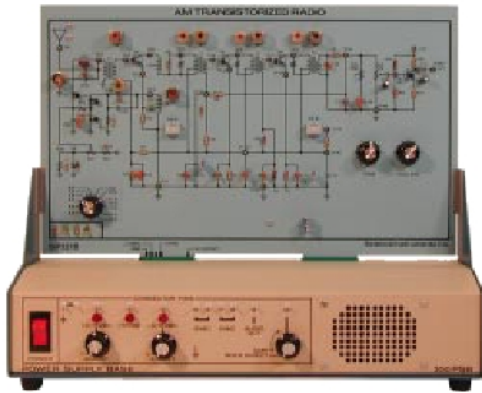


AM TRANSISTOR RADIO TRAINER

DESCRIPTION



The CL-SIP327, AM Transistor Radio, is a typical solid-state super-heterodyne receiver utilizing transistors. The individual circuits are provided along with adjustments for tuning. While an integrated circuit can provide the equivalent operation, this panel enables students to see first-hand how the various sections of the AM radio operate. RF and oscillator sections, IF and detector sections, audio and an AVC circuit are provided. The receiver is typical of a commercial/industrial telecommunications solid-state receiver. Alignment techniques are taught with standard industrial instruments. The panel operates from a 9-12V power supply. No speaker is included, since the panel is designed to operate with a power supply base or master builder, both of which contain a power amplifier and loudspeaker. The course includes approximately 40 hours of instruction.

FEATURES

- Tuner, IF detector, audio preamp, tone and gain control of an AM radio;
- Development of diagnostic skills in radio repair;
- Ease in evaluating the performance of a typical AM receiver which uses transistors;
- Varactor-tuned whip antenna, $\leq 5 \mu\text{V}$ sensitivity;
- Can be used with the AM transmitter for demonstration of a communication system; and,
- Includes malfunction switches for diagnostic training.

EXPERIMENT TOPICS

- RF Mixers, Converters;
- IF Amplifiers;
- Detectors, AVC, Audio Amplifiers;
- Alignment Procedures; and,
- Troubleshooting a Receiver .

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AM TRANSISTOR RADIO TRAINER

BASIC EQUIPMENT INCLUDED:

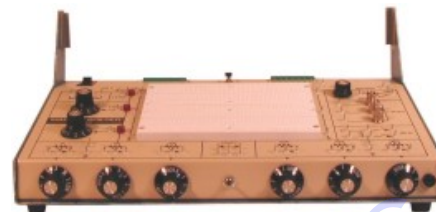
- One (1) CL-SIP327B-1P. AM Transistorized Radio Panel; and,
- One (1) CL-SIP327BM/328DM. Laboratory Manual

POWER BASE REQUIRED:

- One (1) CL-S300B, Master Builder; or,
- One (1) CL-S300PSB, Power Supply Base.

SPECIFICATIONS

- ✓ Painted panel with black symbols;
- ✓ Green mask on PCB side;
- ✓ Panel contains a whip antenna, volume and tone controls;
- ✓ Frequency range: 525 kHz-1705 kHz;
- ✓ IF Frequency: 455 kHz; nominal bandwidth: 4-5 kHz;
- ✓ Capacitor and slug adjustable;
- ✓ Envelope detector;
- ✓ 21 test points are provided at all important locations, and the test points penetrate to both sides of the panel;
- ✓ Panel is made reversible, so that troubleshooting can be performed on the back side of the panel. The printed circuit board side faces the student for troubleshooting;
- ✓ Eight malfunction switches with covers are provided;
- ✓ Gold-plated contacts to power supply;
- ✓ 40-hour course supplied with a comprehensive lab manual, which includes material about the AM/FM radio (SIP327BM/328DM);
- ✓ Panel measures 8.5 x 14 inches; and,
- ✓ Total weight: 3.5 lbs (1.59 kg).



CL-S300B



CL-S300PSB