



## SALES SERVICE INFORMATION

The Technical Materiel Corporation  
Manhasset Neck New York

SSB 114

### Model TAK-2 Tone Keyer

The Model TAK-2 Tone Keyer is a high stability Tone Keyer specifically designed for multi-channel transmission of Radio Teletype information over a Microwave Radio System or land line.

The Tone Keyer has been designed to accommodate conventional (60-75-100 wpm) teletype transmissions or high speed intelligence such as the multiplex output of the AN/FGC-5 equipment.

The Model TAK-2 contains a high stability audio frequency oscillator which generates the standard tone frequency voltage. The tone frequency is determined by a plug-in frequency determining element. A balanced output stage is keyed by the incoming intelligence. At the output of the tone keyer this intelligence exists as amplitude modulated tone keyed on-off. Special attention has been given to the reduction of bias distortion; there are no keying transients generated in the keyed stage. This is accomplished by a specially designed keying circuit.

#### Technical Specifications:

- Keying Speed: 0 to 125 dot cycles per second.
- Keying Inputs:
- Polar relay contacts shorting to ground.
  - Amplitude modulated (keyed) tone 400 to 10,000 cps.
  - DC current pulsed positive or negative with respect to ground.
- (NOTE: Keying inputs a and b above will accommodate keying speeds of up to 40 dot cycles per second maximum.)
- Input Levels:
- Keyed tones 0 dbm.
  - DC current pulses 30 to 60 ma.
  - Relay contacts: shorting to ground.
- Input Impedances:
- Keyed tones 600 ohms balanced.
  - Relay contacts 100,000 ohms.
  - DC current 1800 ohms, external load
- Tone Carrier Frequencies:
- 40 dot cycles per second  
595, 765, 935, 1105, 1275, 1445, 1615, 1785, 1955, 2125, 2295, 2465 cycles per second.
  - 125 dot cycles per second  
1785, 2465, 3145 cycles per second