



Fig. 9.1. Time division multiplier with associated waveforms

COMPONENTS . . .

UNIT "D" FRONT PANEL AND BOX

Potentiometers

- VR25 100Ω wirewound
- VR26 50Ω wirewound
- (both panel mounting type)

Switches

- S11 3 pole, 4 way rotary
- S12 Double-pole slide switch (c/o contacts)

Sockets

- 2 red, 2 blue, 1 black, 2 yellow, 3 white,
- 1 green, and 6 miniature sockets

Miscellaneous

Material for front panel and box. Hardboard, 2 off 12 $\frac{3}{8}$ in \times 4 $\frac{1}{2}$ in, 2 off 4 $\frac{1}{2}$ in \times 3 $\frac{3}{8}$ in. White plastic laminate, 2 off 12 $\frac{3}{8}$ in \times 4 $\frac{1}{2}$ in, 2 off 3 $\frac{1}{2}$ in \times 4 $\frac{1}{2}$ in, 1 off 12in \times 3 $\frac{1}{8}$ in. Softwood, 25in \times $\frac{1}{2}$ in \times $\frac{1}{2}$ in. Knob, one Radiospares 1 $\frac{1}{8}$ in type PK with pointer.

UNIT "D" BISTABLE RELAY AND PRODUCT AMPLIFIER

Resistors

R1 1kΩ	*R14 10kΩ 1%
R2 4.3kΩ	R15 1kΩ
R3 4.3kΩ	R16 820Ω
R4 4.3kΩ	R17 820Ω
R5 1kΩ	R18 1kΩ
R6 100Ω	R19 8.2kΩ
*R7 11kΩ 1%	R20 22kΩ
R8 10kΩ	R21 22kΩ
R9 27kΩ	R22 8.2kΩ
R10 2.2kΩ	*R23 200Ω 2%
R11 100Ω	*R24 1kΩ 2%
*R12 10kΩ 1%	*R25 1.2kΩ 1%
*R13 9.1kΩ 1%	*R26 300Ω 1%

(All 10% $\frac{1}{2}$ watt carbon composition except * = 1W metal oxide)

Potentiometers

- VR1 100kΩ vertical skeleton pre-set
- VR2 220Ω miniature horizontal pre-set

Capacitors

- C1 1μF polyester 250V d.c.
- C2 0.25μF polyester 250V d.c.
- C3 1μF elect. 15V
- C4 8μF elect. 15V
- C5 100μF elect. 15V

Transistors

- TR1, TR2 2N2926 (orange) or 2N3904 (2 off)
- TR3 2N3906
- TR4 2N3904
- TR5, TR6 ACY28 or AC126 (2 off)

Diodes

- DI-D4 OA202 (4 off)

Choke

- L1 5H (Radiospares "Midget" type)

Reed coils

- RLA, RLB Miniature triple 12V
- Osmor type MT12V (2 off)

Reed switches

- RLA1, RLA2 Hamlin MRG2 20-40AT (4 off)
- RLB1, RLB2

Miscellaneous

- S.R.B.P., 1 off 3in \times 3 $\frac{1}{2}$ in, 1 off 3in \times 4 $\frac{1}{2}$ in.
- Small turret tags. Baseboard 12in \times 4in
- s.r.b.p. or plastic laminate