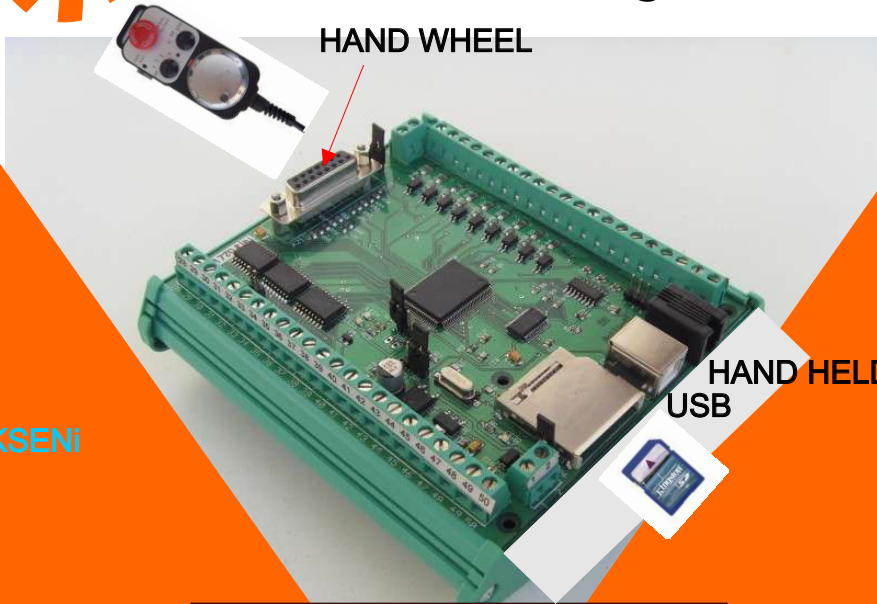




# ESROBOTTEK®

WWW.ESROBOTTEK.COM.TR  
esrobotek@esrobotek.com.tr



HAND WHEEL

HAND HELD  
USB

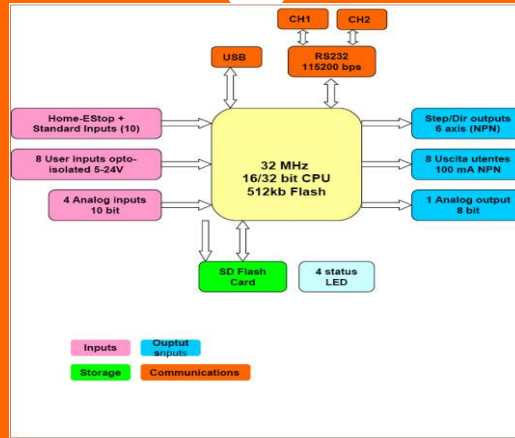
X AXE  
Y AXE  
Z AXE  
A AXE  
B AXE  
C" AXE

USB 6 AXES  
G & M CODES  
24VDC IN - OUTPUT  
OPTOISOLATION

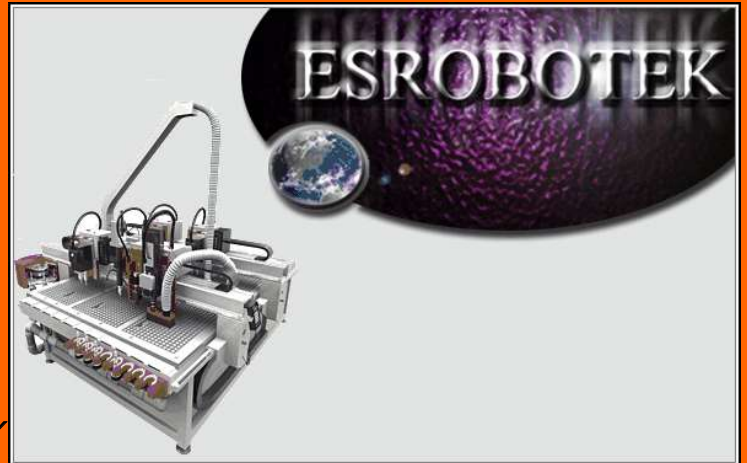
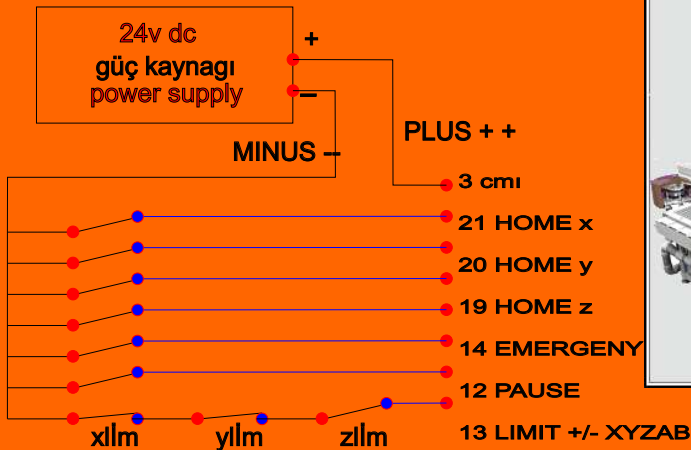
DIN RAY MOUNT  
USB CONNECTION

