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/3ggscjb7jte8id6/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
 - ٠ The software will search for the drive, select the drive when it is found. If there are problems, try changing the Applied Com.

Connect		
- Select a Mode		
O Offline	Tips:	Program will search the SERVO that has connected
© Online		
Select a Type of Servo		
í EDB		EDB Series AC Servo
C EDC		EDC Series AC Servo
C ProNet		ProNet Series AC Servo
C EDS		EDS Series AC Servo
C SVP		Servo Pump Special Series AC
Communication Setting		
Apllied Com		СОМ1 -
Baud Ratef (bits/s)		9600
Device ID Range		1 • To 1 •
Cancel		Search

- 3. Click Parameters \rightarrow 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

👬 ES	View - [ProNet-Para 1]	t Car	-		and the second	(Inches)	340.0	-	6. eme		
🖉 Eile Parameters <u>T</u> est Run <u>A</u> djustments <u>M</u> onitors <u>V</u> iew <u>W</u> indow <u>H</u> elp											
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Data Monitor											
Axis	Name	Value	Unit 🔺		No.	Name	Set Value	Min Value	Max Value	Default	Unit
	Speed Feedback	0	r/mi 📃		Pn131	Speed lag ring of friction comr	0	0	100	0	rom
	Speed Reference	0	r/mi		Pn132	Viscous friction load			100	0	0.1%/1000rpm
	Torque Reference	0	% ≡		Pn200	PG Divider	2500	1	2500	16384	Pule
	Torque Feedback	0	%		Paza	The First Electropic Gear Bati	2000	1	CEEDE	10504	T GIS
	Encoder Pulse Counter	2401	1 🖵	11	- Pn202	Electronic Gear Batio (Deport	1	1	65525	1	
	Reference Pulse Speed	0	KHz	16	Pp202	The Second Electronic Gear	1	1	CEEDE	1	
L 01	Position Feedback	n	1				-		65555		

- 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,
 - $Pn300 = \frac{5000}{10} = 500$
- 5) Click Select All then click Write.
- 6) Cycle power to the drive, restart the software.
- 6. Click **Test Run** \rightarrow **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.

O JOG	×						
Axis C 1# C 2#							
JOG Speed Setting							
Pn305 JOG Speed							
250 r/min	Edit						
SERVO ON	SERVO OFF						
Forward	Backward						

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=80Ka=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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