

Fig. 8.2. Details and measurements of UNIT "C" function generator case

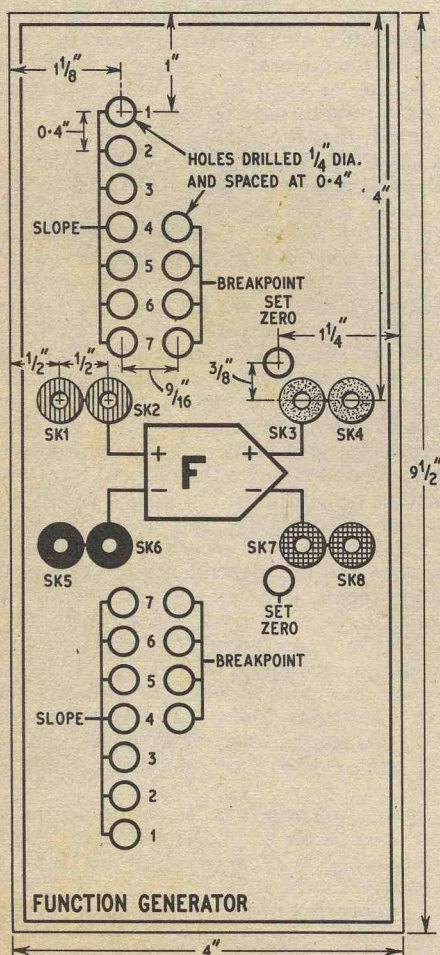


Fig. 8.3. Front panel layout of UNIT "C" function generator

TABLE 8.1

Diode	E_{in}	Adjust slope	Adjust break-point	E_o
1	-0.2V	VR1	—	+ 0.04V
2	-0.5V	VR2	—	+ 0.25V
3	-1.0V	VR3	—	+ 1.0V
4	-1.5V	—	VR5	+ 2.25V
	-2.0V	VR4	—	+ 4.0V
5	-2.5V	—	VR7	+ 0.625V
6	-3.5V	VR6	—	+ 1.225V
	-4.0V	—	VR9	+ 1.6V
	-6.0V	VR8	—	+ 3.6V
	-6.5V	—	VR11	+ 4.225V
	-9.0V	VR10	—	+ 8.1V

$E_o = E_{in}^2$
 $R_r = 100k\Omega$

$E_o = \frac{E_{in}^2}{10}$
 $R_r = 10k\Omega$

COMPONENTS...

UNIT "C" BOX

Plywood $9\frac{1}{2}$ in \times 4in \times $\frac{1}{2}$ in
 Softwood $\frac{1}{2}$ in \times $\frac{1}{2}$ in \times $3\frac{1}{2}$ in
 White plastics laminate $9\frac{1}{2}$ in \times 4in (2 off),
 $4\frac{1}{8}$ in \times 1in (2 off)
 Rubber grommet $\frac{1}{4}$ in \times $\frac{5}{16}$ in

UNIT "C" Front Panel

White plastics laminate $9\frac{1}{2}$ in \times 4in. Sockets: 2 red, 2 yellow, 2 black, 2 blue.

UNIT "C" Function Generator Components

Resistors

R1 3.3M Ω (2 off)
 R2 470k Ω (2 off)
 R3 1M Ω (2 off)
 All 10%, $\frac{1}{2}$ W carbon composition

Pre-set Potentiometers

VR1, VR5 1M Ω (4 off)
 VR2, VR3, VR9 220k Ω (6 off)
 VR4, VR6 100k Ω (4 off)
 VR7 470k Ω (2 off)
 VR8 47k Ω (2 off)
 VR10 22k Ω (2 off)
 VR11, VR12 47k Ω (4 off)
 All miniature horizontal mounting

Diodes

D1 1B30 (2 off) (Radiospares)
 D2-D7 OA202 (12 off)

Miscellaneous

S.R.B.P. $3\frac{3}{4}$ in \times $3\frac{3}{4}$ in (2 off). Small turret tags
 4mm stackable plugs, one red, one blue
 (Radiospares)