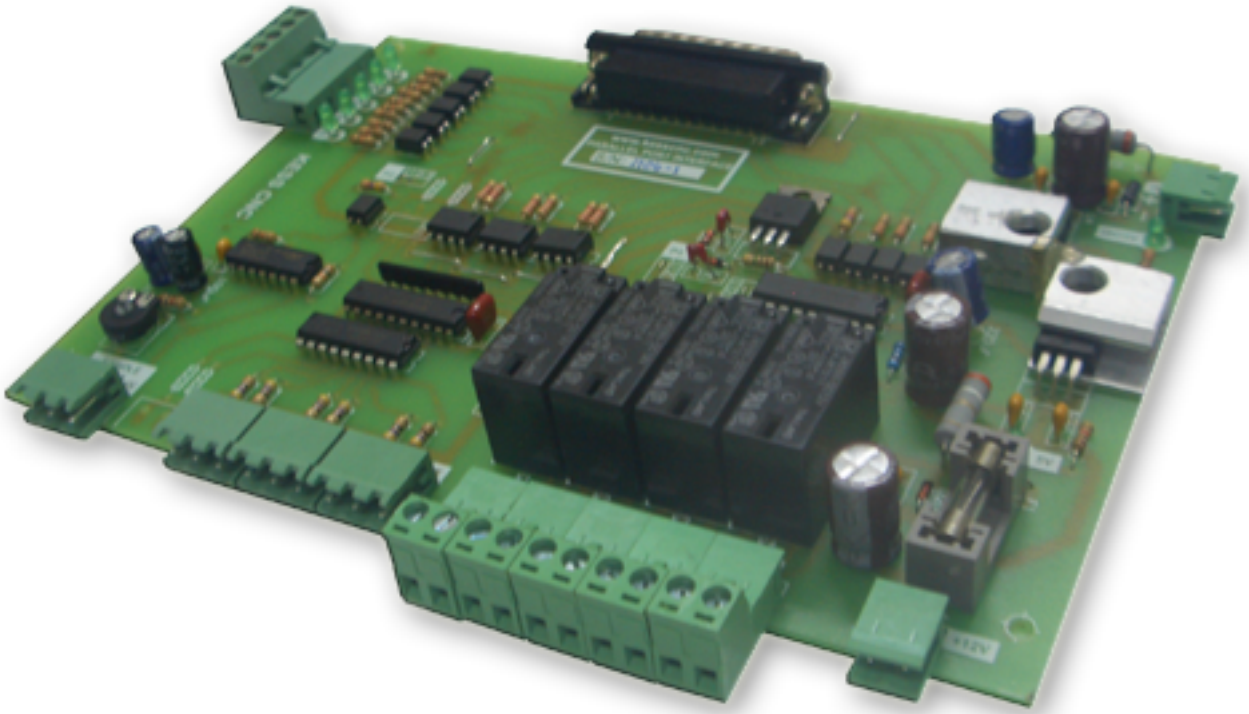


MACH3 Paralel Port Kartı



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PORT AYARLARI

Engine Configuration... Ports & Pins

Port Setup and Axis Selection | Motor Outputs | Input Signals | Output Signals | Encoder/MPG's | Spindle Setup | Mill Options

Port #1
 Port Enabled
0x378 Port Address
Entry in Hex 0-9 A-F only

Port #2
 Port Enabled
0x278 Port Address
Entry in Hex 0-9 A-F only
 Pins 2-9 as inputs

OR

MaxNC Mode
 Max CL Mode enabled
 Max NC-10 Wave Drive
Program restart necessary

Restart if changed
 Sherline 1/2 Pulse mode.
 ModBus InputOutput Support
 ModBus PlugIn Supported.
 TCP Modbus support
 Event Driven Serial Control
 Servo Serial Link Feedback

Kernel Speed
 25000Hz 35000Hz 45000Hz 60000hz
 65000hz 75000hz 100khz
Note: Software must be restarted and motors returned if kernel speed is changed.

