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SHORT FORM CATALOG



PRECISION TEST EQUIPMENT

**BOONTON RADIO
CORPORATION**
BOONTON • NEW JERSEY • U. S. A.

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Zurich 1/39, Switzerland

BRO PRECISION ELECTRONIC

Measures Q and Reactance
of Networks

190-A Q METER

RF Range: 20 to 260 Mc \pm 1%

Q Range: 5 to 1200

Q Accuracy: \pm 7%* 20 to 100 Mc

\pm 15%* 100 to 260 Mc

*For circuit Q of 400 read directly on indicating Meter

Capacitor Range: 7.5 to 100 μ f

Capacitor Accuracy: \pm 0.2 μ f 7.5 to 20 μ f

\pm 0.3 μ f 20 to 50 μ f

\pm 0.5 μ f 50 to 100 μ f

Power Requirements: 190-A: 90-130 Volts, 60 Cps, 55 watts

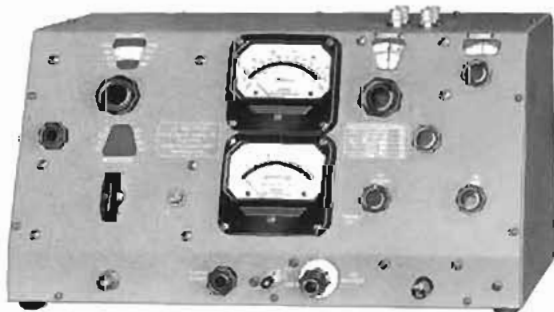
190-AP: 90-130 Volts, 50 Cps, 55 watts



Price: \$875.00

Measures Q and
Reactance of Networks

260-A Q METER



RF Range: 50 Kc to 50 Mc \pm 1% approx.

Q Range: 10 to 625

Q Accuracy: \pm 5%* 50 Kc to 30 Mc

\pm 10%* 30 Mc to 50 Mc

*For circuit Q of 250 read directly on
indicating Meter

Main Capacitor Range: 30 to 460 μ f

Main Capacitor Accuracy: \pm 1% or 1 μ f which-
ever is greater

Vernier Capacitor Range: -3.0 to +3.0 μ f

Vernier Capacitor Accuracy: \pm 0.1 μ f

Power Requirements: 260-A: 90-130 Volts, 60 Cps,
65 watts

260-AP: 90-130 Volts, 50 Cps,
65 watts

Price: \$850.00

Measures Resistance and
Reactance of Networks

250-A RX METER



RF Range: 500 Kc to 250 Mc \pm 1%

Resistance Range: 15 to 100,000 Ω

Resistance Accuracy:

$$\pm \left[2 + \frac{F^2}{200} + \frac{R^2}{5000} + \frac{Q^2}{20} \right] \% \pm 0.2\%$$

*F = frequency (Mc);

R = RX Meter R_x reading (Ω);

Q = $\omega RC \times 10^{-12}$, where C =
RX Meter C_r reading (μ f)

Capacitance Range: -100 to 20 μ f

Capacitance Accuracy:

$$\pm (0.5 + 0.5 F^2 C^2 \times 10^{-12}) \% \pm 0.15 \mu\text{f}$$

*F = frequency (Mc);

C = RX Meter C_r reading (μ f)

Power Requirements: 105 to 125 volts, 50-60 cps,
60 watts

Price: \$1525.00

Calibrates Band - Pass Circuits

240-A SWEEP SIGNAL GENERATOR

RF Range: 4.5 to 120 Mc \pm 1%

RF Output: 1 μ v to 0.3 Volts[°] (sweep)
1 μ v to 0.1 Volts[°] (CW & AM)
[°]Across external 50 ohm load

Price:
\$1820.00

Sweep Range: \pm 1% to \pm 15 Mc or \pm 30% of center frequency,
whichever is smaller

Sweep Linearity: \pm 10% over central \pm 80% of Sweep excursion
 \pm 20% over outer 20% of sweep excursion

Output Flatness: Flat within < 7%

Crystal Birdle Markers: 0.1, 0.5 and 2.5 Mc \pm 0.005%

Pip Markers: 2 Markers continuously adjustable to any position on
sweep excursion

AM Level: Approximately 30% from internal 1000 Cps Oscillator

Power Requirements: 240-A: 105-125 Volts, 60 Cps, 280 watts
240-AP: 105-125 Volts, 50 Cps, 280 watts



Extends Frequency Range of 240-A

203-B UNIVERTER

RF Range: 100 Kc to 25 Mc[°]
[°]With 70 to 95 Mc input from 240-A

RF Output: (A) 1 μ v to 0.1 Volts[°]
[°]Across external 50 ohm load
(B) 2 Volts approximately

