TRAVIS INDUSTRIES Hidden LED Floating Shelf Instructions

TRAVIS

instructables

Hidden LED Floating Shelf

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INDUSTRIES Hidden LED Floating Shelf

In this video, I'm going to show you how to make a strong dating shelf with a hidden LED light! I'll show you how to build the shelf and integrate into an LED light strip. I'll also show you how to run the wire down the wall to make it completely discrete. I use both Samsung Smartthings and Google home to control my lights.

This shelf helped me organize my oce desk and eliminate the need for a desk lamp. It's classy and functional. Please SUBSCRIBE to my YouTube channel for more great how-to videos!
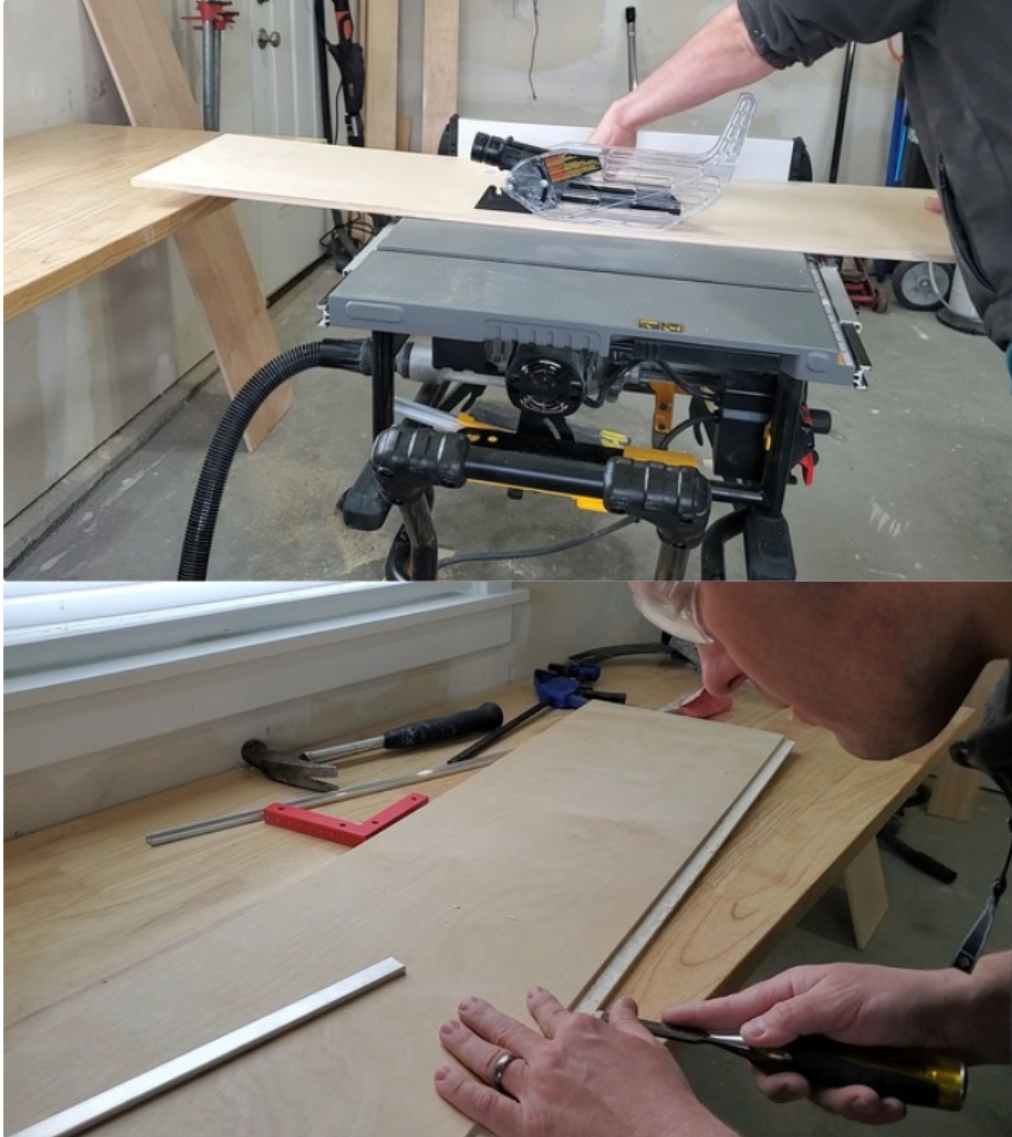

Hidden LED Floating Shelf:

Step 1: Make Upper and Lower Panels

First, I determine how big you want your shelf to be, then cut your upper and lower panels out of ½" plywood. The panels should be the size of the shelf minus the width of your perimeter panels. In my case I subtracted ¾" for the front panel and 1 ½" for the two side panels.
Use a scrap piece of LED light channel to determine the size of the rabbet in the edge of the bottom panel. I cut the rabbet on a table saw with multiple passes and then cleaned it up with a chisel.

