**Features & Benefits**

- 125% positive modulation meter
- 100% negative modulation or carrier level deviation meter
- No overshoot linear phase filtering for high accuracy
- 500 kHz to 40 MHz bandwidth to cover standard AM Broadcast and MW
- Built-in P.M.D.D. circuit for digital peak indicator modulation
- Built-in voltmeter amplifies proof-of-performance measurements
- NRSC compliant
- Built-in modulation calibrator eliminates need for external calibration
- Optional frequency agile AM band preselector for off-air monitoring

**General Description**

The TFT Model 923 AM Modulation Monitor is a precision broadband demodulator which permits extremely accurate proof-of-performance measurements for an AM transmitter and for monitoring the modulation level of an off-air broadcast signal when it is used in conjunction with the optional AM broadcast band RF preselector.

**Multiple Meters**

Two large front panel meters are standard for simultaneous display of positive and negative modulation. The left meter can be switched to monitor modulation of carrier shift level. The right meter can be switched to measure SNR or frequency response.

**Digital Peak Modulation Indicators**

Model 923 contains three peak flashers for quick visual monitoring. These indicators "catch" modulation peaks which cannot be observed on the Modulation Meter. The "+" 125% indicator is factory set, the "+" and "-" indicators are digitally programmable from the front panel for peaks from 50 to 150% in 1.0% increments.

TFT’s exclusive microprocessor based Peak Modulation Duration Differentiation (P.M.D.D.) circuit measures true modulation peaks and separates peak modulation from transients for accurate measurement and display.

**Internal Self-Calibration**

The 923 also contains a built-in modulation calibration circuit which provides both the "±" 100% and "+" 125% peak modulation reference levels. The signal used for calibration is a true amplitude modulated RF carrier generated internally. The AM calibrator provides an accurate validation of the 923’s modulation measurement.

**Built-in AC Voltmeter**

The 923 includes a built-in 50 dB attenuator calibrated in 10 dB steps for making measurements of frequency response as well as signal to noise ratio to -70 dB below 100% modulation.

**RF Preselector Expansion**

Although the basic 923 is designed for
A high level RF feed directly from a transmitter, it can be used for off-air monitoring by adding a preselector module. The preselector is frequency synthesized from 500 kHz to 1,990 kHz and tunable digitally in 1 kHz steps from the front panel. The only requirement for off-air modulation monitoring is an antenna; no external RF amplifier is needed. 50 dB of AGC insures that adequate input signal is available for AM transmitters at different powers and patterns.

**Audio Outputs**

The rear panel audio outputs conform to NRSC response for studio monitoring system.