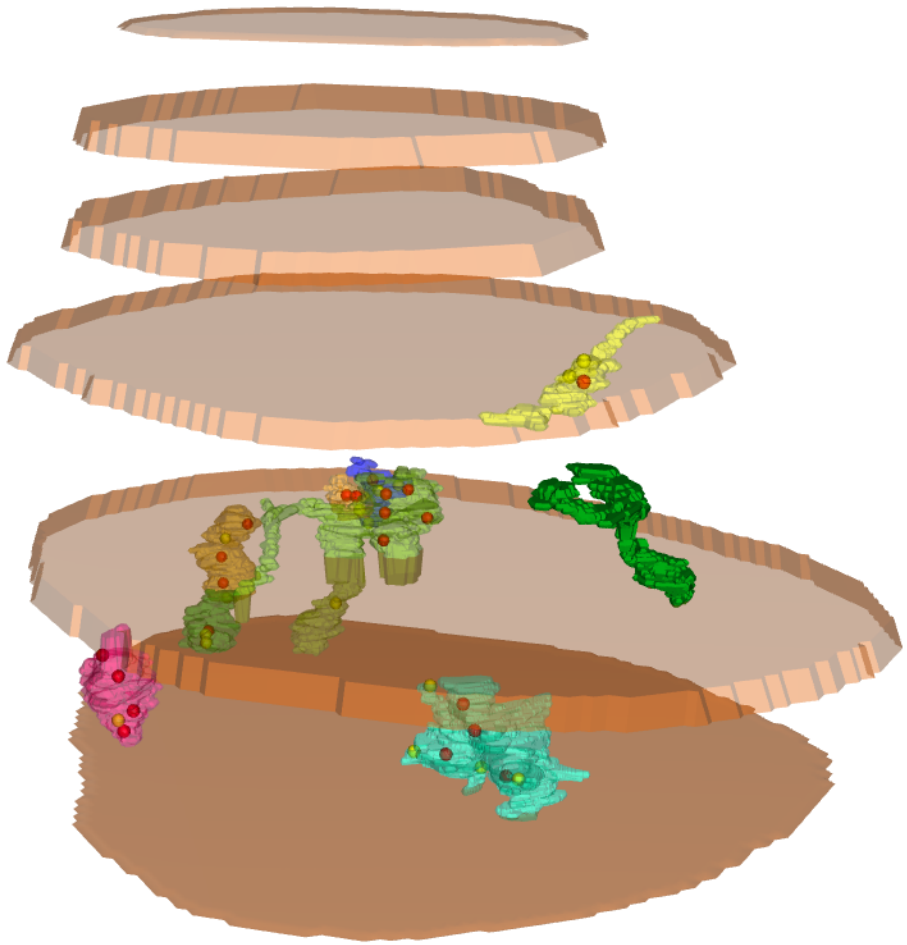

Table S5-1 VA7-LN synaptic inventory

	LN	vol (µm³)	surf (µm²)	pre	post	total	ratio	sy/µm³	pre	post	sy/µm²	pre	post	id
1	LN1	1.32	14.34	5	1	6	5.0	4.55	3.79	0.76	0.42	0.35	0.07	2495
2	LN2	0.79	6.42	4	1	5	4.0	6.33	5.06	1.27	0.78	0.62	0.16	2621
3	LN3	0.25	3.8	1	2	3	0.5	12.00	4.00	8.00	0.79	0.26	0.53	2633
4	LN4	0.12	1.96	1	3	4	0.3	33.33	8.33	25.00	2.04	0.51	1.53	2704
5	LN5	0.12	1.62	2	1	3	2.0	25.00	16.67	8.33	1.85	1.23	0.62	2688
6	LN6	0.66	8.93	2	3	5	0.7	7.58	3.03	4.55	0.56	0.22	0.34	2737
7	LN7	1.55	13.53	4	4	8	1.0	5.16	2.58	2.58	0.59	0.30	0.30	2747
8	LN8	0.4	3.58	1	3	4	0.3	10.00	2.50	7.50	1.12	0.28	0.84	2761
9	LN9	0.58	5.56	3	2	5	1.5	8.62	5.17	3.45	0.90	0.54	0.36	3526
	total	5.79	59.74	23	20	43	1.2	7.43	3.97	3.45	0.72	0.39	0.33	

vol: neurite volume; surf: neurite surface; total: number of all synapses counted per profile; pre: presynaptic site (output synapse) post: postsynaptic site (input synapse); ratio: number of out-to-input synapses; sy: synapse; sy/µm³: volumetric density ;sy/µm²: surface density

Table S5-2 VA7-LN synaptic configuration

configuration	LN1		LN2		LN3		LN4		LN5		LN6		LN7		LN8		LN9			all PN	percent	sum targets	percent
	pre		pre		pre		pre		pre		pre		pre		pre		pre						
3	3		1		1				2		1						2			10	43.5%	30	36.6%
4	2		3				1				1		4		1		1			13	56.5%	52	63.4%
																			total	**23**	**100.0%**	**82**	**100.0%**
configuration	LN1		LN2		LN3		LN4		LN5		LN6		LN7		LN8		LN9			**sum**	percent	**sum**	percent
	post		post		post		post		post		post		post		post		post						
3					1															1	5.3%	3	3.3%
4	1				1		2		1		3		2		2		1			13	68.4%	52	57.1%
5							1								1					2	10.5%	10	11.0%
6																	1			1	5.3%	6	6.6%
8			1																	1	5.3%	8	8.8%
12													1							1	5.3%	12	13.2%
																			total	**19**	**100.0%**	**91**	**100.0%**
																			< 7	**17**	**89.5%**	**71**	**78.0%**
																			> 6	**2**	**10.5%**	**20**	**22.0%**

config: synaptic configuration, e.g. 4 = tetrad, **total:** number of configurations; **sum targets**: number of all postsynaptic profiles targeted by output synapses