Tamam iptal Uygula

MOTOR ÇIKIŞ AYARLARI 4- eksen kontrol

Engine Configuration... Ports & Pins

Port Setup and Axis Selection | Motor Outputs | Input Signals | Output Signals | Encoder/MPG's | Spindle Setup | Mill Options

Signal	Enabled	Step Pin#	Dir Pin#	Dir LowActive	Step Low Ac...	Step Port	Dir Port
X Axis		2	3			1	1
Y Axis		4	5			1	1
Z Axis		6	7			1	1
A Axis		8	9			1	1
B Axis		0	0			0	0
C Axis		0	0			0	0
Spindle		0	0			0	0

Tamam iptal Uygula

MOTOR ÇIKIŞ AYARLARI

3- eksen ve Spindle kontrol

Eğer 4. eksen kullanılmayacak ise Spindle Hız kontrol çıkışı aşağıdaki gibi ayarlanır

Engine Configuration... Ports & Pins

Port Setup and Axis Selection | Motor Outputs | Input Signals | Output Signals | Encoder/MPG's | Spindle Setup | Mill Options

Signal	Enabled	Step Pin#	Dir Pin#	Dir LowActive	Step Low Ac...	Step Port	Dir Port
X Axis		2	3			1	1
Y Axis		4	5			1	1
Z Axis		6	7			1	1
A Axis		0	0			0	0
B Axis		0	0			0	0
C Axis		0	0			0	0
Spindle		9	0			1	0

Tamam | İptal | Uygula

GİRİŞ AYARLARI

Engine Configuration... Ports & Pins

Port Setup and Axis Selection | Motor Outputs | Input Signals | Output Signals | Encoder/MPG's | Spindle Setup | Mill Options

Signal	Enabled	Port #	Pin Number	Active Low	Emulated	HotKey
X ++		0	0			0
X --		0	0			0
X Home		1	12			0
Y ++		0	0			0
Y --		0	0			0
Y Home		1	11			0
Z ++		0	0			0
Z --		0	0			0
Z Home		1	10			0
A ++		0	0			0
A --		0	0			0

Pins 10-13 and 15 are inputs. Only these 5 pin numbers may be used on this screen

Automated Setup of Inputs

Tamam | İptal | Uygula

GİRİŞ AYARLARI - devam

Engine Configuration... Ports & Pins

Port Setup and Axis Selection | Motor Outputs | **Input Signals** | Output Signals | Encoder/MPG's | Spindle Setup | Mill Options

Signal	Enabled	Port #	Pin Number	Active Low	Emulated	HotKey
A Home		1	15			0
B ++		0	0			0
B --		0	0			0
B Home		0	0			0
C ++		0	0			0
C --		0	0			0
C Home		0	0			0
Input #1		0	0			0
Input #2		0	0			0
Input #3		0	0			0
Input #4		0	0			0

Pins 10-13 and 15 are inputs. Only these 5 pin numbers may be used on this screen

Automated Setup of Inputs

Tamam | iptal | Uygula

Engine Configuration... Ports & Pins

Port Setup and Axis Selection | Motor Outputs | **Input Signals** | Output Signals | Encoder/MPG's | Spindle Setup | Mill Options

Signal	Enabled	Port #	Pin Number	Active Low	Emulated	HotKey
Input #4		0	0			0
Probe		0	0			0
Index		0	0			0
Limit Ovrld		0	0			0
EStop		1	13			0
THC On		0	0			0
THC Up		0	0			0
THC Down		0	0			0
OEM Trig #1		0	0			0
OEM Trig #2		0	0			0
OEM Trig #3		0	0			0

Pins 10-13 and 15 are inputs. Only these 5 pin numbers may be used on this screen