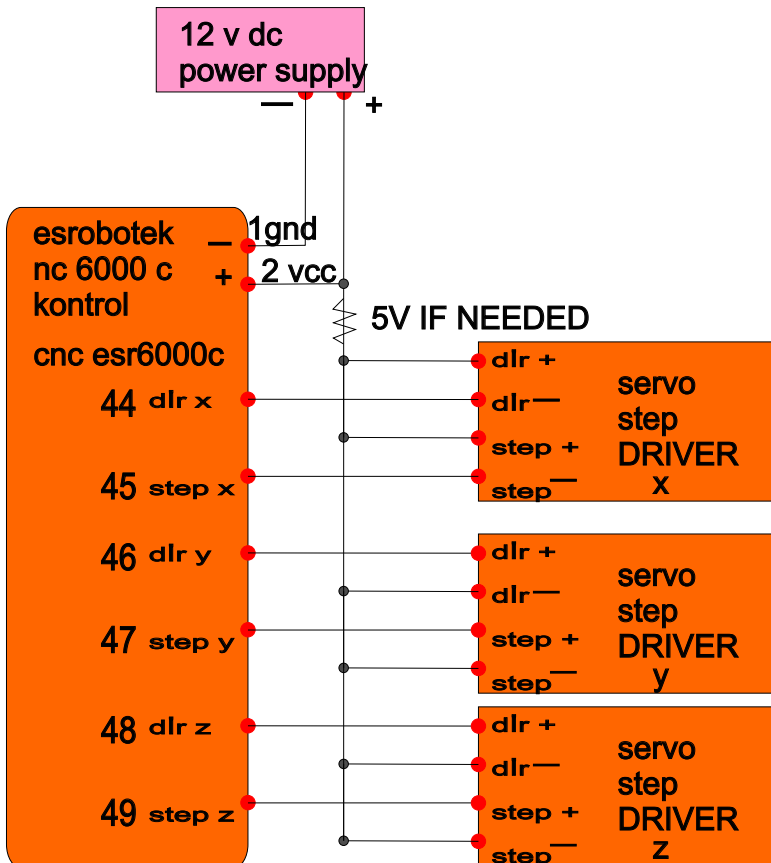
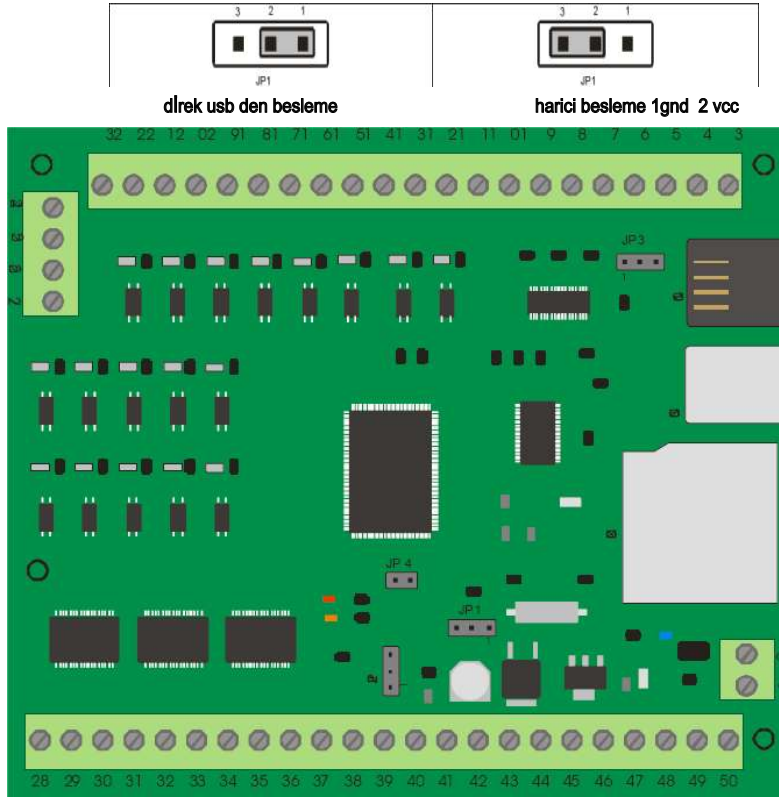


