

AUXILIARY TEST EQUIPMENT AND CABLE REQUIREMENTS

Auxiliary test equipment required to supplement the Model 1040 CB ServiceMaster and make up a complete test center: RF signal generator, frequency counter, and oscilloscope. If mobile radios are to be tested, a DC power supply is also required. This section of the manual outlines the minimum specifications for the auxiliary test equipment. Moderately priced, general purpose instruments will usually meet all the requirements. Naturally, instruments that exceed the minimum specifications may also be used. You may use your present test instruments if desired; merely

check that they meet the specifications. If new test equipment is to be purchased, **B & K-Precision** offers the ideal companions for the Model 1040. Contact your **B & K-Precision** dealer for information on currently available models, or write to Dynascan for a free catalog.

This section of the manual also provides information on the variety of cables that may be required to interconnect the instruments that make up the test center, and cables that connect to the radio under test.

RF SIGNAL GENERATOR SPECIFICATIONS

FREQUENCY	Must cover the 27 MHz band CB channels.
OUTPUT IMPEDANCE	50 ohms.
OUTPUT LEVEL	Must provide at least 1000 microvolts output at highest setting and be adjustable down to 0.25 microvolt or less. Attenuator should accurately indicate output level in microvolts.
MODULATION	Must have AM modulation capability, external modulation capability, and modulation percentage meter.
DESIRABLE FEATURES	Covers commonly used CB IF frequencies (especially 455 kHz). Ultra-fine vernier control for easily setting exactly on frequency. High stability.

FREQUENCY COUNTER SPECIFICATIONS

FREQUENCY	Must display 27 MHz band CB frequencies. Should display 6 digits to show frequency to nearest hundred Hz.
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SENSITIVITY	50 millivolts or less.
INPUT IMPEDANCE	Low-impedance (50-ohms), or high-impedance (typically 1 megohm).

OSCILLOSCOPE SPECIFICATIONS

FREQUENCY RESPONSE	20 Hz to 2 MHz or greater.
SENSITIVITY	50 millivolts/div or less.

POWER SUPPLY REQUIREMENTS

VOLTAGE	Adjustable from approximately 11.5 to 15 volts, nominal 13.8 volts transmit and receive.
CURRENT	2 amperes minimum.
DESIRABLE FEATURES	Adjustable current limiting. Maximum voltage output of approximately 15 volts to prevent accidental damage to radios. Low ripple and transient content. Good regulation as radio is switched from receive to transmit mode and vice versa.

CABLE REQUIREMENTS

The cables which connect from the Model 1040 CB ServiceMaster to the RF signal generator, frequency counter, and oscilloscope may terminate a wide variety of connectors, depending upon the specific test instruments used. The cables which connect from the Model 1040 to

the radio under test may also require a variety of terminations depending upon the specific radio set. Fig. 4 shows several cables terminated in a variety of the most commonly encountered connectors. Each cable is identified by the corresponding **B & K-Precision** model number for convenience in ordering.