

Lotsamillions 3D Printed Bartop Arcade, Model 101, Bill of Materials

Item	Model or Part Number	Description	Quantity	Source	Price	Link	Options
1	B01M2X88QP	Arcade Buttons EG STARTS 1 Player DIY Kit Joystick 5V LED Arcade Button for Arcade Stick PC Games Mame Raspberry pi	1 Kit	Amazon	\$22.88	https://smile.amazon.com/gp/product/B01M2X88QP/ref=ppx_yo_dt_b_asin_title_o00_s00?ie=UTF8&psc=1	Any Joystick/Button kit with USB encoder that works with a Raspberry Pi should work provided the critical dimensions are met. Joystick mounting plate: 97mm x 54mm maximum overall dimensions with mounting hole centers at 81mm x 40mm Buttons: 28.5mm maximum diameter for threaded portion that goes through control panel cutouts. 37mm maximum diameter for button threaded nuts that go on the back side of the control to hold the button in place. As of 5/30/2020 this kit is not available on Amazon. There are several others that appear to be identical but sold under a different name.
2	User Sourced	10mm x 2mm disc magnet	2	User Sourced			Magnets should be glued in place. Double sided adhesive tape may not have sufficient strength to hold the magnets in place. Magnet polarity must be observed so that they attract the door to the cabinet for positive closure retention.
3	B07S51QDTG	Raspberry Pi Touchscreen Monitor, 7" HDMI Touch Screen Display IPS 1024x600 with Prop Stand Built-in Dual Speakers HDMI 2.0 Plug and Play FPC for Raspberry Pi 4 3 2 Zero B+ Model B Xbox PS4 iOS Win	1	Amazon	\$69.99	https://smile.amazon.com/gp/product/B07S51QDTG/ref=ppx_yo_dt_b_search_asin_title?ie=UTF8&psc=1	Substitutions may be possible here but the bezel was designed around this specific display. 115mm x 157mm is the hole pattern centers. This display comes with a power supply that sufficiently runs the display and the Raspberry Pi 3B (not overclocked). The display includes a cable to power the Pi over GPIO and a flat ribbon cable to connect the Pi's HDMI to the display. This display also has built in speakers that are sufficiently loud for the enclosure.
4	B06XGTJHZ8	Non Slip Furniture Pads X-PROTECTOR – Premium 12 pcs 3" Furniture Pad! Best Furniture Grippers - SelfAdhesive Rubber Feet - Furniture Floor Protectors for Keep in Place Furniture & Furniture Stoppers	1 pack	Amazon	\$13.91	https://smile.amazon.com/gp/product/B06XGTJHZ8/ref=ppx_yo_dt_b_search_asin_title?ie=UTF8&psc=1	Four of these are applied to the bottom of the cabinet. They provide excellent grip so the cabinet doesn't slide around while playing.
5	B07WH59N6T	HELIFOUNER 420 PCS M2 M3 M4 M5 Female Thread Knurled Nuts Brass Threaded Insert Embedment Nuts Assortment Kit	1 kit	Amazon	\$19.99	https://smile.amazon.com/gp/product/B07WH59N6T/ref=ppx_yo_dt_b_search_asin_title?ie=UTF8&psc=1	M4 threaded, 6mm diameter x 6mm tall, Heat Set inserts were used. To mount the control panel.
6	User Sourced	Fastening Hardware		User Sourced			M4 and M3 Button Head Cap Bolts were used in assembly
	B007TSYNG8	E6000 230010 Craft Adhesive, 3.7 Fluid Ounces		Amazon	\$8.95	https://smile.amazon.com/E6000-230010-Craft-Adhesive-Ounces/dp/B007TSYNG8/ref=sr_1_5?dchild=1&keywords=e6000&qid=1590877320&sr=8-5	E6000 adhesive works very well for PLA. Any adhesive suitable for the filament being used is acceptable. The major cabinet parts are tongue and groove fit, but adhesive is needed to hold in place.
8		3D Printer Filament	< 1kg				Filament quantity varies depending on chosen wall quantity and infill. Infill was increased in all areas that accept screws or screw inserts. The control panel was also given a higher infill in a vertical and horizontal strip across the center of the panel. This is done in your slicer.
9		3D Printer					All parts were printed on a Creality CR-10. A bed size of 300mm x 300mm is needed to print the size panels. No parts can be scaled due to critical dimensions throughout the design.
10							M4 and M3 Button Head Cap Bolts were used in assembly