Hidden LED Floating Shelf:

Step 2: Make Front and Side Panels

Measured and cut the side and front panels. I used 1×3 boards with basic miter joints in the corners.

Step 3: Assemble Shelf

Now assemble the front and side panels to the top and bottom panels using glue and brad nails.
Because I could not nail into the front edge with the rabbet, I added support to help align the bottom panel in the middle and just glued it in place.
I had one gap I wanted to close, so instead of using a brad nail in that corner, I pre-drilled a hole and used a finishing screw.
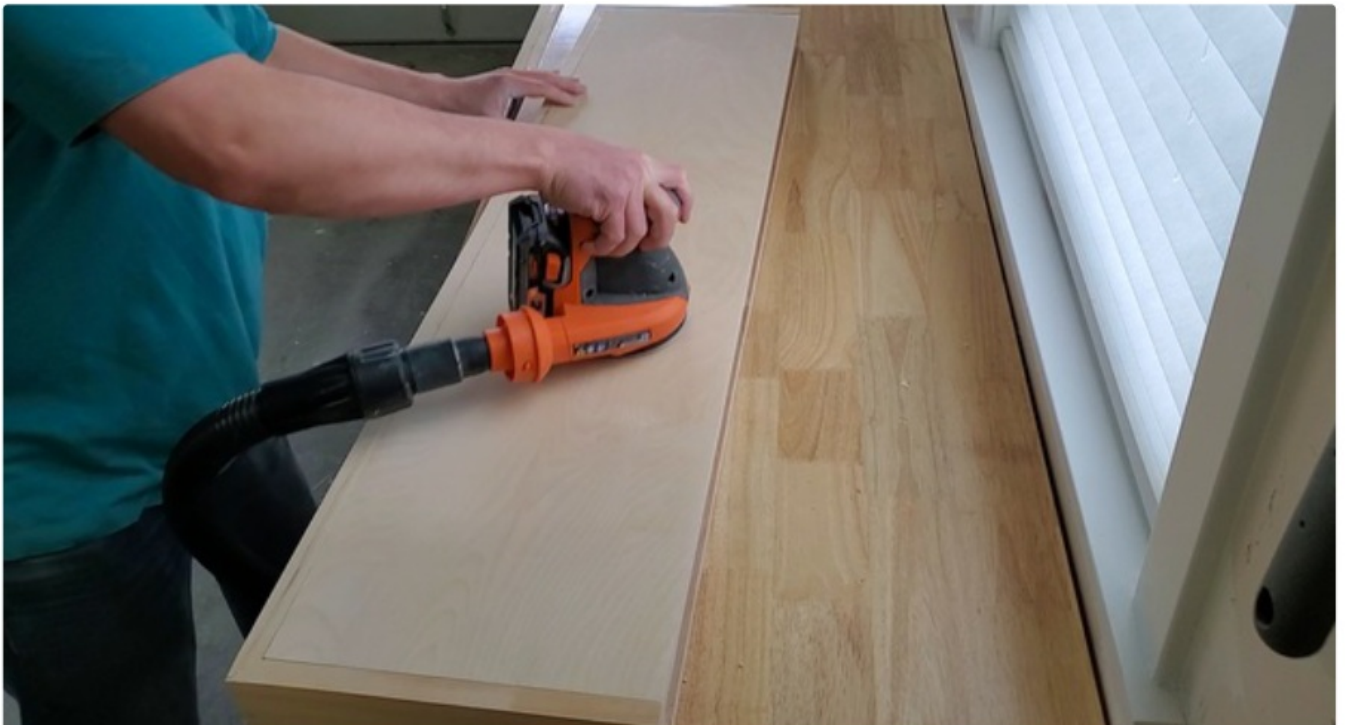
Step 4: Fill Holes

Now fill the holes with wood filler.

