

Materials List for

A Flexible Platform for Monitoring Cerebellum-Dependent Sensory Associative Learning

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jove.com/video/63205

Materials

Name	Company	Catalog Number	Comments
"B" Quick Base For C&B METABOND - 10 mL bottle	Parkell	S398	Dental cement solvent
"C" Universal TBB Catalyst - 0.7 mL	Parkell	S371	Catalyst
#8 Washers	Thorlabs	W8S038	Washers
0.250" (1/4") x 8.00" Stainless Steel Precision Shafting	Servocity	634172	1/4" shaft
0.250" (0.770") Clamping Hub	Servocity	545588	Clamping hub
1/4" to 6 mm Set Screw Shaft Coupler- 5 pack	Actobotics	625106	Shaft-coupling sleeve
1/4"-20 Cap Screws, 3/4" Long	Thorlabs	SH25S075	1/4" bolt
100 pcs 5 mm 395–400 nm UV Ultraviolet LED Light Emitting Diode Clear Round Lens 29 mm Long Lead (DC 3V) LEDs Lights +100 pcs Resistors	EDGELEC	ED_YT05_U_100Pcs	CS LEDs
2 m Micro HDMI to DVI-D Cable - M/ M - 2 m Micro HDMI to DVI Cable - 19 pin HDMI (D) Male to DVI-D Male - 1920 x 1200 Video	Star-tech	HDDDVIMM2M	Raspberry Pi4B to monitor cable
256 GB Ultra Fit USB 3.1 Flash Drive	SanDisk	SDCZ430-256G-G46	USB thumb drive
3.3 V–5 V 4 Channels Logic Level Converter Bi-Directional Shifter Module	Amazon	B00ZC6B8VM	Logic level shifter
32 GB 95 MB/s (U1) microSDHC EVO Select Memory Card	Samsung	MB-ME32GA/AM	microSD card
4.50" Aluminum Channel	Servocity	585444	4.5" aluminum channel
48-LED CCTV Ir Infrared Night Vision Illuminator	Towallmark	SODIAL	Infrared light array
4PCS Breadboards Kit Include 2PCS 830 Point 2PCS 400 Point Solderless Breadboards for Proto Shield Distribution Connecting Blocks	REXQualis	B07DL13RZH	Breadboard
5 Port Gigabit Unmanaged Ethernet Network Switch	TP-Link	TL-SG105	Ethernet switch

5 V 2.5 A Raspberry Pi 3 B+ Power Supply/Adapter	Canakit	DCAR-RSP-2A5	Power supply for Raspberry Pi 3B+
5-0 ETHILON BLACK 1 x 18" C-3	Ethicon	668G	Sutures
6 mm Shaft Encoder 2000 PPR Pushpull Line Driver Universal Output Line Driver Output 5-26 V dc Supply	Calt	B01EWER68I	Rotary encoder
Ø1/2" Optical Post, SS, 8-32 Setscrew, 1/4"-20 Tap, L = 1", 5 Pack	Thorlabs	TR1-P5	Optical posts
Ø1/2" Optical Post, SS, 8-32 Setscrew, 1/4"-20 Tap, L = 2", 5 Pack	Thorlabs	TR2-P5	Optical posts
Ø1/2" Optical Post, SS, 8-32 Setscrew, 1/4"-20 Tap, L = 4", 5 Pack	Thorlabs	TR4-P5	Optical posts
Ø1/2" Optical Post, SS, 8-32 Setscrew, 1/4"-20 Tap, L = 6", 5 Pack	Thorlabs	TR6-P5	Optical posts
Ø1/2" Post Holder, Spring-Loaded Hex-Locking Thumbscrew, L = 2"	Thorlabs	PH2	Optical post holder
Adapter-062-M X LUER LOCK-F	The Lee Co.	TMRA3201950Z	Solenoid valve luer adapter
Aeromat Foam Roller Size: 36" Length	Aeromat	B002H3CMUE	Foam roller
Aluminum Breadboard 10" x 12" x 1/2", 1/4"-20 Taps	Thorlabs	MB1012	Aluminum breadboard
Amazon Basics HDMI to DVI Adapter Cable, Black, 6 Feet, 1-Pack	Amazon	HL-007347	Raspberry Pi3B+ to monitor cable
Arduino Uno R3	Arduino	A000066	Arduino Uno (microcontroller board)
Arduino Due	Arduino	A000062	Arduino Due (microcontroller board)
Bench Power Supply, Single, Adjustable, 3 Output, 0 V, 24 V, 0 A, 2 A	Tenma	72-8335A	Power supply
Clear Scratch- and UV-Resistant Cast Acrylic Sheet, 12" x 24" x 1/8"	McMaster Carr	8560K257	Acrylic sheet
CNC Stepper Motor Driver 1.0–4.2 A 20–50 V DC 1/128 Micro-Step Resolutions for Nema 17 and 23 Stepper Motor	Stepper Online	B06Y5VPSFN	Stepper motor driver
Compact Compressed Air Regulator, Inline Relieving, Brass Housing, 1/4 NPT	McMaster Carr	6763K13	Air source regulator
Cotton Swab	Puritan	806-WC	Cotton swab
Dell 1908FP 19" Flat Panel Monitor - 1908FPC	Dell	1908FPC	Computer monitor
Flex Cable for Raspberry Pi Camera	Adafruit	2144	camera serial interface cable
High Torque Nema 17 Bipolar Stepper Motor 92 oz·in/65 N·cm 2.1 A Extruder Motor	Stepper Online	17HS24-2104S	Stepper motor
Isoflurane	Henry Schein	66794001725	Isoflurane
Krazy Maximum Bond Permanent Glue, 0.18 oz.	Krazy Glue	KG483	Cyanoacrylate glue
Lidocaine HCl	VetOne	510212	Lidocaine
Low-Strength Steel Hex Nut, Grade 2, Zinc-Plated, 1/4"-20 Thread Size	McMaster Carr	90473A029	Nuts
M3 x 50 mm Partially Threaded Hex Key Socket Cap Head Screws 10 pcs	Uxcell	A16040100ux1380	M3 bolt
NEMA 17 Stepper Motor Mount	ACTOBOTICS	555152	Stepper motor mount
Official Raspberry Pi Power Supply 5.1 V 3 A with USB C - 1.5 m long	Adafruit	4298	Power supply for Raspberry Pi 4B

