



ASCARVA 3

User Manual V1.0



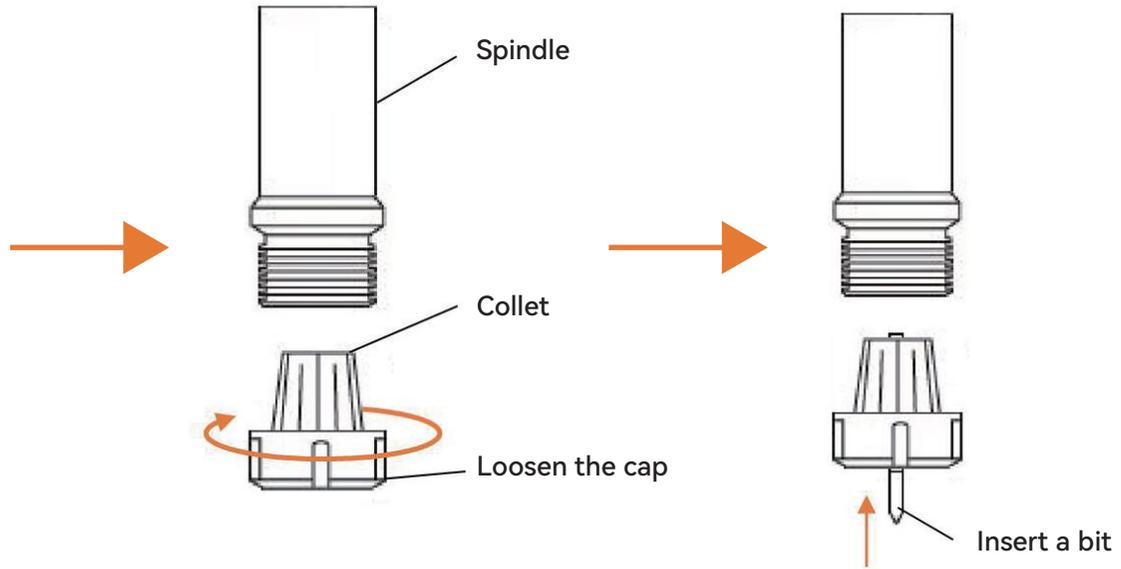
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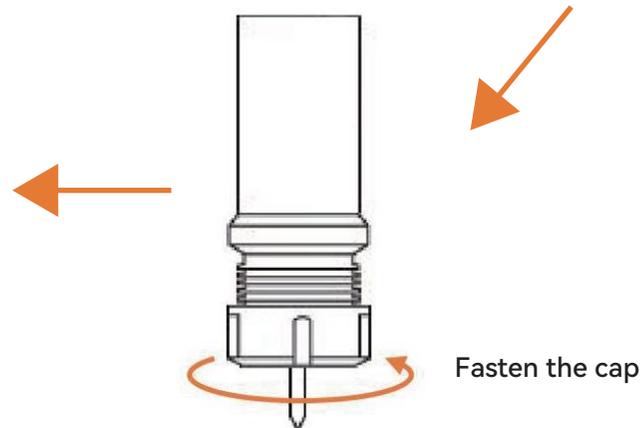
How to install the Router Bit



Unlock the cap



Tighten



Make your first cut

1. Connect the USB cable and power on.
2. Copy the UGS installer from the USB disk or download UGS from here: https://winder.github.io/ugs_website/download/

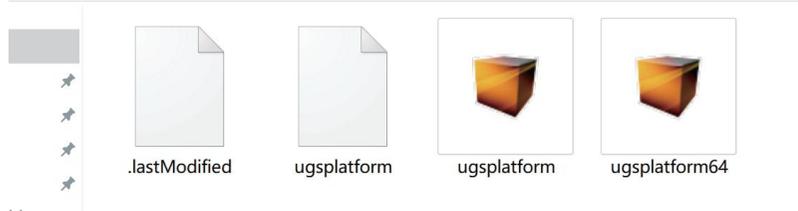
UGS Platform

The next generation platform-based interface.

