

# WAYNE KERR

INNOVATIONS IN INSTRUMENTATION

## audio-video instrumentation

Wayne Kerr, makers of the world's most comprehensive range of electronic bridges, have also developed many precision signal-generating, attenuating, measuring and analysing instruments for frequencies from DC to 60 Mc/s. These instruments combine maximum versatility with simplicity of operation, and are in widespread use throughout Government Establishments, Broadcasting Authorities, the Armed Services and all types of scientific and industrial laboratories.

### INSTRUMENT-OF-THE-MONTH

**VTVM measures  $30\mu\text{V}$ -100V from 20 c/s to 300 kc/s**

The Wayne Kerr M121 AF Voltmeter has open, linear scales for the accurate measurement of voltages with negligible loading on the source. The mirror-scale movements are individually calibrated in r.m.s. values and in dB relative to 1mW in 600 ohms. Exceptional linearity and stability have been achieved by including the rectifying elements in a current-feedback loop. The h.t. supply for all stages is fully stabilised, eliminating any undesired effects of mains fluctuations. A cathode-follower output stage is included to permit feed-through amplification of up to 60dB.

#### Brief Specification:

Ranges 1, 3, 10, 30, 100 and 300mV,  
1, 3, 10, 30 and 100V r.m.s.  
(Multiplier for 300V.)

Accuracy Better than 1% f.s.d.

#### Input Impedance

1 mV to 10V (direct):  $\geq 15\text{ M}\Omega$  shunted by 20pF  
1 mV to 10V (transformer): 600 $\Omega$  and 100k $\Omega$ ,  
balanced or unbalanced  
30V and 100V (direct): 1 M $\Omega$  shunted by 15 pF



#### AUDIO SIGNAL GENERATOR S121

Very low harmonic content, 13-ft. tuning scale.

Frequency 10 c/s to 120 kc/s  
Stability 100 ppm  
Accuracy  $1\% \pm 0.5\text{ c/s}$   
Output (600 $\Omega$ ) -70 dBm to +10 dBm  
Hum level at least 60 dB down



#### COMPLEX-WAVEFORM ANALYSER A321

High selectivity plus simple operation

Frequency 20 c/s to 20 kc/s  
Stability 1%  
Response  $\pm 1\text{ dB}$   
Accuracy Frequency: 2%  
Level: 5% or  $\pm 1\text{ dB}$



#### WIDE-BAND ATTENUATOR Q251

Compact, high accuracy and stability  
Frequency DC to 60 Mc/s  
Range 0-61.5 dB (0.5-dB steps)  
Impedance 50 $\Omega$  or 75 $\Omega$   
Accuracy  $\pm 0.1\text{ dB}$



#### VIDEO OSCILLATOR Q22D

Output level unaffected by frequency changes

Frequency 10 kc/s to 10 Mc/s, plus mains-frequency square wave  
Accuracy 1%  
Output -51.5 to +10 dB on 1 Vp-p across 75 $\Omega$  (alternatives: 1mW in 75 $\Omega$ , or 1mW in 50 $\Omega$ )  
Stability  $\pm 0.5\text{ dB}$

FOR MORE INFORMATION use the coupon below (faster) or the reader enquiry service (easier).

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## WAYNE KERR

The Wayne Kerr Laboratories Limited  
Sycamore Grove, New Malden, Surrey  
Telephone: MALden 2202 Telex 262333  
Cables: Waynkerr, New Malden

Please send me further information about the instruments I have indicated (tick appropriate box)

'Instrument-of-the-month' AF Voltmeter M121 ☐

Audio Signal Generator S121 ☐

Complex-Waveform Analyser A321 ☐

Wide-band Attenuator Q251 ☐

Video Oscillator Q22D ☐

Electronic Bridges ☐

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