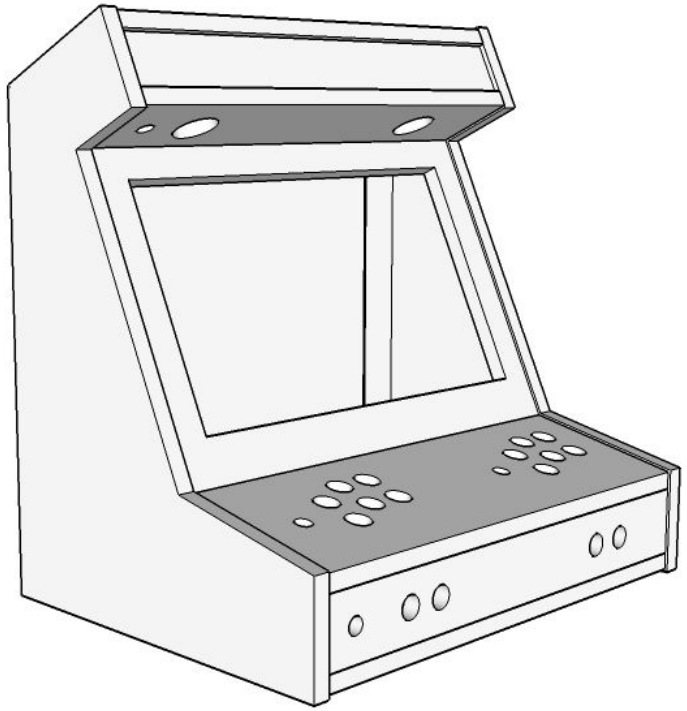
Bartop Arcade w/ Raspberry Pi



Can't get enough retro gaming? Why not build a cabinet to run a Raspberry Pi-based system! This model includes a 6-button/joystick layout, 21.5" display, USB port, custom LED-lit marquee, and 2" speakers with volume control. The design is versatile and can be changed to suit your specific needs in gear, layout, and appearance. All in a format that looks just as good in your living room as it does in a dedicated game room.

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Plans: Marc Spagnuolo & Brian Benham
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Version 1

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Cut List

Section	Part ID	Part Description	Material	QTY	Width	Length
Arcade	A	Sides	3/4“ Plywood	2	18”	25”
	B	Marquee Top	3/4“ Plywood	1	6 3/4“	22”
	C	Monitor Panel	3/4“ Plywood	1	18”	22”
	D	Control Panel Top	3/4“ Plywood	1	7 7/8“	22”
	E	Control Panel Front	3/4“ Plywood	1	3 1/8“	22”
	F (G)	Back - (Door)	3/4“ Plywood	1	20 3/4“	22”
	H	Marquee Bottom	3/4“ Plywood	1	4”	22”
	I	Bottom	3/4“ Plywood	1	17 1/2“	22”
	K	Monitor Cleat	3/4“ Plywood	1	4”	22”

Materials Needed:

1 Sheet of 3/4“ Plywood
1pc of 1/8“ Plexi Glass 3” x 22”
Optional - 1pc of 4/4 hardwood 1 1/2“ x 96” for banding

Important Building Note:

After you cut your parts out and the cut the necessary bevels, there’s a really good chance your final measurements will differ from those laid out in the plans. That’s absolutely OK. The final shape of your cabinet will be transferred to the cabinet sides and those will be cut last. So use the cut list as your starting point and don’t worry if your numbers differ slightly from the plans.

Resources

Everything you need to know about retro gaming on Raspberry Pi:
https://retropie.org.uk

