TB291 (Rev1) – Estun Velocity Mode Setup

Velocity mode configuration of Estun Pronet Series AC Servo drives.
What you need:
Estun Pronet manual, Estun, winZip, ESView Software, USB cable, extension cable, Windows laptop or computer w/cnc11 v3.12r25 or higher,

Download links

CNC11
http://www.centroidcnc.com/dealersupport/tch_software_CNC11.php

WinZip (Click download now, install it using advanced, uncheck “set yahoo as homepage,” use evaluation version.)
http://www.winzip.com/lanrar.htm

ESView Software (open with WinZip, run the .exe to install ESView)
https://www.dropbox.com/s/3gqscjb7jte8id6/ESView_V210.rar?dl=0

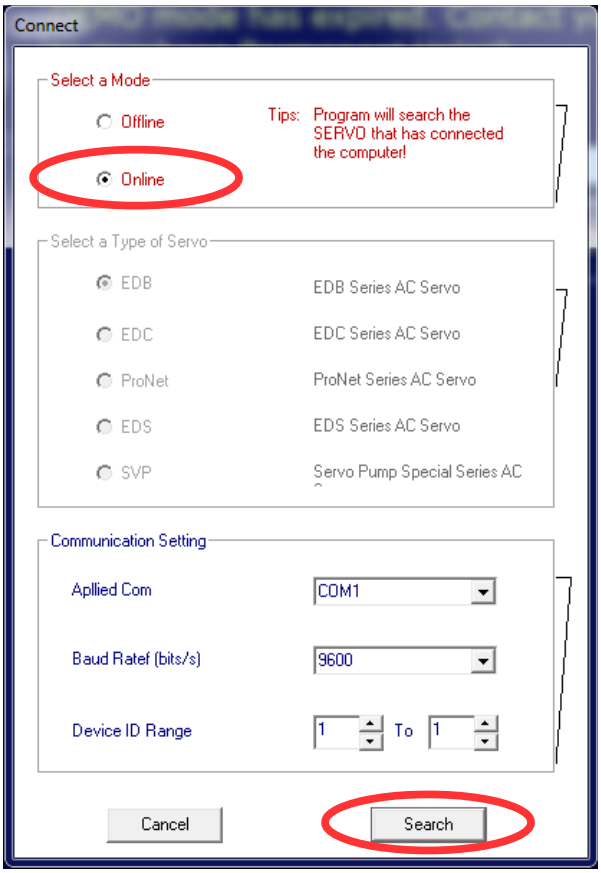
Estun Manual
http://www.estun.com/en/download/getfile/50.html

1. Plug the drive into the computer via the CN4 connection.

2. **Start Software** -

    1) Select **Online**, click **Search**

    - The software will search for the drive, select the drive when it is found.
      If there are problems, try changing the Applied Com.



3. Click **Parameters** → **Parameter Edit**.

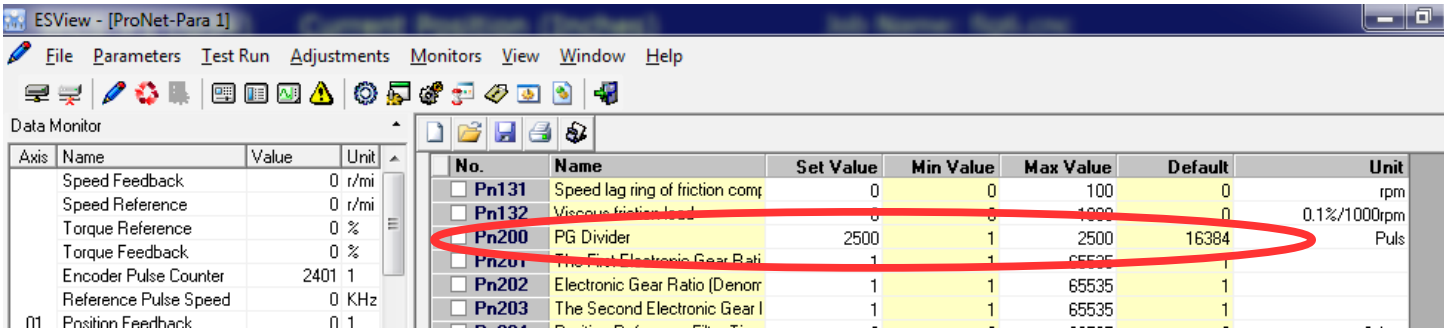
4. Click **Select All**, then **Initialize** to start with the defaults.

5. Change the following:

    1) Change Pn000 to **0110**.

    2) Click the plus next to Pn005 to open the menu. Change hex3, Motor Type, according to the motor type being used:

    [0] EMJ
    [1] EMG
    [2] EML



    3) Look at Pn200. Make sure it is at it's Max Value, which may be different than the default value. **Write this number down**.

    4) Set Pn300 to the max rpm of the motor divided by 10.
    Ex: max motor speed 5000,
    $$Pn300 = \frac{5000}{10} = 500 \quad .$$

    5) Click **Select All** then click **Write**.

    6) Cycle power to the drive, restart the software.