Step 5: Rough Sand

Rough sand the shelf with 120 grit sandpaper.

Step 6: Build Frame

Cut a test piece to make sure the frame is right inside the shelf. It should be snug, but not tight.
Once you like the t, determine how much wood you will need for the frame. I like to make the frame about 2" smaller than the opening on all sides. This allows a bit of adjustment later and ensures you won't hit any nails that may have poked through during assembly.

Then rip all the frame pieces to the right width. Then cut them all to the right length. Lay out the frame and then clamp all the pieces into place. Pre-drill all the holes with a countersinking bit and then screw the frame together. Finally, test the frame inside of the shelf.

Step 7: Caulk All Seams

Caulk all the seams and gaps with paintable caulk.

Step 8: Final Sand

Sand again with 220 grit sandpaper.

Step 9: Prime

Now prime the shelf.
Once the primer is dry, drill some holes with a countersink bit to screw the shelf to the frame and then, lightly sand again with 220 grit sandpaper.

Step 10: Paint

Now paint the shelf.

Step 11: Install LED Lights

Lay down a bead of CA glue and then install the LED light strip channel. Before doing this I spray-painted it white to match the shelf. Next, drill a hole for the wire, feed the wire into the hole, and solder the wires to the LED light strip.
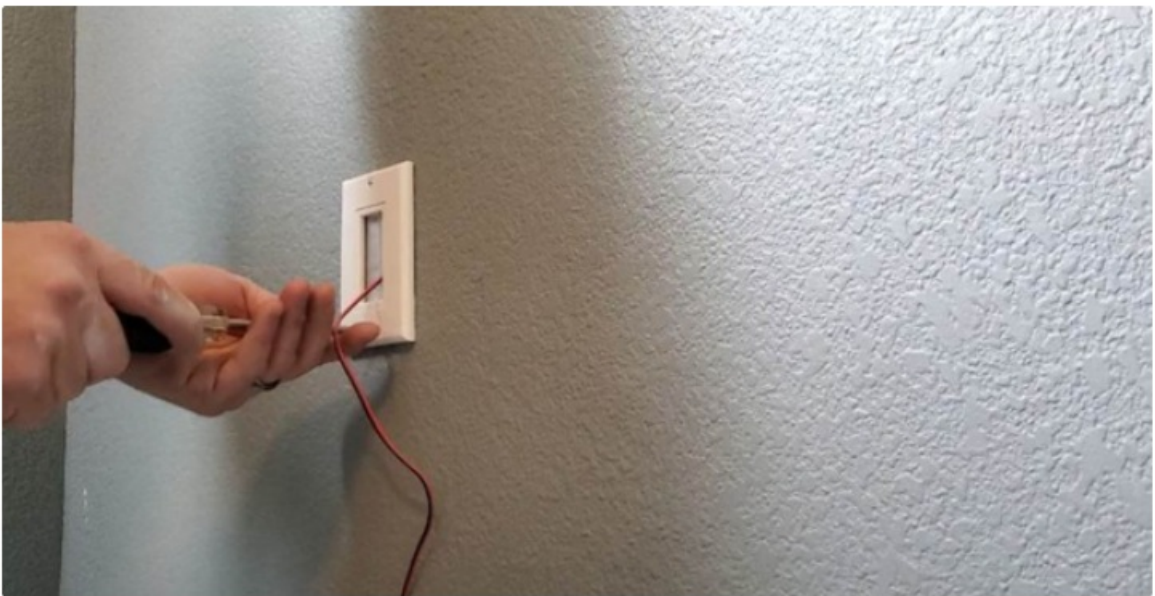Now cut the dirlla user to length and snap it into place.

Step 12: Prep for Install

Mark out a level line where you want to put the shelf and mark out all the stud locations Drill a hole for the wire to pass through the wall.
Now mark out the location for the wall plate. Be sure it's in the same wall cavity as the hole you drilled above carefully cut out the drywall for the plate.
Fish the fire through the wall using a fish tape.
Now install the wall plate.

Step 13: Install Frame

Install the frame. Start by drilling a hole where the wire will pass through. Then mark the location of the studs on

the frame and start the screws. I used 3" wood screws with washers. Run the wire through the hole and screw in one of the screws. Now, make sure the frame is perfectly level, and then screw in the rest of the screws.

