

DESCRIPTION

The M152 is designed to appropriately predistort "X" and "Y" signals before they are applied to the electromagnetic deflection coils of a CRT, in such a way as to eliminate "pincushion" distortion. It also provides a signal to correct for spot de-focusing that occurs away from the screen's center. The circuit may be used in CRT's of various deflection angles (up to 90°) by adjusting the values of two external resistors.

Mathematically, the following signals are available as outputs:

$$|x|, |y|, \frac{\sqrt{1 + (K_1 X)^2 + (K_2 Y)^2}}{1 + (K_1 X)^2 + (K_2 Y)^2},$$

$$K_3 = \frac{\sqrt{1 + (K_1 X)^2 + (K_2 Y)^2}}{1 + (K_1 X)^2 + (K_2 Y)^2},$$

$$\frac{X}{\sqrt{1 + (K_1 X)^2 + (K_2 Y)^2}},$$

$$\frac{Y}{\sqrt{1 + (K_1 X)^2 + (K_2 Y)^2}}$$

Where K_1 , K_2 , and K_3 are adjustable externally.

PROCESS	200 Ω/Sq
POWER SUPPLY.	+15V, -12V, (-15V Optional)
PACKAGE	16 DIP (Plastic)
DESIGNERS.	Binoy Rosario Harvey Golladay
INSTRUMENT USAGE	4006

