



# Shop Tips & Tricks

Created by lady ada



<https://learn.adafruit.com/shop-tips-and-tricks>

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# Storage

This mini-tutorial will be about storage! This is a common request - how to store all that good stuff - PCBs, kits, parts, etc. Now, everybody's needs are different, so just because we use something doesn't mean you should do the same. Research, look around, experiment! We are in New York City and have a very constrained space with high rent. That means we need to prioritize on saving space, and accessibility, even if its more expensive. If you're in a big space, having stuff strewn about may work out just fine for you.

## Shelving!

We need to pile stuff up high to keep our 2000 sq.ft. clear. The shelves we have found that do the job best for us are these [18 Gauge 73" high \(https://adafru.it/ck0\)](https://adafru.it/ck0) ones from Global Industrial. They're boltless so they're easy to set up and you can easily adjust/add/remove the shelves. They're also a little less expensive than 'wire shelving'. We have tall ceilings and we like the shelves to reach pretty much near the top.



We keep heavy/rarely used stuff at the very bottom, then more common stuff in the middle and at the very top stack up some storage boxes.

## Bins!

The next ingredient in our storage sandwich is bins. We really like stacking bins like shown above stacked on the shelves. These are the really nice Akro Bins ([also available from Global Industrial \(https://adafru.it/CcJ\)](https://adafru.it/CcJ) and other shipping supply shops). There are knockoff ones you can get but they're usually not as strong and don't nest/stack as nicely. We suggest going for the clear Akro bins. They come in every size! Every product has a bin with a label, and that's worked out really nicely for us.

For components for kitting, we also use bins but we use mini-bins on a louvered wall (also called a 'pick rack'). What's nice about these is you can remove and replace the mini bins without disturbing the others. [There's a few different types at GI \(https://adafru.it/ck2\)](https://adafru.it/ck2).



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## Outlets

You have equipment - you need to power it! This little tip is one that we find so useful, we can't imagine how we did without: being able to turn an entire outlet strip on and off, easily without having to reach behind some machinery on the floor.

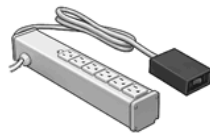
For example, if you have a laser cutter and a filter, you need to make sure that the filter is turned on whenever the laser cutter is used. Once in a while, we'd forget to turn on the filter, and 3 minutes later the room would smell of acrylic. Yuk! After trying signs, notes, and beatings we just bought [this awesome \(but sadly a little expensive\) outlet with remote switch \(https://adafru.it/ck3\)](https://adafru.it/ck3) (McMaster #69565K21 / Wiremold UL207RSBC) The switch is lightweight and easily mounts anywhere, the actual button itself is lit when the power is on which is a nice extra.



## Extension Cords, Power Cords, and Outlet Strips

This product matches all of your selections.

[Catalog Page](#) | [Bookmark](#)



69565K21

Each

In stock for \$41.56



Plug



Outlet

Type	Outlet Strips
Outlet Strip Type	Standard
Standard Outlet Strip Type	With Remote Switch
Plug and Outlet Style	NEMA 5-15 (Standard Three-Prong) Plug and Outlet
Number of Connectors/Outlets	6
Cord Type	SJT
Shielded?	No
Wire Size (AWG)	14/3
Volts	120 VAC
Amps	15
Cord Length	6'
Housing Color	Putty
Outlet Angle	Straight
Housing Material	Aluminum
On/Off Switch	With Illuminated On/Off Switch
Center-to-Center (Outlets)	1-1/4"
Strip Length	12-1/4"
Strip Width	2"
Strip Depth	1-3/4"
Indoor/Outdoor Use	Indoor
Temperature Range	+32° to +150° F
Specifications Met	Underwriters Laboratories (UL)
UL Specification	UL Listed, C-UL Listed
Mounting Information	Mounting clips included.

