

# Errata and Addendum

There is given below information to correct or supply data regrettably not properly given in the original *Journal* publication.

## MARCH 1969

For the March 1969 *Journal*, pp. 137-148: Corrected copies of the papers published as a group in that issue under the overall title of "An Engineering Approach to Color Telecine" are available as reprints from SMPTE Headquarters without charge for single copies.

On page 140, col. 1, Ref. 8, paper by S. F. Quinn,  
For: "Development Report. . ."  
Read: "CBC Internal Report. . ."  
and col. 2, Ref. 10  
For: "CPT"  
Read: "CTP"

On page 140, col. 1, footnote, paper by D. H. McRae,  
For: "Cole St."  
Read: "Cote St."

On page 141, col. 1, the equations are shown correctly below

$$ROT = 260(\Delta U^2 + \Delta V^2)^{1/2}$$

where

$$\Delta U = u_1 - u_2$$

$$\Delta V = v_1 - v_2$$

$u_1, v_1$  are the coordinates of the scene color on the CIE 1960 Nearly Uniform Chromaticity diagram;

and

$u_2, v_2$  are similar coordinates for the reproduced color

CIE System

$$\Delta E_{CIE} = [(U_1^* - U_2^*)^2 + (V_1^* - V_2^*)^2 + (W_1^* - W_2^*)^2]^{1/2}$$

where

$$W^* = 25Y^{1/3} - 17$$

where  $1 \leq Y \leq 100$

$$U^* = 13W^*(u - u_0)$$

$$V^* = 13W^*(v - v_0)$$

where  $u_0, v_0$  are the coordinates of the light source on a UCS diagram.

$Y$  = Percentage luminance of color referred to "white" luminance.

On page 141, Table I, first column of figures under "Yellow"

For: "Blue 0.295"

Read: "Blue 0.080"

second column of figures under "Magenta"

For: "Blue 1.835"

Read: "Blue 1.080"

third column of figures under "Cyan"

For: "Blue 0.450"

Read: "Blue 1.030"

On page 142, Table III

For: "(b) = 0.65 simple lobes"

Read: "(b)  $\gamma$  = 0.65 simple lobes" and

For: "(c) = 0.65 optimized curves"

Read: "(c)  $\gamma$  = 0.65 optimized curves"

On page 142, top of page, unnumbered Fig. is Fig. 2.

On page 145, paper by D. H. McRae, page numbers were omitted from Refs 1. and 3. The references read properly: "1. S. F.

Quinn, "Film review rooms for color television," *Jour. SMPTE*, 78: 138-140, March 1969." and "3. F. D. E. Corley, "Color telecine alignment slides," *Jour. SMPTE*, 78: 145-148, March 1969."

On page 145, paper by D. H. McRae, the Appendix was omitted: it appears on the following page.

For: "(Fig. 2)"

Read: "(Fig. 2B)"

On page 145, col. 3, line 20, paper by F. David E. Corley

On page 148, paper by F. David E. Corley, the illustrations for the Appendix were omitted. The Appendix is complete as shown on the opposite page which may be substituted for page published in March.

## MAY 1969

On page 331, "Progress Report: European Television Community,"

Table I: The Color Television Services of EBU Active Members as of December 31, 1968 — under Country, see Germany, F.R., ZDF 2nd, under Program hours/week 1968

For: 7.05

Read: 9.15

On page 334, Table II. Development of Television During 1968 in the Countries Participating in Eurovision — under Country and program designation, see Germany, F.R., ZDF 2nd, under Program hours/week 1968

For: 46.14

Read: 53.2

On page 340, "Progress Report: Federal Republic of Germany — Television" Fig. 59 (No-rewind device . . . Kinton GmbH) The figure has been turned so that what is correctly the bottom of the device appears on the left side of the figure. The figure is shown correctly below.



On page 355, col. 1, lines 27, 33 and 45, "Progress Report: United Kingdom—Television"

For: "interpolation"

Read: "interpolation"

## JULY 1969, Pt. II

On p. 16, Article III, Board of Governors, Sec. 1, lines 6 and 7 of paragraph 5; p. 17, Sec. 5, lines 14 and 15 and p. 17, Article IV, Officers, Sec. 12, lines 1-4

For: "Vice-President for Instrumentation and High-Speed Photography Affairs"

Read: "Vice-President for Photoinstrumentation Affairs"

On p. 20, Article XII, Standards and Recommendations, Sec. 1, lines 2 and 3 and Sec. 2, lines 2 and 3

For: "American Standards"

Read: "USA Standards"

SEPTEMBER 1969

On p. 702, Fig. 10 (1960 CIE Uniform Chromaticity Scale Diagram.), Col. 1 under the Fig. title: Line 12  
 For:  $\alpha$  (measure of hue shift...)  
 Read: AX  
 Line 15  
 Omit (— is clockwise)  
 Line 16  
 For:  $\beta$  (= a measure of hue shift when color sample...)