Automated Setup of Inputs

Tamam | iptal | Uygula

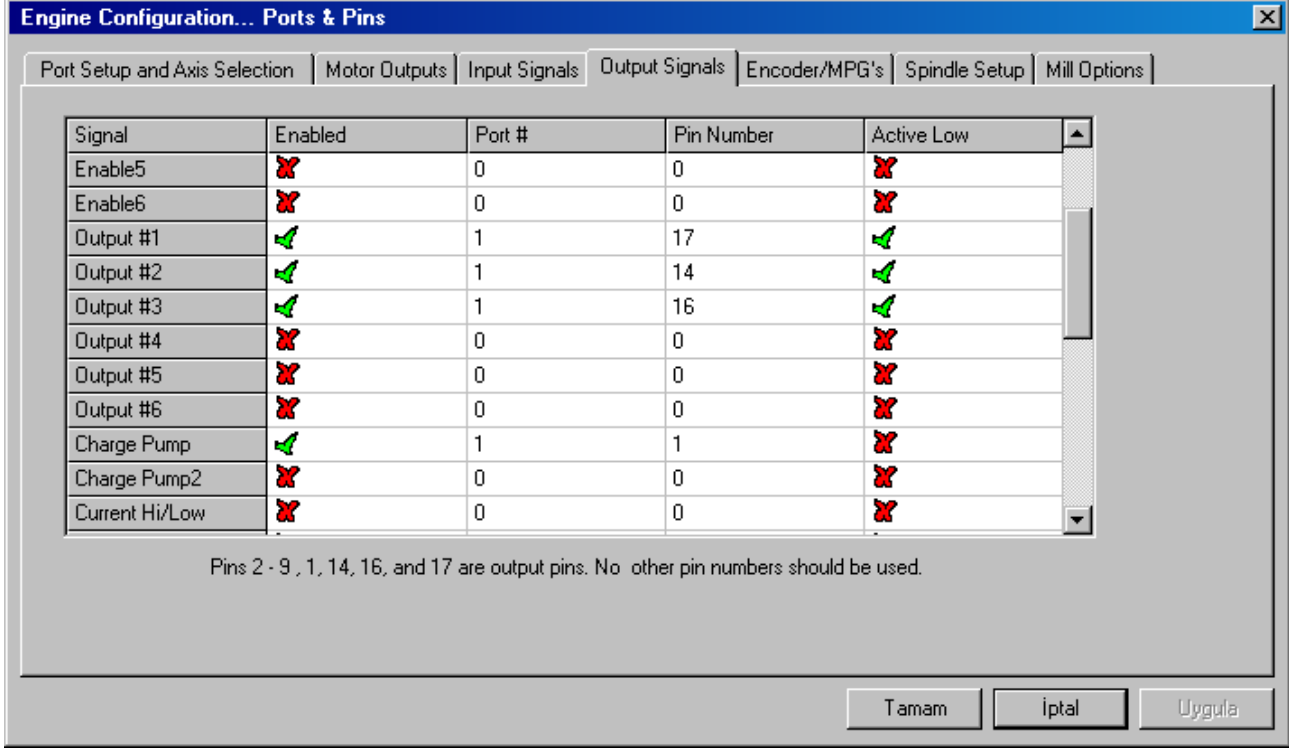
ÇIKIŞ AYARLARI

Output 1 = Spindle Start

Output 2 = Flood

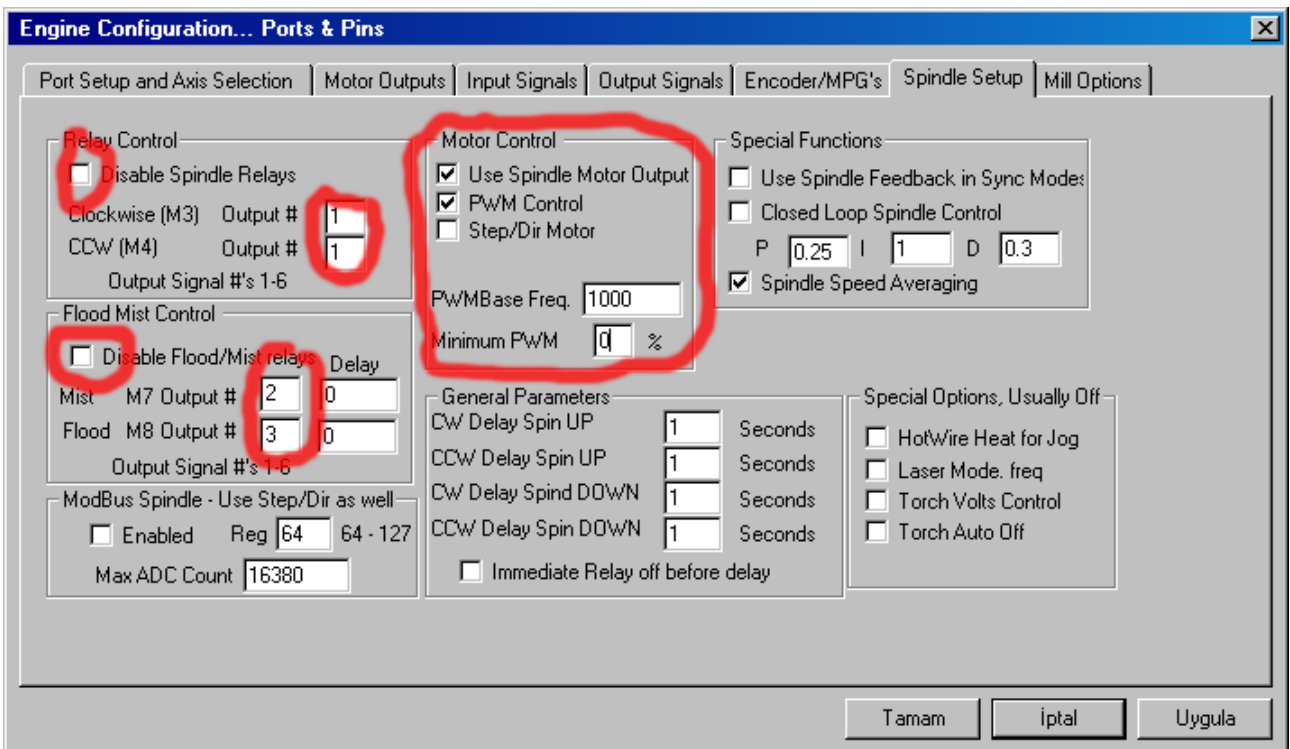
Output 3 = Misc

Charge Pump çıkışı Mach3 çalışmadığı sürece çıkış rölelerinin çalışmasını engeller. Özellikle bilgisayar açılırken paralel port'un bazı çıkışları kendiliğinden aktif olabilir. Charge Pump ile bu sorun engellenmiş olur.



SPINDLE AYARLARI

Eğer Spindle Çıkışı kullanılacak ise aşağıdaki resimde gösterilen "Motor Control" bölümündeki "Use Spindle Motor Output" ve "PWM Control" seçilerek "PWMBase Freq." değeri 1000 yapılır.



GENEL AYARLAR

“Set Charge Pump to 5Khz” seçilir

General Logic Configuration

G20,G21 Control
 Lock DRO's to setup units

Tool Change
 Ignore Tool Change
 Stop Spindle. Wait for Cycle Start.
 AutoTool Changer

Angular Properties
Unchecked for Linear
 A-Axis is Angular
 B-Axis is Angular
 C-Axis is Angular

Pgm End or M30 or Rewind
 Turn off all outputs
 E-Stop the system
 Perform G92.1
 Remove Tool Offset
 Radius Comp Off
 Turn Off Spindle

M01 Control
 Stop on M1 Command

Serial Output
ComPort # BaudRate
 8-Bit 1 Stop 7 Bit 2-Stop

