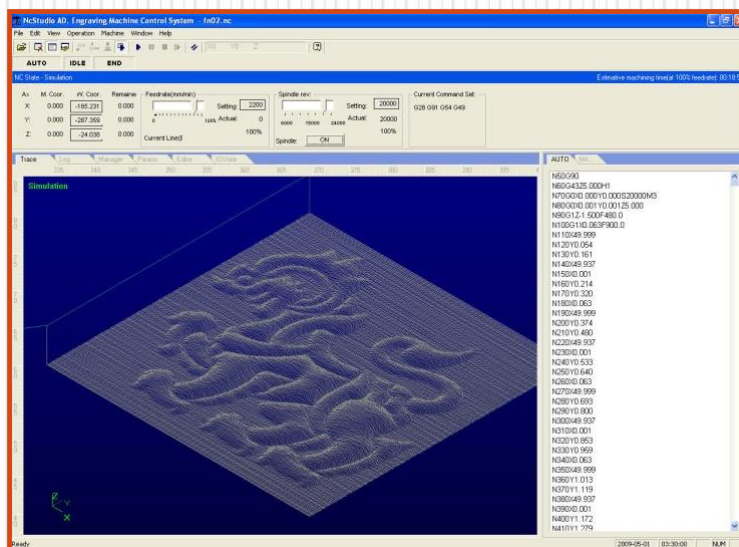


# QUICK START-UP CNC ROUTER WITH NC STUDIO V. 4.44-B

By:  
AUTOMATION MAKER LTD.



# QUICK START- CONTENTS

1. INSTALL &  
INSERT CARD

2. SET IO

3. SET  
PARAMETERS

4. TEST  
RUN



Each machine is different. Therefore we are not responsible for any inaccurate data that maybe occur in this manual.

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# START UP- INSTALL NCSTUDIO & INSERT CARD

