KL-1313 and KL-1325 Installation Guide

[Hardware installation]

1.Unload and setup machine:

Unload the machine from the base of the crate and screw in four feet for each corner. Put it on the floor and keep it stable and horizontal.

2. Electrical Cable and Plugs

a. Plugin all cables to the cabinet and match up labels of them. (See picture 1.1)

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b. KL-1325 or KL-1313 Machine works on **220V AC power source.**

● If you have a 220VAC outlet, Connect the cable as:

Blue - L1   to   N
Brown - L2   to   L
Yellow/Green - PE   to   GND

● If you do not have a 220VAC outlet, you do need a 110V to 220V up-transformer.(See picture 1.2)
We have listed 3KW transformers and 5KW transformers on our website.

Also, You need to solder a power cord with the cable that comes from the cabinet for the transformer. (See picture 1.3)

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P1.3

c. Finally, open the front panel of the cabinet and connect the breakout board to your computer.

3. Chilling system:

    a. There is a 55W submersible pump that comes with the machine in the plastic box. It also works on 220VAC.

    b. If you need powerful chiller, we have listed 3KW water chiller and 5KW water chiller on our website:

    c. Notes:
- Must be used under the water.
- Must cut off the electricity once the product works improperly and maintain it after lifting it from the water.

4. Oil Pump Instruction:

    a. Display instruction:
- Left Display: Running time
  It will pump oil for [left display] seconds when you press RST button
- Right Display: Interval time
  It will pump oil for [left display] seconds in every [right display] Minutes.

    b. Button instruction:
- Left red button: SET button

Press the button for 2 seconds then release to ACT(working)
time setting. Press SET button again for 2 seconds, INT (resting) time setting,
at last press the button for 2 seconds. After hearing the sound, the setting
finishes.

- Middle 2 blue buttons: Adjust button
  Adjust working (1 second ~ 999 seconds) and stop (1 second ~ 999 seconds)
  time value.
- Right red button: RST button
  Press the button to pump oil once for [left display] seconds.

[Software installation]

1. **operating software download:**
   Mach3 Download

   Mach4 Download

2. **Software plugin download:**
   a. Ethernet Plugin:
      - System Configuration Utility
      - Download the system configuration utility first and follow steps to
        configure your computer.
      - IP adress: 10.9.9.2 Subnet Mask: 255.255.255.0
        Default gateway: 10.9.9.9
      - If you are using our Ethernet interface box.

Connect its **PC connection** to your computer.
Connect its **Port 1** to the Breakout board of the machine with Parallel
cable.

b. UC100 Plugin:
- [UC100 CNC Drive](#)
- Download the automatic installer. (See picture 2.1)
- It might update your feature drive first. After downloading, open the installer again. It will give you 2 choices: Mach3 or Mach4. Pick the one you are using.
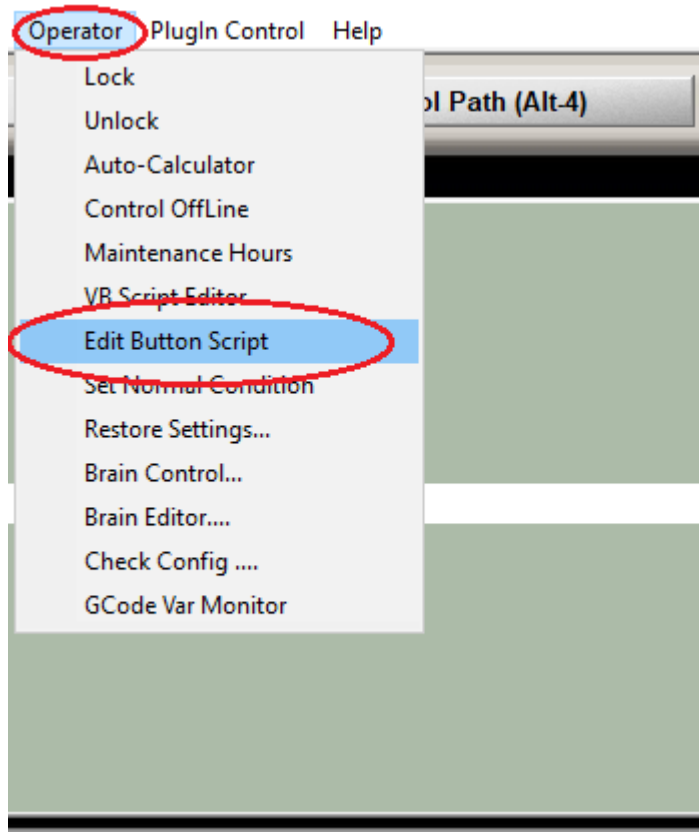- Uncheck all except UC100 and download.

