**Figure 7-source data 1**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Control | Cpx KO | p-value |
|  | 7.8 ± 0.7·10-4 s-1 (n = 26) | 7.0 ± 1.6·10-4 s-1 (n = 47) | 1.0·10-3 (Mann-Whitney U test) |
|  | 2.0 ± 0.2·10-1 s-1 (n = 24) | 8.4 ± 0.9·10-2 s-1 (n = 32) | 1.9·10-8 (Two-sample t-test) |
|  | 3.3 ± 0.2 s-1 (n = 26) | 2.4 ± 0.1 s-1 (n = 47) | 2.6·10-5 (Two-sample t-test) |

**Parameter values Figure 7B**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Control | Cpx KO | p-value |
|  | 0.0 ± 0.1 RT | 0.1 ± 0.3 RT | As in figure B |
|  | -5.6 ± 0.1 RT | -4.7 ± 0.1 RT | As in figure B |
|  | -8.4 ± 0.1 RT | -8.0 ± 0.0(4) RT | As in figure B |

**Parameter values Figure 7C**

|  |  |  |
| --- | --- | --- |
|  | Diff. in | Bootstrapped 95%CI |
|  | 7.23·10-5 s-1 | [-2.9, 3.8]·10-4 s-1 |
|  | 1.16·10-1 s-1 | [0.81, 1.53]·10-1 s-1 |
|  | 8.99·10-1 s-1 | [0.46, 1.36] s-1 |

**Parameter values Figure 7D**

|  |  |
| --- | --- |
|  | Diff. in |
|  | 0.10 RT |
|  | 0.87 RT |
|  | 0.32 RT |

**Parameter values Figure 7E**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Parameter | Mean | Std | 95% CI | Unit | Mean ± SEM (fig 8) |
|  | 7.76·10-4 | 0.70·10-4 | [6.47, 9.19]·10-4 | 1/s | 7.8 ± 0.7·10-4 1/s  (n=26) |
|  | 2.00·10-1 | 0.16·10-1 | [1.71, 2.32]·10-1 | 1/s | 2.0 ± 0.2·10-1 1/s  (n=24) |
|  | 3.30 | 0.21 | [2.91, 3.74] | 1/s | 3.3 ± 0.2 1/s  (n=26) |
|  |  |  |  |  |  |
|  | 7.03·10-4 | 1.58·10-4 | [4.36, 10.0]·10-4 | 1/s | 7.0 ± 1.6·10-4 1/s  (n=47) |
|  | 8.38·10-2 | 0.93·10-2 | [6.62, 10.3]·10-2 | 1/s | 8.4 ± 0.9·10-2 1/s  (n=32) |
|  | 2.40 | 0.09 | [2.24, 2.58] | 1/s | 2.4 ± 0.1 1/s  (n=47) |
|  |  |  |  |  |  |
|  | 7.32·10-5 | 1.72·10-4 | [-2.9, 3.8]·10-4 | 1/s | 7.23·10-5 1/s |
|  | 1.16·10-1 | 0.18·10-1 | [0.81, 1.53]·10-1 | 1/s | 1.16·10-1 1/s |
|  | 8.95·10-1 | 2.30·10-1 | [0.46, 1.36] | 1/s | 8.99·10-1 1/s |

**Parameter values Bootstrap analysis Figure 7**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Control | Cpx KO | p-value |
|  | 133 ± 25 pA (n = 26) | 156 ± 21 pA (n = 47) | > 0.05 (Two-sample t-test) |

**Parameter values Figure 7-figure supplement 1A**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Control | Cpx KO | p-value |
|  | 8.3 ± 1.2·10-2 s-1 (n = 26) | 8.9 ± 0.8·10-2 s-1 (n = 47) | > 0.05 (Two-sample t-test) |

**Parameter values Figure 7-figure supplement 1B**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Control | Cpx KO | p-value |
|  | 1.57 ± 0.15 nC (n = 26) | 1.65 ± 0.15 nC (n = 47) | > 0.05 (Two-sample t-test) |

**Parameter values Figure 7-figure supplement 1C**

|  |  |
| --- | --- |
| Model parameter | Value (unit) |
|  | 0.75 (s-1) |
|  | 0.09 (s-1) |
|  | 1.4 (nC) |
|  | 1.6 (nC) |
|  |  |
| Sucrose function parameter |  |
|  | 0.01-10 (s-1) |
|  | 1.2 (s) |
|  | 0.14 (s) |
| Duration of sucrose pulse | 4 (s) |

**Parameter values Figure 7-figure supplement 1D**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Parameter | Mean | Std | 95% CI | Unit | Mean ± SEM (fig S6) |
|  | 134 | 24 | [91, 184] | pA | 133 ± 25 pA  (n=26) |
|  | 155 | 21 | [115, 198] | pA | 156 ± 21 pA  (n=47) |
|  |  |  |  |  |  |
|  | 8.4·10-2 | 1.1·10-2 | [6.3, 10.7]·10-2 | 1/s | 8.3 ± 1.2·10-2 1/s  (n=26) |
|  | 8.9·10-2 | 0.8·10-2 | [7.3, 10.4]·10-2 | 1/s | 8.9 ± 0.8·10-2 1/s  (n=47) |
|  |  |  |  |  |  |
|  | 1558.1 | 150.1 | [1268.3, 1855.1] | pC | 1.57 ± 0.15 nC  (n=26) |
|  | 1646.9 | 149.4 | [1363.4, 1950.5] | pC | 1.65 ± 0.15 nC  (n=47) |

**Parameter values Bootstrap analysis Figure 7-figure supplement 1**