## 6 AXES

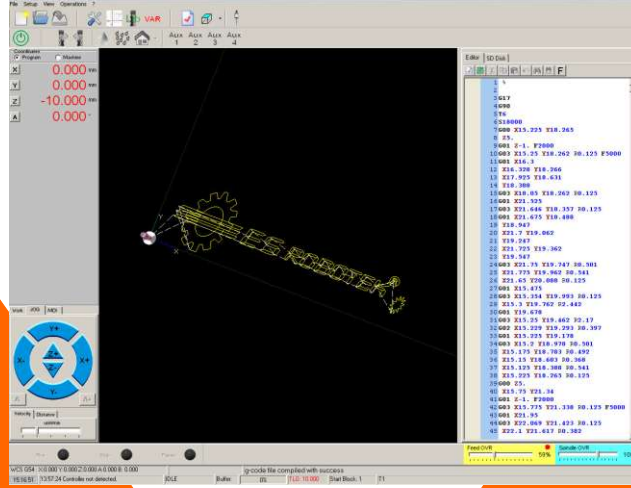


### 3D SCANNING



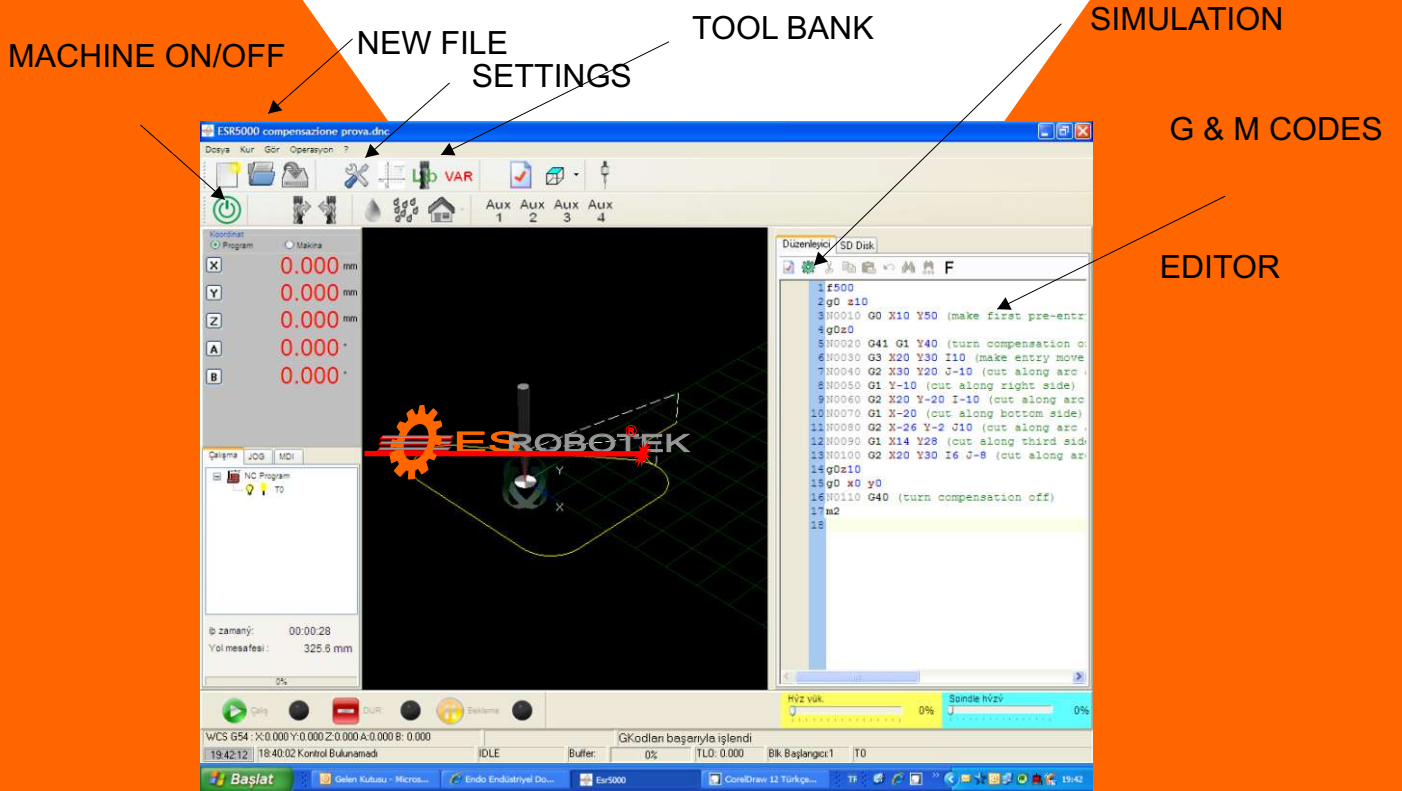


NO	ITEM	DESCRIPTION
1	GND	MINUS -
2	VCC	POWER 12 V OR 24V +
3	vcc	24 OR 12 V +
4	input - INPUT 7	7 nolu INPUT - ALL INPUTS ARE GND
5		6 nolu INPUT
6		5 nolu INPUT
7		4 nolu INPUT
8		3 nolu INPUT
9		2 nolu INPUT
10		1 nolu INPUT
11		0 nolu INPUT
12	PAUSE / BEKLET	CNC PAUSE - BEKLETME KOMUTU INPUT
13	limit input	limit INPUT
14	/E. STOP /Acil stop	E STOP /Acil stop inputu NPN
15	prop	3 D SCANNING - tarama probu girişi
16	HMC	C eksenini HOME INPUT
17	HMB	B eksenini HOME INPUT
18	HMA	A eksenini HOME INPUT
19	HMZ	Z eksenini HOME İyut
20	HMY	Y eksenini HOME INPUT
