TB306 (Rev1) – Estun ProNet Step and Direction Setup for Acorn CNC Controller

Position mode configuration of Estun Pronet Series AC Servo drives.

What you need:

Estun Pronet manual, Estun, winZip, ESView Software, USB cable, Windows laptop or computer w/CNC12

Download links

CNC 12 <u>http://www.centroidcnc.com/centroid_diy/centroid_cnc_software_downloads.html</u> <u>WinZip</u> (Click download now, install it using advanced, uncheck "set yahoo as homepage," use evaluation version.) <u>http://www.winzip.com/lanrar.htm</u> <u>ESView Software</u> (open with WinZip, run the .exe to install ESView) <u>https://www.dropbox.com/s/3gqscjb7jte8id6/ESView_V210.rar?dl=0</u> Estun ProNet Manual V2.21 <u>http://en.estun.com/upimages/7ac3040a-c49f-43e9-a6c9-c97aa2d0c2e1.pdf</u>

- 1) Turn on power to the Estun Servo Drive logic.
- On the Estun Servo Drive, use the Mode (M) button to switch to Parameter mode. Pn___ will be displayed. The Up (▲) and Down (▼) buttons are used to change parameter numbers. Once the correct parameter is selected, press the Enter(◀) button to view the parameter.
 - 1. Editing Parameters: Press and hold enter until a flashing period (cursor) appears. Press enter to cycle the cursor to each digit of the parameter. The up and down arrows can then be used to change the digits. Press Mode when you are done editing the parameter.
- 3) Before connecting motor, set Estun Servo Drive Parameters as shown in the documentation included with your drive. An excerpt of this documentation is included at the end of the tech bulletin for reference. Power Cycle drive at the end of this procedure. This procedure sets the motor model in the drive. If you get a A.43 or A.44 on the Estun servo drive, recheck this procedure.
- 4) Once this Servo Drive Model Parameters are set and the drive has been initialized, There are some other parameters that must be set so the drive works with Acorn. This can be accomplished by manually inputting the parameters on the drive or using the Estun ESView software.
- 5) Method 1 Manually input these parameters on the Servo Drive using the display and buttons as described in step 2) Alternatively, go to Step 6) Method 2 to use Estun Software

Pn000 = 0110	disables P-OT, N-OT
Pn004 = 1000	Inverts SIGN
Pn005 = _010	sets position mode. Pn005.3 sets Servomotor model and should not be changed.
Pn100 = 0	sets manual gain adjustment
Pn201 = 256	1 st Electronic Gear Numerator
Pn202 = 1	Electronic Gear Denominator
When done, Skip to Ste	p 7)

6) Method 2 Estun ESView Software

- 1. Plug the drive into the computer via the CN4 connection.
- 2. Start Software -
 - 1. Select Online, click Search

- 3. The software will search for the drive, select the drive when it is found. If there are problems, try changing the Applied Com.
- 4. Click Parameters → Parameter Edit.
- 5. Click **Select All**, then **Initialize** to start with the defaults.
- 6. Change the following:
 - 1. Change Pn000 to **0110**.
 - 2. Pn004 to 1000
 - Pn005.1 to 1 or Pn005 =_010 ; Pn005.3 sets Servomotor model and should not be changed.
 - 4. Pn100 to **0**
 - 5. Pn201 to 256
 - 6. Pn202 to **1**
- 7. Click Select All then click Write.
- 8. Cycle power to the drive, restart the software.
- 9. 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.
- 7) Cycle power to Estun drive. Drive Should Display "bb"
- 8) Run Acorn CNCWizard
 - Under 1) Primary System Config, Select Estun Pronet radio button. Make any changes to match your machine setup.
 - 2. Under 2) Axis Config, Set Steps/Revolution to "4096" for the axis that your Estun is connected.
 - Click "Write Settings to CNC Control Configuration" and click "OK"
- 9) Refer to ProNet manual for further tuning instructions.

Connect	as express contact p
C Select a Mode	
O Offline	Tips: Program will search the SERVO that has connected the computer!
 Online 	
Select a Type of Servo-	
€ EDB	EDB Series AC Servo
O 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	
Baud Ratef (bits/s)	9600
Device ID Range	1 <u>*</u> To 1 <u>*</u>
Cancel	Search

JOG	X
Ажіз С 1# С 2#	
JOG Speed Setting Pn305 JOG Speed 250 r/min	Edit
SERVO ON	SERVO OFF
Forward	Backward

Estun Servo Drive Model Parameter Setup



Please set the servo driver parameters as following before connecting the motor:

1. After confirming the servomotor and servo drive models, set Pn840.2, Pn840.1 and Pn005.3 according to the following tables.



Parameter	Description	Function and Meaning	
		[0] EMJ	
B-005 3	Servomotor model	[1] EMG	
F1003.3		[2] EML	
		[3] EMB	
Pn840 1	Servomotor designing sequence	[0] EMA	
11040.1	Servornotor designing sequence	[1] EMO-OOOOB	
		[E] 0.05kW Servo drive	
		[F] 0.1kW Servo drive	
		[0] 0.2kW Servo drive	
		[1] 0.4kW Servo drive	
		[2] 0.75kW Servo drive	
•	-	[3] 1.0 kW Servo drive	
Pn840.2	Servo drive model	[4] 1.5kW Servo drive	
11010.2		[5] 2.0kW Servo drive	
	· · · · · · · · · · · · · · · · · · ·	[6] 3.0kW Servo drive	
		[7] 5.0kW Servo drive	
		[8] 7.0kW / 7.5kW Servo drive	
		[9] 11kW Servo drive	
		[A] 15kW Servo drive	
		[B] 22kW Servo drive	

Note: The following servomotor models are special. Please set the parameters ~ according to the following table.

Servomotor model	Pn005.3	Pn840.2	Pn840.1
EMJ-04A□H	1	1	0
EMG-60D□A	0	8	0
EMB-1ZD□A	2	9	0
EMB-1CD□A	1	A	0
EMB-1FD A	2	A	0
EMB-2AD□A	2	В	0
EMB-2FD 🗆 A	1	B	0

2. Follow the procedures below to execute the parameter settings initialization:

- 1) Press the MODE key to select the utility function mode.
- Press the INC or DEC key to select the function number of parameter settingsinitialization.



3) Press the ENTER key to enter into parameter settings mode.



4) Hold the ENTER key for one second, the parameters will be initialized.

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5) Release the ENTER key to ruturn to the utility function mode display Fn001.

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Note: Press the ENTER key during servo ON does not initialize the parameter settings.Initialize the parameter settings with the servo OFF.

3. After changing the parameters, restart the main circuit to enable the new settings .

Document History

Rev1 Created on 2018-05-02 by #423