

Over 5000 VXI cards and mainframes in stock. 1000's of pieces of Test Equipment in stock.



Looking for Test Equipment?
Visit us on the web at
www.recycledequipment.com

Recycled Equipment buys, sells, and repairs VXI cards, VXI mainframes and Test Equipment. We have tens of thousands of pieces of Electronic Test Equipment and one of the worlds largest selections of VXI cards. We have VXI cards by almost every manufacture; from Agilent to Ziatech. **Every item on our website is IN STOCK and ready to ship with in 24 hours.**

Sell your equipment for cash

Recycled Equipment is interested in buying your surplus equipment! Call us today at **(410)685-1997** or email to **recycled@usimperio.com**

Sell your equipment on consignment

Recycled Equipment can sell your equipment on consignment. This allows you to get retail prices for your equipment with out the hassle.

(410)685-1997 sales@recycledequipment www.recycledequipment.com

SECTION I - GENERAL DESCRIPTION

1. TECHNICAL SUMMARY

POWER OUTPUT: 10 volt-amperes (20 volt-ampere peaks), continuous, from dc to 500 kc into a 1,000 ohm resistive or reactive load; 10 watts (20 watt peaks), continuous, from 1 cps to 1 mc into a 600 ohm resistive load. See Note 2 on Page 7 and Figure 11.

OUTPUT VOLTAGE: Greater than 105 volts rms (300 volts peak to peak) open circuit from dc to 1 mc; 100 volts rms (280 volts peak to peak) across 1,000 ohms from dc to 500 kc; 78 volts rms (218 volts peak to peak) across 600 ohms from 1 cps to 1 mc.

OUTPUT CURRENT: Above 1 cps, greater than 210 ma rms (± 300 ma peak) through 10 ohms; 130 ma rms (± 180 ma peak) through 600 ohms; 100 ma rms (± 140 ma peak) through 1,000 ohms. Below 1 cps, 42 ma rms (± 60 ma peak) through 10 ohms; 52 ma rms (± 75 ma peak) through 600 ohms; 100 ma rms (± 140 ma peak) through 1,000 ohms.

OUTPUT REGULATION (from no load to full resistive load): Less than 2% from 10 cps to 100 kc, less than 5% over the entire frequency range.

INTERNAL IMPEDANCE: Less than 10 ohms from 10 cps to 50 kc, less than 50 ohms from dc to 100 kc and less than 100 ohms above 100 kc.

LOAD IMPEDANCE: Matching, nominal 600 ohms from 1 cps to 1 mc; below 1 cps, 1,000 ohms minimum load for full power output. See Figure 8. Minimum load, 10 ohms. See Figure 10.

LOAD POWER FACTOR: Unity to zero, lagging or leading.

OUTPUT DC LEVEL: Zero volts at capacitor-coupled AC OUTPUT terminals; nominal zero volts at the DC OUTPUT terminals.

OUTPUT DC LEVEL STABILITY (typical, after initial warm up, expressed in per cent of peak output voltage): $\pm 0.02\%$ in any one-hour period at fixed line voltage and $\pm 0.2\%$ for $\pm 10\%$ line voltage change in all positions of the INPUT SELECTOR switch except the X10 DC and POT DC positions where $\pm 0.1\%$ and $\pm 1\%$ apply.

VOLTAGE GAIN: Maximum of 10, variable continuously, fixed gain of $10 \pm 10\%$ (20 ± 1 db), or fixed gain of $1 \pm 10\%$ (0 ± 1 db) as determined by the INPUT SELECTOR switch. Less than ± 0.25 db change in gain for a 10% change in line voltage within the operating range.

FREQUENCY RESPONSE: Flat within ± 1 db from dc to 1 mc under all specified operating conditions; approximately 3 db down at 2 mc. See Figure 10.

PHASE SHIFT: Zero ± 1 degree from dc to 10 kc in the X10 and POT positions of the INPUT SELECTOR switch. See Figure 13. In the X1 position the phase shift is 180 ± 1 degrees.

SECTION I - GENERAL DESCRIPTION

HARMONIC DISTORTION (rms): At full power output, less than 0.1% from 20 cps to 50 kc, less than 0.5% from near dc to 100 kc and less than 3% above 100 kc. In the X1 positions of the INPUT SELECTOR switch the distortion is less than 5% above 100 kc. See Figure 12. DC linearity is within +1% with loads above 500 ohms.