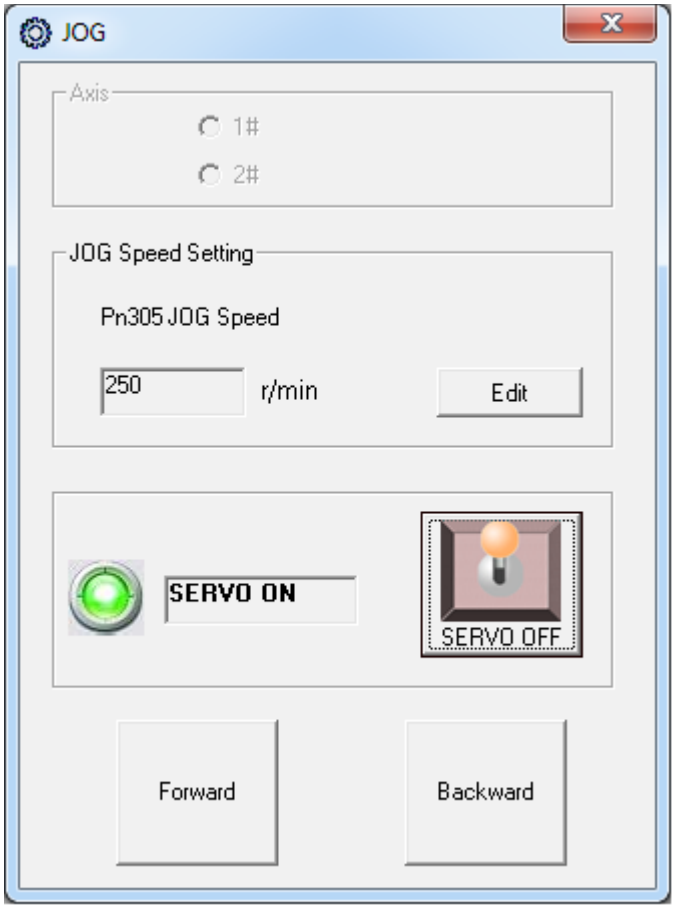
6. Click **Test Run** → **Jog.**

    1) Make sure the axis can move without running into something, Click **OK**.

    2) Click **edit** and change the jog speed to something fairly slow (250 or so)

    3) Click **Servo On**, observe that the indicator goes green.

    4) Click **Forward** and **Reverse** and check that the motor moves.



CNC11 Control Configuration

1. When all you drives have been tuned (and parameters SAVED to the drive) in the software, Start CNC11.

2. Set all axes encoder counts/rev to the number from Pn200 multiplied by 4.
   ex: If Pn200 is 16384, set the encoder counts/rev to 65536 (16384*4=65536).

3. Set parameter 256 to 1 to enable velocity mode.

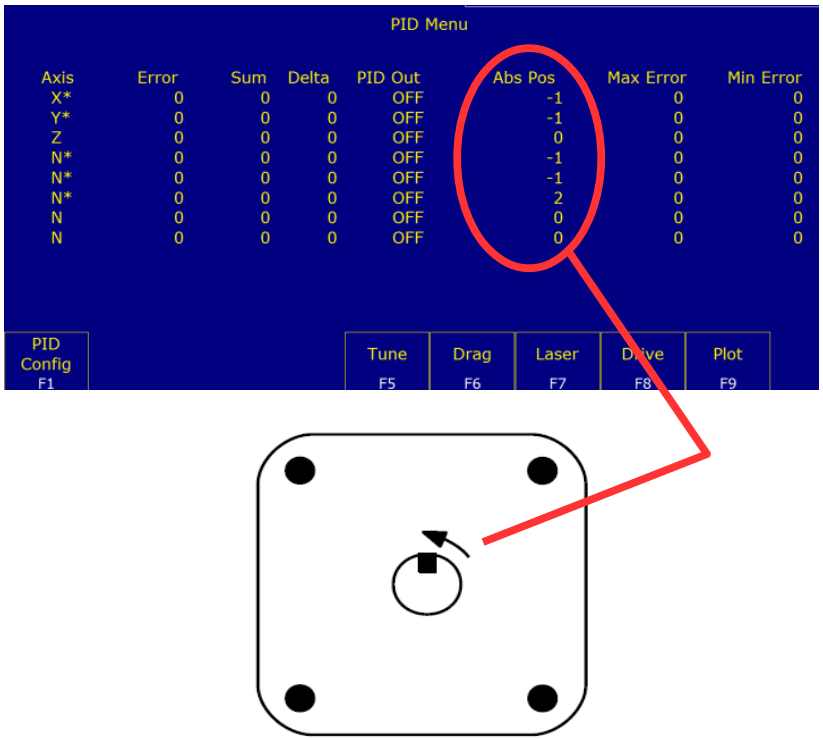
4. In the PID screen, set the following:

   Kp=0.04 **Ki**=0.0005 **Kd**=0.00 **Limit**=256000 **Kg**=0 **Kv1**=80**Ka**=0 **Accel.**=0.500

   Follow TB 234 to tune the drives further after finishing the rest of this bulletin.
   (http://www.centroidcnc.com/dealersupport/tech_bulletins/uploads/234.pdf)

5. If there is a lot of error, set Pn101 to something higher, like 10.
   15 is the maximum but going too high can result in vibrations.

6. Use the software to jog the motors (as in step 7 above)
   In the PID menu, confirm that the Abs Pos field is increasing when the shaft is moving counter clockwise.



Document History

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