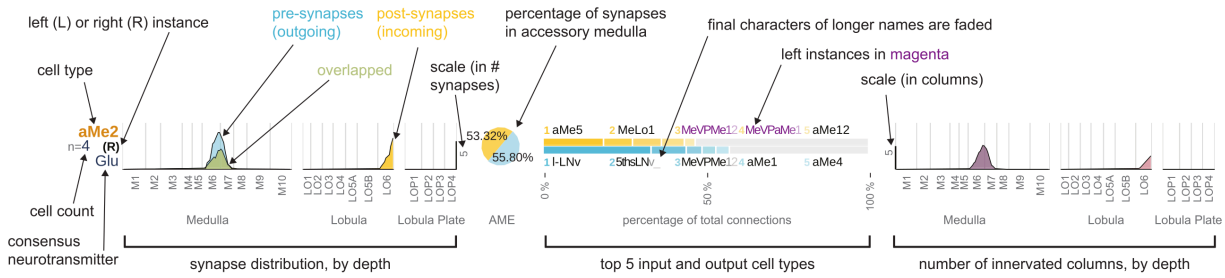
Supplementary Fig. 1: Summary of the anatomy and connectivity of visual system neurons

The 70-page summary of all the neurons follows the conventions of Fig. 5 (see Methods section **Summary of connectivity and size by depth**). The quantified morphology and distribution of pre- and post-synapses (mean of all cells of the type), together with the top five connected cells (for connections > 1, averaged across all cells of the type), are found on odd pages. For details of cell type names, see the methods section **Cell type nomenclature**. Some bilateral neurons are found in the right optic lobe, and to distinguish between the right and left hemisphere versions of the cell type, we treat them separately and append an (R) or (L) to the cell type's name. In the top 5 connectivity data in the center panel, left-hemisphere cell types are indicated with a magenta label. The synapse distributions are plotted as counts of synapses in each bin along columns of the brain region, with the scale indicated on the right-hand side. Medulla columns: 121 bins (0.54µm mean length), lobula columns: 76 bins (0.75 µm mean length), lobula plate columns: 51 bins (0.5µm mean length). The length of columns varies by spatial position (see Extended Data Fig. 7b).

Annotated example of per-cell type summary:



A gallery of rendered example neurons (see Methods section **Gallery of representative neurons**) is paired with the summary data and shown on even pages. A representative neuron of each type has been selected and is shown in a sliced view to reveal the innervation patterns of the visual regions (scale bar = 50µm); the central brain arbors of most VPN and VCN neurons are not shown in their entirety. Each slice is taken from one of three locations, indicated by D (dorsal), E (equatorial), or V (ventral), with most neurons shown in the E slice, except for cells best represented in more dorsal or ventral locations. The layers are sheared relative to the slicing planes in the D and V locations, so the layer patterns should be viewed as suggestive, but the more accurate description is found in the corresponding synapse and size (by depth) data plots.

The PDF document contains bookmarks with cell type names (linked to the summary data). The document is most conveniently viewed in "two-page view" and tested to work well with Adobe Acrobat and Poppler based viewers.