HUM AND NOISE (referred to output): Less than 10 mv with the input shorted and less than 20 mv with an open circuit input.

DYNAMIC RANGE: Approximately 80 db.

SQUARE WAVE RESPONSE: See Figure 9.

INPUT IMPEDANCE: Greater than 1 megohm in parallel with approximately 50 uuf in the fixed gain positions; 5,000 ohms in parallel with approximately 50 uuf in the variable gain positions.

INPUT COUPLING: Either direct coupling or capacitor coupling with a low cut-off frequency of 1 cps.

INPUT SENSITIVITY: 7.8 volts rms with a 600 ohm load and 10 volts rms with a 1,000 ohm load for 10 watts output at maximum gain (X10).

INPUT VOLTAGE LIMITS: 400 volt maximum dc component in the ac coupled (1 CPS) fixed gain positions; combined input signal voltages (ac and dc) must not cause more than 2 watts dissipation in the 5,000 ohm GAIN potentiometer in either variable gain position.

AMBIENT TEMPERATURE AND DUTY CYCLE: Continuous duty at full 10 watt output up to 50°C (122°F) ambient.

FRONT PANEL CONTROLS:

- INPUT SELECTOR switch.
- GAIN control.
- OUTPUT DC LEVEL control (screwdriver adjust).
- POWER ON switch.

TERMINALS: Two multi-purpose binding posts for the INPUT (signal and ground) and three for the OUTPUT (DC signal, AC signal and ground).

POWER REQUIREMENTS: 105-125 or 210-250 volts; single phase; 50-60 cycles; 250 watts.

FUSE PROTECTION:

- Line: 2.5 ampere slow-blow.
- Plate supply: 3/16 ampere slow-blow.

TUBE COMPLEMENT (furnished with instrument): 2-6GT5, 2-6CL6, 1-6AQ5, 1-12AX7, 1-6AS7-GA, 1-6BK7-B, 1-5R4-GYB.

SECTION I - GENERAL DESCRIPTION

FORM: Furnished in an attractively styled perforated steel cabinet with a cast aluminum front panel and frame. Front panel finished in gray enamel; frame and cabinet in blue enamel. Other finishes available on special order. Over-all dimensions Model DCA-10: 7 1/2" wide, 10" high, 15" deep. Weight 35 lbs. net, 40 lbs. shipping. For rack mounting see Model DCA-10R described below.

NOTE 1: The specifications above apply only after adjustments in OPERATION, SECTION II-5 have been made. They apply to the direct-coupled (DC) positions of the INPUT SELECTOR switch and the direct-coupled (DC) output terminals unless otherwise stated.

NOTE 2: The permissible power output below 1 cps is limited with loads under 1,000 ohms because the plate temperature of the output tubes may become excessive during instantaneous plate dissipation peaks.

MODEL DCA-10R*

FRONT PANEL CONTROLS:

INPUT SELECTOR switch.
GAIN control.
OUTPUT DC LEVEL control (screwdriver adjust).
QUIESCENT CURRENT control (screwdriver adjust).
POWER OFF-ON switch.

TERMINALS: Two multi-purpose binding posts for the INPUT (signal and ground) and three for the OUTPUT (DC signal, AC signal and ground). In addition, three BNC type coaxial connectors are located on the rear of the chassis, one for the INPUT, one for the DC OUTPUT and one for the AC OUTPUT.

FORM: Furnished in a metal cabinet with standard relay rack panel only. Panel finished in gray enamel; dust cover in blue wrinkle. Other finishes available on special order. Over-all dimensions Model DCA-10R: 19" wide, 5 1/4" high, 15" deep. Weight 36 lbs. net, 41 lbs. shipping.

*This Instrument is the Model DCA-10 designed for rack mounting. The electrical specifications for this Model are identical with those for the Model DCA-10, except for an increase in Input Capacitance from 50 to 75 uuf.

To offer maximum versatility and convenience in this mounting method the shape of the instrument has been changed to conserve space, connectors have been added on the rear of the chassis, and all controls and test points have been located on the front panel so that access to the back of the instrument is not required during normal operation.