



cation. Continuous measurements can also be made of the VSWR of components as they are adjusted.

The accuracy of the method at very low values of VSWR is primarily determined by the VSWR of the 50-ohm termination unit used to set up the instrument. The residual VSWR can be as large as twice the VSWR of this termination. The accuracy of the method also decreases at large values of VSWR, reaching  $\pm 0.006$  at a VSWR of 1.1 and  $\pm 0.03$  at a VSWR of 1.22.

— R. A. SODERMAN

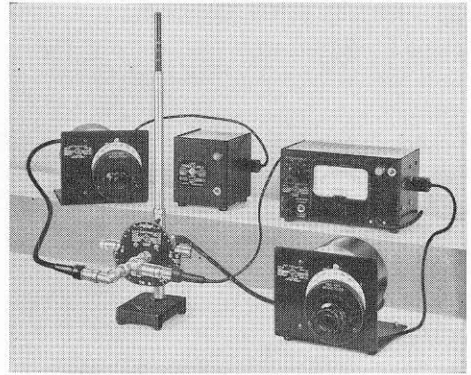


Figure 5. The Admittance Meter as set up for admittance or VSWR measurements, with a Type 1209-B Unit Oscillator and a Type DNT-3 Detector.

## ASSEMBLY TOOLS FOR TYPE 874 COAXIAL CONNECTORS

To facilitate the assembly of our TYPE 874 Coaxial Connectors on cables or rigid line, we are making available a set of tools, illustrated in Figure 1. The TYPE 874-TOK Assembly Tool Kit consists of an outer-connector wrench, an inner-connector wrench, and a coupling-nut wrench, as shown in Figure 1. The inner-connector wrenches are used for holding and installing both the insulat-

ing bead and the inner connectors. They also prevent possible damage to the keyway in the bead during installation which can result in misalignment of the inner and outer connectors. The outer-connector wrench and the coupling-nut wrench are used to install the outer connector and to tighten the coupling nut properly without marring the surface. These three wrenches, which are sold as a

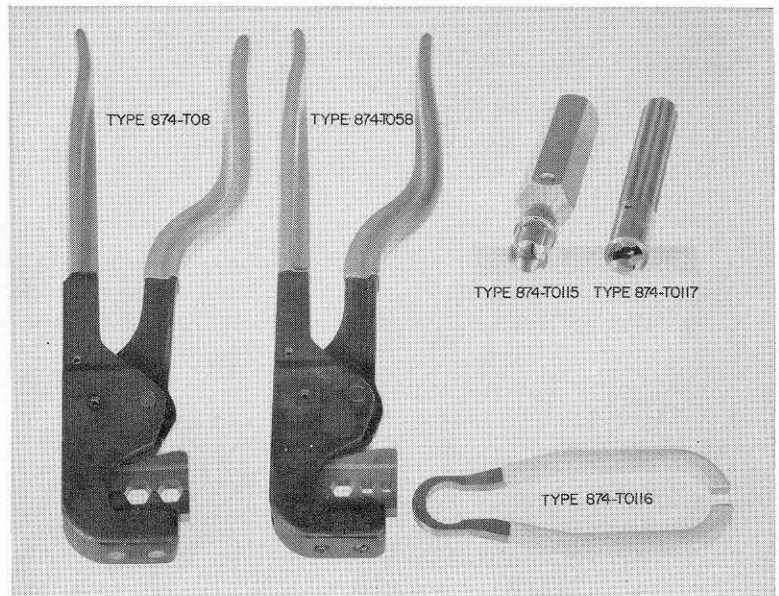


Figure 1. View of the assembly tools for assembly of Type 874 Coaxial Connectors. The three tools at the right, Types 874-T015, 116, and 117, comprise the Type 874-TOK Tool Kit. The crimping tools are shown at the left.



unit, facilitate the installation of connectors on both rigid line and cable.

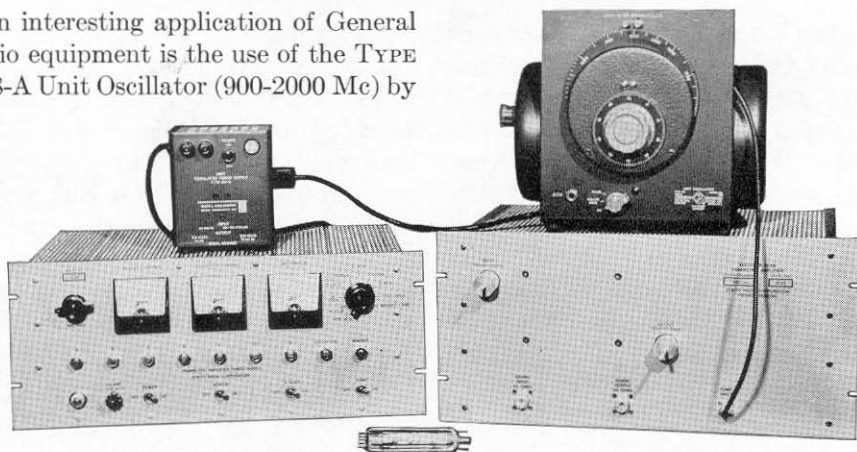
In the installation of shielded cable on cable connectors and panel connectors, a ferrule is crimped in place to secure the braid of the cable shield firmly to the shell of the connector. When large numbers of connectors are to be installed, or where the neatest possible crimp is wanted, the use of the TYPE 874-TO58 or the 874-TO8 Crimping Tools is recom-

mended. These tools use hexagonal dies to produce a hexagonally shaped crimp. The appropriate tools for each 874-type cable or panel connector are indicated below.

<i>Type</i>	<i>Connector Type</i>	<i>Crimping Tool Type</i>	<i>Code Word</i>	<i>Price</i>
874-TOK	874-C58, -P58, -PB58	} 874-TO58	COAXKITTEN	\$20.00
874-TO58	874-C62, -P62, -PB62		COAXCRIMPO	75.00
874-TO8	874-C, -P, -PB		COAXCRIMBA	85.00
	874-C8, -P8, -PB8	} 874-TO8		
	874-C9, -P9, -PB9			

## UNIT OSCILLATOR USED AS PUMP IN PARAMETRIC AMPLIFIER

An interesting application of General Radio equipment is the use of the TYPE 1218-A Unit Oscillator (900-2000 Mc) by



the Zenith Radio Corporation to supply energy at the "pump" frequency in a parametric amplifier.

Shown in the photo is the Zenith Electron Beam Parametric Amplifier and associated power supply, together with a General Radio Unit Oscillator and regulated power supply.

Zenith is currently delivering Para-

metric Amplifiers in the frequency range of 350 to 1000 Mc (and soon 1300 Mc) and has selected General Radio Oscillators as standard equipment to "pump" the Parametric Amplifier.

Noise figures of the order of 1 db are observed over a wide band. Unconditional stability and high gain are characteristic of electron tube parametric devices.

# General Radio Company