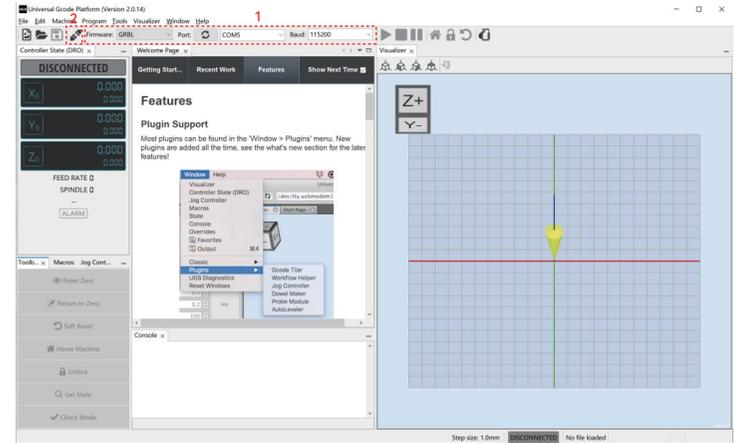
Version 2.0.14	Version 2.0.13	Description
Windows x64	Windows x64	Windows 64-bit version with bundled Java
Windows	Windows	Windows version with bundled Java
MacOSX	MacOSX	MacOSX version with bundled Java
Linux	Linux	Linux version with bundled Java
Linux ARM	Linux ARM	Linux ARM version with bundled Java. Can be used with RaspberryPi
All platforms	All platforms	A generic package without Java which needs to be installed separately

3. Unzip the file, find "bin>ugsplatform64.exe", double click to open the software.

win64-ugs-platform-app-2.0.14 (1) > ugsplatform-win > bin

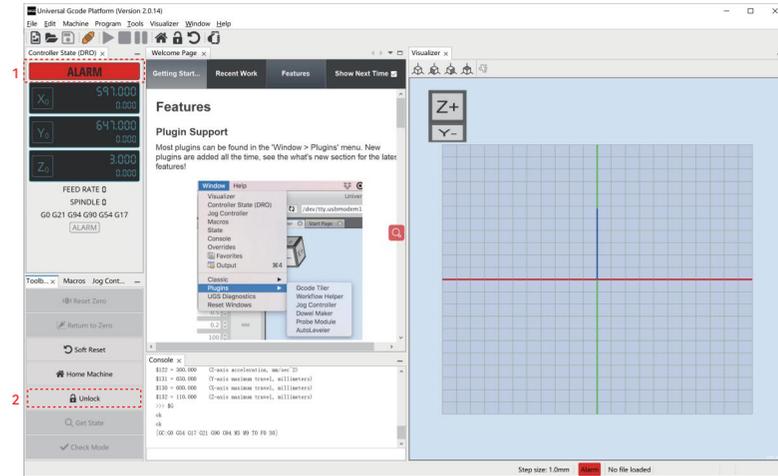


4. Connect the machine and computer via USB cable, select "Firmware-GRBL, COM port, and Baud-115200"; and then click "Connect" button.

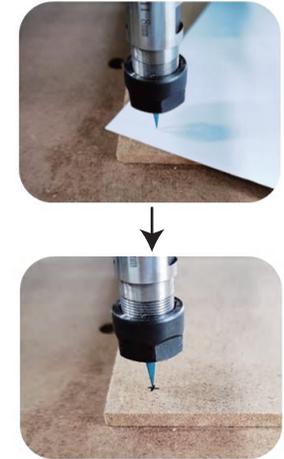
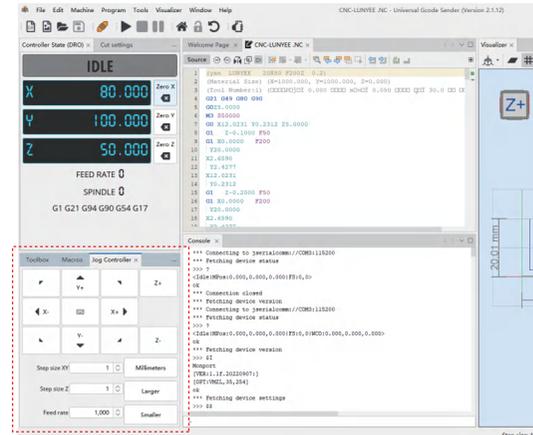


