

color mixture and color attributes of low and high color metrics			
mode of color mixture			
	dichromatic	trichromatic	
lower color- or valence metrics:			
white value W	V	V	
black value N	$100 - Y$	$100 - O$	
chromatic value C	$Y - V$	$O - V$	
higher color- or sensation metrics:			
whiteness W^*	V^*	V^*	
blackness N^*	$100 - Y^*$	$100 - O^*$	
chromaticness C^*	$Y^* - V^*$	$O^* - V^*$	

NE410-3, BT2_01

color threshold formula LABJNDS 1985 (JND=just noticeable difference)	
$\Delta E_{JND}^* = Y_0 [(\Delta Y)^2 + (a_0 \Delta a'' \cdot Y)^2 + (b_0 \Delta b'' \cdot Y)^2]^{1/2} / (s + d Y^e)$	
$a = x/y \quad a_n = x_n/y_n \quad b = -0,4 z/y \quad b_n = -0,4 z_n/y_n$	
$a'' = a_n + (a - a_n) / (1 + 0,5 a - a_n) \quad n = D65 \text{ or } A (\text{surround})$	
$b'' = b_n + (b - b_n) / (1 + 0,5 b - b_n)$	
$Y = (Y_1 + Y_2) / 2 \quad \Delta Y = Y_1 - Y_2 \quad \Delta a'' = a_1'' - a_2'' \quad \Delta b'' = b_1'' - b_2''$	
$s = 0,0170 \quad d = 0,0058 \quad e = 1,0$	
$a_0 = 1,0 \quad b_0 = 1,8 \quad Y_0 = 1,5 \quad \text{surround } D65$	
$a_0 = 1,0 \quad b_0 = 1,7 \quad Y_0 = 1,0 \quad \text{surround } A$	

NE410-7, BT4_01

basic and mixed colors of standard color printing by DIN 16 539					
basic color or mixed color and name	CIE standard chromaticity		CIE standard tristimulus value		
	x	y	X	Y	Z
<i>three subtractive basic colors:</i>					
C cyanblue	0,1553	0,1967	16,92	21,44	70,62
M magentared	0,4675	0,2314	33,88	16,77	21,82
Y yellow	0,4399	0,4925	68,13	76,28	10,48
<i>three subtractive mixed colors:</i>					
O orangered	0,6152	0,3226	30,51	16,00	3,08
L leafgreen	0,1958	0,5256	6,05	16,23	8,06
V violetblue	0,1807	0,1009	4,86	2,72	19,33
NLC (white)	0,3101	0,3162	98,07	100,00	118,22

NE411-3, BT5_01

basic and mixed colors of standard color television by DIN 6169					
basic color or mixed color and name	CIE standard chromaticity		CIE standard tristimulus value		
	x	y	X	Y	Z
<i>three additive basic colors:</i>					
O orangered	0,6400	0,3300	43,03	22,19	2,02
L leafgreen	0,2900	0,6000	34,16	70,68	12,96
V violetblue	0,1415	0,0482	17,82	7,13	93,87
<i>three additive mixed colors:</i>					
C cyanblue	0,2197	0,3288	51,98	77,81	106,83
M magentared	0,3270	0,1576	60,85	29,32	95,89
Y yellow	0,4172	0,5019	77,19	92,87	14,98
D65 (white)	0,3127	0,3291	95,01	100,00	108,85

NE411-7, BT5_02