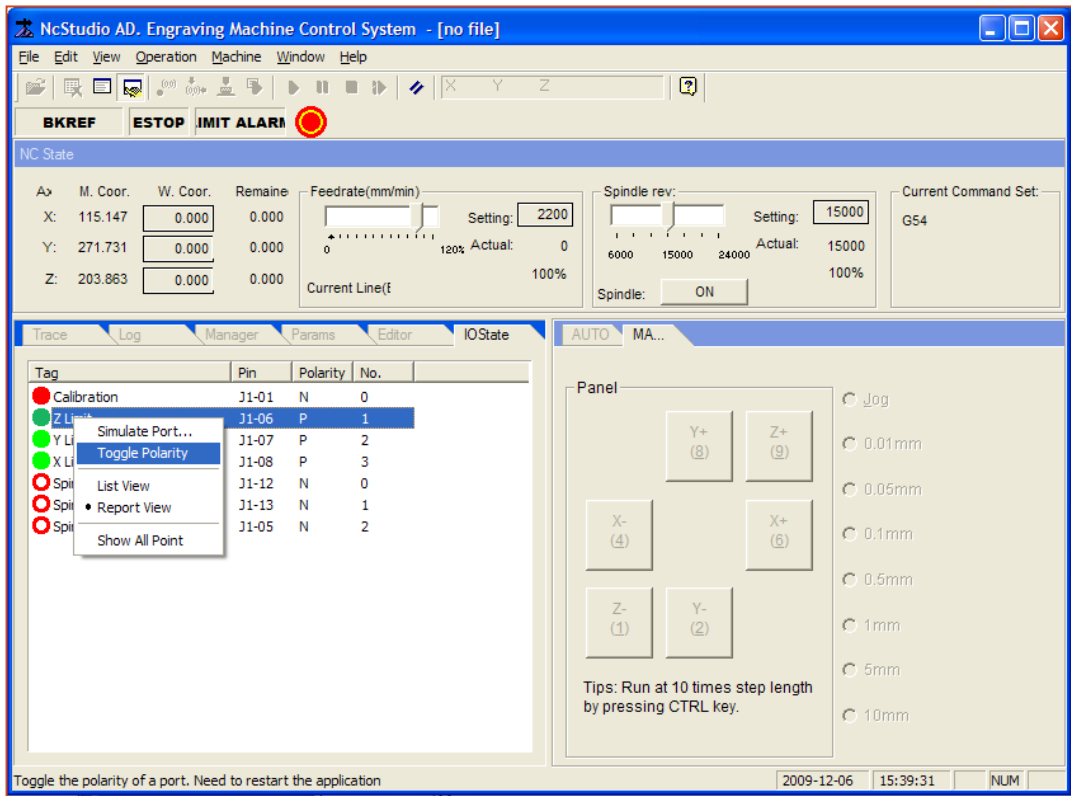
1



2



1. First install the program **NcStudio**.
2. Insert the card and find its driver in the NcStudio folder.



**Ctrl + Shift + Alt + Right Mouse button.**  
**Click Toggle Polarity**

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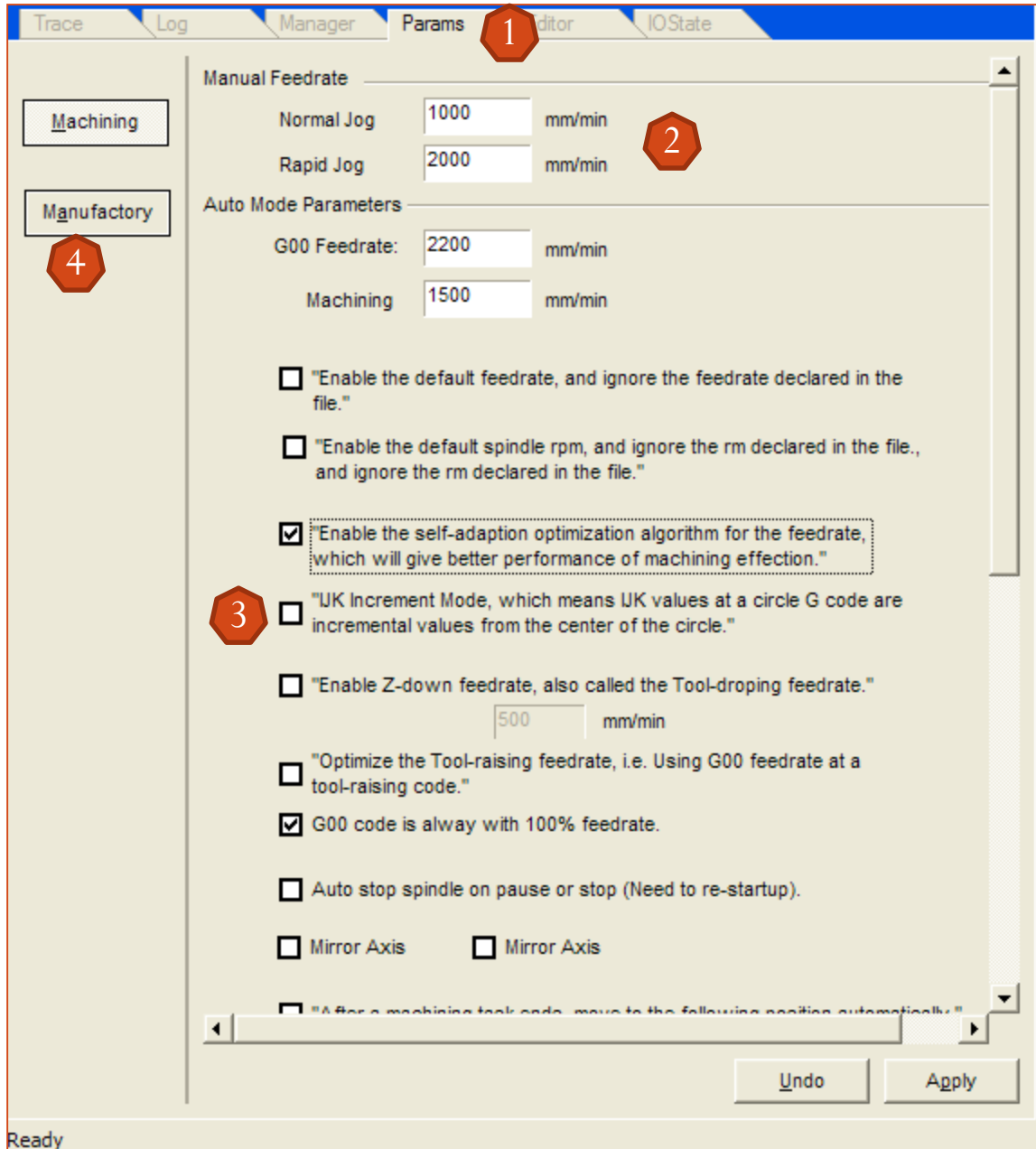
# START UP- SET IO State