Make your first cut

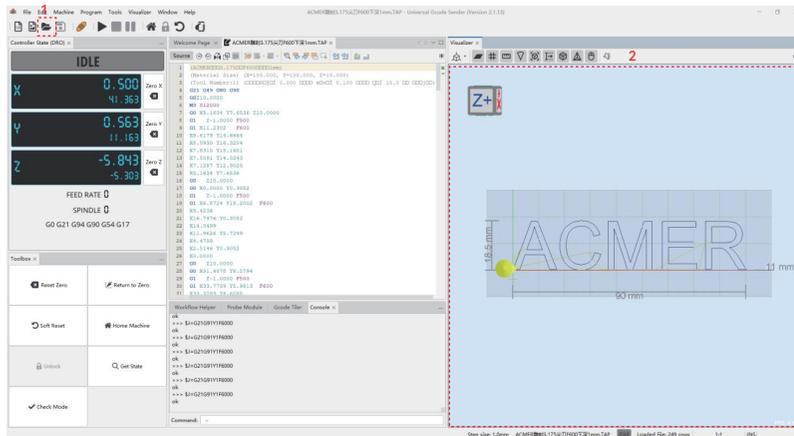
5. Status will change to ALARM, click "Unlock" to change the status to "IDLE".



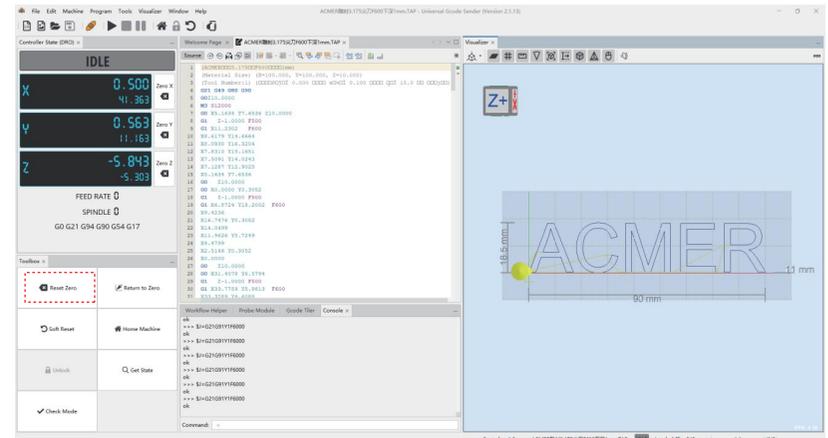
7. Click the Jog Controller to move the bit to the origin of the object. The proper gap between the bit and object's surface is that only an A4 paper can move through tightly.