Modulation: Duplicate AM and sweep modulation of 240-A

Power Requirements: 105-125 Volts, 50-60 Cps, 50 watts

Price: **\$420.00**



Calibrates Receivers and Associated Circuits

225-A SIGNAL GENERATOR

RF Range: 10 to 500 Mc \pm 0.5%

RF Output: 0.1 μ v to 0.1 Volts[°]
[°]Across external 50 ohm load

AM Range: 0 to 30%

AM Distortion: 5% 10 to 250 Mc, 7% 250 to 500 Mc

FM Range: 0 to between 5 Kc and 60 Kc, depending
upon frequency in the range 130 to 500 Mc

PM Rise Time: 5 μ sec 10 to 40 Mc
3 μ sec 40 to 80 Mc
2 μ sec 80 to 500 Mc

PM Overshoot: 10% 10 to 100 Mc
25% 100 to 500 Mc

Mod. Osc. Frequency: 400 and 1000 Cps \pm 10%

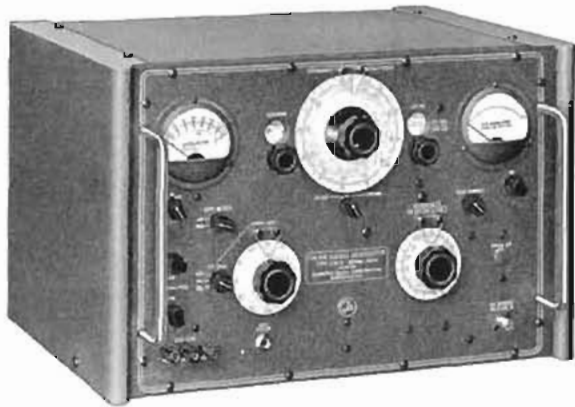
Power Requirements: 225-A: 105-125 Volts,
60 Cps, 80 watts
225-AP: 105-125 Volts,
50 Cps, 80 watts



Price: **\$945.00**

ORDERING INFORMATION / FOB: All prices are quoted F.O.B. Boonton, N. J.
TERMS: Net 30 days (domestic commercial orders)

Calibrates FM, TV, and Mobile Receivers



202-E SIGNAL GENERATOR

RF Range: 54 to 216 Mc \pm 0.5%

RF Output: 0.1 μ v to 0.2 Volts*
*Across external 50 ohm load

AM Range: 0 to 50%

AM Distortion: < 5% at 30%
< 8% at 50%

FM Range: 0 to 240 Kc

FM Distortion: < 2% at 75 Kc
< 10% at 240 Kc

PM Rise Time: < 0.25 μ sec

PM Decay Time: < 0.8 μ sec

Mod. Osc. Frequency: 50 Cps, 100 Cps, 400 Cps, 1000 Cps,
5 Kc, 7.5 Kc, 10 Kc, 60 Kc

Power Requirements: 105-125 Volts, 50-60 Cps, 65 watts

Price:

\$1125.00

Extends Frequency Range of 202-E

207-E UNIVERTER

RF Range: 100 Kc to 55 Mc*
*With 150 to 205 Mc input from 202-E

RF Output: (A) 1 μ v to 0.1 Volts*
*Across external 50 ohm load
(B) 1.5 Volts approximately

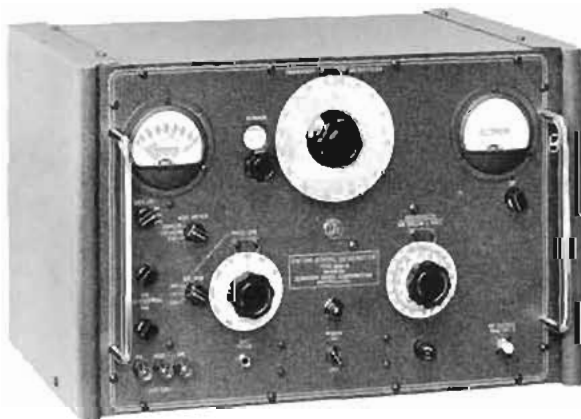
Modulation: Duplicates FM and AM modulation of 202-E

Power Requirements: 207-E: 95-130 Volts,
60 Cps, 45 watts
207-EP: 95-130 Volts,
50 Cps, 45 watts



Price: \$430.00

Calibrates Telemetering Receivers



202-G SIGNAL GENERATOR

RF Range: 195 to 270 Mc \pm 0.5%

RF Output: 0.1 μ v to 0.2 Volts*
*Across external 50 ohm load

AM Range: 0 to 100%

AM Distortion: < 5% at 30%
< 8% at 50%
< 20% at 100%

FM Range: 0 to 240 Kc

FM Distortion: < 2% at 75 Kc
< 10% at 240 Kc

PM Rise Time: < 0.25 μ sec.