The Raspberry PI:
http://amzn.to/2j1sjQf

Marquee LED Lights:
http://amzn.to/2jbjwbL

Speakers:
http://amzn.to/2ic6qws

Display:
http://amzn.to/2jbmZqK

Buttons and Joysticks:
http://amzn.to/2jbncKG

USB Hub
http://amzn.to/2j1sGdB

Countersink Bit
http://amzn.to/2j4VEW6

Jigsaw Blades
http://amzn.to/2iIquHI

Clamping Tool Guide
http://amzn.to/2j1gvxu

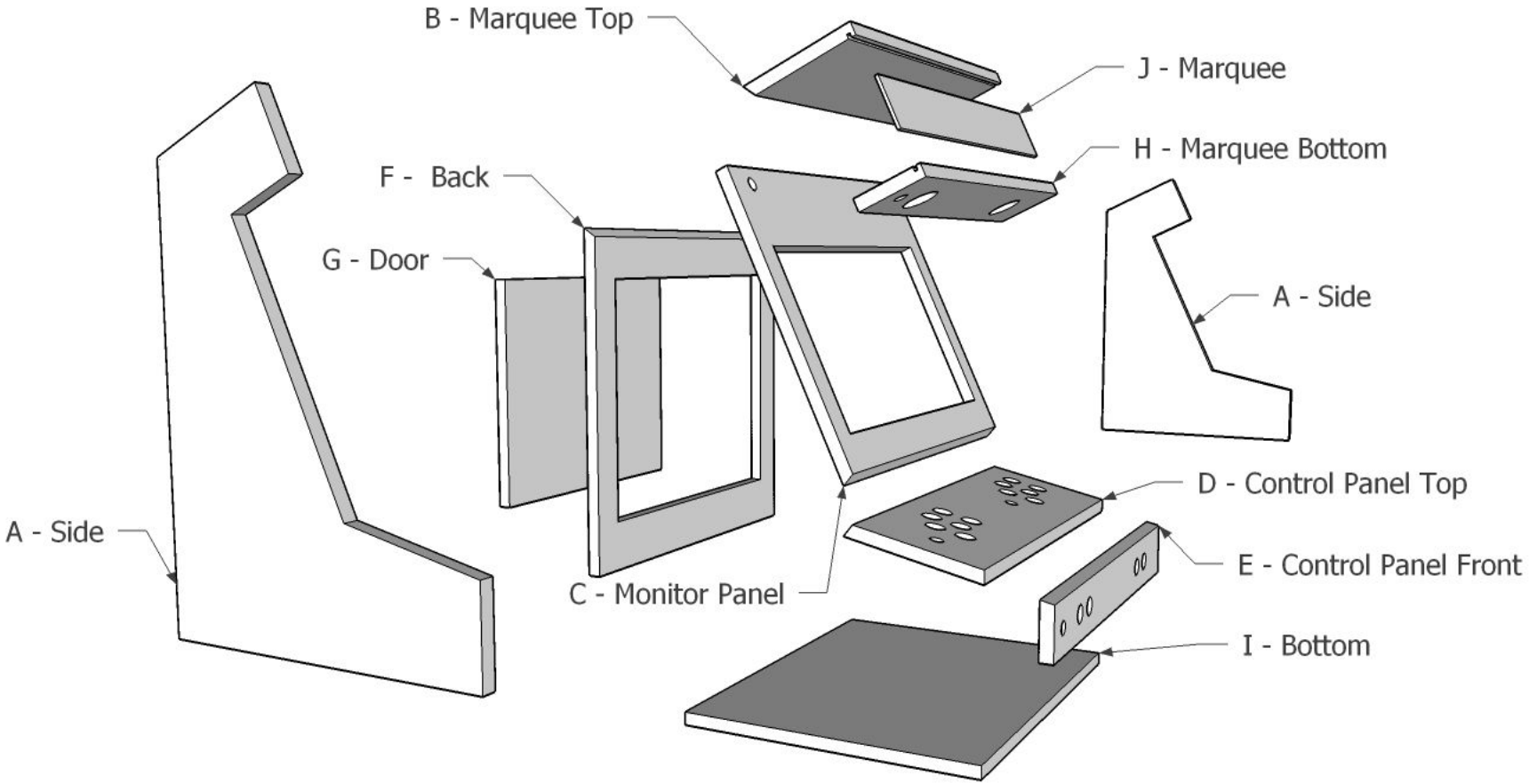
Wiping Poly
http://amzn.to/2j1qjre

GRR-Ripper
http://amzn.to/2iXnpmR

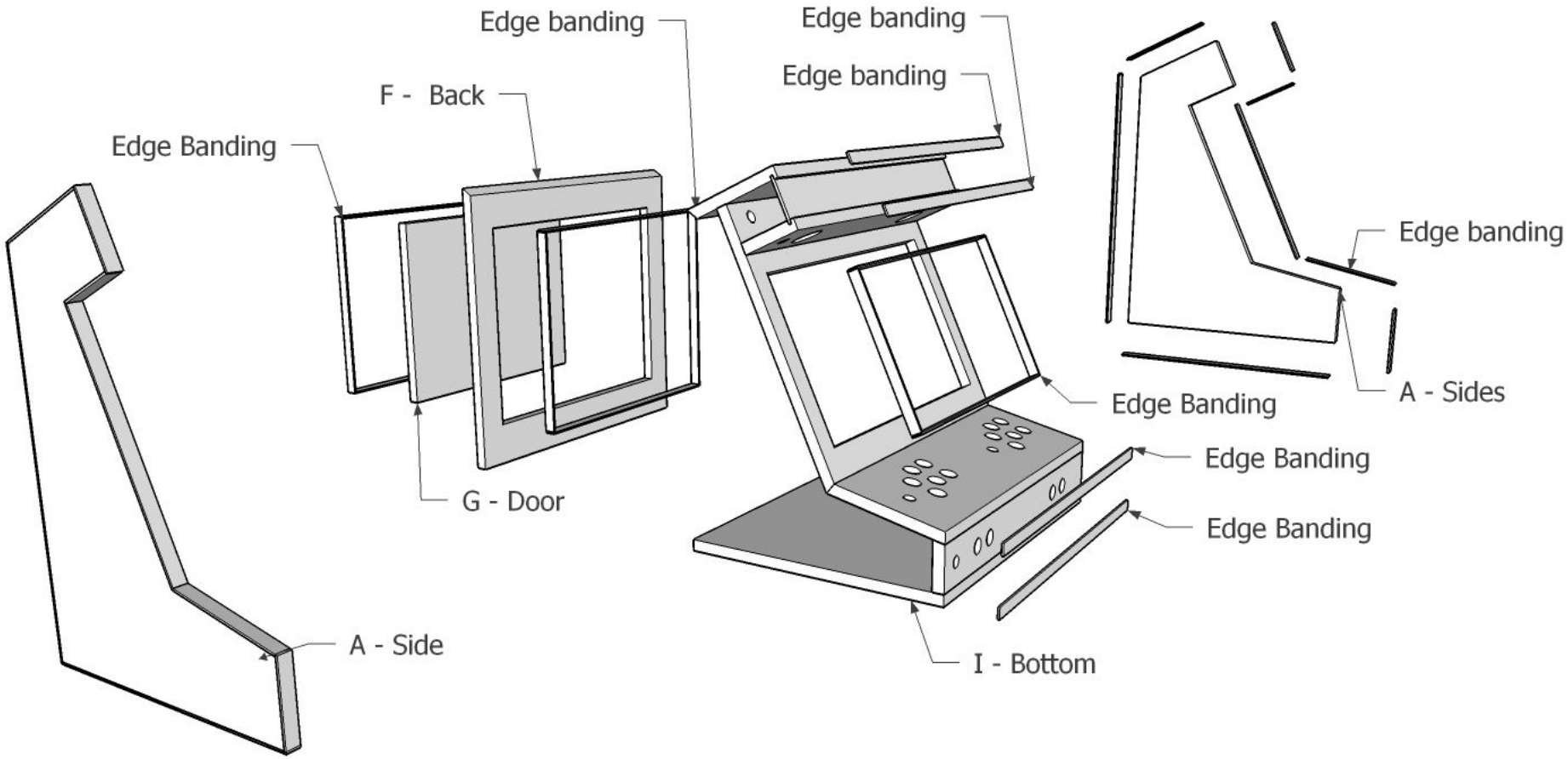
Self-Centering Drill Bits
http://amzn.to/2iWmqBf