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Step 14: Install LED Controller

Install the LED light controller of your choice using the manufacturer's instructions.
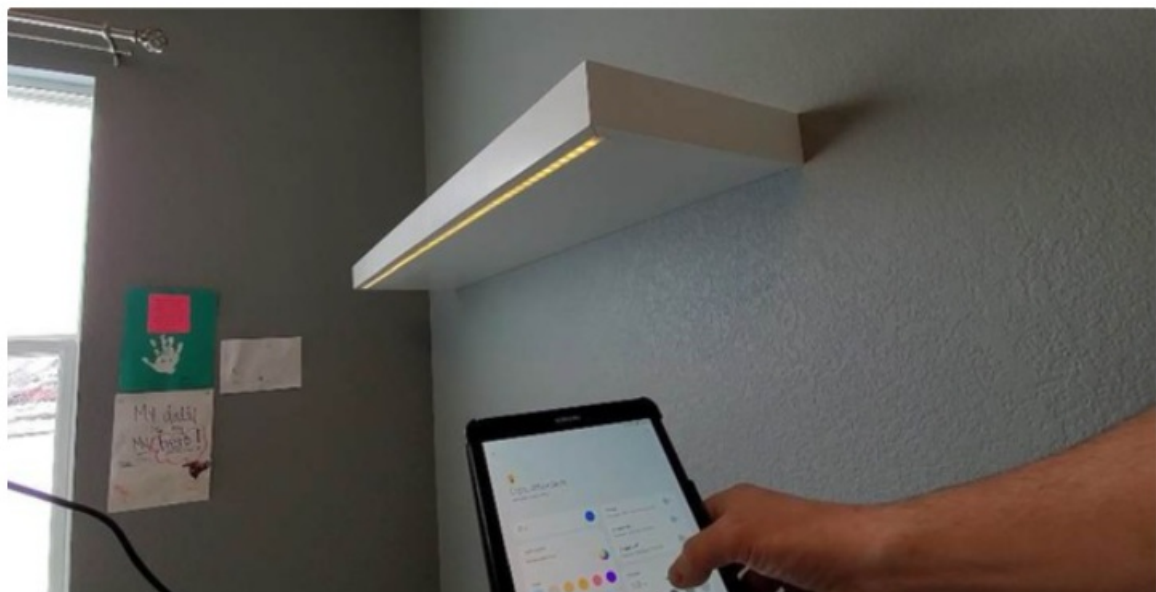

Step 15: Install Shelf

Slide the shelf part way over the frame.
Run the wires through the frame and connect the wires, tuck them back into the shelf cavity and push the shelf against the wall.

Step 16: Test

Before screwing the shelf to the frame, test the LED lights to make sure they function how you want them to. I use Smartthings and Google Home to control these lights.

Step 17: Secure Shelf With Screws

Finally, screw the shelf to the frame.
Enjoy your elegant storage solution!

Regrettably, as so often with Instructables, there is no overview of how it works. If we just followed the video we'd be working blind until we got to the led groove.

PLEASE can Instructables start with an overview of what whatever-it-is is and how it works?!

This problem is very easy to solve if you can even be bothered: first, you read the entire Instructable – or watch the entire video! Next, having decided that you want to make the project, you follow the Instructable step by step, or follow the video, pausing and replaying at each stage! Hope this helped.

I'm not sure exactly what you want to know, but if my title and description do not properly answer any questions about what this is and how it works, I'd be happy to answer any additional questions you might have! In the video intro I also show turning the light on with Google Home.

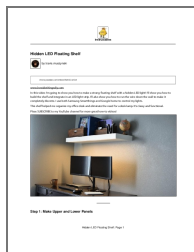Thanks for checking out my Instructable!

Great instructable! Thanx for the share. Looks super neat and cool.

Thank you! Thanks for checking it out!

//www.youtube.com/embed/XshCG-orGv4
www.howidothingsdiy.com

Documents / Resources

	TRAVIS INDUSTRIES Hidden LED Floating Shelf [pdf] Instructions Hidden LED Floating Shelf, LED Floating Shelf, Floating Shelf, LED Shelf

References

- **How I Do Things DIY - Woodworking Plans, Woodworking How-To Videos**
- **Yours for the making - Instructables**

- **[Hidden LED Floating Shelf : 17 Steps (with Pictures) - Instructables](#)**
- **[Travis.muszynski's Activity - Instructables](#)**

Manuals+,