Now we never forget to turn on the filter with the lasercutter because both are just controlled by a single switch. We like this solution because we can keep the power wiring hidden away - unlikely to be tripped over or accidentally unplugged/ turned off.



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# Counting

We really like scales here at the Adafruit factory, we use them extensively for [weighing packages for shipment](https://adafru.it/clP) (<https://adafru.it/clP>). We also like scales for counting components, especially small ones, like LEDs or pogo pins. There's nothing more tedious than counting out bunches of LEDs for [SpokePOV kits](https://adafru.it/ck5) (<https://adafru.it/ck5>) or [LED packs](https://adafru.it/ck6) (<https://adafru.it/ck6>). Using a scale is both fast and precise, leaving us more time for designing kits and writing tutorials!

## Our favorite scale

We use a [MyWeigh](https://adafru.it/ck7) (<https://adafru.it/ck7>) [i601](https://adafru.it/ck8) (<https://adafru.it/ck8>) and it is by far our favorite counting scale. I'm so in love with it, I'm going to get another. Its an ideal counter for small components!



Things we like about this scale (and you should look for in a comparable scale):

- Big clear display - some scales have tiny displays, with confusing indicators. This one is very clear and has a nice little matrix on the side so it can display, for example PCS when counting
- Easy to put into counting mode. This one has a single button (the triangle pile of parts) that puts you into count mode, other scales can be confusing and complex to get into the right mode

- High precision - this scale has 0.01g precision, so you can count items that weigh 0.1 grams or even a little less
- Good capacity - this one goes up to 600 grams, which means its also good for counting heavier items or even boxes (we tare-measure kits/boxes to check that they arent missing anything)
- Battery powered? AC powered? - Battery powered means that you can take it anywhere without cords. AC powered means you're not constantly changing batteries. This guy has the best of both, an internal rechargeable lead acid battery, you can run it all week and then recharge it on the weekend. Our last scale had AAA's that it just ate through every week and it was a hassle to keep replacing them
- Computer tether - Its not super important but I really dig the RS232 port on the side - perhaps one day we will have computer assisted inventory control (!)



The only downside to this scale is its not really cheap - at \$200 or so, its an investment. However, getting 0.01gram accuracy will always cost at least \$100 and I think that the extras of a good capacity, nice display and the internal battery make it a good value.

Be sure to check out the rest of the MyWeigh site for other scales, they have a version in the same form factor but with 1Kg capacity if you need it, etc.



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# Bobbin Winder

This mini tutorial comes to you thanks to [Becky Stern \(https://adafru.it/ck9\)](https://adafru.it/ck9)! While Becky was working on her [iPhone gloves tutorial, \(http://adafru.it/603\)](http://adafru.it/603) she came over and asked if we had any conductive thread. Luckily, we had a bunch of cone samples of thread and yarn. The good news is we had tons of thread, the bad news is that they were in 1 lb cones and Becky wanted to sell small amounts.

She had previously used a 'card' such as used for embroidery floss, but it takes a long time to wind those by hand and she wanted to get these made quick! That's when she realized that you can buy a bobbin winding machine and pick up plastic bobbins from any sewing shop.



A bobbin is the little mini-spool of thread that goes on the bottom of a sewing machine, they can hold ~100 ft of standard thread. [Often times a sewing machine comes with a bobbin winding mechanism, so that you can wind bobbins as necessary. \(https://adafru.it/cka\)](https://adafru.it/cka) There are also machines that you can buy that will do a super-fast job of winding bobbins on their own.

## Machine

Becky went all out and got a [Baby Lock EPBW1 bobbin winder \(https://adafru.it/can\)](https://adafru.it/can). This is a really pro machine, easy to use and incredibly fast!



Simply place the cone or big spool on the left hand holder. Pull the thread thru the lifter, and down to the right. Thread the end into a bobbin, and snap it into the bobbin holder. Snap the lever down, and press the button on the bottom right. The machine will spool the thread on until it fills the bobbin and automatically stop. Nice!

