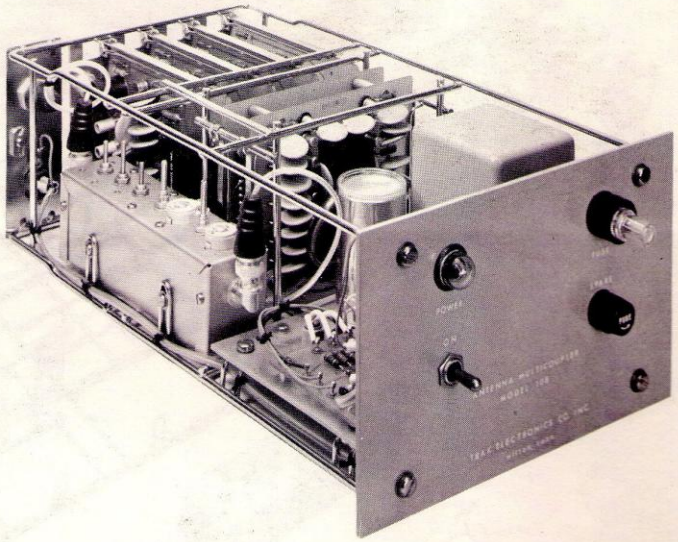
WILTEK, INC.
FORMERLY
TRAK

TRANSISTORIZED ANTENNA MULTICOUPLER MODEL 108 2-32 MC

- Miniaturized, solid state, modular construction
- Permits simultaneous operation of 8 receivers from a single antenna
- Low heat dissipation, requires only 12 watts input power
- Operates from 2-32 mc
- Constructed to Mil-E-16400



The TRAK Model 108 Wideband Antenna Multicoupler is a compact, solid state unit designed for use in h-f direction finding or communication systems. It allows one antenna to service up to 8 receivers isolating them by 40 db. Intermodulation-distortion products are kept low through the use of linear transistor circuitry. Gain is flat over the 2-32 mc band and is constant between channels and between units. Identical phase between channels and between units is obtained by using circuitry whose phase varies linearly with frequency. Input and output impedances are matched at 72 ohms to increase the control of phase and amplitude when used with a direction finding system.

Miniaturized, solid state construction provides a unit which produces less than 10% the heat of conventional multicouplers. It also offers 4 to 1 space advantage over vacuum tube units.

