# Build Your Own: EZshow Show Your Work Easily and Effectively in Remote Settings



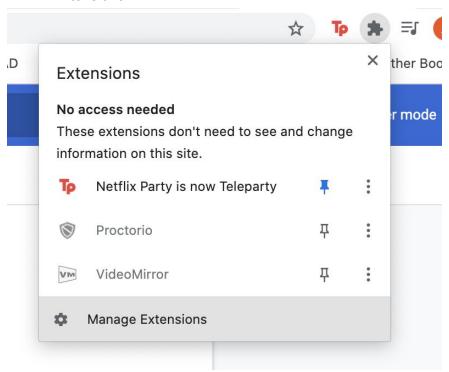
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#### Google Chrome Extension Set-Up:

Note: The extension is only necessary for the viewer. Our extension is not on the google play store, so it will have to be manually installed. Users must be working on Google Chrome for the extension to work.

- 1. Download "Flipper-master1\_0" and unzip the folder.
- 2. Open Chrome, click on the extension "puzzle piece" button, and select "Manage Extensions"



3. Ensure that the "Developer mode" checkbox in the top right-hand corner is checked



- 4. Drag and drop the unzipped folder, "Flipper-master", to add the extension
- 5. The extension is now installed and will work with any video on a currently open tab

#### Materials List:

- 1. MDF (our wood composite of choice)
- 2. Slow close hinge
- 3. Nuts and Bolts (fit hinge, we used 1/8")
- 4. Sealant (necessary if using MDF or other toxic composite)
- 5. Felt pads
- 6. Clear Acrylic (1/8" thick)
- 7. 2 Clothespins
- 8. Super Glue
- 9. Wood Glue (optional)
- 10. White board material (optional)
- 11. Spray paint(optional)
- 12. Access to simple machining (saws, drills, laser cutter, etc.)\*

<sup>\*</sup>Materials are required if not specified as optional. Feel free to experiment with wood type,hinge, etc. Use the specific materials above and your Easy Show will work.

#### How to get started:

Do you have the equipment necessary to build this design? Yes? Do you have proper protective equipment and supervision? Yes? Then acquire all the required materials from the "Materials List." Optional elements add personalization to the design. Be creative! Once you have all the materials, carefully review the following instructions and watch our instructional tutorial video.

#### **Build Instructions:**

- 1. Refer to the instructional video for cutting tips and tricks
- 2. Cut 14" × 20" section of MDF for Base (Figure 1)
- 3. Cut 3.5" × 20" section of MDF for Arm Rest (Figure 2)
- 4. Cut 10.5" × 16" section of MDF for Workspace (Figure 3)
- 5. Cut 10.5" × 3.75" section of MDF for Hinge Lift (
- 6. Mill 1" × 8" handle slot for Workspace (Figure 3)
- 7. On the Workspace, drill two holes through the board at the specified positions (Figure 3)
- 8. Flipping over the Workspace, drill countersinks ½" inch through the Workspace (or enough to ensure the nut is flush or below the surface of the board if desired)
- 9. On the Hinge Lift, Drill two holes through the board for the hinge (see Figure 4)
- 10. Again, flipping over the Hinge Lift, drill countersinks about ½" inch through the Hinge Lift. (Or enough to ensure the nut is flush or below the surface of the board)
- 11. Drill four more holes and appropriate countersinks in the same fashion as steps 7 and 8, this time in the corners of the Hinge Lift (see Figure 4)
- 12. Drill four holes and appropriate counter sinks on Stationary Base in order to attach the Hinge Lift in later steps.
- 13. Disassemble clothespins (3 parts per clothespin: spring, 2 wooden halves) (See Figure 7)
- 14. Cut half of one side of each clothespin (See Figure 8)
- 15. Seal and paint/clear coat all components desired and allow to dry (Must seal all components made of MDF). Follow directions for dry time before assembly.
- 16. Laser cut acrylic with Lever Arm dimensions (Figure 5)\*\*
- 17. Using the super glue, attach the halves of the <u>uncut</u> clothes pins to the acrylic (see Figure 5)
- 18. Use a clamp to keep the clothes pins in place and wait appropriate dry time for glue to cure
- 19. When glue is dry reassemble both clothes pins
- 20. Fasten arm rest to Base using wood glue (follow instructions of wood glue type)
- 21. Attach one half of the hinge to the Hinge Lift
- 22. Now, fasten the Hinge Lift to the Stationary Base using bolts.
- 23. Next, fasten the Workspace to the Hinge.
- 24. Once bolts are tightened and the glue is dry, glue the lever arm/clothes pin assembly to the workspace.
- 25. Optional: Cut out a piece of dry erase material to the size of a standard piece of paper, 8.5"x11". Glue the white board to the workspace, clamp and allow to dry and cure.

