

COMMUNICATIONS DATA SHEET 405

P.A.L. COLOUR BAR PARAMETERS

There are two types of colour bars in use:-

- (a) 100% Saturated colour bars.
- (b) 95% Saturated colour bars.

The subcarrier amplitude of the 95% saturated colour bars is 75% of the subcarrier amplitude of 100% saturated colour bars. Thus 95% saturated colour bars are sometimes referred to as 75% bars.

100% Saturated Colour Bars

R.G.B. inputs to coder 0.7 volts peak-to-peak.

The table below gives the amplitude in volts of the luminance, the peak-to-peak value of the (B-Y), (R-Y) subcarrier, and the peak-to-peak value of the total chrominance subcarrier for each colour. Also the angle of each colour is given relative to the (B-Y) axis. The angles given for line n correspond to the odd lines of the 1st and 2nd fields and the even of the 3rd and 4th fields. The angles given for line n + 1 correspond to the even lines of 1st and 2nd fields and the odd lines of 3rd and 4th fields.

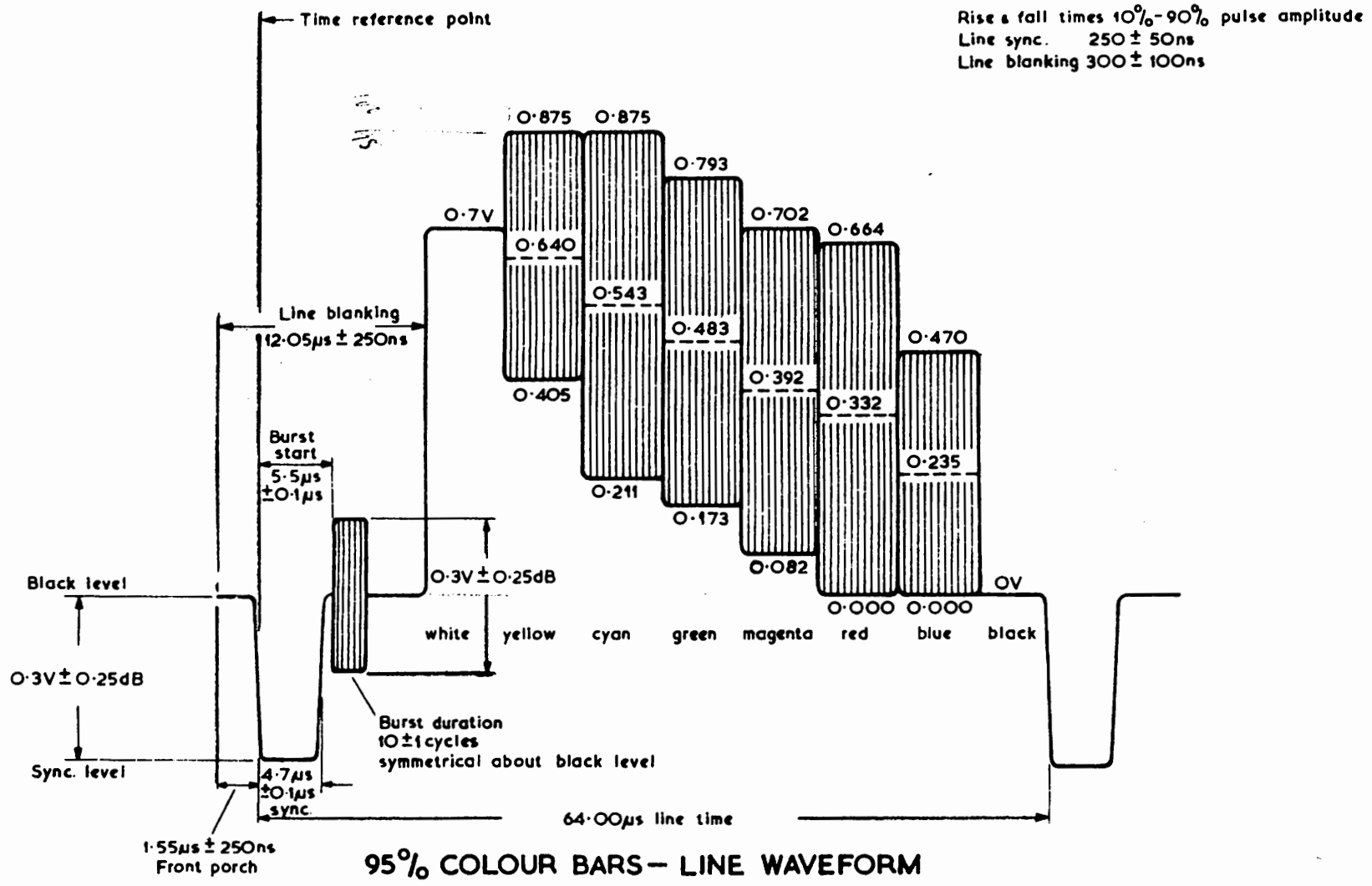
Colour	Luminance	U = 0.493(B-Y)	V = 0.877(R-Y)	Chrominance	Angle in degrees	
					Line n	Line n + 1
White	0.7000	0	0	0	0	0
Yellow	0.6202	0.6115	0.1399	0.6272	167.2	192.8
Cyan	0.4907	0.2064	0.8607	0.8850	283.5	76.5
Green	0.4109	0.4051	0.7207	0.8268	240.66	119.33
Magenta	0.2891	0.4051	0.7207	0.8268	60.66	299.33
Red	0.2093	0.2064	0.8607	0.8850	103.5	256.5
Blue	0.0798	0.6115	0.1399	0.6272	347.2	12.8
Burst	0			0.3000	135.0	225.0

