I have compared these three products for the practicality issue of the value prop that we are thinking.

<http://www.tensunits.com/product/DI8195.html>

<http://www.tensunits.com/product/DT3002.html>

<http://www.tensunits.com/product/DI3717.html>

So on average, the weight is give or take 1 pound which is manageable. The cost varies a lot from the product to product ranging from $100 to $300, but this site offers a significant price off for some reason up to 83%. The cost is totally doable as the cheapest option just became available at $19. There are two options for the power input, one is battery and one is just normal a/c adapter. Using battery, it seems like it lasts about 50 hours which equals to about 100 usages, and the battery that this tens unit uses is a 9 volt battery, which is easy to obtain and replace if you know the right places to get them. So I do not see why not just purchase a cheap tens unit and use it for our prototype. It is light, doesn’t take up that much space, portable, and easily maintainable.

Moving on to the programming and wireless connecting issue regarding the value prop, the purchased tens units are always manually controlled. So if we were to put a wirelessly connected tens unit, purchasing a tens unit is not an option. We will need to make a new one using Justin’s method.

Recently I bought a Yi camera from Xiaomi. (This is not off topic). The camera was about 2x3x3 but it had a built in Wi-Fi router so that my phone could connect to the camera to set a wireless connection. This allowed me to get the image of what camera was recording live. If we devise something similar to that for our value prop, it will be nice. In other words if we make the tens unit to be the router as well as a tens unit, and let a phone or other smart devices to connect to the tens unit, and let some information transfer in and out, it might be easier to control. However, the only problem with this is the security, and the necessity of making an application on a phone to control.

<https://www.cdw.com/shop/products/TP-LINK-TL-WR702N-wireless-router-802.11b-g-n-desktop/2975774.aspx?cm_cat=GoogleBase&cm_ite=2975774&cm_pla=NA-NA-TPL_WI&cm_ven=acquirgy&ef_id=VfI@UQAAAQtu@bCr:20151026061201:s&gclid=Cj0KEQjw-7GxBRCL_Kq6mZSHvdsBEiQA7r8VhCOrk687xZZBqxbh1fNxn_8ekJ_DcjsFy0EHlgN-vv4aAoqN8P8HAQ&s_kwcid=AL!4223!3!61836303019!!!g!106057986979>!

These aren’t really practical for our purposes, wireless portable routers are about $20. Just for the information.