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3. Preset Computer for all machines:

If you do not want to configure everything by yourself, we have listed preset computer on our website: [i5 Preset CNC computer with 19" Monitor](#)
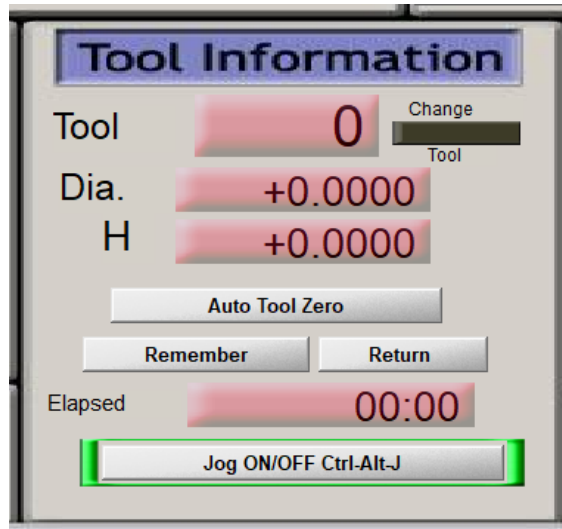
【Mach3 Auto Tool Zero Setup】

1. Find out the "Edit Button Script" of the "Operator" which is at the right top of the Mach3 screen(Picture 3.1).

2. After clicking it, you will see buttons blinking. Find out "Auto Tool Zero" which is at the middle bottom(Picture 3.2). It is blinking white and black. Then click it and "Mach3 VB Script Editor"(Picture 3.3) will pop up.

3. Paste Auto tool zero script:

```
CurrentFeed = GetOemDRO(818) 'Get the current feedrate to return to later
CurrentAbsInc = GetOemLED(48) 'Get the current G90/G91 state
CurrentGmode = GetOemDRO(819) 'Get the current G0/G1 state

If GetOemLed (825)=0 Then 'Check to see if the probe is already grounded or faulty
DoOEMButton (1010) 'zero the Z axis so the probe move will start from here
Code "G4 P3" ' this delay gives me time to get from computer to hold probe in place
Code "G90 G31Z-4. F4" 'probing move, can set the feed rate here as well as how far
to move
While IsMoving() 'wait while it happens
Wend
ZProbePos = GetVar(2002) 'get the exact point the probe was hit
Code "G0 Z" &ZProbePos 'go back to that point, always a very small amount of
overrun
While IsMoving ()
Wend
Call SetDro (2, .060) ' change .060 to your plate thickness and then adjust for final
accuracy
Sleep 200 'Pause for Dro to update.
Code "G1 Z1. F50" 'put the Z retract height you want here, must be greater than the
touch plate thickness
While IsMoving ()
Wend
Code "(Z axis is now zeroed)" 'puts this message in the status bar
Code "F" &CurrentFeed 'Returns to prior feed rate
Else
Code "(Z-Plate is grounded, check connection and try again)" 'this goes in the status
bar if applicable
End If
If CurrentAbsInc = 0 Then 'if G91 was in effect before then return to it
Code "G91"
End If
If CurrentGMode = 0 Then 'if G0 was in effect before then return to it
Code "G0"
End If
```

P 3.2


```
CurrentFeed = GetOemDRO(818) 'Get the current feedrate to return to later
CurrentAbsInc = GetOemLED(48) 'Get the current G90/G91 state
CurrentGmode = GetOemDRO(819) 'Get the current G0/G1 state

If GetOemLed (825)=0 Then 'Check to see if the probe is already grounded or faulty
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Call SetDro (2, .060) ' change .060 to your plate thickness and then adjust for final accuracy
Sleep 200 'Pause for Dro to update.
Code "G1 Z1. F50" 'put the Z retract height you want here, must be greater than the touch plate thickness
While IsMoving ()
Wend
Code "(Z axis is now zeroed)" 'puts this message in the status bar
Code "F" &CurrentFeed 'Returns to prior feed rate
Else
Code "(Z-Plate is grounded, check connection and try again)" 'this goes in the status bar if applicable
End If
If CurrentAbsInc = 0 Then 'if G91 was in effect before then return to it
Code "G91"
End If
If CurrentGMode = 0 Then 'if G0 was in effect before then return to it
Code "G0"
End If
```

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