

# You get all these features ONLY in the Western Electric 5A Monitor for FM Broadcasting

## CENTER FREQUENCY MONITOR:

Accuracy—better than  $\pm 500$  cycles. ( $\pm 200$  cycles if occasionally adjusted to agree with a primary standard)  
Meter Range— $\pm 3,000$  cycles  
Terminals for connecting remote meter

## MODULATION PERCENTAGE MONITOR:

Accuracy—better than 5% for all readings  
Modulation Range Capability—up to 133% ( $\pm 100$  kc)  
Terminals for connecting remote meter

## QUALITY DESIGN AND MANUFACTURE:

Designed by Bell Telephone Laboratories.  
Built by Western Electric, to Western Electric standards of quality.



## PROGRAM MONITORING CIRCUIT:

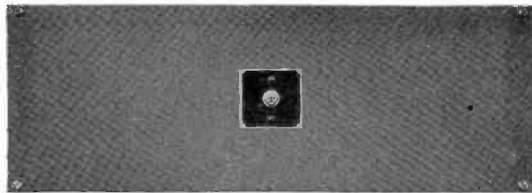
Output suitable for either aural program monitoring or FM noise and distortion measurements  
Frequency Response— $\pm 0.25$  db, 30 to 30,000 cycles, without de-emphasis; with de-emphasis, response is within  $\pm 0.5$  db of the standard 75 microsecond de-emphasis curve  
Audio Output Power—output level adjustable up to +12 dbm—permits direct switching of program monitor from transmitter input to 5A Monitor output  
Harmonic Distortion—less than 1/4 of 1% from 30 to 15,000 cps  
Output Noise—at least 75 db below signal at 100% modulation

## MODULATION PEAK INDICATOR:

Indication Lamp—flashes when a selected level of modulation is exceeded  
Peak Limit Range—continuously adjustable between 40% and 140% modulation

## AM NOISE DETECTOR:

An exclusive feature in the 5A Monitor. The output of this detector—which may be read directly on an electronic voltmeter or noise meter—is automatically referred to 100% amplitude modulation, thus simplifying measurement of transmitter AM noise.



**POWER SUPPLY:** Newly designed 20C Rectifier (furnished as a part of the 5A Monitor) provides electronically regulated d-c with less than 1 millivolt ripple from 105-125 volts a-c 60 cycles. May be remotely located if desired.

The 5A Monitor includes numerous other valuable features such as: dual thermostats and dual heaters for each crystal—means for checking the inherent noise level of the monitor from its input to output terminals—requires only a low RF input level (1 watt) which can vary from 0.3 to 3.0 watts; i. e., a 10 to 1 variation without affecting the performance of the monitor. To get the complete story on this outstanding monitor value, call your Graybar Broadcast Representative or mail the coupon below.

# Western Electric

Distributors: In the U. S. A.—Graybar Electric Company.  
In Canada and Newfoundland—Northern Electric Company, Ltd.



—QUALITY COUNTS—

Graybar Electric Company  
420 Lexington Avenue, New York 17, N. Y.

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Please send me Bulletin T-2437, including curves, schematics and block diagram of the 5A Monitor.

NAME \_\_\_\_\_

STATION \_\_\_\_\_

ADDRESS \_\_\_\_\_

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