

## INTRODUCTION

The B & K-Precision Model 1040 CB ServiceMaster is a high-quality test instrument intended primarily for performance testing of class D Citizen's Band transceivers in the 27 MHz band. It will also test other types and bands of two-way radio transceivers, transmitters, receivers and audio equipment. Numerous measurements can be made directly from the Model 1040, but it also is designed for interconnection to an RF signal generator, frequency counter and oscilloscope, forming an entire Citizen's Band radio test center. The test center is capable of complete performance testing, including checks such as receiver sensitivity, receiver audio output power, audio distortion, transmitter frequency, transmitter modulation, transmitter RF power output, antenna standing wave ratio (SWR) and many more. The unit includes features for testing both AM and SSB operation.

The test center, including a Model 1040 CB ServiceMaster, helps the service technician realize his primary goal of quick and accurate trouble diagnosis. Time is the technician's most costly resource; he must spend as little time as possible servicing each piece of equipment. The

Model 1040's simplicity of connections, easily used operating controls, and fast testing procedures significantly reduce servicing time. The instrument will quickly pay for itself. For example, only the antenna jack and external speaker jack of the radio are connected to the Model 1040 for testing. All standard tests can be made without changing test equipment or radio set connections.

Accurate trouble diagnosis the first time is crucial to the technician's reputation for competence and professionalism. The Model 1040 makes this possible. It offers every test necessary to isolate virtually any trouble in any CB radio. It tests all modes of operation and all channels of operation, and includes vital testing of accessories such as microphones and antennas. All test readings are the direct-reading type, which eliminates the need for any calculations or conversions. This further enhances the other speed and accuracy features of the instrument.

The versatile instrument operates from AC power for use on the service bench, or from 12-volts DC power for use in a vehicle.

## FEATURES

### FULLY SOLID STATE

Offers all the advantages of solid state construction, including:

- Instant warm-up
- Low power drain
- Dependability, reliability
- Ruggedness
- Light weight

### AC OR DC POWERED

Operates from 120-volt, 60 Hz AC power for bench servicing or from 12-volt DC power. Operation from 12-volt DC power is convenient for in-vehicle testing such as SWR checks of antennas.

### VERSATILITY

In addition to testing Citizen's Band transceivers in the 27 MHz band, it will test many other communications transceivers, transmitters, receivers and audio equipment. Examples of testing several types of equipment are included in this instruction manual.

### SIMPLIFIED OPERATING CONTROLS

Controls are so located and labeled as to eliminate error and speed servicing. Even distortion and SWR measurements are direct-reading for simplified and speedier operation.

### SIMPLIFIED CONNECTIONS

Only one connection required from each instrument, RF generator, frequency counter, and oscilloscope, to the 1040. These connections need never be changed unless the instruments are to be used elsewhere. Only two connections to radio set for all standard tests, at the antenna jack and external speaker jack. Connections need not be changed from one test to another.

### FAST SERVICING

Many troubles can be pinpointed directly from the test results. The housing does not even need to be removed from the radio set unless test results show the trouble is inside the radio.

### RECEIVER AUDIO OUTPUT POWER MEASUREMENT

Accurately measures receiver audio output power from 1 milliwatt to 10 watts.

### AUDIO LOAD

Terminates receiver audio output in 4-ohm, 8-ohm or 16-ohm load. Load dissipates up to 10 watts continuous.

### RECEIVER SENSITIVITY MEASUREMENT

True signal-plus-noise to noise ratio (S + N)/N sensitivity measurement is made easily using dB scale.