Program Safety
 Program Safety Lockout
This disables program translation while the External Activation #1 input is activated.

Editor
GCode Editor

Startup Modals
 Use Init String on ALL "Resets"
Initialization String

Motion Mode
 Constant Velocity Exact Stop

Distance Mode
 Absolute Inc

IJ Mode
 Absolute Inc

Active Plane of Movement
 X-Y Y-Z X-Z

Jog Increments in Cycle Mode

Position 1	<input type="text" value="1"/>
	<input type="text" value="0.1"/>
	<input type="text" value="0.01"/>
	<input type="text" value="0.001"/>
Use 999 to indicate a Continuous Jog selection.	<input type="text" value="1"/>
	<input type="text" value="0.1"/>
	<input type="text" value="0.01"/>
	<input type="text" value="0.001"/>
Position 10	<input type="text" value="0.0001"/>

Shuttle Wheel Setting
Shuttle Accel. Seconds

General Configuration
 Z is 2.5D on Output #6
 Home Sw. Safety
LookAhead Lines
 Ignore M calls while loading
 M9- Execute after Block
 UDP Pendent Control
 Run Macro Pump
 ChargePump On in EStop
 Persistent Jog Mode.
 FeedOverride Persist
 No System Menu in Mach3
 Use Key Clicks
 Home Slave with Master Axis
 Include TLO in Z from G31
 Lock Rapid FRD to Feed FRD