Flush-Trim Bit
http://amzn.to/2jfkKBE

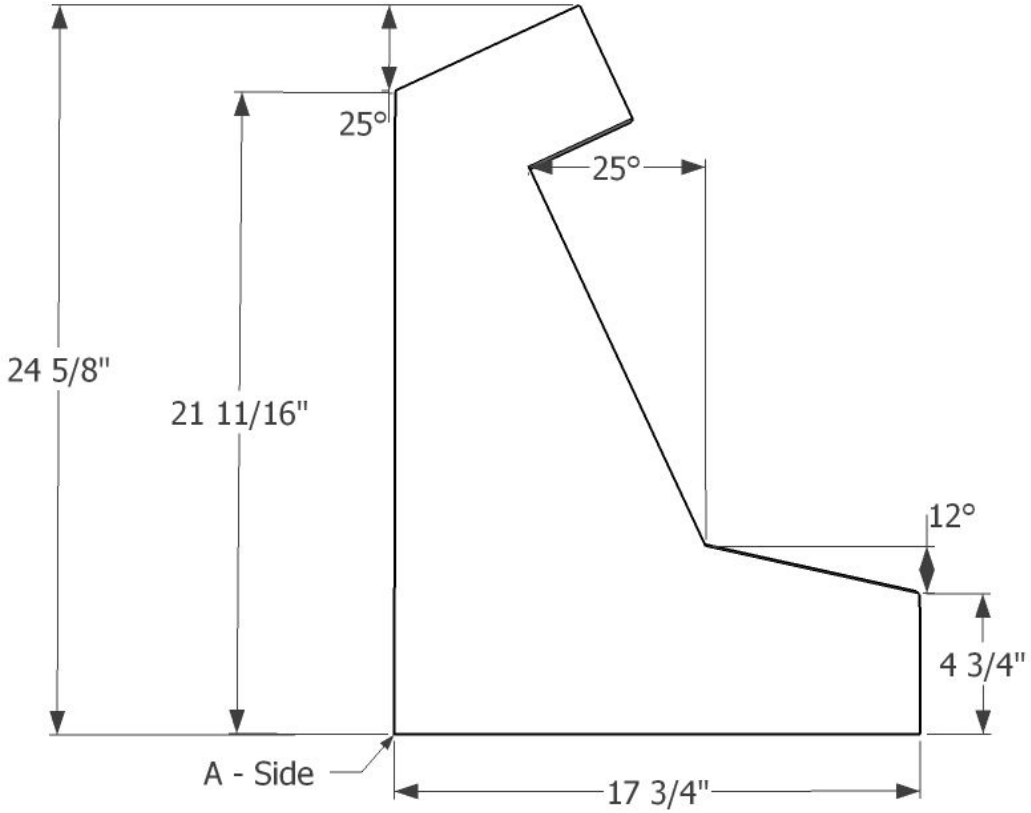
Exploded View



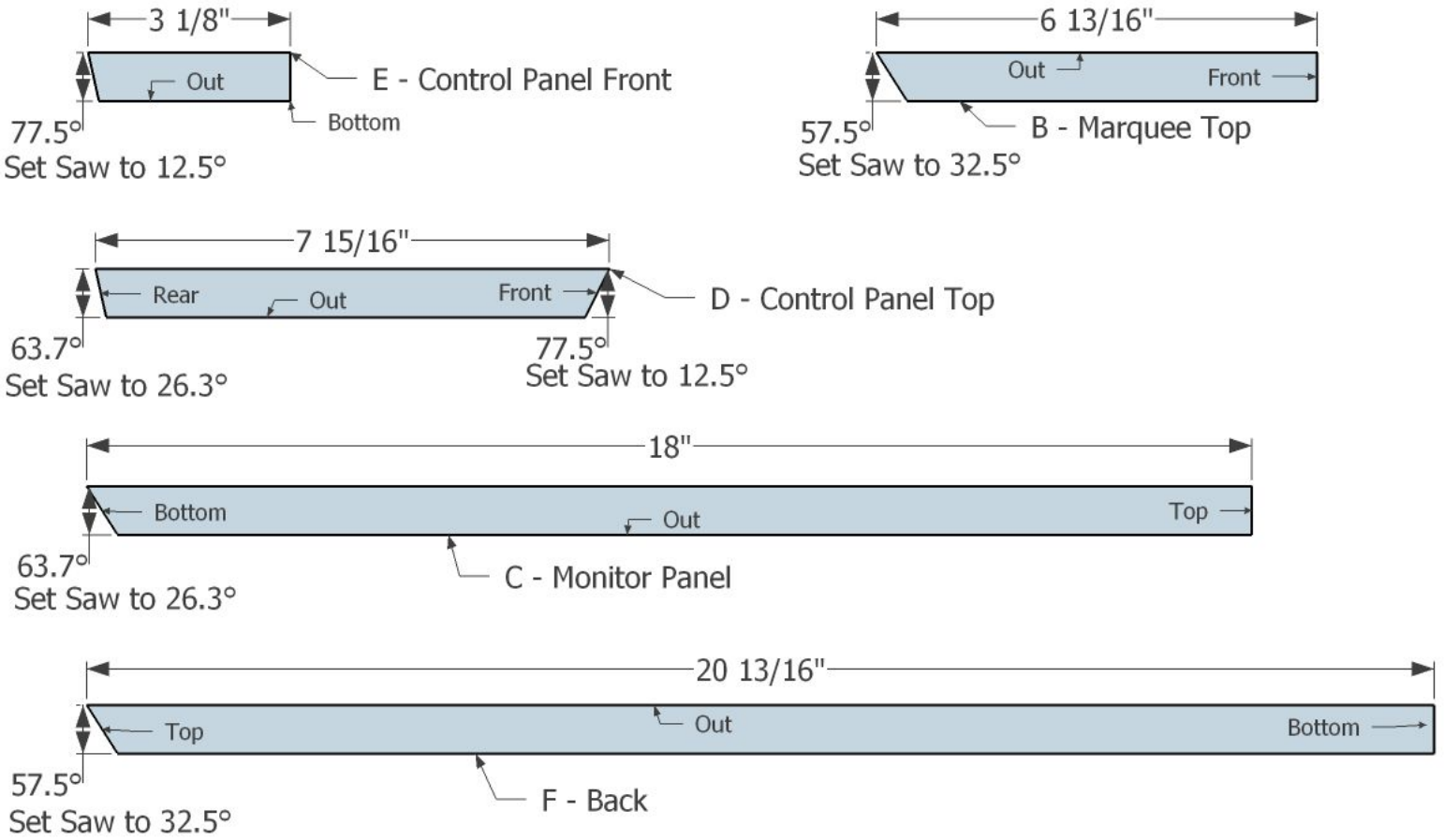
Banding Exploded View (optional)