PM Decay Time: < 0.8 μ sec

Mod. Osc. Frequency: 50 Cps, 400 Cps, 730 Cps, 1700 Cps,
3.9 Kc, 10.5 Kc, 30 Kc, 70 Kc

Power Requirements: 105-125 volts, 50-60 Cps, 65 watts

Price:

\$1100.00

INSTRUMENTS SINCE 1934

Checks Q and Reactance of Networks

265-A Q COMPARATOR

RF Range: 200 Kc to 70 Mc*

*Through use of eight type 520A Oscillator Inductors

Q Range: 30 to 500

%Q Range: $\pm 25\%$ of Standard

%Q Accuracy: $\pm 5\%$ on 25% range

L Range: 0.15 μ h to 15 mh

C Range: 5 μ f to 0.01 μ f

R Range: 500 Ω to 20 meg Ω

% L-C Range: $\pm 5\%$ or $\pm 20\%$ of standard, full scale

% L-C Accuracy: Direct reading to $\pm 20\%$ of % L-C range
Comparison to $\pm 10\%$ of limit standards

Power Requirements: 265-A: 105-125 Volts, 60 Cps, 115 watts
265-AP: 105-125 Volts, 50 Cps, 115 watts

Price: \$795.00

(including choice of one type
520A Oscillator Inductor)



245-C SIGNAL GENERATOR CALIBRATOR



RF Range: 500 Kc to 1000 Mc

RF Voltage Measurement Levels

Input: 0.025, 0.05, 0.1 Volts

Output: 5, 10, 20 μ v

RF Voltage Accuracy

Input: $\pm 10\%$ 500 Kc to 500 Mc*

$\pm 15\%$ 500 Mc to 1000 Mc*

*When supplied from a 50 ohm nominal source,
with a VSWR < 2 .

Output: $\pm 10\%$ 500 Kc to 500 Mc

$\pm 20\%$ 500 Mc to 1000 Mc

AM Range: 10 to 100%

AM Accuracy: $\pm 10\%$ 30 Cps to 15 Kc*

$\pm 15\%$ 20 Cps to 20 Kc*

*Modulating frequency

Power Requirements: No external requirements; all
necessary power furnished by internal
mercury batteries

Price: \$390.00

245-D SIGNAL GENERATOR CALIBRATOR



RF Range: 500 Kc to 1000 Mc

RF Voltage Measurement Levels

Input: 0.025, 0.05, 0.1 Volts

Output: 0.5, 1, 2 μ v

RF Voltage Accuracy

Input: $\pm 10\%$ 500 Kc to 500 Mc*

$\pm 15\%$ 500 Mc to 1000 Mc*

*When supplied from a 50 ohm nominal source,
with a VSWR < 2 .

Output: $\pm 10\%$ 500 Kc to 500 Mc

$\pm 20\%$ 500 Mc to 1000 Mc

AM Range: 10 to 100%

AM Accuracy: $\pm 10\%$ 30 Cps to 15 Kc*

$\pm 15\%$ 20 Cps to 20 Kc*

*Modulating frequency

Power Requirements: No external requirements; all
necessary power furnished by internal
mercury batteries

Price: \$385.00

BOONTON RADIO CORPORATION

BOONTON, NEW JERSEY, U.S.A.



Telephone: DEERFIELD 4-3200

Calibrates VOR/ILS Receivers
211-A SIGNAL GENERATOR



Price: \$1890.00

RF Range: 88 to 140 Mc (master oscillator)
 110.1 and 114.9 Mc (crystal oscillator)

RF Output: 0.1 μ v to 0.2 Volts*
 *Across external 50 Ω load

AM Range: 0 to 100%

AM Distortion: < 5% at 90% AM

AM Fidelity: \pm 0.5 db 30 Cps to 11 Kc
 \pm 0.1 db 90 Cps to 150 Cps
 \pm 0.1 db 9.5 Kc to 10.5 Kc
 \wedge 0.25° phase shift at 30 Cps
 10° phase shift approx. at 11 Kc

Mod. Osc. Frequency: 400 and 1000 Cps

Power Requirements: 105-125 Volts,
 50-60 Cps, 150 watts

Calibrates Glide Slope
 Receivers

232-A SIGNAL GENERATOR



RF Range: (A) 329.3 to 335.0 Mc \pm 0.0065% in
 increments of 0.3 Mc
 (B) 20.7 Mc \pm 0.0065%

RF Output: 1 μ v to 0.2 Volts*
 *Across external 50 ohm load

AM Range: 0 to 100%

Mod. Osc. Freq. (A) 1000 Cps
 (B) 90/150 Cps in the following tone
 ratios:
 0 db \pm 2.0 db
 \pm 0.5 db \pm 3.3 db
 \pm 1.0 db \pm infinite db (calibrate)

Power Requirements: 105-125 Volts, 60 \pm 1 Cps,
 150 watts

Price: \$1990.00

Calibrates Phase Shift
 in 211-A

213-A PHASE TEST SET



30 Cps Bridge Operation: Phase shift of 1° produces
 at least 2" Oscilloscope deflection for 30% or
 greater AM on 211-A. Calibration error < 0.1%
 in 1° Bridge Calib position

Direct Measurement Range: 20 to 11,000 Cps
 Power Requirements: No external power required

Price: \$215.00

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BOONTON RADIO CORPORATION

BOONTON, NEW JERSEY, U.S.A.

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