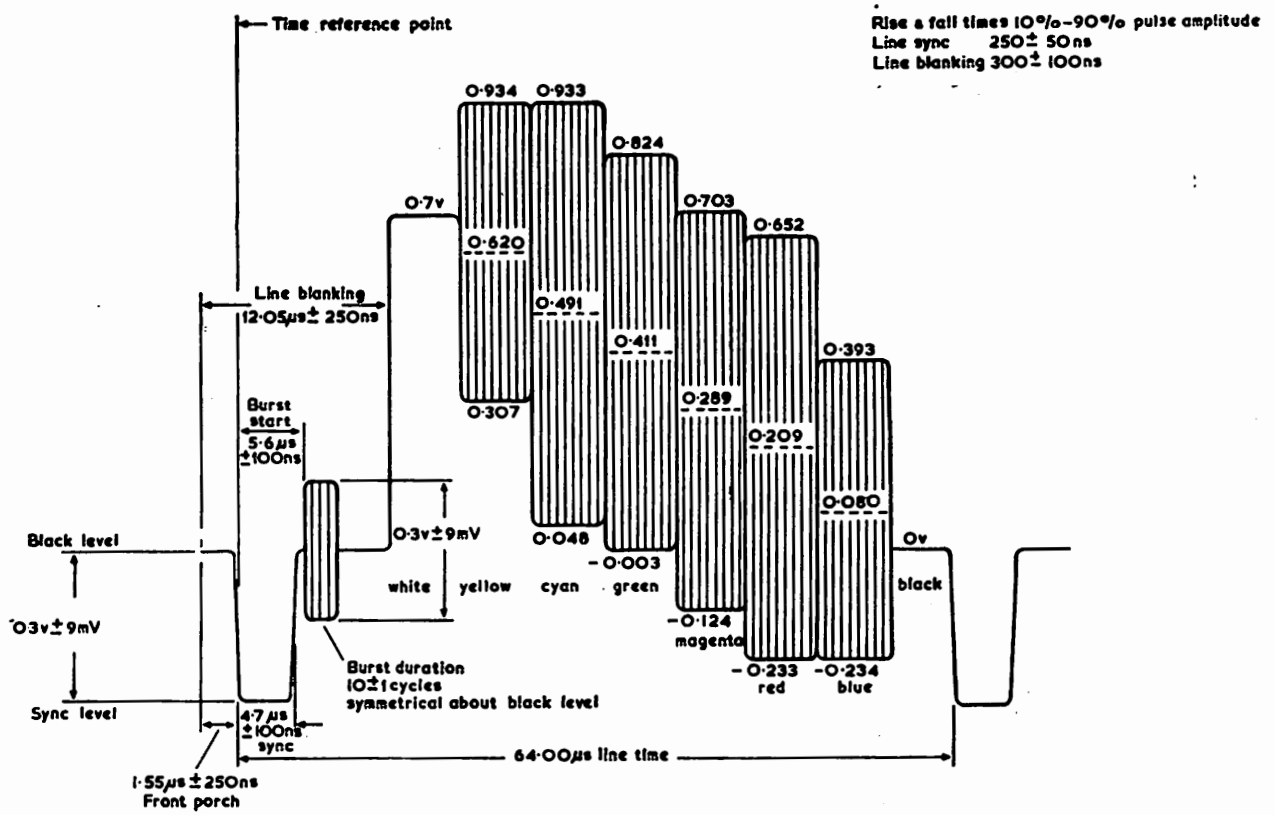
95% Saturated Colour Bars

R.G.B. inputs to coder 0.7 volts peak-to-peak.

Desaturating pedestal on R.G.B. 0.175 volts.

Colour	Luminance	U = 0.493(B-Y)	V = 0.877(R-Y)	Chrominance	Angle in Degrees	
					Line n	Line n + 1
White	0.7000	0	0	0	0	0
Yellow	0.6401	0.4086	0.1049	0.4704	167.2	192.8
Cyan	0.5431	0.1548	0.6455	0.6638	283.5	76.5
Green	0.4832	0.3038	0.2705	0.6200	240.66	119.33
Magenta	0.3918	0.3038	0.2705	0.6200	60.66	299.33
Red	0.3319	0.1548	0.6455	0.6638	103.5	256.5
Blue	0.2351	0.4086	0.1049	0.4704	347.2	12.8
Burst	0			0.3000	135.0	225.0





100% COLOUR BARS - LINE WAVEFORM