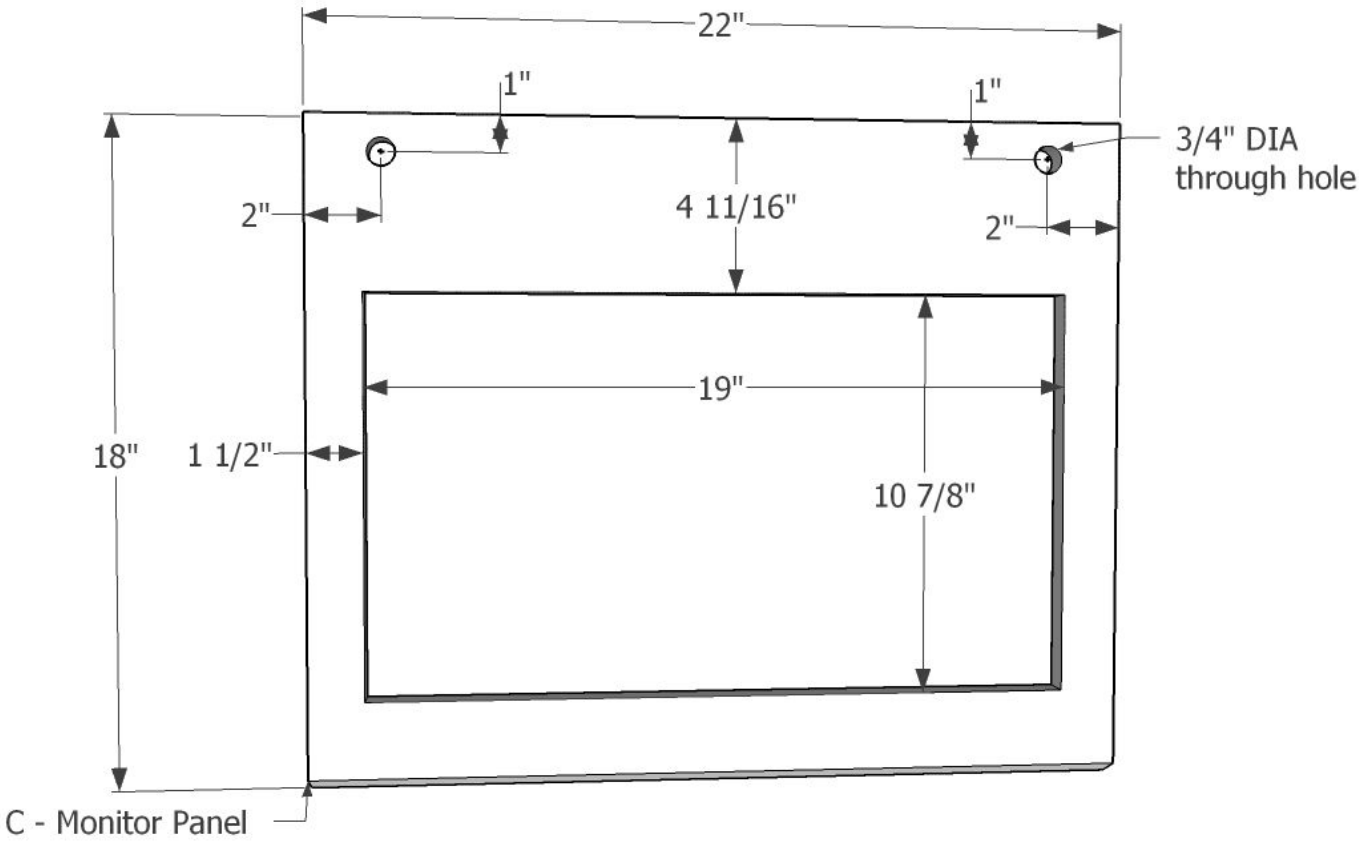
Sides



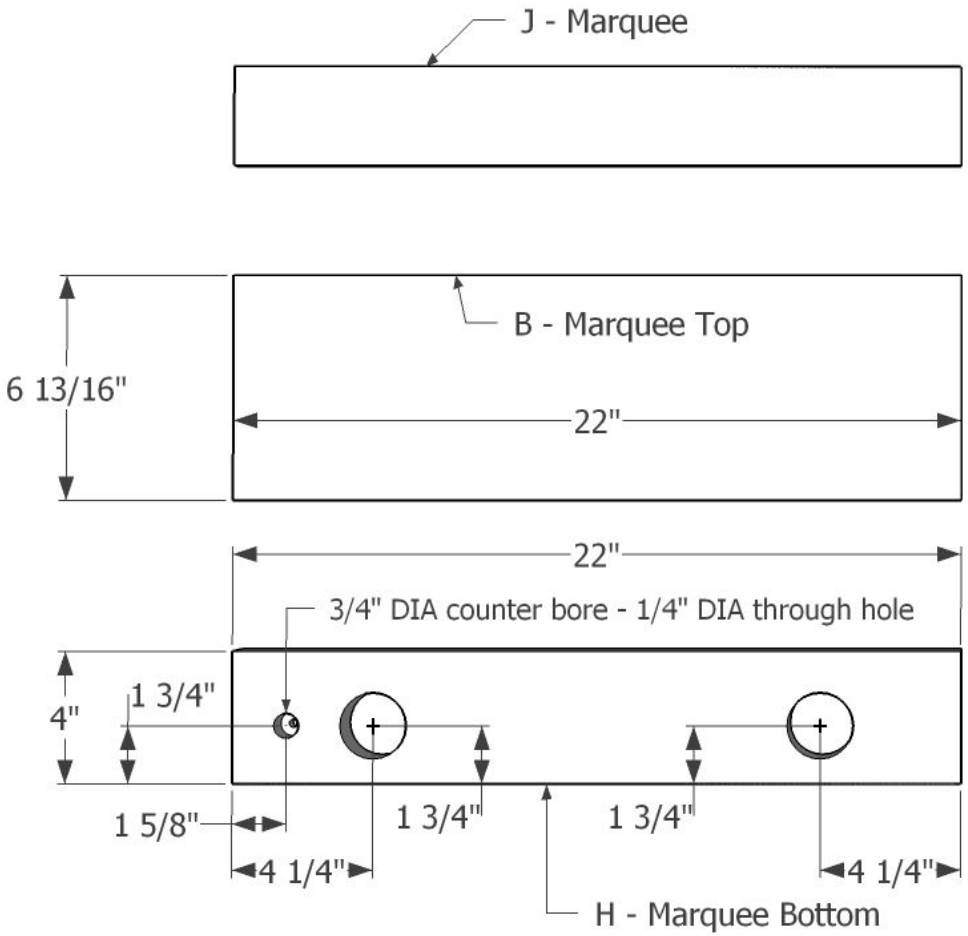
Bevel Cuts

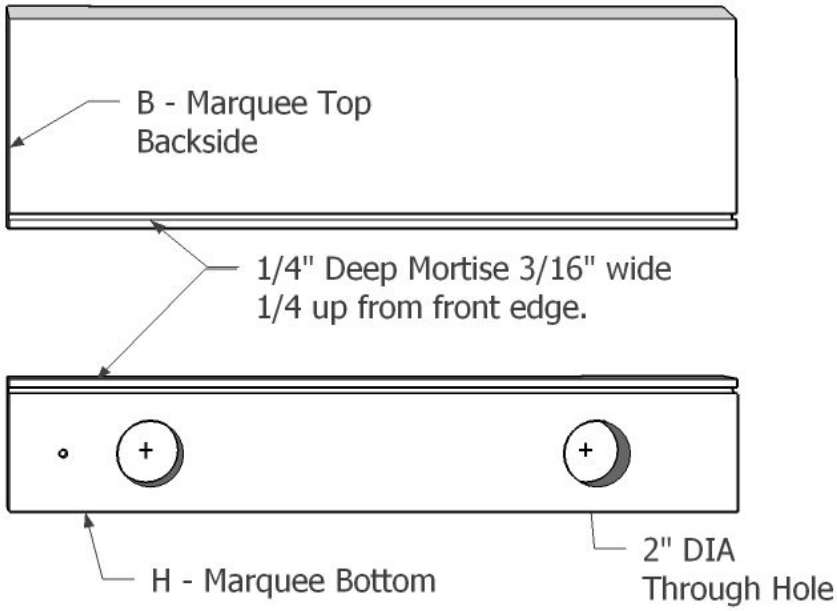

3 1/8"
Out
E - Control Panel Front
Bottom
77.5°
Set Saw to 12.5°
6 13/16"
Out
Front
B - Marquee Top
57.5°
Set Saw to 32.5°
7 15/16"
Rear
Out
Front
D - Control Panel Top
63.7°
Set Saw to 26.3°
77.5°
Set Saw to 12.5°
18"
Bottom
Out
Top
C - Monitor Panel
63.7°
Set Saw to 26.3°
20 13/16"
Top
Out
Bottom
F - Back
57.5°
Set Saw to 32.5°