6. Open a G-code file, Preview G-Code in Visualizer.

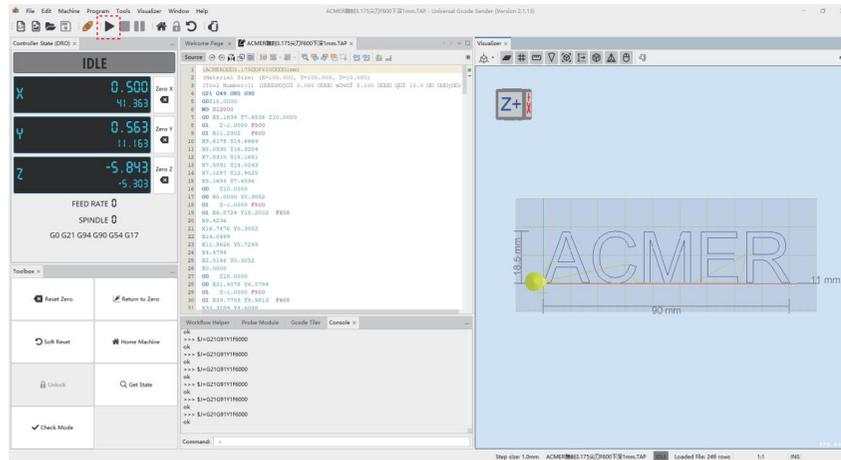


8. Click "Reset Zero" in the toolbox window.



Make your first cut

9. Then click "Send" to start engraving.



10. Engraving Finished.



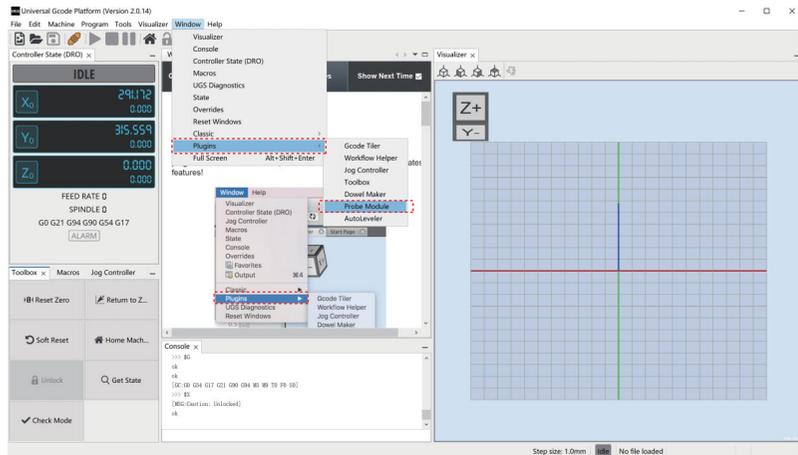
Z-Probe Operating

1. Measure the thickness of the Z-probe

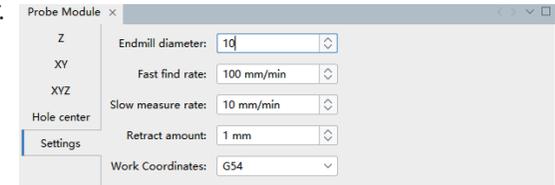


Thickness: 1.6mm

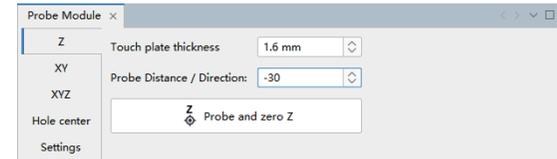
2. Click Window->Plugins->Probe Module



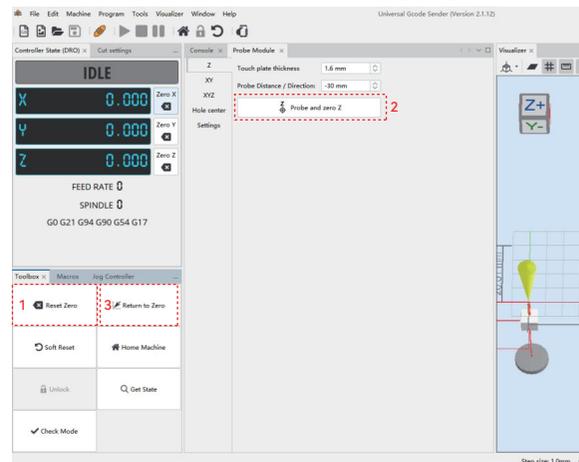
3. Setting: edit the parameters as follow. Z-probe will run twice in fast and slow speed for accurate result. The speed will be faster when number is set to bigger.



Click "z": enter the measured Z-probe thickness in Touch plate thickness. Probe Distance/ Direction: set it to -30 (means Z-axis moves downward for 30mm max.). If the router bit still cannot touch the Z-probe when it moves 30mm, it will show error alarm. When it turns to "ALARM", click "Unlock".

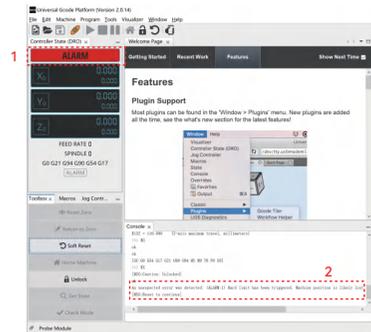
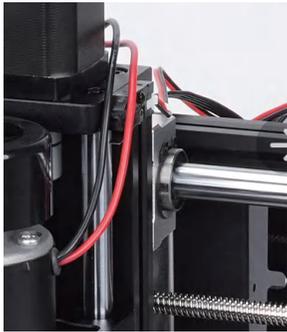


4. Click "Reset Zero", Then click "Probe and zero Z", Click "Return to Zero" Open the file, then click send to engraving.