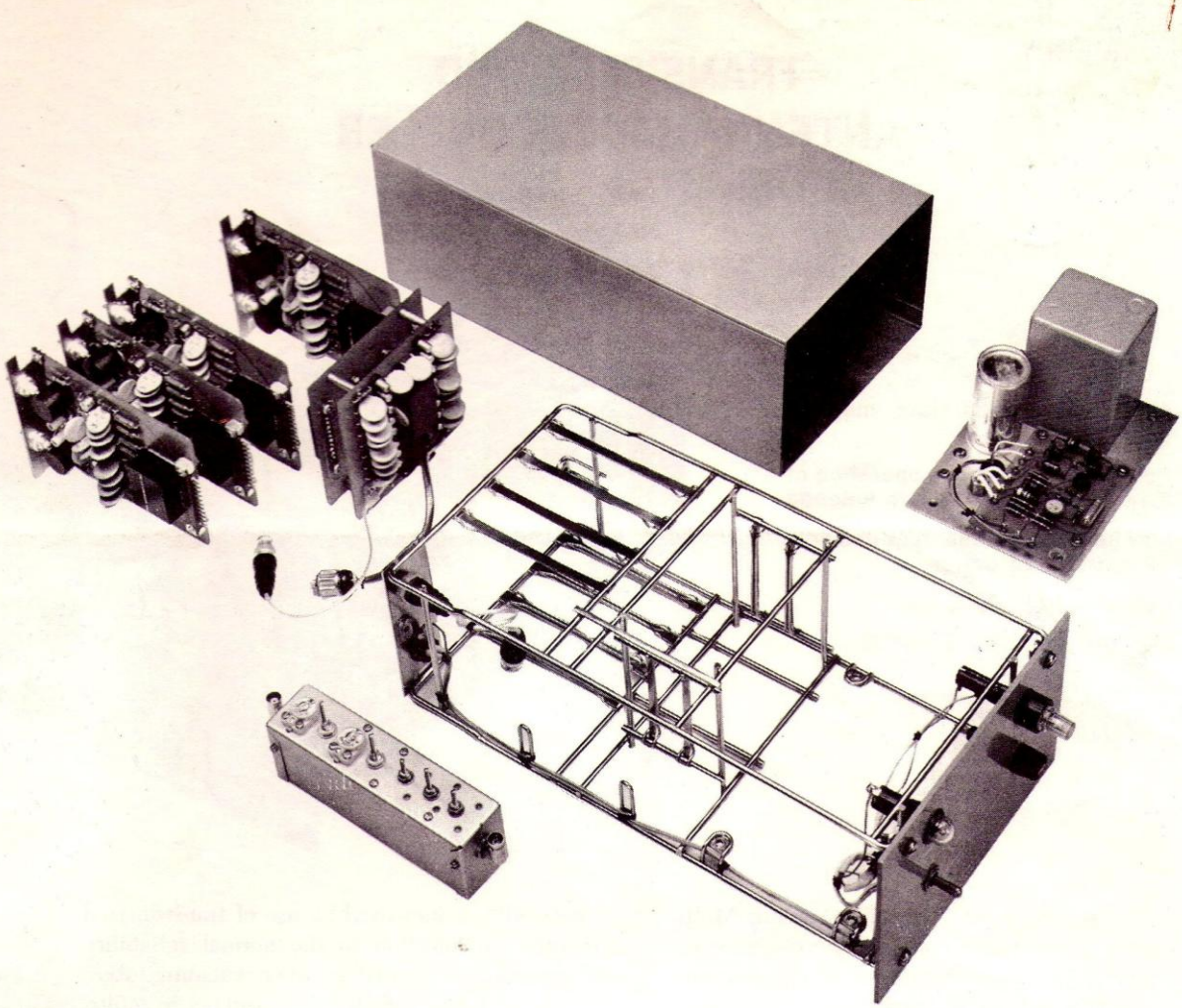
Form 2-1-36

Reliability is increased by use of transistorized circuitry. In addition to the normal reliability advantages of transistors over vacuum tubes, there is an added reliability advantage in multicoupler circuitry. This is because the linear region of the transistors occurs at approximately one-half maximum dissipation as opposed to vacuum tubes which are operated at full dissipation for linearity.

Maintenance is facilitated by the use of plug-in modules minimizing down time. Modules are all interchangeable.

This compact transistorized multicoupler, incorporating advanced techniques in circuit and mechanical design, offers electrical performance combined with high reliability suitable to meet the requirements of the latest communications and direction finding systems.

WILTEK, INC., formerly
TRAK ELECTRONICS COMPANY, Inc. TRAK WILTON, CONNECTICUT



SPECIFICATIONS

Frequency Range	2-32 mc in one band
Outputs	8 at 72 ohms
Output VSWR	1.5:1
Input	One at 72 ohms
Input VSWR	1.7:1
Insertion gain	2 ± 1 db
Amplitude matching	± 0.5 db between any channel of any multicoupler
Overload	1.5 volt signal reduces amplitude of small signal 3 db.
Noise figure	less than 10 db
Intermodulation	2nd and 3rd order products 60 db. below two 0.25v signals
Output Isolation	40 db. minimum
Receiver radiation isolation	60 db. minimum
Phase characteristics	less than ± 2° between any channel or any multicoupler
Size	less than ½ cubic foot
Weight	approximately 10 pounds
Power	115v ± 10%, 48-63 cycles, single phase, 12 watts