

| Symbol | Description | Units | Generic value | Range |
|-------------|---|------------------------|---------------------|---|
| τ_R | time constant of R* inactivation | ms | 3.4 | 0.5 - 6.5 |
| τ_E | time constant of E* inactivation | ms | 8.7 | 3.0 - 16.8 |
| c_β | rate constant of cGMP hydrolysis in darkness | (ms) ⁻¹ | $2.8 \cdot 10^{-3}$ | $2.0 \cdot 10^{-3}$ - $4 \cdot 10^{-3}$ |
| k_β | rate constant of cGMP hydrolysis | (ms) ⁻¹ /td | $1.6 \cdot 10^{-4}$ | $4.9 \cdot 10^{-5}$ - $3.9 \cdot 10^{-4}$ |
| β | cGMP hydrolysis rate | (ms) ⁻¹ | - | - |
| τ_X | time constant of cGMP turnover | ms | - | - |
| X | scaled cGMP concentration | au | - | - |
| n_X | apparent Hill coefficient of CNG activation | - | 1 | fixed |
| I_{os} | scaled photocurrent of outer segment | au | - | - |
| τ_C | time constant of Ca ²⁺ extrusion | ms | 3 | 2 - 6.3 |
| C | scaled Ca ²⁺ concentration | au | - | - |
| a_C | scaling constant of GC activation | au | $9 \cdot 10^{-2}$ | $3.5 \cdot 10^{-2}$ - $2.1 \cdot 10^{-1}$ |
| n_C | apparent Hill coefficient of GC activation | - | 4 | fixed |
| α | GC activity | au | - | - |
| τ_m | capacitive membrane time constant | ms | 4 | fixed |
| V_{is} | membrane voltage of inner segment | mV | - | - |
| γ | parameter of membrane nonlinearity | - | 0.7 | 0.49 - 0.73 |
| a_{is} | scaling constant of membrane nonlinearity | au | $7 \cdot 10^{-2}$ | $1.9 \cdot 10^{-2}$ - $1.7 \cdot 10^{-1}$ |
| τ_{is} | time constant of membrane nonlinearity | ms | 90 | 23 - 139 |
| V_s | effective membrane voltage of cone pedicle after subtractive feedback | mV | - | - |
| g_t | parameter of transmitter activation curve | au | 125 | 71 - 185 |
| V_k | parameter of transmitter activation curve | mV | -10 | fixed |
| V_n | parameter of transmitter activation curve | mV | 3 | fixed |
| I_t | transmitter activation | au | - | - |
| V_1 | parameter of gain factor a_I | mV | 20 | 20 - 50 |
| μ | parameter of gain factor a_I | - | 0.7 | 0.17 - 0.73 |
| τ_a | time constant for gain factor a_I | ms | 250 | fixed |
| a_I | gain factor | - | - | - |
| τ_1 | time constant of cone - horizontal cell loop | ms | 4 | fixed |
| τ_2 | time constant of cone - horizontal cell loop | ms | 4 | 2.5 - 4 |
| τ_h | time constant of cone - horizontal cell loop | ms | 20 | 20 - 35 |
| V_h | membrane voltage of horizontal cell | mV | - | - |

Table 1. Parameters and variables used in the model; see Figure 6 and Equations 7-22. Generic values are used for calculating the generic curves in the figures. The range shows the minimum and maximum values obtained from all fits presented here. Notes: the smallest of the values at τ_R and τ_E is arbitrarily assigned to τ_X ; generic values of τ_X ($=1/(c_\beta+k_\beta I)$, with I in td) are 340, 230, 53, and 6.1 ms for illuminances of 1, 10, 100, and 1000 td, respectively. au = arbitrary unit.