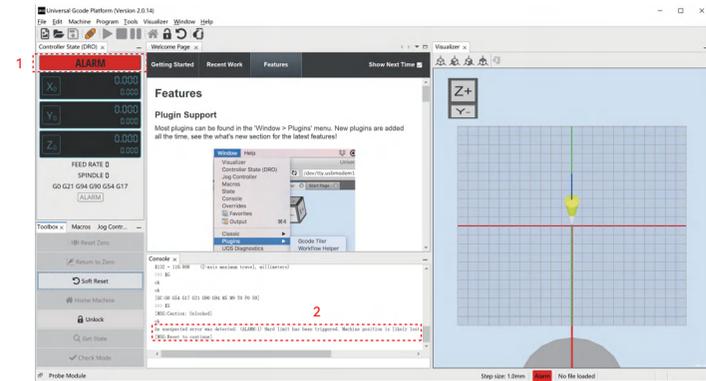
How to Unlock Limit Switch

1. When the machine triggers limit switches, it will turn to "Alarm". Console window will show the following error message: An unexpected error was detected: (ALARM:1) Hard limit has been triggered. Machine position is likely lost due to sudden halt. Re-homing is highly recommended.[MSG:Reset to continue]

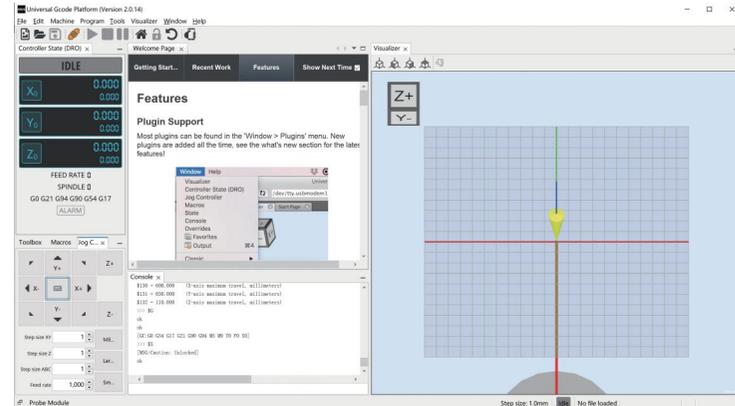
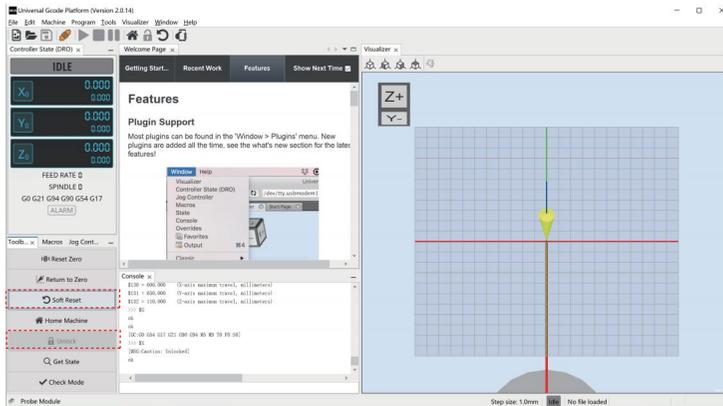


2. Click Soft Reset > Unlock, then jog the axis to the opposite direction from the limit switches.

3. If it turns to "ALARM" and shows error message again, repeat this step. Click Soft Reset -> Unlock; then limit switch will be unlocked completely.