Optixcare Dog & Cat Eye Lube Lubricating Gel, 0.70-oz tube	Optixcare	142422	Ophthalmic ointment
Precision Stainless Steel Ball Bearing, Shielded, Trade No. R188-2Z, 13000 rpm Maximum Speed	McMaster-Carr	3759T57	Bearing
Premium Female/Female Jumper Wires - 40 x 6"	Adafruit	266	Wires
Premium Female/Male 'Extension' Jumper Wires - 40 x 6" (150 mm)	Adafruit	826	Wires
Premium Male/Male Jumper Wires - 40 x 6"	Adafruit	758	Wires
Radiopaque L-Powder for C&B METABOND - 5 g	Parkell	S396	Dental cement powder
Raspberry Pi (3B+ or 4B)	Adafruit	3775 or 4295	Raspberry Pi
Raspberry Pi NoIR Camera Module V2 - 8MP 1080P30	Raspberry Pi Foundation	RPI3-NOIR-V2	Raspberry NoIR V2 camera
Right-Angle Bracket, 1/4" (M6) Counterbored Slot, 8-32 Taps	Thorlabs	AB90E	Right-angle bracket
Right-Angle Clamp for Ø1/2" Posts, 3/16" Hex	Thorlabs	RA90	Right-angle optical post clamp
Right-Angle End Clamp for Ø1/2" Posts, 1/4"-20 Stud and 3/16" Hex	Thorlabs	RA180	Right-angle end clamp
RJ45 Cat-6 Ethernet Patch Internet Cable	Amazon	CAT6-7FT-5P-BLUE	Ethernet cable
Rotating Clamp for Ø1/2" Posts, 360° Continuously Adjustable, 3/16" Hex	Thorlabs	SWC	Rotating optical post clamps
Spike & Hold Driver-0.1 TO 5 MS	The Lee Co.	IECX0501350A	Solenoid valve driver
Swivel Base Adapter	Thorlabs	UPHA	Post holder adapter
USB 2.0 A-Male to Micro B Cable, 6 feet	Amazon	7T9MV4	USB2 type A to USB2 micro cable
USB 2.0 Printer Cable - A-Male to B-Male, 6 Feet (1.8 m)	Amazon	B072L34SZS	USB2 type B to USB2 type A cable
VHS-M/SP-12 V	The Lee Co.	INKX0514900A	Solenoid valve
Zinc-Plated Steel 1/4" washer, OD 1.000"	McMaster Carr	91090A108	Washers