Monitor Panel

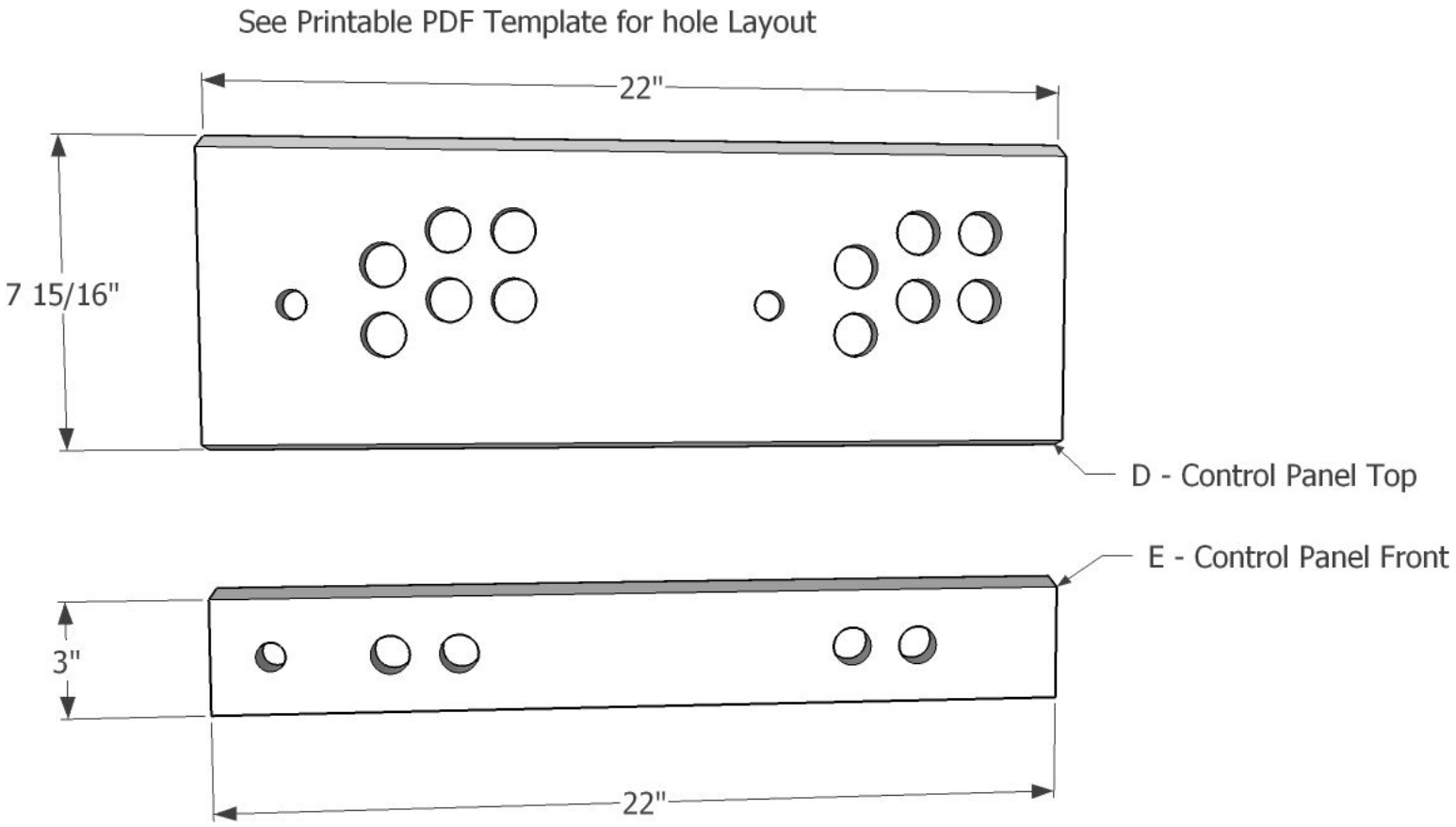


Marquee Pieces

