

## Contrast expander for weather satellite pictures

This expander performs the same function as the circuits described by Bayliss & Brush, *Wireless World* December 1973 and G. R. Kennedy, *Wireless World*, December 1976, but it operates on the detected video signal and is variable from zero to approximately 83%. Resistor  $R_1$  is adjusted for +1V at the non-inverting input of  $IC_1$  which then operates as an inverting amplifier

with a gain of  $-R_8/(R_7+R_1)$  with reference to 1V. Resistors  $R_2$  and  $R_3$  provide a -2V level shift to give the required but inverted transfer function. Positive video is restored by  $IC_2$ , and

$D_1, D_2$  prevent the output from going negative.

J. Beauchamp  
Portsmouth  
Hants

Black = 0V  
Peak white = +1V

