Specification

Section 2

DISPLAY

 8×10 cm rectangular mono-accelerator c.r.t. at 2kV e.h.t. Trace Rotation by front panel preset.

VERTICAL DEFLECTION

Two identical input channels CH1 and CH2. Bandwidth (-3dB) d.c. to 20MHz (2Hz to 20MHz on a.c.) Sensitivity 2mV/cm to 10V/cm in 1-2-5 sequence. Accuracy ±3%

 Variable Sensitivity > 2,5:1 range allows continuous adjustment of sensitivity from 2mV/cm to 25V/cm.
 Input Impedance 1MΩ/28pF approx.
 Input Coupling DC-GND-AC

Input Protection 400V d.c. or pk a.c.

DISPLAY MODES

Single Trace CH1 or CH2

- Dual Trace Chopped or Alternate modes automatically selected by the T.B. switch. Between 0.5μ s/cm and 0.2ms/cm the ALTERNATE MODE is selected. While on ranges slower than 0.2ms/cm CHOP MODE is selected. The CHOP frequency is 500kHz.
- Add CH1 and CH2 added to give the algebraic sum of the two channels.
- Invert CH2 CH2 may be inverted. When used in conjunction with Add mode it gives the algebraic difference of the two channels.
- X-Y CH2 input gives Y deflection and CH1 input gives X deflection.
- Bandwidth (-3dB) DC to 1MHz with less than 3° phase shift at 50kHz.

HORIZONTAL DEFLECTION

Timebase 0.5μ s/cm to 0.2sec/cm, 18 ranges in 1-2-5 sequence

Accuracy ±3%, (to 200ns/cm)

X Expansion x 10 push button gives fastest speed of 50ns/cm. Accuracy ±3% (50ns/cm range ±5%)

Variable Sweep > 2.5:1 allows continuous coverage from 0.5µs/cm to 0.5sec/cm.

TRIGGER

Variable level control with Bright Line ON/OFF facility. With Bright Line on, the timebase free-runs when insufficient signal (20Hz -20MHz) is present or when the selected level is outside the range of the input signal. **Source** Internal CH1 or CH2 or External.

Slope + or -.

Coupling DC, AC or TV (active sync. separator with line/frame selected by T.B. switch between 50 and 100µs/cm).

Sensitivity

Internal: DC coupled 2mm to 2MHz, 5mm to 20MHz. AC coupled 2mm, 10Hz–2MHz. 5mm, 4Hz–20MHz. External Input Protection 250V d.c. or pk, a.c.

ADDITIONAL FACILITIES

Calibrator 1V, 2% squarewave at approx. 1kHz.
Ramp Output Approx. +3.5V ramp from 5kΩ.
Z Mod. Input DC coupled, 2V visible mod. sensitivity, +40V cut-off sensitivity, input impedance 10kΩ/10pF approx. Maximum input 100V d.c. or pk, a.c.

SUPPLY

100V, 120V, 220V and 240V ± 10% 45 to 440Hz approx. 40VA.

SAFETY

Designed for I.E.C.348 Cat. 1.

OPERATING TEMPERATURE RANGE

0 to $+50^{\circ}$ C (+15 to $+35^{\circ}$ C for full accuracy)

DIMENSIONS

140 x 305 x 460mm

WEIGHT

6kg approx.

ACCESSORIES SUPPLIED

Manual P.N. 80-OS300 Mains lead P.N. 402001

OPTIONAL ACCESSORIES Probe Kit PB12

A passive probe kit with switched X1 and X10 attenuations. X10 attenuation input impedance is $10M\Omega/11.5pF$.

Probe Kit PB13

A X10 passive probe with 1.5m of cable. Input impedance $10M\Omega/11.5pF.$

Viewing Hood

P.N. 41179.

Trolley

Type TR7. General Purpose.

Protective Carrying Case

P.N. 42610 A strong case which completely encloses the oscilloscope with 3 thicknesses of padding covering the front panel.

Tube Option

Long persistance c.r.t. P7 phosphor.

Rack Mount Kit

P.N. 450070.

Front Cover

P.N. 450240.