The screenshot shows the NcStudio AD interface. At the top, there are buttons for **BKREF**, **ESTOP**, and **IMIT ALAR!** with a red warning sign. The **NC State** section displays coordinates (X: 115.147, Y: 271.731, Z: 203.863), feedrate (Setting: 2200, Actual: 0), and spindle speed (Setting: 15000, Actual: 15000). The **IOState** table is shown with columns for Tag, Pin, Polarity, and No. A context menu is open over the table, highlighting the **Toggle Polarity** option. A smaller window below shows the software after a restart, with the **IOState** table updated and the warning sign removed.

Tag	Pin	Polarity	No.
Calibration	J1-01	N	0
Z Limit	J1-06	P	1
Y Limit	J1-07	P	2
X Limit	J1-08	P	3
Spindle Low Rev	J1-12	N	0
Spindle Medal Rev	J1-13	N	1
Spindle High Rev	J1-05	N	2

1. When start up, if the polarity of X,Y, Z limit are P, we must change to N by click **Ctrl + Shift + Alt +Right Mouse button**.
2. Change the all the Toggle Polarity for X,Y, Z limit
3. Close the program and Restart the program again. The warning sign should be off
4. Once it restarted the program, it should not be any Alarm.

# START UP- SET PARAMETERS



1. Now click on the Params
2. Normal Jog and Rapid Jog can be adjust with this number.
3. If IJK are needed, this button should be unclick
4. Now click on Manufactory. The password is “**ncstudio**”.

# START UP- SET PARAMETERS

**Workbench**

"Set the workbench dimensions, w/ raises an out-of-limit alarm after the become effective."

Start (Mechanical) Coord.

X:  mm

Y:  mm

Z:  mm

Y:  mm

Z:  mm

Note: Please restart after changing above

**Mobile Calibrator:**

Thickness of the  mm

**Motor Parameter** rate of z axis:

X:  mm/pulse

Y:  mm/pulse

Z:  mm/pulse

Start-up Feedrate:  mm/min

the maxium feedrate of z axis:  mm/min

**Acceleration**

Set the angle-per-pulse while Y axis is a revolving axis:

Linear Acceleration:  mm/sec<sup>2</sup>

Connection Acceleration:  mm/sec<sup>2</sup>

Spindle

Undo Apply

**Password**

Please input the password to open the Manufactory Parameter Window:

Please enter a

OK Cancel

2

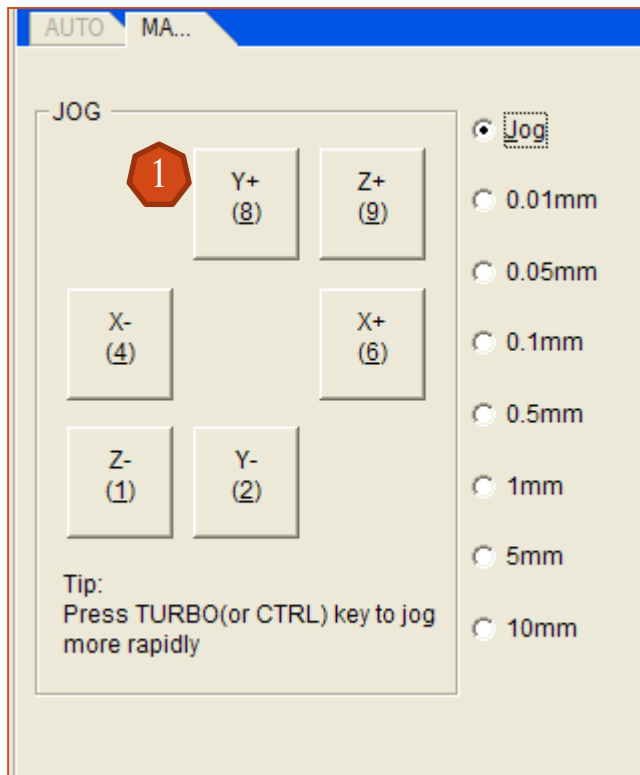
1

Normally, motor parameter is either 0.003125 or 0.00625 depending on machine models.