Read: bT  
 Col. 2 under the Fig. title, Line 5:  
 Omit: (— is clockwise)  
 Line 7  
 For: aT/CT  
 Read: aT  
 Line 10  
 For: bL/CL  
 Read: bL

For p. 145, March, 1969, Journal of the SMPTE:

APPENDIX

Computed Color Rendition Errors of Six Selected Colors.

| Condition   | Calculation  | Yellow | Magenta | Cyan   | Red    | Green  | Blue   | White  | Matrix                 |
|---|--------------|--------|---------|--------|--------|--------|--------|--------|------------------------|
| (a) Linear phototube hypothetical curves, positive single lobes only              | Reproduced U | 0.2041 | 0.2909  | 0.1509 | 0.3177 | 0.1457 | 0.1900 | 0.2000 | 2.110 - 1.220 + 0.110  |
|   | V            | 0.3565 | 0.2319  | 0.3027 | 0.3291 | 0.3571 | 0.2096 | 0.3106 | -0.173 + 1.320 - 0.147 |
|   | Errors ROT   | 0.13   | 0.06    | 0.26   | 0.14   | 0.05   | 0.32   | 0.00   | 0.027 - 0.159 + 1.132  |
| (b) As above, except nonlinear phototube gamma = 0.65                             | Reproduced U | 0.2018 | 0.2912  | 0.1586 | 0.3262 | 0.1552 | 0.1850 | 0.2000 | 1.900 - 0.950 + 0.050  |
|   | V            | 0.3541 | 0.2328  | 0.3063 | 0.3285 | 0.3546 | 0.2112 | 0.3106 | -0.300 + 1.500 - 0.200 |
|   | Errors ROT   | 0.97   | 0.26    | 2.47   | 2.12   | 2.56   | 1.09   | 0.00   | 0.000 - 0.075 + 1.075  |
| (c) Optimized curves, nonlinear phototube gamma = 0.65                            | Reproduced U | 0.2038 | 0.2885  | 0.1583 | 0.3206 | 0.1533 | 0.1889 | 0.2000 | 1.900 - 0.900 + 0.000  |
|   | V            | 0.3554 | 0.2368  | 0.3045 | 0.3304 | 0.3566 | 0.2055 | 0.3106 | -0.075 + 1.200 - 0.125 |
|   | Errors ROT   | 0.39   | 1.47    | 2.23   | 0.80   | 1.97   | 1.02   | 0.00   | 0.050 - 0.100 + 1.050  |
| (d) As above, except white balanced on color film gray scale                      | Reproduced U | 0.2008 | 0.2844  | 0.1556 | 0.3177 | 0.1490 | 0.1870 | 0.2000 | 1.925 - 0.950 + 0.025  |
|   | V            | 0.3556 | 0.2377  | 0.3040 | 0.3293 | 0.3572 | 0.2076 | 0.3106 | -0.075 + 1.175 - 0.100 |
|   | Errors ROT   | 1.02   | 2.31    | 1.53   | 0.18   | 0.84   | 0.66   | 0.00   | 0.075 - 0.150 + 1.075  |
| (e) As above, except practical filters in camera optics                           | Reproduced U | 0.2000 | 0.2851  | 0.1537 | 0.3217 | 0.1455 | 0.1892 | 0.2000 | 1.800 - 0.850 + 0.050  |
|   | V            | 0.3557 | 0.2324  | 0.3066 | 0.3274 | 0.3583 | 0.2081 | 0.3106 | -0.090 + 1.180 - 0.090 |
|   | Errors ROT   | 1.24   | 1.55    | 1.41   | 1.03   | 0.28   | 0.36   | 0.00   | 0.050 - 0.100 + 1.050  |
| (f) 4-tube camera, phototube gamma 0.65, practical filters, color film gray scale | Reproduced U | 0.2003 | 0.2851  | 0.1560 | 0.3219 | 0.1496 | 0.1886 | 0.2000 | 1.850 - 0.900 + 0.050  |
|   | V            | 0.3549 | 0.2356  | 0.3046 | 0.3312 | 0.3539 | 0.2094 | 0.3106 | 0.000 + 1.075 - 0.075  |
|   | Errors ROT   | 1.16   | 1.83    | 1.68   | 1.21   | 1.31   | .03    | .00    | 0.050 - 0.100 + 1.050  |
| (g) Measured optics of 4-tube camera currently used in studio                     | Reproduced U | 0.2063 | 0.2700  | 0.1627 | 0.3088 | 0.1613 | 0.1830 | 0.2000 | No matrix used         |
|   | V            | 0.3495 | 0.2372  | 0.3090 | 0.3237 | 0.3510 | 0.2258 | 0.3106 |                        |
|   | Errors ROT   | 1.89   | 5.66    | 3.73   | 2.72   | 4.37   | 4.52   | 0.00   |                        |
|   | CIE          | 6.37   | 9.91    | 10.4   | 7.10   | 12.0   | 7.68   | 0.00   |                        |