**Output of L2/3**

**Pyramidal (L2) to Other Cell Types**

**Pyramidal to Pyramidal**

| **Source (L2)** | **Target Layer** | **Target Cell Type** | **Synaptic Weight** | **Delay (ms)** | **Target Sections** |
| --- | --- | --- | --- | --- | --- |
| Pyramidal | L4 | Pyramidal | 0.00035 | 1.6 | ['basal', 'apical'] |
| Pyramidal | L5 | Pyramidal | 0.0007 | 1.8 | ['basal', 'apical'] |
| Pyramidal | L6 | Pyramidal | 0.00035 | 4.9 | ['basal', 'apical'] |

**Pyramidal to PV**

| **Source (L2)** | **Target Layer** | **Target Cell Type** | **Synaptic Weight** | **Delay (ms)** | **Target Sections** |
| --- | --- | --- | --- | --- | --- |
| Pyramidal | L4 | PV | 0.006 | 1.2 | ['somatic', 'basal'] |
| Pyramidal | L5 | PV | 0.003 | 1.4 | ['somatic', 'basal'] |
| Pyramidal | L6 | PV | 0.003 | 4.5 | ['somatic', 'basal'] |

**Pyramidal to SST**

| **Source (L2)** | **Target Layer** | **Target Cell Type** | **Synaptic Weight** | **Delay (ms)** | **Target Sections** |
| --- | --- | --- | --- | --- | --- |
| Pyramidal | L4 | SST | 0.00375 | 1.5 | ['somatic', 'basal'] |
| Pyramidal | L5 | SST | 0.001875 | 1.7 | ['somatic', 'basal'] |
| Pyramidal | L6 | SST | 0.001875 | 4.8 | ['somatic', 'basal'] |

**Pyramidal to VIP**

| **Source (L2)** | **Target Layer** | **Target Cell Type** | **Synaptic Weight** | **Delay (ms)** | **Target Sections** |
| --- | --- | --- | --- | --- | --- |
| Pyramidal | L4 | VIP | 0.003 | 1.5 | ['somatic', 'basal'] |
| Pyramidal | L5 | VIP | 0.0015 | 1.7 | ['somatic', 'basal'] |
| Pyramidal | L6 | VIP | 0.0015 | 4.8 | ['somatic', 'basal'] |

### PV to Other Cell Types

#### **PV to PYR**

| **Source (L2/3)** | **Target Layer** | **Target Cell Type** | **Synaptic Weight (uS)** | **Delay (ms)** | **Target Sections** |
| --- | --- | --- | --- | --- | --- |
| PV | L4 | PYR | 0.0024 \* 1 = 0.0024 | 0.9 | ['somatic', 'basal', 'apical'] |
| PV | L5 | PYR | 0.0024 \* 2 = 0.0048 | 1.1 | ['somatic', 'basal', 'apical'] |
| PV | L6 | PYR | 0.0024 \* 1 = 0.0024 | 4.2 | ['somatic', 'basal', 'apical'] |

#### **PV to SST**

| **Source (L2/3)** | **Target Layer** | **Target Cell Type** | **Synaptic Weight (uS)** | **Delay (ms)** | **Target Sections** |
| --- | --- | --- | --- | --- | --- |
| PV | L4 | SST | 0.0024 \* 1.01 = 0.002424 | 1.5 | ['basal'] |
| PV | L5 | SST | 0.0024 \* 1.01 = 0.002424 | 1.7 | ['basal'] |
| PV | L6 | SST | 0.0024 \* 1.01 = 0.002424 | 4.8 | ['basal'] |

#### **PV to VIP**

| **Source (L2/3)** | **Target Layer** | **Target Cell Type** | **Synaptic Weight (uS)** | **Delay (ms)** | **Target Sections** |
| --- | --- | --- | --- | --- | --- |
| PV | L4 | VIP | 0.0024 \* 0.22 = 0.000528 | 1.2 | ['somatic', 'basal'] |
| PV | L5 | VIP | 0.0024 \* 0.22 = 0.000528 | 1.4 | ['somatic', 'basal'] |
| PV | L6 | VIP | 0.0024 \* 0.22 = 0.000528 | 4.5 | ['somatic', 'basal'] |

### SST to Other Cell Types

#### **SST to PYR**

| **Source (L2/3)** | **Target Layer** | **Target Cell Type** | **Synaptic Weight** | **Delay (ms)** | **Target Sections** |
| --- | --- | --- | --- | --- | --- |
| SST | L4 | PYR | 0.0024 \* 1 = 0.0024 | 1.5 | ['basal', 'apical'] |
| SST | L5 | PYR | 0.0024 \* 2 = 0.0048 | 1.7 | ['basal', 'apical'] |
| SST | L6 | PYR | 0.0024 \* 1 = 0.0024 | 4.8 | ['basal', 'apical'] |

#### **SST to PV**

| **Source (L2/3)** | **Target Layer** | **Target Cell Type** | **Synaptic Weight** | **Delay (ms)** | **Target Sections** |
| --- | --- | --- | --- | --- | --- |
| SST | L4 | PV | 0.0024 \* 0.33 = 0.000792 | 1.5 | ['basal'] |
| SST | L5 | PV | 0.0024 \* 0.33 = 0.000792 | 1.7 | ['basal'] |
| SST | L6 | PV | 0.0024 \* 0.33 = 0.000792 | 4.8 | ['basal'] |

#### **SST to VIP**

| **Source (L2/3)** | **Target Layer** | **Target Cell Type** | **Synaptic Weight** | **Delay (ms)** | **Target Sections** |
| --- | --- | --- | --- | --- | --- |
| SST | L4 | VIP | 0.0024 \* 0.77 = 0.001848 | 1.5 | ['basal'] |
| SST | L5 | VIP | 0.0024 \* 0.77 = 0.001848 | 1.7 | ['basal'] |
| SST | L6 | VIP | 0.0024 \* 0.77 = 0.001848 | 4.8 | ['basal'] |

### VIP to Other Cell Types

#### **VIP to PYR**

| **Source (L2/3)** | **Target Layer** | **Target Cell Type** | **Synaptic Weight** | **Delay (ms)** | **Target Sections** |
| --- | --- | --- | --- | --- | --- |
| VIP | L4 | PYR | 0.0024 \* 0.02 = 0.000048 | 1.5 | ['basal', 'apical'] |
| VIP | L5 | PYR | 0.0024 \* 0.02 = 0.000048 | 1.7 | ['basal', 'apical'] |
| VIP | L6 | PYR | 0.0024 \* 0.02 = 0.000048 | 4.8 | ['basal', 'apical'] |

#### **VIP to SST**

| **Source (L2/3)** | **Target Layer** | **Target Cell Type** | **Synaptic Weight** | **Delay (ms)** | **Target Sections** |
| --- | --- | --- | --- | --- | --- |
| VIP | L4 | SST | 0.0024 \* 20 = 0.048 | 1.5 | ['basal'] |
| VIP | L5 | SST | 0.0024 \* 20 = 0.048 | 1.7 | ['basal'] |
| VIP | L6 | SST | 0.0024 \* 20 = 0.048 | 4.8 | ['basal'] |