

Instructions for building a light box

The goal is to build a lightbox with an illuminated area in a 3X2 ratio to match the sensor ratio of most DSLR cameras.

These plans maximize the size using an 8 foot piece of 1X4 lumber for the outer edges.

Bill of materials

1"X4" 8 foot Primed Pine board. Actually 3/4 X 3 1/2 X 8 foot.	\$ 6.15
3/4 " thick 24"X48" melamine board normally used as shelving	\$13.69
2" drywall screws gold or black	\$ 1.00
2 sections of Cool White LED rope. 200 LED's ea Walmart \$17 ea	\$34.00
White #2447 acrylic sheet 1/8" or 3/16" Thick	\$22.00
Misc wire clamps , screws	\$ 5.00
Total materials	\$81.84

Cut the 1X4 into 4 pieces. 2 @ 18.5" and 2 @ 29.25"
Cut the 3/4 thick Melamine board to 18.5" X 27.75".



The 18.5 pieces will fit inside both ends of the 29" pieces creating an inner space of 18.5" X 27.75" (a 3 X 2 ratio of the lighted area to match the camera sensor)

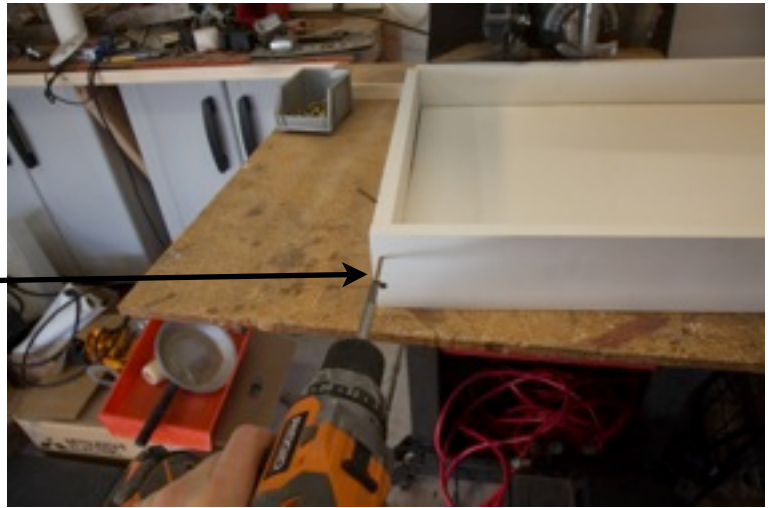
Pre-drill for 2 screws for each corner and 3 screws on the long edge to attach the sides to the melamine base and 2 screws on the short edge attaching the sides to the base.

Drilling pilot holes

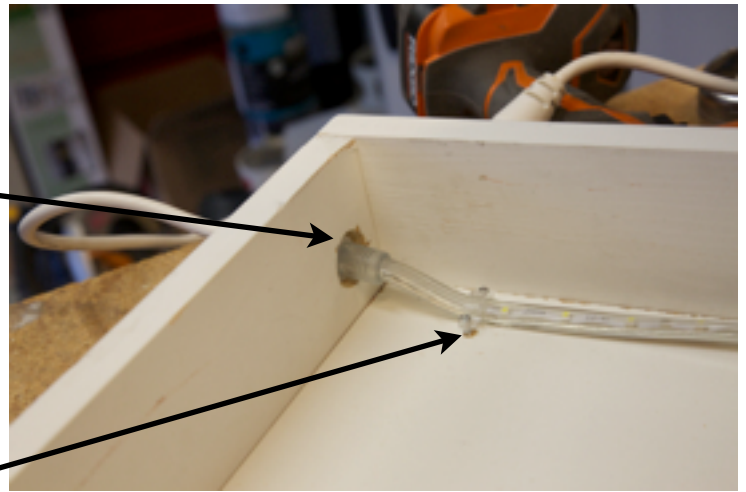


Screw the sides together and screw the sides to the base to form a box using the 2" screws.

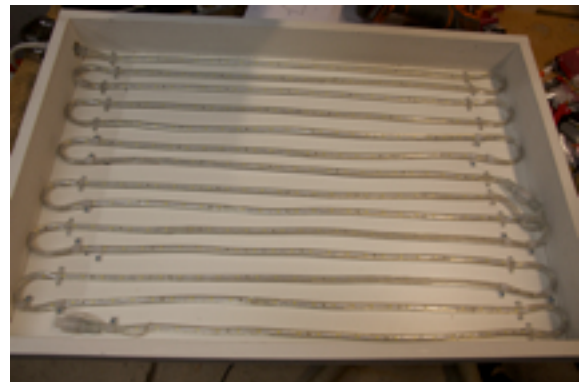
Screwing sides together



Drill large hole to put the power cable through the side. The size will depend on what kind of cord your lights have.



Use the included clamps to mount the light rope to the base. If you run out of the included clamps you can use plastic electrical clamps. Pre-drill the holes for the #6 X 1/2 inch screws.



Place the White #2447 acrylic sheet on top of the sides and secure with screws. You can also add a ledge to the inside of the walls and have the acrylic sheet inset to a flush mount but you will lose a small amount of illumination area.



The finished light box.

Notes: Rev 2 will try to coil the LED rope in a spiral instead of back and forth.