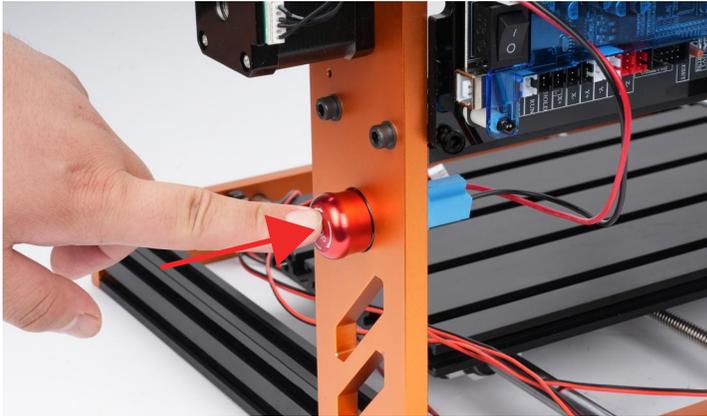


4. Jog the axis to the opposite direction. The machine can run normally.

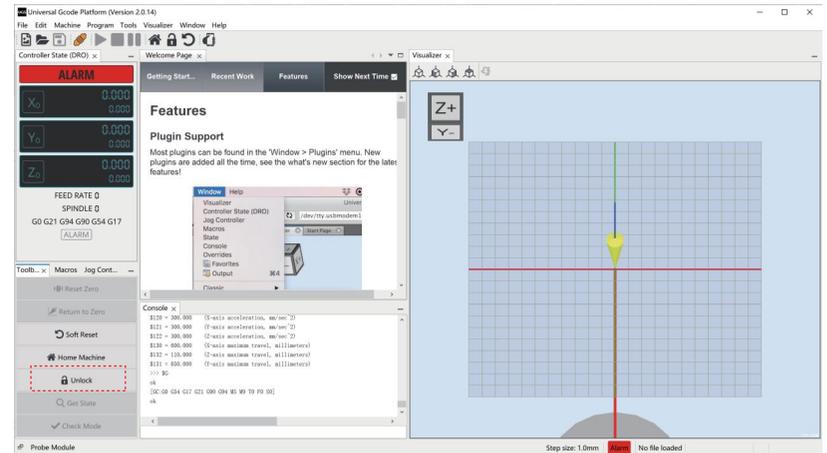


How to Use E-stop

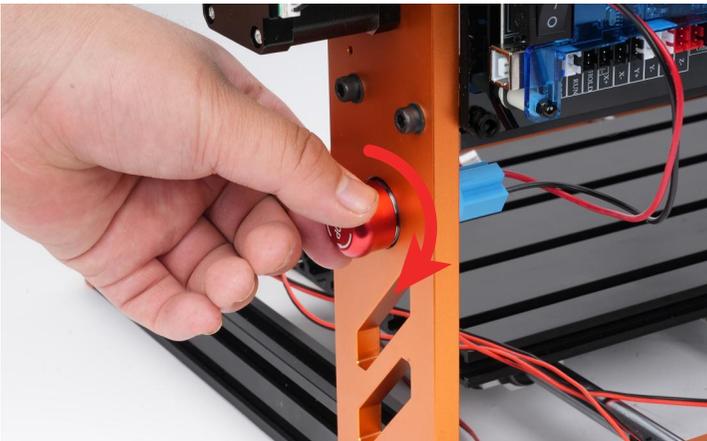
1. Press down the Emergency Stop button to stop the machine when unexpected situation occurs.



2. Click on the software window to restore: It will turn to "ALARM", click "Unlock" to return to normal working status.



3. You can also restore manually: Rotate the button clockwise to restore normal working state.



CNC Software Recommendation

Software/OS	Windows	Mac	Linux	Link
Easel	√	√	√	https://www.inventables.com/technologies/easel
Candle	√	×	√	https://github.com/Denvi/Candle
UGS	√	√	√	https://winder.github.io/ugs_website/download/
Fusion360	√	√	×	https://www.autodesk.com/products/fusion-360
Vcarve / Vcarve Pro	√	√	√	https://www.vectric.com/products/vcarve pro
Lightburn	√	√	√	https://lightburnsoftware.com/
Lasergrbl	√	×	×	https://lasergrbl.com/
OpenBuilds	√	√	√	https://software.openbuilds.com/
Aspire	√	√	√	https://www.vectric.com/products/aspire

Driver	Link
CH340 driver	http://www.wch-ic.com/search?t=all&q=CH340
Boot camp	https://support.apple.com/en-us/106378



<https://acmerlaser.com>

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