

Consew CSM100 Menu Items:

Sorry, this is just a direct copy of my post from the facebook group that I made at around 4am:

So considering this speed controller is probably generic and used for other things besides a sewing machine. Decided to spend a bit of time going through all the menus to see if I could decipher any of it. Changing one thing at a time and testing for results. I'll post below what I could figure out so far.

-U0-XX is setting the default max speed. Which BTW is 5000 RPM (edit..it's actually 5500) and not the 4200 the seller I bought from states.

U2-X is in the manual for reversing

U3-X no noted changes (or I forgot to write that one down...sleepy)

U4-X ramp up time (0 instant - 9 slow ramp)

U5-X no noted changes

U6-X this one gets interesting. Set it to 0 and the voltage needed to start turning dropped slightly and the RPM actually picked up sooner. Using 0 gets the ball rolling for the next part.

U7-X unable to change

U8-x unable to change

So my signal converter is 0-5v out, not 2 to 4v and no way to really change it. But what I can control is the duty cycle set up in UCCNC (or in Mach3). Haven't tweaked it in because I got too damn sleepy, but here is what I have so far. Using 30% min duty cycle and 75% max duty cycle for the PWM got me within 100RPM starting at 1000RPM up to 4500RPM (didn't want to push it to 5000 RPM). I don't plan on threading with a mill, so not too worried about being 100 RPM off and also can't see going below 1000 RPM (though these values will all be multiplied by your pulley ratio of course).

Forgot to add the belt and pulley info:

Go here and use their calc: <https://www.bbman.com/belt-length-calculator/>

Size XL, .375 belt, 20 tooth and 40 tooth gear for 2 to 1 ratio. Also, with the extended mount I uploaded, you can even use the 60 tooth and get a center to center shaft distance of anywhere from about 2.75 to 4". I prefer the shortest distance.

Thanks goes to Stuart Andrews who found all this information for us on the Taig Facebook group.