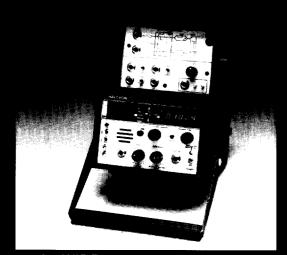


701A TRANSMISSION TEST SET



702A TRANSMISSION LINE MONITOR



704A2 WIDE-BAND TEST SET

The 701A Transmission Test Set and the 702A Transmission Line Monitor measure transmission level, frequency, and noise (including notch noise) on voice-grade, and program circuits up to 20 kHz in bandwidth. The 702A is a compact, rackmount instrument requiring only 13/4 inches of mounting space; the 701A is a rugged, portable version.

Dual digital displays in both the 702A and the 701A provide positive differentiation between level/noise and frequency readouts. A crystal-controlled 1004-Hz holding tone may be used to measure loss, noise with tone, transient events, and other parameters that require precise test tones. The oscillator can also be manually adjusted to provide tones over a 50 Hz to 20 kHz frequency range. Other features include four built-in noise-weighting networks, dial/hold capability, and a built-in speaker.

Both instruments may be optionally equipped for dc operation. Self-contained, rechargeable batteries provide the 701A with six hours of normal operating time. The 702A may be equipped for operation from a -48 Vdc office battery, a feature which is particularly convenient in areas where the use of ac is restricted by potential interference with low-level signals. The Halcyon 701E is available in CCITT parameters.

## **FEATURES**

- Dual digital displays
- Holding-tone oscillator Dial hold capability
- Optional battery operation

The 704A2 Wide Band Test Set performs general transmission measurements on voice-grade, program, and wide-band carrier channels. With a frequency range of 110 kHz and 50 kbit noise weighting filter, it is well suited for analog DDS local loop measurements per BSP-314-410-510.

The 704A2 measures transmission level, frequency,

noise (idle-channel and notch), three levels of impulse noise, noise-to-ground, P/AR, and return loss. Its dual digital readouts simultaneously display both the prime measurement

(level or noise-with-tone) and frequency.

With split transmit/receive impedance capability, the 704A2 may be set for different impedance values on transmitting and receiving lines.

Highly stable fixed-frequency and variable oscillators provide a source for notch noise and similar measurements that require precise, low-distortion test tones. In addition, the 704A2 incorporates six weighting networks and a notch noise filter which can be used with any of the weighting networks.

Operating from either ac or self-contained, rechargeable batteries, the 704A2 is ideal for field use.

The Dial and Hold Unit provides dial-and-hold capability for two lines, one in the transmit mode and one in the receive mode. This unit requires no power and is packaged in the front cover of the 704A2.

## **FEATURES**

- Dual digital displays (level/noise and frequency)
- Split transmit/receive impedances
- Extended impedance range (135, 150, 600, 900, and 1200 ohms)
- P/AR
- Return loss
  - Four-wire dial/hold capability