Rotational
 Rot 360 rollover
 Ang Short Rot on G0
 Rotational Soft Limits

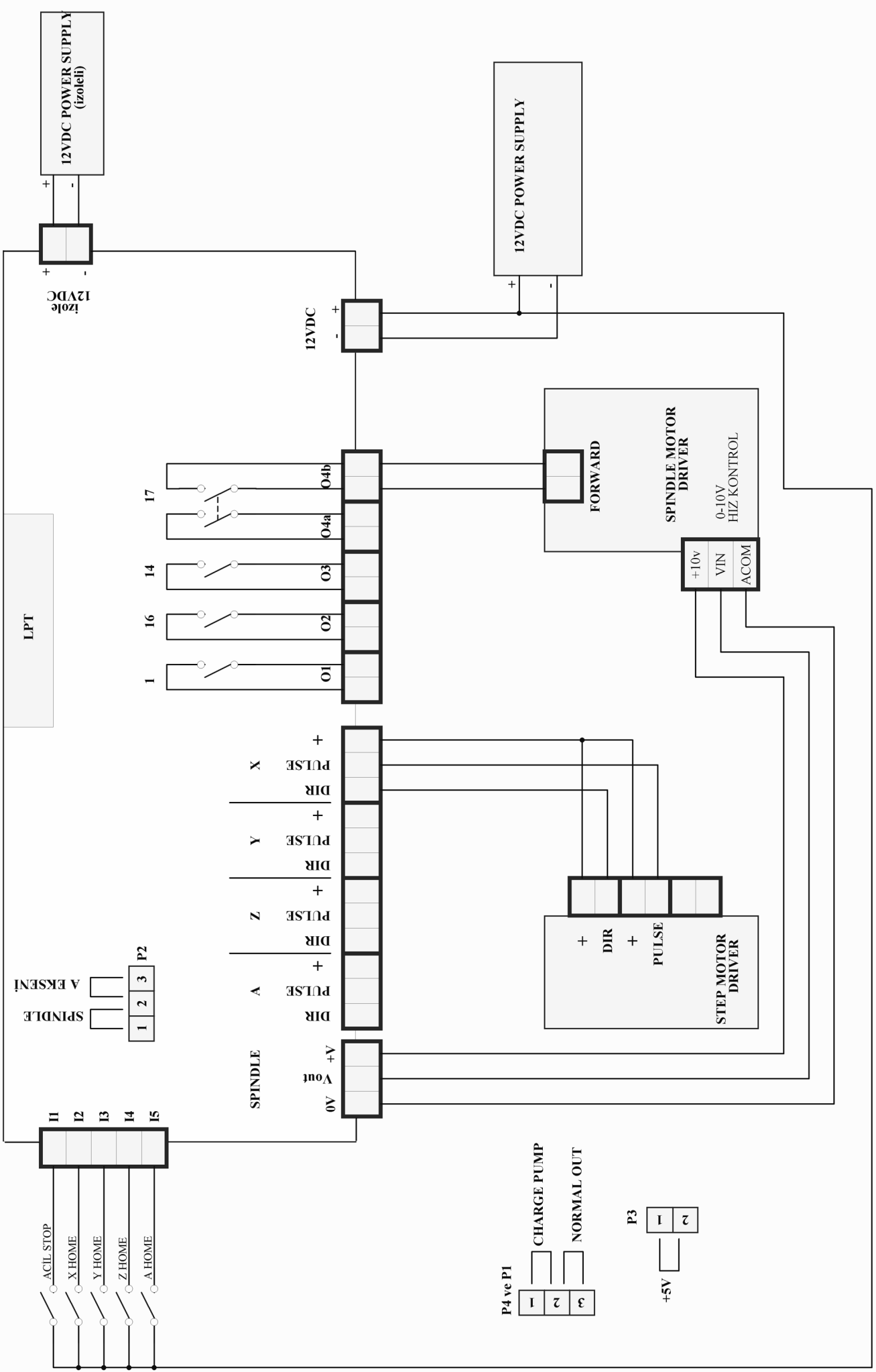
Screen Control
 Hi-Res Screens
 Boxed DRO's and Graphics
 Auto Screen Enlarge
 Flash Errors and comments.

Inputs Signal Debouncing/Noise rejection
Debounce Interval x 40us
Index Debounce

General Configuration (continued)
 Disable Gouge/Concavity Checks
 G04 Dwell in ms
 Use WatchDogs
 Debug This Run
 Enhanced Pulsing
 Allow Wave Files
 Allow Speech
 Set Charge Pump to 5Khz - Laser Stndby
 Use OUTPUT20 as Dwell Trigger
 No FRD on Queue
 Turn Manual Spindle Incr.
 Spindle OV increment

CV Control
 Plasma Mode
 CV Dist Tolerance Units..
 G100 Adaptive NurbsCV
 Stop CV on angles > Degrees

Axis DRO Properties
 Tool Selections Persistent.
 Optional Offset Save
 Persistent Offsets
 Persistent DROs
 Copy G54 from G59.253 on startup



BAĞLANTI ŞEMASI