Figures:

<sup>\*\*</sup>Can also substitute wood for acrylic. Wood will partially obstruct standard 8.5"x11" work when fastened.

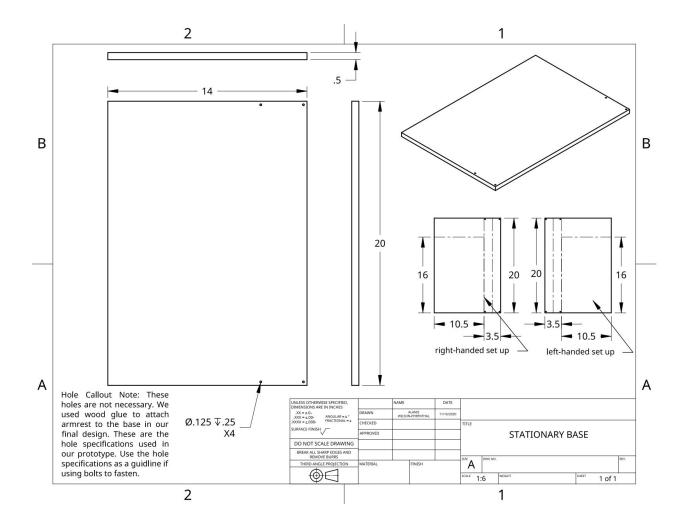


Figure 1

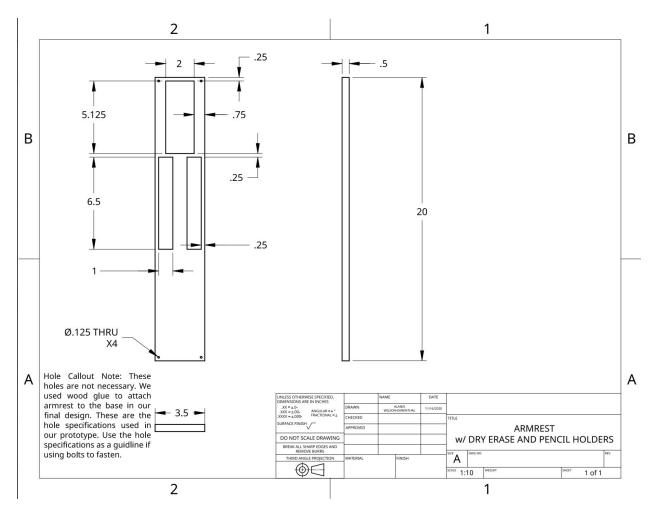


Figure 2

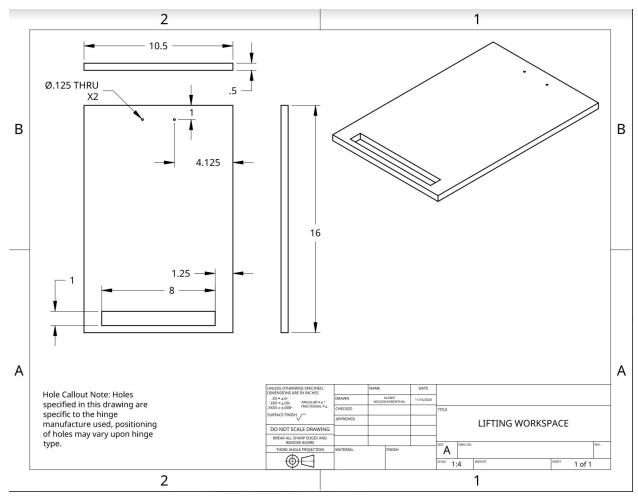


Figure 3

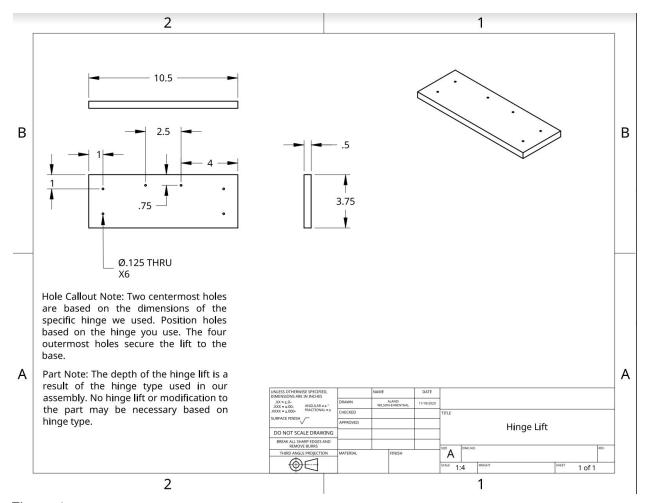


Figure 4

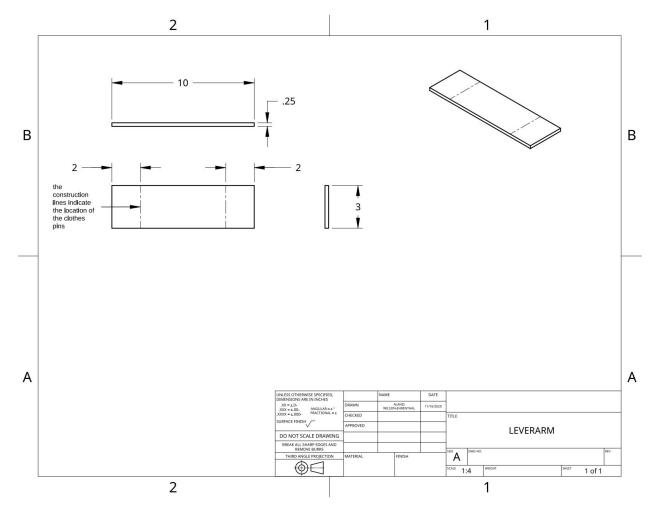


Figure 5

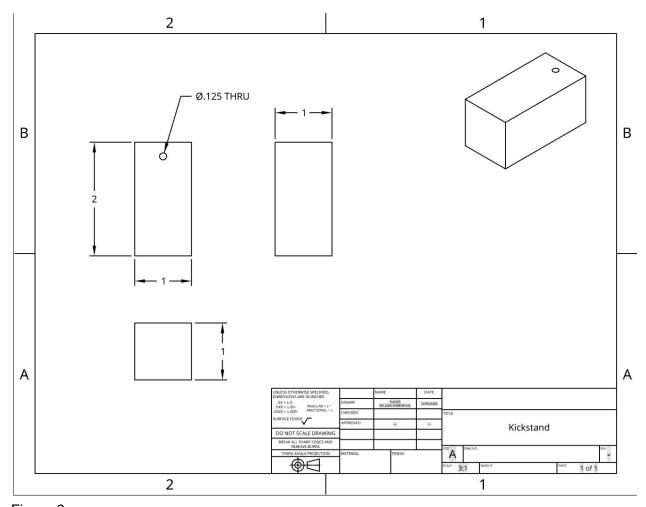
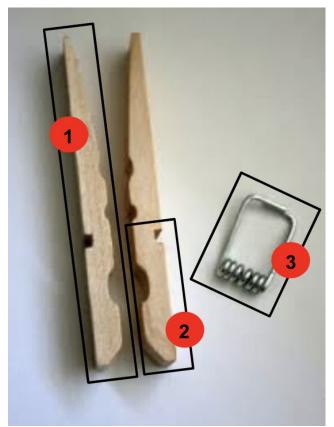


Figure 6



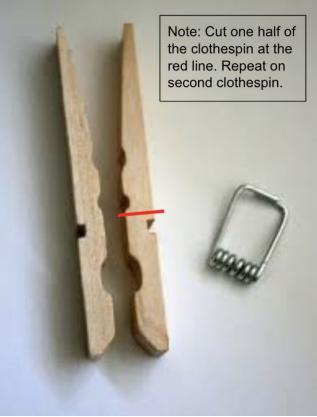


Figure 7 Figure 8

### Bill of Materials:

Part	Amount	Model	Cumulative Price
MDF	1	24in x 48in x .5in	\$18.92
Hinge	1	Gray Polybutylene Plastic:McMaster,2 116A15	\$53.31
Bolts	10	1/3 in x 3/4 in Countersunk	\$4
	1	1/2 in x 2 in Countersunk	\$0.20
Nuts	12	1/₃ height	\$3.80
Washers	22	1/ <sub>16</sub> in	\$2
Wood Glue	1	Titebond 3	\$5
Super Glue	1	Gorilla Glue	\$4
Sealant	1	Shellac Traditional Finish and Sealer 12 oz	\$8
Clothespins	2	Original	\$.20
Acrylic	1	10 in x 3 in x .25 in Clear	\$2
Feltpads	4	Self-Adhesive Heavy Duty 1-1/4 in	\$6
Whiteboard	1	8in x 11.5 in	\$1
Spray Paint	2	Ultra Cover Paint+Primer 12oz	\$7.96
		Total	\$119.57