21	HMX	X eksenini HOME iNPUT
22	GND ANALOG	ANALOG GND analog input eksi ucu
23	AN0	0 AD ANALOG iNPUT
24	AN1	1 AN ANALOG İyut
25		2 AN ANALOG iNPUT
26		3 AN ANALOG iNPUT
27	DA0	DIJİTALDEN ANALOG OUTPUT
28	CMO COMMON OU	COMMON POZİTİF OUTPUT
29	UO7	7 OUTPUT NPN
30	UO6	6 OUTPUT NPN
31	UO5	5 OUTPUT NPN
32	UO4	4 OUTPUT NPN
33	UO3	3 OUTPUT NPN
34	UO2	2 OUTPUT NPN
35	UO1	1 OUTPUT NPN
36	UO0	0 OUTPUT NPN
37	GND	GND EKSi
38	DIC	DIRECTION C EKSi NPN
39	STC	STEP C NPN
40	DIB	DIRECTION B NPN
41	STB	STEP B NPN
42	DIA	DIRECTION A NPN
43	STA	STEP A NPN
44	DIZ	DIRECTION Z NPN
45	STZ	STEP Z NPN
46	DIY	DIRECTION Y NPN
47	STY	STEP Y NPN
48	DIX	DIRECTION X NPN
49	STX	STEP X NPN
50	GND	GND EKSi



