

# Errata

## An Improved Model of the Moog Ladder Filter

Stefano D'Angelo

- On page 731, equation (12) should read

$$d\Delta V_1 = -\frac{I_{\text{ctl}}}{2C} \left[ \tanh\left(\frac{\Delta V_1[n-1]}{2V_T}\right) + \tanh\left(\frac{V_{\text{in}}[n] + k\Delta V_4[n-1]}{2V_T}\right) \right].$$

- On page 731, equation (17) should read

$$\frac{\Delta V_i(s)}{\Delta V_{i-1}(s)} = \frac{A}{B} f_s \left[ \frac{1 + A + B}{s + f_s(1 - A - B)} - \frac{1 - A - B}{s + f_s(1 - A + B)} \right].$$

- On page 731, equation (19) should read

$$A = \pi V_T \frac{f_c}{f_s} \frac{1 - \pi \frac{f_c}{f_s}}{1 + \pi \frac{f_c}{f_s}}.$$

- On page 731, Fig. 3(b), the coefficient value should be  $\frac{2f_s A}{V_T}$ .
- On page 731, Fig. 3(c), the coefficient value should be  $4f_s A$  and there should be another multiplier between the output and the  $\tanh()$  nonlinearity with value  $\frac{1}{2V_T}$ .