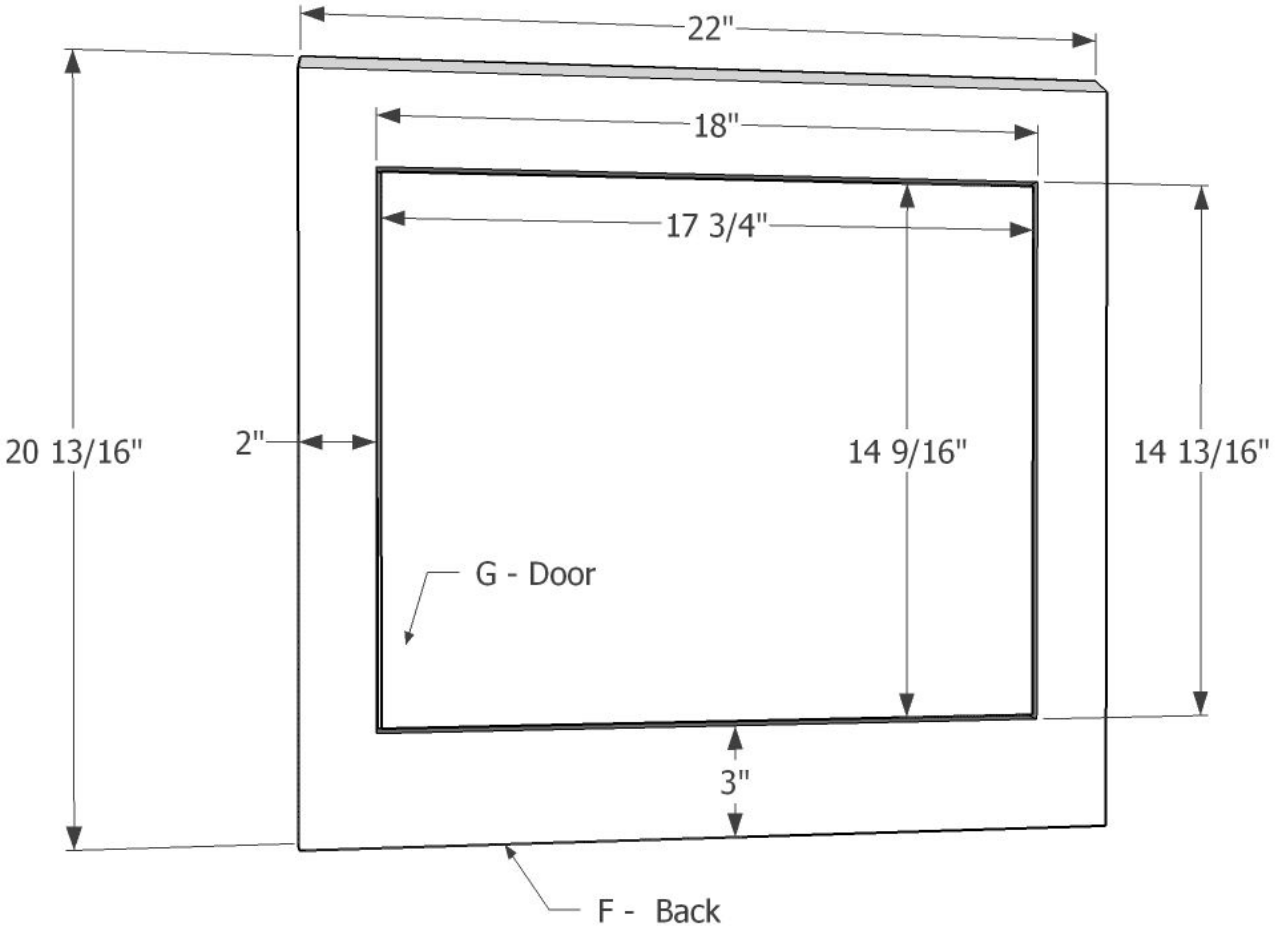




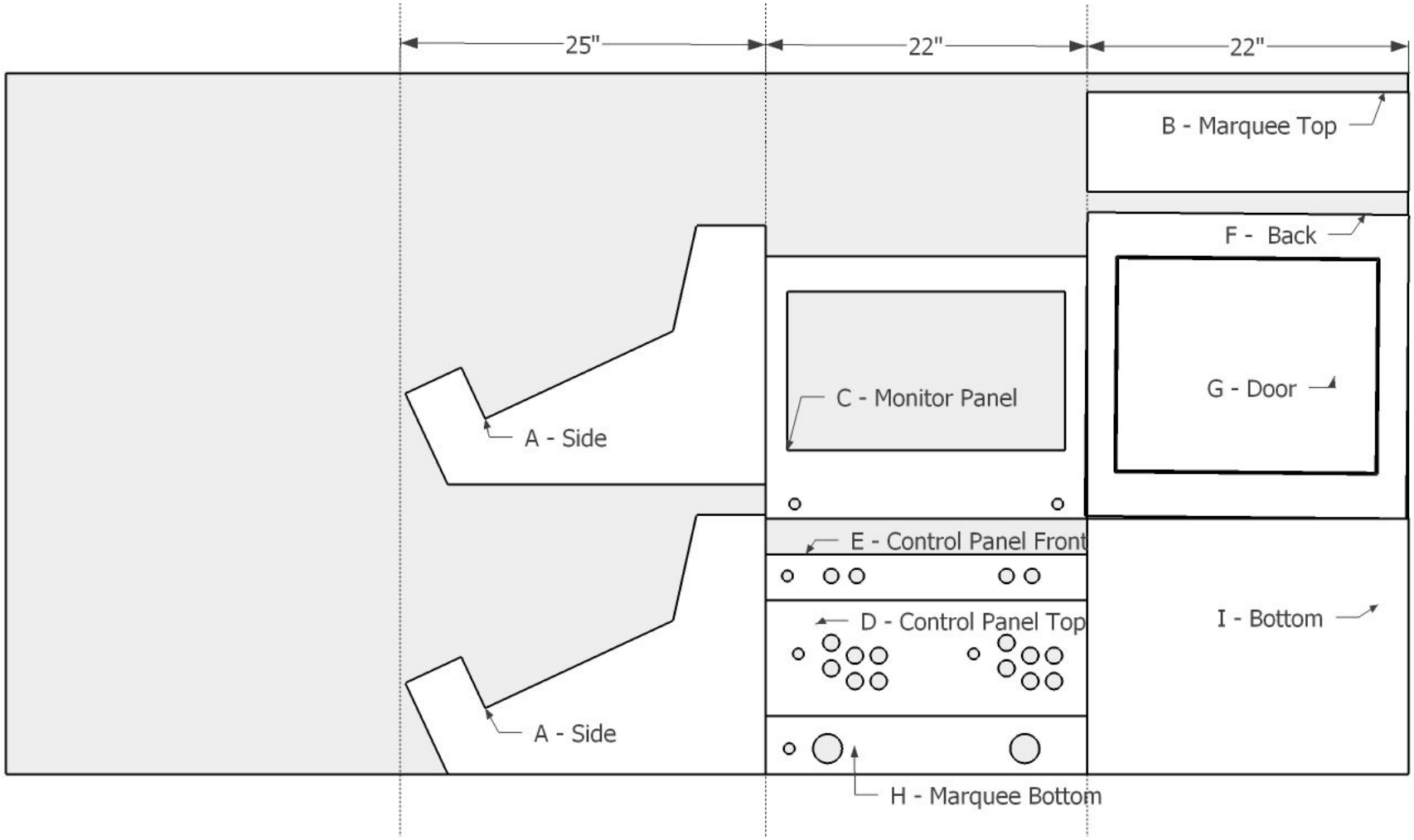