# 6 AXES STEP / SERVO





8 npn input  
8 npn output

\*\*\*\* inputlara + voltaj bağlamayınız  
tüm girişler eksı voltaj gnd ile aktif hale gelir

## TOOL CHANGE SAMPLE MACRO

Toolchange macros for ESR5000

Your specifications:

Z safe position: -10

Z Tool Position: -150

Y Tool Position: 2400

Y Extract/Engage Position: 2250

Inputs:

0 Tool InPlace 0= empty 1= full

1 Spindle turning: 1= turning 0= stopped

2 Tool Clamp: 1=Opened 0=Closed

Outputs:

0 (M90) Clamp: M90=Opened (output active) M91=Closed (output inactive)

Number of tools: 8

Use Axis 5 (B) for the revolver.

Degree for tools absolute: 0,45,90,135,180,225,270,315;

Option for Home axis B when "Home All"

Unload Macro for Tool 1

G49 (tool offset off)

M5 (spindle off)

G53G0Z-10 (Z axis on top position)

G0B0 (rotate toolchanger)

M66P0L0 (Tool holder must be empty)

G53G0Y2250 (Y position to unload)

M66P1L0 (Wait for spindle stop)

G53G1Z-150F5000 (z down to the tool position)

G53G1Y2400F3000 (insert the tool)

M90 (open clamp)

M66P2L1 (Wait for clamp open)

G53G1Z-10F5000 (Z on the top position)

Load Macro for Tool 1

G49 (tool offset off)

M5 (spindle off)

G53G0Z-10 (Z axis on top position)

M66P1L0 (Wait for spindle stop)

G0B0 (rotate toolchanger)

M66P0L1 (Tool holder must be full)

G53G1Y2400F5000 (Y axis over the tool)

M90 (Open Clamp)

M66P2L1 (Wait for clamp open)

G53G1Z-150F5000 (z down to the tool)

M91 (close clamp)

M66P2L0 (Wait for clamp closed)

G4P1 (1 second pause)

G53G1Y2250F5000 (extract the tool)

G53G1Z-10F5000 (Z on the top position)

G43H1 (Tool offset enabled)

Note for input read: if an input doesn't go to the specified value the program will stay in the wait-input state until the user press STOP.



## TOOL CHANGE INI

```
[UnloadTool0]
RowCount=1
unload0=
[LoadTool0]
RowCount=2
load0=M5 (Spindle off)
load1=G49 (tool offset off)
[UnloadTool1]
RowCount=13
unload0=G49 (tool offset off)
unload1=M5 (spindle off)
unload2=G53G0Z-10 (Z axis on top position)
unload3=G0B0 (rotate toolchanger)
unload4=M66P0L0 (Tool holder must be empty)
unload5=G53G0Y2250 (Y position to unload)
unload6=M66P1L0 (Wait for spindle stop)
unload7=G53G1Z-150F5000 (z down to the tool position)
unload8=G53G1Y2400F3000 (insert the tool)
unload9=M90 (open clamp)
unload10=M66P2L1 (Wait for clamp open)
unload11=G53G1Z-10F5000 (Z on the top position)
unload12=
[LoadTool1]
RowCount=16
load0=G49 (tool offset off)
load1=M5 (spindle off)
load2=G53G0Z-10 (Z axis on top position)
load3=M66P1L0 (Wait for spindle stop)
load4=G0B0 (rotate toolchanger)
load5=M66P0L1 (Tool holder must be full)
load6=G53G1Y2400F5000 (Y axis over the tool)
load7=M90 (Open Clamp)
load8=M66P2L1 (Wait for clamp open)
load9=G53G1Z-150F5000 (z down to the tool)
load10=M91 (close clamp)
load11=M66P2L0 (Wait for clamp closed)
load12=G4P1 (1 second pause)
load13=G53G1Y2250F5000 (extract the tool)
load14=G53G1Z-10F5000 (Z on the top position)
load15=G43H1 (Tool offset enabled)
```