

Materials List for:

Using Affordable LED Arrays for Photo-Stimulation of Neurons

Matthew Valley¹, Sebastian Wagner¹, Benjamin W. Gallarda¹, Pierre-Marie Lledo¹

¹Laboratory for Perception and Memory, Institut Pasteur and Centre National de la Recherche Scientifique (CNRS)

Correspondence to: Benjamin W. Gallarda at gallarda@pasteur.fr, Pierre-Marie Lledo at pmlledo@pasteur.fr

URL: <https://www.jove.com/video/3379>

DOI: [doi:10.3791/3379](https://doi.org/10.3791/3379)

Materials

Name	Company	Catalog Number	Comments
Ketamine	Imalgène 1000		100 mg/ml
Xylazine	Rompun		2%
NaCl	Sigma-Aldrich	S5886	
KCl	Sigma-Aldrich	P5405	
MgSO ₄	Sigma-Aldrich	M1880	
NaHCO ₃	Sigma-Aldrich	S5761	
NaHPO ₄	Sigma-Aldrich	S5011	
Glucose	Sigma-Aldrich	G7021	
CaCl ₂	Sigma-Aldrich	C7902	
Agarose	Sigma-Aldrich	A9539	
Pipette Puller	Sutter Instrument Co.		P-97
Glass Capillaries	Harvard Apparatus	GC150T-10	1.5 mm O.D./1.17 mm I.D.
LED array	Bridgelux	BXRA-C2000	
Collimating lens	Thorlabs Inc.	LEDC1	40 mm beam diameter
Power supply	A1W Elektronik	HKO2800	2.8 amp
Optical power meter	Thorlabs Inc.	PM 100	
Heatsink	Thermaltake	A1838	Silent Boost K8
Fan	Thermaltake	A1838	Silent Boost K8
Vibratome	Leica Microsystems	VT1200S	