1. Once again, password is **“ncstudio”**

2. Normally, motor parameter for X,Y, Z is either 0.003125 or 0.00625 depending on machine models. We recommend you to start with 0.00625. Then test the axis for example try to move Y 100mm, if it's not right then change to .003125

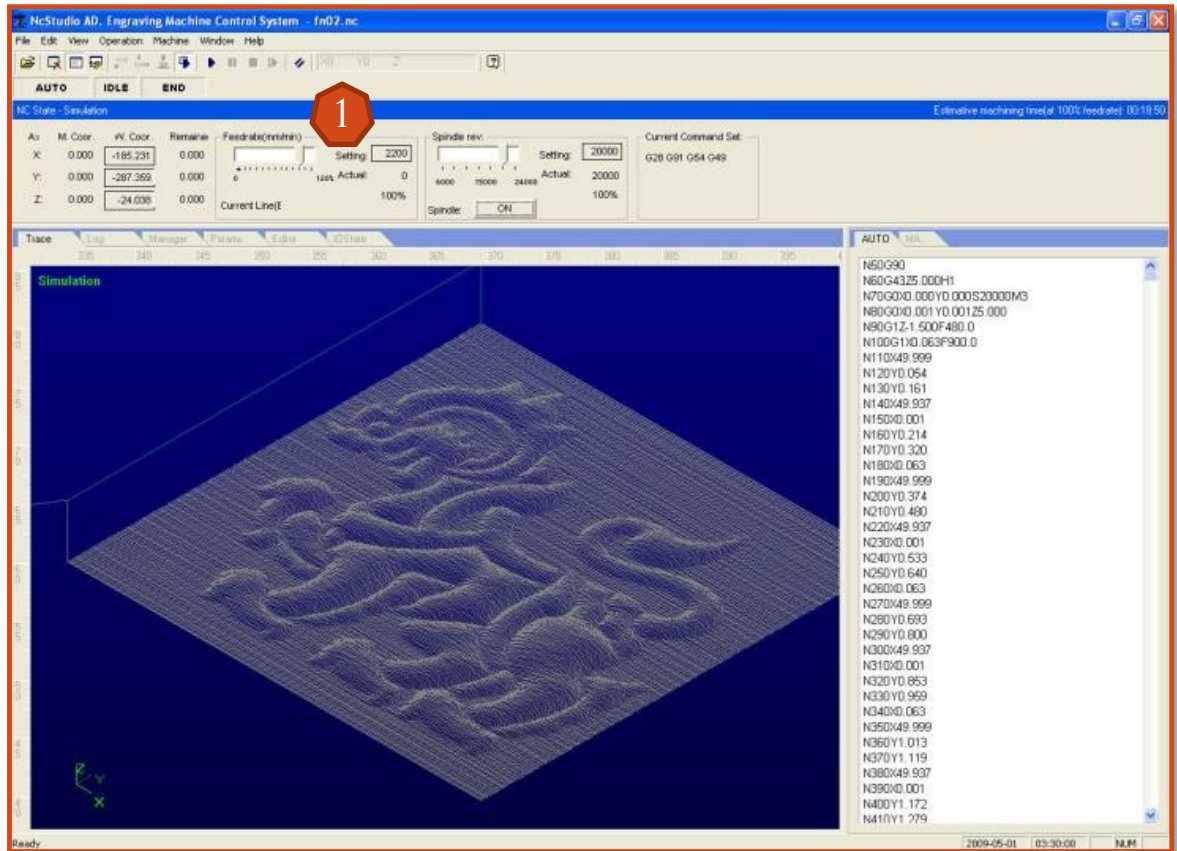
# START UP- TEST RUN



1. Test X,Y, Z to see if they work property or not.You can use ruler or vernier caliper to test if the machine run according to the control. If not, then readjust Manufactory Parameter.
2. Ctrl + Enter for Full Screen. Repeat will return back to the normal screen



# START UP- ADVICE!



1. Always **reduce speed** to a very low before start the Auto Play. Then when everything is okay increase the speed to be normal.
2. **Simulation= F8, Start= F9, Pause=F10, Stop = F11**

For more detail please see  
CNC Router Manual V4.4