 Hz- 10KHz
▪ Microphone	: Carbon /Condenser
▪ Square Signal Generator	: Amplitude 0-5Vpp , Frequency variable upto 100KHz
▪ Digital Data Input	: Four Bit
▪ RF Modulator	: ASK
▪ RF Frequency	: 433 MHz
▪ RF Link Distance	: 10 meter
▪ Antennas	: 02
▪ Audio Amplifier	: Mono 2W
▪ Audio Output	: Speaker 4 Ω
▪ Weight	: 6.0 kg (approx)
▪ Dimensions (mm)	: L 270 x W 390 x H 130
▪ Interconnections	: 2mm Banana sockets
▪ Operating Temperature	: 0-55 $^{\circ}$ C, 85% RH

Learning Scope

- To study the circuit of RF Wireless Communication System.
- To study the Transmission of Analog Input.
- To study the Transmission of Voice signal.
- To study the Transmission of Digital Data Input.
- To study the RF Transmitter section.
- To study the RF Receiver section.
- To study the Reception of Analog input.
- To study the Reception of Voice signal.
- To study the Reception of Digital Data input.
- To observe and note the wireless communication link between RF Transmitter & Receiver

Other Instruments Required : Digital Multimeter, CRO.

Accessories Included : MIC, Speaker, Patch Cord and Detail Instruction Manual.