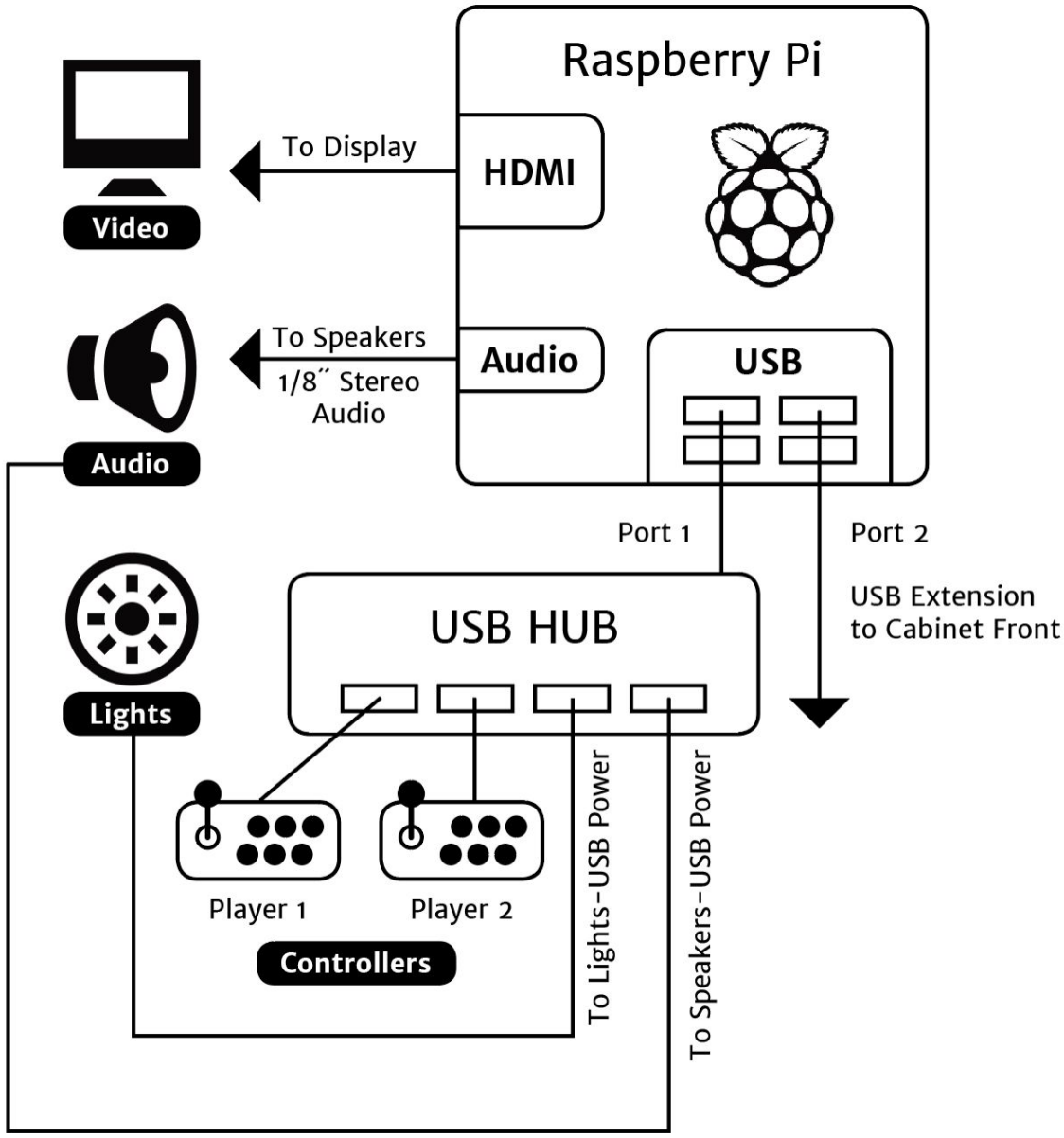
Components Layout



Back



Plywood Cut Diagram



Wiring Diagram