

Abstract

5 A driver (12) for a cathode ray tube (14) includes a  
black level compensation circuit (22) which generates an offset  
voltage (EREF) which tracks the current flowing to the output of  
the driver and therefore the average picture level (APL). The  
offset voltage is added as a component of the output voltage  
(EOUT) so as to increasingly shift the output voltage toward black  
as the APL increases. This compensates for CRT gamma non-  
10 linearities and for light scattering effects which might otherwise  
cause the loss of perceived detail and sharpness in dark areas of a  
high APL image. In the disclosed embodiment, the driver  
comprises a cascode amplifier (Q2, Q3) and the offset voltage  
generating element includes a capacitively bypassed (C) resistor  
15 (R8) connected in a reference voltage network (R7, R8, Z)  
connected (via R4) to the emitter circuit of the lower (common  
emitter configured) transistor (Q2) of the cascode amplifier.

THIS SHEET HAS BEEN  
REPLACED

This Sheet Has Been Replaced

